Brigham Young University
BYU ScholarsArchive

Theses and Dissertations

1997

A Model of Delinquency Among LDS Adolescents: The Effect of Peer Influences, Religiosity, Personality Traits, School Experiences, and Family Characteristics

Janice Garrett
Brigham Young University - Provo

Follow this and additional works at: https://scholarsarchive.byu.edu/etd

Part of the Mormon Studies Commons, and the Sociology Commons

BYU ScholarsArchive Citation
Garrett, Janice, "A Model of Delinquency Among LDS Adolescents: The Effect of Peer Influences, Religiosity, Personality Traits, School Experiences, and Family Characteristics" (1997). *Theses and Dissertations*. 4711.
https://scholarsarchive.byu.edu/etd/4711

This Thesis is brought to you for free and open access by BYU ScholarsArchive. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of BYU ScholarsArchive. For more information, please contact scholarsarchive@byu.edu, ellen_amatangelo@byu.edu.

المنارة للاستشارات

www.manaraa.com

L1

A Model of Delinquency Among L.D.S. Adolescents:

The Effect of Peer Influences, Religiosity, Personality Traits, School Experiences, and Family Characteristics

A Thesis

Presented to the

Department of Sociology

Brigham Young University

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

by

Janice Garrett

August 1997

This thesis by Janice Garrett is accepted in its present form by the Department of Sociology of Brigham Young University as satisfying the thesis requirement for the degree of Master of Science.

Bruce A. Chadwick, Committee Chair

Brian K. Barber, Committee Member

Stephen J. Bahr, Committee Member

7-16-97
Date

Stephen J. Bahr, Department Chair

TABLE OF CONTENTS

Acknowledgements iv

List of Figures v

List of Tables vi

Introduction 1

Theoretical Background 4

Literature Review
- Peer Influences 7
- Religiosity 10
- Personality Traits 16
- School Experiences 21
- Family Characteristics 24
- Family and Peer Influences 36

Delinquency Model 40

Methodology
- Data Collection 41
- Measurement of Variables 43

Results
- Descriptives 53
- LISREL Analysis 66

Discussion and Conclusion 79

References 85

Figures 97

Tables 104

ACKNOWLEDGEMENTS

Of the many individuals to whom thanks is due in the completion of my thesis, I would especially like to thank my thesis committee—Bruce Chadwick, my committee chair, for his never ending encouragement, nurturing guidance, and for having more confidence in me than I had in myself; Brian Barber, for helping me to refine my thoughts and to challenge my knowledge and skills; and Steve Bahr, for his constructive criticisms and his genuine concern for the graduate students in the department. I would also like to thank the other students in the program for their friendships and for making my graduate experience so enjoyable and memorable. Finally, I would like to thank my family for their continual love and support in all my endeavors.

LIST OF FIGURES

1 Conceptual Model with Peer Influences, Religiosity, Personality Traits, School Experiences and Family Characteristics Predicting Adolescent Delinquency 97

2 Structural Equation Model for Religiosity, Peer Influences, and Family Characteristics Predicting Adolescent Delinquency for the Total Sample 98

3 Structural Equation Model for Religiosity, Peer Influences, and Family Characteristics Predicting Adolescent Delinquency for Pacific Northwest Boys Only 99

4 Structural Equation Model for Religiosity, Peer Influences, and Family Characteristics Predicting Adolescent Delinquency for Pacific Northwest Girls Only 100

5 Structural Equation Model for Religiosity, Peer Influences, and Family Characteristics Predicting Adolescent Delinquency for Utah County Boys Only 101

6 Structural Equation Model for Religiosity, Peer Influences, and Family Characteristics Predicting Adolescent Delinquency for Utah County Girls Only 102

LIST OF TABLES

1 Factor Weights and Reliability Scores for Delinquency Scales, by Gender 104

2 Factor Weights and Reliability Scores for Peer Pressure Scales, by Gender 106

3 Factor Weights and Reliability Scores for Peer Example Scales, by Gender 108

4 Factor Weights and Reliability Scores for Religiosity Scales, by Gender 110

5 Factor Weights and Reliability Scores for Personality Scales, by Gender 112

6 Factor Weights and Reliability Scores for Family Scales, by Gender 114

7 Percent of LDS Youth who have Committed Offenses Against Others, Offenses Against Property, and Status Offenses, by Religious Ecology and Gender 117

8 Average Number of Times LDS Delinquent Youth have Committed Offenses Against Others, Offenses Against Property, and Status Offenses, by Religious Ecology and Gender 119

9 Percent of LDS Youth whose Friends have Pressured them to Commit Offenses Against Others, Offenses Against Property, and Status Offenses, by Religious Ecology and Gender 121

10 Percent of LDS Youth whose Friends have Committed Offenses Against Others, Offenses Against Property, and Status Offenses, by Religious Ecology and Gender 123

11 Frequency of Six Religiosity Dimensions, by Religious Ecology and Gender 127

12 Comparison of Personality Traits, by Religious Ecology and Gender 131

LIST OF TABLES (Continued)

13 Comparison of School Experiences, by Religious Ecology and Gender 135

14 Family Characteristics of LDS Youth, by Religious Ecology 136

15 LDS Youth's Perception of Family Connection, Parental Regulation, and Psychological Autonomy, by Religious Ecology 137

16 Correlation Matrix between all the Variables in the Model 139

17 Lambda Y's, Lambda X's, and R^2's for Latent Variables Used in the Model 140

Introduction

Disturbing reports of juvenile violence flood media airways and newspapers daily as delinquency rates continue to rise dramatically. Although adolescents comprised only 7.2 percent of the population in 1995, they committed 31 percent of the violent crimes, such as murder, forcible rape, robbery, and aggravated assault (Statistical Abstract of the United States, 1996: Tables 14, 325). Furthermore, the rate of violent crimes per 100,000 juveniles under the age of eighteen has drastically increased over the past several decades from 58 in 1965 to 163 in 1980 to 209 in 1992 (Maguire & Pastore, 1995: Table 4.18). Criminologists warn that because of the continual rise in the adolescent population and its associated increase in juvenile delinquency, overall crime rates could likewise soon escalate. In an Associated Press report, James Alan Fox, Dean of Criminal Justice at Northeastern University in Boston, cautioned that "we are facing a bloodbath of violence in the years ahead that will make 1995 look like the good old days" (Davidson & Swensen, 1996).

Adolescents face uncertainties and difficult life changes as they progress through the transitional period between childhood and adulthood. Adolescence encompasses a vital realm in youths' development of independence and sense of competency which lays a foundation for later-life achievement. However, a sizeable number of youth have difficulty adjusting during this period, and many react to these challenges with delinquent behavior.

Previous research has consistently linked several factors with delinquency. Repeatedly, the literature has identified peers as exerting the strongest influence on delinquent involvement (Agnew,1991; Thornberry et al., 1994; Warr & Stafford, 1991). Similarly, although not as strong of predictors, religiosity, personality traits, and school experiences have also been related to delinquent behavior (Brownfield & Sorenson, 1991; Chadwick &Top, 1993; Rosenberg, Schooler, & Schoenbach, 1989; Rowe & Flannery, 1994; Jarjouri, 1993). While some research attempts have directly linked family characteristics and delinquency (Barber & Shagle, 1992; Johnson & Pandina, 1991; Patterson & Southamer-Loeber, 1984), other studies have found mixed or weak results, especially when family experiences are compared against peer influences (Aseltine, 1995; Bahr, Marcos, & Maughn, 1995; Brody & Forehand, 1993; Litchfield, Thomas, & Li, 1997; Orthner, 1990). Theory suggests, however, that family may influence delinquency indirectly through fostering higher religiosity, positive school experiences, the selection of non-delinquent friends, and the ability to resist negative peer pressures.

Therefore, one purpose of this study was to test a multivariate model which included peer influences, religiosity, personality traits, school experiences, and family characteristics. The model allowed family characteristics to compete with the other variables in explaining delinquent behavior and examined both the direct and indirect effects of family. The model was tested using two samples of youth belonging to The Church of Jesus Christ of Latter-day Saints (LDS). This religion's theology and cultural practices place significant importance on family life which we also anticipated would heighten the influence of religiosity and family characteristics in the young people's lives.

Moreover, because some have argued that religiosity is related to delinquency only in highly religious environments (e.g., Stark, 1984, 1996), we selected a sample from youth living in the Pacific Northwest which has the lowest religious ecology in the United States (Stark, Kent, & Doyle, 1980) as well as a sample of youth living in Utah Valley which has an exceptionally high religious ecology. Thus, a second purpose of this study was to test the model in two rather different religious ecologies.

Theoretical Background

Social scientists have strived for over a half a century to explain why some adolescents commit delinquent behavior while others do not. *Differential association* and *social control* theories offer two prevalent views which differ in their fundamental approaches for explaining delinquency. The basic assumptions of these two theories guided the selection of variables tested in the model.

Sutherland's (1947) differential association theory asserts that youth learn definitions or behavior patterns in their peer group associations which either promote or discourage deviant behavior. The theory posits that in a criminally inducive environment, youth are exposed to "differential associations" which serve as tutelage for acquiring criminal values and skills (Cloward & Ohlin, 1960). In this differential learning process, youth glean from their peers motives, drives, rationalizations, and attitudes toward viewing laws as either rules to be observed or broken (Matsueda, 1982). Moreover, differential association theory maintains that delinquent behavior is generally learned only within intimate, personal groups rather than through media or impersonal societal influences (Sutherland, 1947).

The theory predicts that youth become delinquent not only because of exposure to criminal patterns but also due to isolation from anti-criminal patterns. Although the theory does not specifically explain why certain associations are formed, differential association theory expects that youths' associations are often determined by the general

context of their social organization, such as family life and socioeconomic status (Sutherland, 1947; Sutherland & Cressey, 1978).

Moreover, the youths' associations with both criminal and noncriminal behavior may vary in their frequency, duration, priority, and intensity which also influence their involvement in criminal behavior (Sutherland & Cressey, 1978). In other words, more frequent exposure to behavior patterns for longer periods of time, earlier in life, and from a more prestigious source will more strongly determine subsequent delinquent or non-delinquent behavior (Matsueda, 1982).

Hirschi's (1969) social control theory focuses on reasons behind conformity rather than delinquency and addresses the rationale behind "why not." Hirschi (1969) maintained that "the question 'Why do they do it?' is simply not the question that [social control] theory is designed to answer. The question is 'Why don't we do it?' There is much evidence that we would if we dared" (p. 34). Social control theory assumes that delinquency results when the social bonds of an individual are weak or broken. For example, social control theory hypothesizes that strong social bonds which prevent delinquent behavior are formed through parental attachment, success in school, involvement in school activities, high educational or career expectations, religious beliefs and activity, and belief in conventional values (Hirschi, 1969; Hirschi & Stark, 1969; Johnson, 1979).

Hirschi (1969) proposed four elements that are needed to develop delinquency-preventing bonds between an individual and society: 1) Attachment, 2) Commitment, 3) Involvement, and 4) Belief. *Attachment* refers to affectional ties one has with others,

such as parents, peers, and school authorities. Social control theory asserts that if the youth does not care about the expectations and wishes of others, then the individual is not bound by the norms held by members in society, and is free to deviate (Hirschi, 1969, p. 45). *Commitment* refers to the youth's actual or expected devotion to conventional goals and activities which reduces their inclination toward delinquency. (Agnew, 1993; Hirschi, 1969). Similar to the idea that "idle hands are the devil's workshop," *involvement* is defined as participation in conventional activities, such as athletic activities, school events, and doing homework. This involves the youth in approved activities and leaves little time for engagement in delinquent activities (Baker, 1981; Hindelang, 1973; Hirschi, 1969). Finally, *belief* refers to the youth's internalizing moral values which forbid delinquency (Hirschi, 1969). Of the four elements, attachment to conventional members of society, primarily to family and school, is presumed to be the strongest deterrent of delinquency (Aseltine, 1995; Hirschi, 1969).

In summary, theoretical explanations of delinquency attempt to clarify not only why some youth commit delinquent acts but also why some do not. Differential association theory purports that delinquent behavior results from youth learning deviant values and behavior patterns through involvement with delinquent peer groups. Social control theory exerts that delinquency results when social bonds leading to conformity are weak or broken. As mentioned, the model in this study is not designed to pit one theory against the other; rather, this study attempts to integrate variables suggested by both differential association and social control theories in the formulation and testing of a multivariate model.

Literature Review

Building on the theoretical orientations of differential association and social control theories, extensive empirical research has examined several predictors of delinquency. The literature has repeatedly shown the importance of peer relationships, religiosity, personality traits, school experiences, and family characteristics in predicting delinquency.

Peer Influences

Differential association theory's central focus is the importance of associations with peers in predicting delinquent behavior (Sutherland, 1947). Conversely, a weakness of social control theory, which even Hirschi (1969) recognized, was the theory's underestimation of peer influence. Consequently, some social control theory advocates stress the importance of differentiating between attachments to conventional and unconventional peers in explaining delinquent behavior (Hindelang, 1973). In support of these ideas, the literature has repeatedly documented that peers exhibit the strongest influence in predicting juvenile delinquency.

Agnew (1991) sought to determine whether or not the influence of delinquent peers is conditioned by attachment to peers, time spent with peers, and the extent of peers' delinquency. He analyzed interview data collected in 1979 as part of the National Youth Survey (Elliott, Huizinga, & Ageton, 1985), which included a probability sample of 1,725 youth, ages 11 to 17. The study measured offense-specific items, such as felony

assault, robbery, felony theft, and minor theft in addition to several status-offense items, such as running away, skipping classes, sexual intercourse, and being loud or rowdy. The researcher discovered that high levels of all three peer conditions—attachment to peers, time spent with peers, and peers' delinquency—strongly predicted delinquency.

McBride, Joe, and Simpson (1991) examined the influence of peers in their multivariate model predicting adolescent drug and alcohol use. The researchers analyzed questionnaires collected from 175 Mexican American youth as they entered into a drug prevention program and interviews conducted following intervention. Analysis consistently revealed peer deviance, including drug-use problems, to have significant association with the youths' deviant behaviors. In addition, peer pressure was found to be a significant contributor to alcohol use for males, but not females. Specifically, the researchers found that young men, who went along with the crowd, felt a strong need to be liked by the group, and followed the group, more frequently drank alcohol compared to those who resisted such peer pressure.

Similarly, Warr and Stafford (1991), also using interview data from the National Youth Survey (Elliott et al., 1985), investigated the influence of delinquent peers' attitudes and behavior on youth's use of marijuana, larceny, and cheating in school. Findings suggested that the peers' behavior has a much stronger effect on delinquency than their attitudes. Consequently, the researchers concluded that delinquent behavior is not primarily a consequence of attitudes gained from peers. Instead, the authors proposed that delinquent acts stem from social learning mechanisms, such as imitation or reinforcement, or from peer pressures to conform to group behavior.

Thornberry et al. (1994) also tested the interaction between associating with delinquent peers, adopting delinquent beliefs, and engaging in delinquent behavior. Their study used longitudinal, interview data and official records from a stratified sample of 841 at-risk seventh and eighth graders. Delinquent beliefs items evaluated how wrong the respondents thought it was to commit specific delinquent behavior. In addition, forty-four delinquent behavior and drug use items assessed youth's delinquent behavior. The authors proposed that an interactional model rather than a simple, unidirectional model may be more appropriate for predicting peer influence on delinquency. Their analysis supported an interactional process where associating with delinquent peers led to increased delinquency which in turn reinforced delinquent peer networks. In addition, results suggested that engaging in delinquent acts increased association with delinquent peers. Similarly, delinquent beliefs facilitated association with delinquent peers and involvement in delinquency; and in turn, these variables consolidated youth's delinquent belief structure.

Dishion, Andrews, and Crosby (1995) investigated the associations between delinquent boys and their close friends. The study used a longitudinal sample of 186, 13-14 years-old young men and assessed their antisocial behavior through interviews with the youth, teacher ratings and school records, juvenile court records, and participation in videotaped problems-solving tasks with a friend. Results showed that antisocial boys generally formed friendships with neighborhood youth who, thus, shared similar demographic backgrounds. In addition, the youth often met in unstructured, unsupervised activities. Moreover, the findings suggested that friendships of antisocial boys tended to

last for shorter periods of time which may be due to the interactive behavior styles of the antisocial youth.

Recently, researchers have also suggested that unstructured socializing with peers without adult supervision increases delinquency among adolescents. Osgood et al. (1996) tested their model in a follow-up sample of over 1800, 18 through 26 years-old young adults drawn from the Monitoring the Future Study (Bachman, O'Malley, & Johnston, 1991). The study measured offenses against others and property as well as several status offenses, such as heavy alcohol and drug use and dangerous driving. As expected, the findings revealed that unstructured socializing with peers, such as going to parties, riding in a car, or visiting friends, were consistently associated with delinquency whereas participation in community activities and working around the house were both related to lower rates of delinquency.

Overall, research has shown that peers exert the strongest influence on youth's delinquent activity. Specifically, most research has found peer pressure and peer delinquent behavior, rather than peer attitudes or beliefs, to have the strongest influence on delinquency. Consequently, youth's perceptions of peer pressures and peer deviance was added to the model tested.

Religiosity

The influence of youth's religiosity on delinquency has also received a great deal of attention from social science research. Although differential association theory fails to specifically address this socialization factor, a social control argument, termed the

"Hellfire Hypothesis," has been repeatedly tested since its formulation by Hirschi and Stark (1969). This hypothesis asserts that religious beliefs and rituals which encourage moral values and warn of "hellfire" consequences for sinners deter youth's involvement in delinquent behaviors. Thus, the higher the religiosity, the lower the delinquency (see Cochran & Akers, 1989 for brief review of hypothesis). Overall, support for a religion/delinquency link has been limited (Albrecht et al, 1977; Brownfield & Sorenson, 1991; Chadwick & Top, 1993). Some researchers have argued that religiosity influences delinquency only in a supportive religious environment in which delinquent activities are discouraged (Stark, 1984, 1996; Stark, Kent, & Doyle, 1980; Welch, Tittle, & Petee, 1991). Others have argued against the significance of the religiosity-delinquency link when other factors such as individual characteristics and social pressures are considered (Cochran, Wood, & Arneklev, 1994).

Brownfield and Sorenson (1991) tested the relationship between religiosity and drug use among adolescents. Three samples of over 800 white, male Seattle high school students were obtained from populations of non-delinquent youth, youth with a police record, and youth with a court record. Questionnaire items measured five types of drug use including: 1) drinking beer or wine, 2) smoking marijuana, 3) taking barbiturates or methedrine without a prescription, 4) taking angel dust, LSD, or mescaline, and 5) using cocaine. The researchers assessed church attendance, religious affiliation, and how religious the youth perceived themselves (religiosity). Small cell sizes in religious affiliation responses precluded any denominational comparisons. Both church attendance and religiosity yielded negative associations with drug use. For example, only six percent

of youth who attended religious services at least once a week reported using all five drug types compared to 23 percent who never attended church meetings.

Chadwick and Top (1993) argued that weak measures of religiosity, such as church membership and attendance, have contributed to the lack of support for the religiosity/delinquency hypothesis. Moreover, the investigators tested the hypothesis that religiosity is related to delinquency only in highly religious environments where pressures for conformity are high. They drew a sample of 1700 youth living in a low-LDS religious climate along the East coast during 1990. The study focused on status crimes (e.g., alcohol and drug use, reading of pornography, and premarital sexual activity), offenses against others (e.g., attacks on parents, teachers, and other adolescents), and offenses against property (e.g., shoplifting, theft, and vandalism). The researchers tested their model using five different measures of religiosity: 1) religious beliefs, 2) public religious behavior, 3) private religious behavior, 4) spiritual experiences, and 5) social integration into a congregation.

As anticipated by the researchers, private religious behavior, such as personal prayer and scripture reading, demonstrated a significant inverse relationship to delinquency while public religious behavior (attendance) did not. Moreover, correlations between religiosity and delinquency among adolescents living in the low-LDS environment were as strong, if not stronger, than those found in a previous study of youth living in a high LDS religious ecology (Albrecht, Chadwick, & Alcorn, 1977). The researchers also found that private religious behavior and spiritual experiences made a

significant negative contribution in explaining delinquency in a multivariate model which included family characteristics, peer pressure, and peer example.

Free (1994) studied the influence of adolescent religiosity on alcohol, marijuana, and polydrug use. Subjects consisted of 850 sociology students attending a predominantly conservative Protestant southwestern university and a major state university in the Midwest which enrolls many Catholics and liberal Protestants. All of the students came from two-parent homes, and nearly all were White (96 percent). Questionnaire items assessed several dimensions of religiosity including ritualism, religious devotion, and salience of religion. Analysis showed that religiosity was negatively related to minor delinquency and alcohol use for all youth as well as to illicit drug use for polydrug users.

Cochran, Wood, and Arneklev (1994) used social control theory as well as arousal theory to test the relationship between religiosity and delinquency. The authors analyzed self-report data from 1,600 high school students living in Oklahoma. Social control theory items measured internalized control (self-esteem and socialization), parental control (parental supervision and family structure), and institutional control (school attachment and commitment). Arousal theory items assessed the youth's tendencies for risk-taking and impulsiveness behaviors as well as preferences for physical activities. Measures of religiosity were limited to church attendance during the last month and a four-point scale item assessing the importance of religion in their life. Fifteen delinquency items were combined into three scales: 1) interpersonal delinquency (e.g.,

assault and robbery), 2) property theft (e.g., larceny and auto theft), and 3) property damages (e.g., vandalism, arson, and burglary).

The researchers found religiosity negatively related to delinquency; however, when arousal and social control indicators were entered into the model, religiosity's contribution diminished to insignificance. The only exception to this finding was religiosity's significant negative relationship to the use of legalized substances, such as tobacco and alcohol. Consequently, the authors concluded that religiosity's relationship to delinquency is indeed spurious.

Recently, Benda and Corwyn (1997) also investigated the relationship between religiosity and delinquency while controlling for attachment to parents, commitment to education and careers, involvement in homework and school activities, and belief about personal moral standards (social control theory) as well as peer associations, modeling, reinforcement, and rationalization (social learning theory). The researchers studied 724 high school students living in the Midwest. The study examined how often the youth had committed crimes against others, crimes against property, and status offenses in the last two months. Religious factors included church attendance, religiosity (time in prayer, Bible study, and financial contribution), and evangelism (talking about religion with family and friends, sharing joys and problems of religious life, and trying to convert someone).

When variables representing social control and social learning theories were controlled for, the relationships between church attendance and religiosity with crime and status offenses were reduced to insignificance. Surprisingly, however, evangelism was

found to be negatively related to crime even after controlling for social control and social learning theories. Based on these findings, the authors concluded that:

> It seems likely that church attendance and religiosity are unrelated to crime because they are more superficial indicators of commitment to religion.... Evangelism appears to represent a deeper commitment to religion that would inhibit criminal impulses, and yet it is unrelated to status offenses because adolescence is a period of experimentation, even with the milder forms of delinquency such as alcohol use, for all youths (Benda & Corwyn, 1997, p. 90).

In addition, Litchfield, Thomas, and Li (1997) investigated several dimensions of religiosity as mediators between parenting practices and juvenile delinquency. In two separate studies, the researchers used data from over 1,500 LDS adolescents drawn from a representative sample of church congregations from across the United States. Delinquency items assessed in the first study included drinking of beer, smoking cigarettes, and reading pornographic books and magazines. Delinquency was assessed in the second study again using tobacco and alcohol use, as well as marijuana use, premarital sex, fighting, stealing, vandalism, and vulgar talk, jokes and films. The authors measured four dimensions of religiosity including public religiosity, private religiosity, family religious behavior, and future religious plans. Parenting practices included youth's connection with their mother, parental monitoring, and degree of psychological autonomy granted to youth by their parents.

Results showed that public religious behavior was not directly related to adolescent delinquency. On the other hand, private religious behavior was significantly associated with delinquency. In addition, the researchers found that private religious behavior was a strong predictor of future religious plans which, in turn, was related to

lower delinquent involvement. Furthermore, while parental behaviors exerted an independent influence on predicting delinquency, parenting practices also moderately impacted religiosity which, in turn, was negatively related to delinquency.

In summary, tests of the "hellfire hypothesis" have shown that measures of private religiosity are more strongly negatively associated with delinquent behavior compared to church membership and attendance. Moreover, the religion/delinquency relationship was found true even in a low-religious ecology where the pressures to conform are minimal. Conversely, research has suggested that the significance of religion diminishes when other factors such as personality traits, peer associations, social pressures are controlled. Based on these findings, the current model tested multiple measures of religiosity as well as included similar social control factors, such as self-esteem, parental supervision, family structure, and school involvement; social learning factors, such as peer delinquency and peer pressure; as well as arousal theory items, such as risk-taking and impulsiveness, identified by Cochran et al. (1994) and Benda and Corwyn (1997) as important in testing the link between religiosity and delinquency.

Personality Traits

Because of individual personality differences, some youth may be more likely than others to engage in delinquent behavior. While criminology research has repeatedly debated the importance of social versus biological factors, differential association theory asserts that social relations more strongly predict delinquency than personality traits (Sutherland & Cressey, 1978). However, the theory proposed that the influence of

differential association, which is the process of learning, can be combined with personality traits, which are essentially the product of learning, in predicting delinquency (Sutherland & Cressey, 1978). Conversely, social control theory addresses personality traits in terms of internalized attitudes and values which reflect the youth's commitment to conformity (Hirschi, 1969). Although limited in number, existing research has identified both positive personality traits, which we grouped as *self-esteem,* and negative personality traits, which we grouped as *rebelliousness*, as significant predictors of delinquency.

Self-Esteem. Youth's *self-esteem* and internal *locus of control* have been found to be inversely related to delinquency. For example, Rosenberg and Rosenberg (1978) examined whether self-esteem has a greater effect on delinquency than delinquency has on self-esteem. The researchers analyzed the first two waves of data from the Youth in Transition study (Bachman et al., 1972), conducted between the fall of 1966 and the spring of 1968. The probability sample included 2,213 tenth grade boys attending 87 selected high schools across the country. The study measured delinquency using five indices which included delinquent behavior at school, frequency of delinquent behavior, seriousness of delinquent behavior, theft and vandalism, and total delinquency (which combined all of the above items). Modest correlations showed a stronger relationship between self-esteem predicting delinquency compared to delinquency predicting self-esteem. Nevertheless, the association between self-esteem predicting delinquency was weak.

More recently, Rosenberg, Schooler, and Schoenbach (1989) further investigated the reciprocal relationship between self-esteem and delinquency. The researchers again performed secondary analysis on the first two waves of the Youth in Transition study (Bachman et al., 1972). The study included several indicators of delinquency, both in and out of school. Analysis showed a significant negative correlation between self-esteem and delinquency. Conversely, positive associations between delinquency and self-esteem were insignificant. Interestingly, self-esteem was found to be an important predictor of delinquency in higher socioeconomic status youth, while delinquency was positively related self-esteem in lower socioeconomic status adolescents.

Evans, Levy, Sullenberger, and Vyas (1991) also studied the relationship between self-concept and delinquency among institutionalized youth. Questionnaires were administered to 190 institutionalized males and 33 institutionalized females. Most of the youth were Black (85 percent), and the majority came from broken or single parent homes (90 percent). Compared against standardized self-esteem scores of non-delinquent adolescents, these institutionalized youth had abnormally low self-esteem, especially the girls.

Youth's locus of control, or the internalization or externalization of control in their lives, is another important aspect of self-esteem that has been used occasionally in research to predict delinquency. Ollendick, Elliott, and Matson (1980) administered the Norwicki-Strickland Locus of Control Scale (Norwicki & Strickland, 1973) to 24 Black and 66 White male delinquents within the first two weeks of incarceration in a behavior modification program. The researchers discovered that internally-oriented youth

committed fewer offenses during their stay in the program and evidenced lower recidivism rates one year following release. Conversely, externally-oriented youths responded less favorably to the program requirements and exhibited higher levels of repeated offense rates following release. Given these findings, it appears that youth who feel they have limited control over their lives are more susceptible to peer and situational pressures to commit delinquent activities.

Similarly, Gerstein and Briggs (1993) explored the influence of locus of control in violent and non-violent offenders. Their study included lengthy, semi-structured interviews with the total juvenile population of 43 serious violent offenders and 41 serious non-violent offenders who were tried and sentenced as adults in the state of Georgia over a two year period. Personality profiles showed that violent delinquents were more willing to admit their general faults and weaknesses compared to non-violent youth who more often believed they had experienced some bad luck in their lives. It seems that violent offenders perceived more internal control over their lives, and thus, were able to recognize their faults and weaknesses. On the other hand, non-violent offenders viewed their troubles as being external or beyond their control due to bad luck or misfortune. Considering these findings, the relationship between locus of control and delinquency may differ depending on the type of offense. Overall, research suggests self-esteem and internal locus of control are inversely related to delinquency.

Rebelliousness. Several negative personality traits, including *rebelliousness, risk-taking,* and *impulsiveness*, have been linked to adolescents' delinquent behavior. Smith and Fogg (1979) included rebelliousness as part of their study of psychological

precursors to drug use. The authors analyzed questionnaire data from 2,249 mostly White, middle-class, ninth to twelfth grade students participating in a five year longitudinal study. Self-reports assessed the frequency of alcohol and various types of drug use during the past year, two years, and lifetime. The researchers found that rebelliousness predicted drug use among non-users and also the degree of subsequent drug involvement of users.

More recently, Rowe and Flannery (1994) examined the influence of rebelliousness on delinquency through home interviews of 499 eligible families who spoke English and had two birth-order-adjacent siblings between the ages of 10 and 16. Twenty delinquency items adapted from Rowe (1985) assessed the youths' involvement in vandalism and theft, lying, speeding in a car, noncompliance to an adult, and aggression. Three factors--delinquency proneness, peer relations, and negative emotionality--were extracted from fifteen explanatory variables which included parental affection, personality traits, and school achievements. Delinquency proneness, with its strongest component being *rebelliousness*, explained over 20 percent of the variance in delinquency.

Krueger et al. (1994) tested the relationship between risk-taking tendencies and delinquency among 862 adolescents from New Zealand. Risk-taking tendencies were measured by self-reports while delinquency was assessed through self-reports, informant reports, and official records. Questionnaire items asked how many of 43 illegal acts the youth had committed in the past twelve months. A nominated family member or friend provided information about the youth's problems in controlling anger, doing things

against the law, vandalism, and drug use. Police and court records identified the number of police contacts and convictions. Findings showed that youth characterized by high levels of risk-taking tendencies were more involved in extensive delinquency.

Similarly, Wood et al. (1995) recently studied the relationship between sensation-seeking and impulsiveness to substance use using questionnaires from 1,179 ninth through twelfth grade students in Oklahoma. Survey items asked the respondents to indicate the number of days during the past four weeks that they had used tobacco products, drank alcoholic beverages, gotten drunk, smoked marijuana, and used hard drugs. As expected, findings showed that sensation-seeking and impulsiveness traits were positively related to substance use.

In summary, limited research has determined personality traits, such as self-esteem and rebelliousness, to be associated with delinquency. Low self-esteem has generally been linked with higher levels of delinquency while youth's internalization of control has been associated with lower delinquency and lower recidivism rates. Similarly, research has also shown rebelliousness and closely related traits, such as risk-taking tendencies and impulsiveness, to be associated with drug-use and delinquent involvement. Consequently, self-esteem, locus of control, rebelliousness, risk-taking tendencies, and impulsiveness were included as predictors in the delinquency model.

School Experiences

Differential association and social control theories offer two different perspectives in explaining the relationship found in social science research between school

experiences and delinquency. Differential association theory asserts that school influences delinquency indirectly through its exposure to delinquent and anti-delinquent behavior patterns (Sutherland & Cressey, 1978). Social control theorists, on the other hand, contend that attachments to teachers, positive school experiences, involvement in school and extracurricular activities, and future expectations for educational success directly decrease the likelihood of delinquency (Johnson, 1979).

In examining the relationship between school experiences and delinquent involvement, Finn, Stott, and Zarichny (1988) collected data from 91 status offenders and 13 adjudicated delinquents referred to the Erie County Mental Health Clinic in New York. Extensive academic achievement data included school attendance records, standardized IQ and reading scores, special education participation, grades, grade retention, school suspensions, and parents' educational backgrounds. Poor school performance was reported in almost all of the delinquents. The researchers found that:

> in a sample of 104 juvenile offenders, 43 percent were reading two or more years behind grade level, 70 percent were receiving barely passing grades or worse, 23 percent were enrolled in special education classes, 45 percent had been held back one or more grades (16 percent more than one grade), and 55 percent had been formally suspended from school one or more times, up to the maximum of 20 suspensions (Finn, Stott, & Zarichny, 1988, 158).

Although results showed school performance as an important factor in predicting delinquency, the authors cautioned against assuming the relationship is causal.

Tygart (1992) failed to find similar associations between academic achievement and delinquency. Questionnaires from 1,734 seventh through twelfth graders assessed the frequency of delinquent acts such as theft, drug and alcohol use, assault, fighting, sex, car

theft, vandalism, robbery, and carrying a weapon. No significant relationship was found between grades and total delinquency. In addition, the authors argued that while lower SES students may more frequently drop out of school, those who remained did not have higher delinquency rates compared to other students.

Jarjoura (1993) also studied the relationship between students dropping out of school and delinquent activities. The researchers analyzed 12,141 interviews from two waves of the National Longitudinal Survey of Youth, conducted by the National Opinion Research Center (Center for Human Resource Research, 1988). The sample was over-representative of populations most frequently engaged in criminal delinquent activities. Delinquency measures included violent offenses, theft, and selling drugs. Findings revealed that youth who dropped out because they disliked school showed significantly higher levels of violence and theft than those who stayed in school. On the other hand, those who dropped out because of poor grades did not significantly differ in delinquency from graduates.

Overall, support for the school experiences/delinquency relationship is mixed, especially when other factors such as socioeconomic status and academic ability are entered into the analysis. Furthermore, as emphasized above, the observed relationship is likely reciprocal in that delinquency may reduce school performance as well as the reverse. Thus, theoretical rationale and past research supported adding several measures of school experiences, including grades, participation in extracurricular activities, feelings about the importance of school, and educational aspirations, to the model.

Family Characteristics

Social control theorists argue that parental attachment and involvement in family activities have a significant and direct impact on deterring delinquent behavior (Hirschi, 1969). Research has repeatedly examined the role the family plays in adolescents' development and socialization. Specifically, family characteristics, such as family structure, family conflict, maternal employment, and parenting practices, have been studied in relationship to delinquency. However, some researchers have argued that the impact of the family is weak relative to peer and school influences (see Bahr et al., 1995 for a brief review). On the other hand, according to the differential association theory, because peers exert such a strong pressure during adolescence, the family affects delinquency more *indirectly* through its influence on youth's selection of and time spent with friends (Aseltine, 1995). While numerous researchers have tested the direct effect of family on delinquency (social control theory), comparatively fewer studies have looked at its indirect effects (differential association theory).

Family Structure and Perceived Family Conflict. Family structure, primarily comparing single, step-parent, and two-biological parent families, has repeatedly been found as important factor in predicting delinquency. Dornbusch et al. (1985) explored this relationship using a sample of 7,514 youth who participated in Cycle III of the National Health Examination Survey, a national study collected between 1966 and 1970. Measures of deviance included number of contacts with the law, arrests, times runaway, regular smoking, as well as frequency of truancy and school discipline. The findings showed that the proportion of deviant adolescents among mother-only households was

consistently greater than the proportion of deviant youth in two-parent households. Furthermore, the presence of two adults in the home was associated with lower levels of adolescent deviance; and extended households among mother-only families raised fewer deviant youth.

Similarly, Steinberg (1987) compared the influence of family structure on youth's susceptibility to negative peer pressure and deviant behavior. The sample consisted of 865 fifth, eighth, and ninth grade students attending public school in Madison, Wisconsin. Boys and girls were equally represented in the predominantly White (86 percent) sample selected from a wide range of socioeconomic classes. The researcher compared youth by three family structures, namely living with both natural parents, mother alone, and one natural parent and a stepparent. Delinquency was determined by the respondents' responses to ten hypothetical situations. Questions inquired whether the youth would choose to do a deviant behavior (e.g., vandalism, cheating on an exam, stealing, etc.) suggested by their "best friends" or if they would choose the behavior that they really thought that they should do. Results showed that youth living with both biological parents were less susceptible to peer pressure to engage in delinquent activities compared to adolescents living in other family structures. Furthermore, contrary to Dornbusch et al.'s (1985) findings, youth growing up in step-families (or in the presence of two adults) appeared to be equally at-risk for involvement in delinquency as youth living in single-parent homes.

Because single-parent families are often indicators of stressful family situations, several researchers have also sought to determine whether family structure per se or

perceived family conflict have the greatest influence on delinquency. For example, LeFlore (1988) compared the influence of family structure (number of siblings in household, family intactness, sibling rank, number of persons in household) and family conflict (family relationships, personal growth, and family system maintenance) on delinquency. Questionnaires were administered to 68 official repetitive/serious delinquents as well as 130 matched non-delinquents. Delinquent youths reported their families as less cohesive and less expressive; however, there were no significant differences between the number of youth who came from broken homes or in the number of persons living in the household. Consequently, the researchers suggested from their findings that the absence of family conflict may be more important than family structure in preventing delinquency.

Furthermore, Wells and Rankin (1991) performed a meta-analysis of 50 studies investigating the impact of broken homes. Most studies consistently found associations between broken homes and juvenile delinquency, with phi coefficients ranging from .05 to .15. In addition, the impact of family structure seemed limited to the type of delinquency. The strongest associations were found for status offenses (mainly truancy and running away) followed by drug use and violence. In addition, correlations were slightly stronger for broken families due to divorce or separation compared to single-parent families due to the death of a parent which again attests to the importance of considering the influence of family conflict rather than simply the number of adults present in the household.

Brody and Forehand (1993) assessed the association between family structure, family processes (conflict), and adolescents' deviant peer associations as well as drug and alcohol use. Participants in this study included 80 adolescents and their mothers with half of the youth raised in divorced, single-parent families and the other half living in traditional, two-parent families. Respondents were recruited through notices posted in several sites in the local communities as well as through media advertisements. Family processes were operationally defined by interparental conflict reported by the mother and by the quality of the mother-adolescent relationship.

Based on self-report data, the researchers found no differences between family structures and rates of deviant peer affiliation nor substance use. Although no significant associations were found between interparental conflict and youth problem behaviors, outcome differences were found as a function of the parent-adolescent relationship. For example, adolescents who reported high levels of parent-adolescent conflict also indicated problems with alcohol use. Likewise maternal acceptance-rejection measures were more strongly associated with affiliations with deviant peers. The authors concluded that "family processes, not divorce per se, contribute unique variance to the forecasting problems with adolescent substance use and affiliation with peers" (Brody & Forehand, 1993, p. 590).

Maternal Employment. Over the past three decades, mothers have increasingly entered the work force. In 1993, for example, 75 percent of married mothers with children ages 6-17 and 78 percent of widowed, divorced, or separated mothers of the same-aged children were employed compared to only 39 percent and 66 percent

respectively in 1960 (Statistical Abstracts, 1994, Table: 626). The dramatic increase in maternal employment in recent years has generated interest in its relationship to juvenile delinquency.

Although the effects of maternal employment have been widely studied for children, its impact on adolescents has been relatively neglected. Orthner (1990) reviewed past research related to maternal employment and adolescent development. He found mixed or no significant associations in these studies. However, Orthner (1990) emphasized that the existing research is too limited in both sample size and quality of design to conclude that no direct or indirect relationships exist between these factors.

Armistead, Wierson, and Forehand (1990) investigated the influence of maternal employment on internalizing and externalizing behavior problems. Teachers reported adolescent behavior problems by completing the Revised Behavior Problem Checklist (Quay & Peterson, 1987). Results showed no significant differences in problem outcomes between adolescents with employed mothers and non-employed mothers. However, this study suffered from several limitations. First, their sample of 63 youth was self-selected from responses to flyers and media announcements. Second, the information collected did not specify whether the mother was employed full-time or part-time. Thirdly, the only data obtained regarding adolescents' internalizing and externalizing problems came from teachers who may not know the full extent of the adolescents' behavior outside the classroom.

Hillman, Sawilowsky, and Becker (1993) examined the effects of maternal employment on adolescents' drug use and risk-taking behaviors among youth living in

two-parent families. The sample consisted of 389 high school students residing in three metropolitan areas in the Midwest. A self-report questionnaire evaluated the adolescents' drinking, smoking, and using of inhalants, marijuana, cocaine, and hallucinogens. No significant differences were found between the age in which substance use began and mothers being employed full-time compared to part-time/not employed. Furthermore, the researchers failed to find a significant relationship between maternal employment and youth's alcohol consumption, cigarette and marijuana use, or other risk-taking behaviors.

Parenting Practices. Extensive literature has also focused on the relationship between differing parenting practices and delinquency. After a comprehensive examination of this literature, Rollins and Thomas (1979) concluded that

> for approximately four decades the parent-child literature has identified at least two variables of parental behavior as critical in accounting for parental influence in the socialization of children. These variables are parental control techniques and parental support (p. 319).

Although often labeled differently, a large body of research has repeatedly found these two core dimensions, parental support and parental control, as essential in raising non-delinquent youth (Kurdek & Fine, 1994; Baumrind, 1991; Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Steinberg, 1990). Recently, Barber (1997) discussed the fundamental importance of these same core elements; however, he relabelled parental support as *family connection* and separated parental control into two distinct dimensions, namely *parental regulation* and *psychological autonomy*.

Family Connection refers to positive interpersonal relationships and emotional attachments between parents and their children. Peterson (1995) defined family

connectedness as "a process that maintains family togetherness in the form of obligations, conformity to expectations, cooperative behavior, and emotional ties" (p.21). Others have discussed connection in terms of warm, nurturing, or loving relationships between parents and children (Maccoby & Martin, 1983; Rollins & Thomas, 1979). Barber (1997) theorized that connection with parents and siblings provides children with essential social skills and a sense of security in their surroundings which would facilitate positive peer relationships and involvement in prosocial activities.

Johnson and Pandina (1991) examined the influence of parental warmth (connection) on youth's criminal activity and drug use. Two waves of longitudinal questionnaire data were collected over a three year period spanning early to late adolescence. Results indicated that father's lack of warmth and both parents' hostility towards their child was associated with delinquency among boys but not among girls. Conversely, parental hostility and lack of warmth significantly predicted alcohol use for the youngest group of girls but not boys. Moreover, parental warmth from both mother and father was only weakly related to drug-use.

Similarly, Barnes and Farrell (1992) investigated the importance of family connection, which they termed parental support, as a predictor of delinquency. The researchers analyzed interview data from 699 adolescents and their families. Parental support was defined by parental behaviors toward the adolescent aimed at making them feel valued, accepted, and loved. Analysis revealed that parental support predicted lower levels of drinking, drug-use, deviance, and school misconduct.

Likewise, Kurdek and Fine (1994) studied the influence of family acceptance (connection) on adjustment in young adolescents. Surveys were administered in classrooms to 1120 fifth through seventh grade students attending two schools in a Midwestern city. Family acceptance was measured by the youths' perception of how much family members help each other, have a feeling of togetherness, and can turn to their family for help. Results showed that family acceptance was negatively related to self-regulation problems as indicated by low grades, drug use, and other externalizing problems, such as fights, threats, and arguments with teachers.

Parental Regulation refers to parents setting rules and monitoring their children's activities. Barber (1997) proposed that inadequate regulation leads to a lack of self-discipline, and this impulsiveness leaves youth more susceptible to negative influences. Thus, poorly regulated youth are more likely to participate in delinquent behavior. Numerous studies have confirmed the importance of parental regulation. For example, McCord (1979) retrospectively examined the influence of parental supervision on delinquency using childhood observation records of 201 men. Parental regulation was observed in home visits twice a month over a five year period. The observations records were coded and later compared against juvenile and adult criminal court records. Of the 201 men, 71 had been convicted of at least one serious crime, and 43 men were classified as "juvenile delinquents" because of repeated offenses as adolescents. Parental supervision accounted for the most variance in the number of serious crime convictions even after controlling for social status and parental characteristics, such as confidence, deviance, and conflict with each other.

Similarly, Patterson and Stouthamer-Loeber (1984) investigated the importance of parental monitoring in deterring juvenile delinquency. Their sample consisted of 73 families of fourth grade boys, 76 families of seventh grade boys, and 57 families of tenth grade boys. Teachers and peers rated the delinquency of the boys. Delinquency was also measured via self-reports as well as school and court records. In addition three hour, structured interviews were conducted separately with the boys and their parents. The parents and child also participated in a video-taped problem-solving session. The researchers discovered a strong relationship between parental regulation and delinquency. The authors proposed that parental monitoring may serve a dual purpose in deterring delinquent activity. They concluded:

> Initially it [parental regulation] may determine which youths become engaged in the delinquency process. Second, it may determine which youths become recidivists. Youths characterized as recidivists were from families in which the monitoring process was even more disrupted than for those only peripherally engaged. The fact that the findings held for both the official records and for self-reported delinquency scores leads one to emphasize the potential importance of this variable (Patterson & Stouthamer-Loeber, 1984, p. 1305).

Barber and Shagle (1992) tested the relationship between parental regulation and delinquency while controlling for peer and religious influences. Their sample consisted of 473 fifth, eighth, and tenth grade students attending Tennessee public school. Delinquency items measured swearing or using dirty language, skipping school, and using alcohol or drugs. Peer involvement asked the youth how often (from 1 "never" to 4 "everyday") they spend time with their boy/girlfriend, hang out with friends, party, and talk on the phone. Religiosity was measured by how religious they felt they were and how often they attended church meetings. Findings revealed that overall peer

involvement was the strongest predictor of delinquency and that the religiosity had a moderate influence on delinquency. Moreover, even after controlling for these non-family contexts, parental regulation had a substantial direct negative effect on delinquency in addition to an indirect effect through peer involvement.

More recently, Aseltine (1995) used longitudinal data to test the influence of parental attachment (connection) and monitoring (regulation) along with friends' deviance to predict delinquency and marijuana use. During ninth through eleventh grades, three waves of interviews were conducted with a sample of 435 youth and their best friend. Not surprisingly, Aseltine (1995) found the strongest predictor of delinquency was delinquent friends. Interestingly, regulation was not directly related to delinquency but was related to lower exposure to delinquent peers which in turn reduced delinquency. On the other hand, regulation did have a direct inverse relationship to subsequent drug-use.

Psychological Autonomy refers to parents efforts to encourage rather than intrude upon the development of their children's sense of identity, efficacy, and self-worth (Barber, 1997). While youth still require parental regulation of their behavior and to pay consequences for their choices, competent adolescents also need opportunities to express independent thoughts and develop a strong sense of self. Parents who use psychological control techniques, such as guilt induction or love withdrawal, deny their children such autonomy. Although allusions have been made to autonomy in the family enmeshment and adolescent individuation literature (e.g., Bowen, 1978; Grotevant & Cooper, 1986; Minuchin, 1974), Barber (1996) argues that it is a relatively neglected construct in juvenile delinquency models.

Barber, Olsen, and Shagle (1994) tested a model which explored the unique relationships between parental regulation and psychological autonomy on external and internal problem behaviors in 524 youth attending Tennessee public schools. External problem behaviors were defined as delinquency, such as drug-use, truancy, and swearing, while internal problem behaviors included difficulties with loneliness, depression, and feeling confused. As mentioned, autonomy is measured by the absence of parental psychological control techniques, such as guilt induction or love withdrawal. The researchers discovered a significant inverse correlation between parental regulation and delinquency and an inverse relationship between psychological autonomy and youth's internalized problem behaviors.

Barber (1996) compared data from three studies to further test his model of parental regulation and psychological autonomy. The first study analyzed questionnaires from 581 youth in fifth, eighth, and tenth grades attending Tennessee public schools. The second study involved secondary analysis of videotaped interactions from 158 high-risk families participating in the Adolescent Transitions Program conducted by the Oregon Social Learning Center. Approximately half were single parent families, and two-thirds were receiving financial assistance. Finally, data from the first wave of a four-year longitudinal study of 1,000 families living in Ogden, Utah were included in the third analysis. The stratified sample included 71 percent White (16 percent Hispanic) youth enrolled in fifth and eighth grade and their parents.

In all three studies, the hypothesized unique association between lack of parental regulation and delinquency was confirmed. In the second study, however, this finding

was only observed in the mother-child dyad. An unexpected finding in the third study revealed that a lack of psychological autonomy equally predicted depression and delinquency. Further analysis of Studies 1 and 3 found the strongest association between psychological autonomy and delinquency for the younger samples and that the strength of this relationship decreased with age. Consequently, as partial explanation for this unexpected finding, the author proposed that psychological autonomy has more general effects until mid- to late-adolescence when most youth are searching for a stronger sense of independence and identity.

Recently, Barber, Thomas, and Proskauer (1997) examined the relationship between all three parenting measures, family connection, parental regulation, and psychological autonomy, in predicting delinquency. The researchers used the second wave (1995) of data from the four-year longitudinal study conducted among fifth- and eighth-grade students attending Ogden, Utah School District discussed earlier. Delinquency items included theft, swearing, skipping school, spending time with delinquent peers, and alcohol or drug use. Results showed that delinquency was significantly predicted by both parental regulation and psychological autonomy but not family connection.

Based on this review of literature, family structure, family conflict, maternal employment, and parenting practices were included in the model predicting delinquency. Most previous research tested the direct relationship of these family characteristics on delinquency. In addition, this study explores not only the direct but also the indirect

effects of family characteristics on delinquency through peer influences, religiosity, school experiences, and personality traits.

Family and Peer Influences

Recent research has also investigated the relationship between family and peers in predicting delinquency. For example, Warr (1993) hypothesized that peers may be instigators of delinquency (differential association theory) while parents may be barriers to delinquency (social control theory). The author examined the relationship between family time and parent attachment on peer delinquent influence and delinquent friendships using data from the National Youth Survey (Elliott et al., 1985). Delinquent behavior items included cheating, marijuana use, burglary, alcohol use, petty larceny, and grand larceny. Family characteristics included attachment to parents and time spent with family.

The researcher discovered that time spent with family reduced negative peer influence, and thus, reduced delinquency. Attachment to parents only produced indirect effects through inhibiting the initial formation of delinquent friendships. Consequently, the author suggested that although *quality time* is desirable, it may not be enough to counteract the negative effects of not spending *quantity time* together as a family. The author concluded:

> In an era when family time is at a premium and family structure has been shaken, the notion of the family as an effective obstacle to delinquency may be difficult to accept. But if the family is capable of counteracting one of the strongest influences on American adolescents, it cannot be easily dismissed (Warr, 1993, p. 262).

Licitra-Kleckler and Waas (1993) examined the influence of family and peer support on delinquency among high-stressed adolescents. From a larger sample of 11th and 12th grade students attending three large Midwestern high schools, a sub-sample of 175 female students and 84 male students with high stress was selected through self-reported stressful life events. Questionnaire items measured involvement in serious crimes, petty delinquency, drug and alcohol use, and school/family offenses. Questionnaire items also assessed the degree to which youth felt they received support from their family and peers. Among these high stress youth, those with high family support demonstrated lower levels of delinquent behaviors; however, a high level of peer support was not consistently related to lower delinquency.

In a longitudinal study, Simons, Wu, Conger, and Lorenz (1994) compared the influence of parents and peers on early and late starters of delinquency. Early starters were defined as adolescents who engaged in delinquency before their 14th birthday while late starters did so after this age. The researchers hypothesized that early starters would be strongly influenced by family while late starters would be more influenced by peers. Four waves of data were collected from 169 families living in small towns in the Midwest. Questionnaires and videotapes of structured family interactions were collected during two home visits conducted annually while the target child attended seventh through tenth grades. Delinquency was measured by self-reports of whether the youth had been arrested, placed in juvenile detention, gone to court, or placed on probation. Indicators for effective parenting included setting standards for children, monitoring, consistently enforcing rules, and refraining from harsh punishment. Using self-reports

and home observation records, oppositional/defiant orientation assessed the degree to which "adolescents demonstrated a coercive, noncompliant orientation in their interactions with others" (Simons et al. 1994, 257).

Results showed that parenting practices were significantly related to peer influences which predicted delinquent involvement. Among early starters, the quality of parenting predicted oppositional/defiant orientation which further predicted deviant peer associations and criminal system involvement. Similarly, among late starters, quality of parenting predicted association with delinquent peers which in turn was correlated with criminal justice involvement. However, oppositional/defiant orientation was not significantly related to late starter's deviant peer relationships nor to involvement in the criminal justice system.

Furthermore, recent research on alcohol use among adolescents further suggested that the family plays a more indirect role in influencing adolescent behavior through peers and educational commitment. Bahr, Marcos, and Maughn (1995) randomly sampled 27,000 high school students living in Utah. The study assessed the frequency and amount of alcohol consumption. Family measures included attachment to parents and family drug use. Peer influences were measured by asking how many of the best friends drank alcohol and used drugs. Educational commitment included the importance of getting good grades, time spent on homework, and educational expectations. Results showed a strong relationship between family bonds and educational commitment which, in turn, lessened adolescents' use of alcohol. Similarly, family bonds also was moderately associated with the number of close friends who used drugs which, in turn, increased

adolescents' alcohol use. Family drug use also indirectly affected alcohol use through peer drug use. Thus, it seems that while the family only weakly affected alcohol consumption directly, it had a strong indirect effect on alcohol use through peers and educational commitment.

As theory would suggest, research has shown that family and peers play an important role in predicting delinquency. Moreover, the reviewed research findings support testing the indirect effects of family through the influence of peers on delinquency in our model. It was expected that family would indirectly affect delinquency through its influence on youth's ability to resist peer pressure and peer selection.

The Delinquency Model

Based on the theoretical ideas suggested by the differential association and social control theories as well as the above review of literature, this study tested a model with two dimensions of peer influence, six dimensions of religiosity, two dimensions of personality traits, four dimensions of school experiences, and four dimensions of family characteristics as predictors of juvenile delinquency. This rather complex model is presented in Figure 1. While previous studies have examined these variables alone or in combination of one or two factors, comparatively fewer studies have examined the strengths of all of these predictors concurrently. Consequently, the delinquency model in this study controlled for peer influences, religiosity, personality traits, school experiences, and family characteristics simultaneously in order to test the comparative strengths of these factors in predicting delinquency. The model was also structured in order to test both the direct and indirect effects of family characteristics.

— Figure 1 about here —

Methods

Data Collection

Data were collected from LDS teenagers living in two different religious ecologies in the United States. A mail questionnaire survey was conducted in the spring of 1995 with a sample of 1,078 teenagers living in Portland, Oregon and Seattle, Washington. A sample from the Pacific Northwest was selected because this area has the lowest religious ecology in the United States (Stark, Kent, & Doyle, 1980). A second mail survey was conducted in the fall of 1995 with a sample of 1,849 adolescents living in Utah County, Utah. This county has an exceptionally high LDS religious ecology. All of the young people included in the study were eligible for enrollment in LDS seminary. Seminary involves religious instruction classes that meet early in the morning before public school; or in some locations, students are released from public school to attend. Most LDS youth in these religious ecologies were enrolled in seminary, regardless of their church activity. Thus, the sampling frame included nearly all LDS youth in the two areas.

A packet was sent to the parents of the young people with a letter explaining the study and asking permission for their child to participate. They were informed that the questionnaire asked about sensitive behaviors such as delinquency, drug use, and sexual activity. Parents were advised to return their mailing label in the enclosed business reply envelope if they did not want their child to complete the questionnaire and no follow-up contacts would be attempted. Only three parents in the Pacific Northwest and four

parents in Utah declined allowing their children the option to participate. Parents were also instructed to give the questionnaire to their children and to allow them to complete it in privacy. A letter to the young people described the study, asked their participation, and promised anonymity. They were instructed to fill out the questionnaire by themselves and to return it in the enclosed business reply envelope.

A postcard reminder was mailed approximately three weeks after mailing the first packet. A complete packet with a modified cover letter, questionnaire, and return envelope was sent one month following the initial mailing. A final appeal was made two months after the first approach with another complete packet. This procedure produced 658 completed questionnaires in the Pacific Northwest. The sample was reduced by 81 youth because the packets mailed to their families were undeliverable by the Postal Service. The response rate was 66 percent. Over a thousand (N=1,122) questionnaires were returned in Utah County. Only 39 potential respondents were removed from the sample because of inadequate addresses. The response rate was 62 percent. The combined response rate for both samples was 63 percent. This moderate response rate may suggest a bias in the number of active compared to less active LDS youth who returned their questionnaires. Furthermore, because the sample consisted of only LDS youth, it limits the generalizability of its findings.

Measurement of Variables

Delinquency

In general, LDS youth have a relatively low frequency of delinquency compared to adolescents across the nation. For example, only 23 percent of LDS young men and 20 percent of LDS young women in a national sample reported having ever drunk alcoholic beverages compared to 81 percent and 80 percent respectively for the entire sample. Likewise, only 12 percent of LDS males and seven percent of LDS females indicated ever using marijuana compared to 39 percent of the males and 31 percent of the females in the same national sample (Johnston, Bachman, & O'Malley, 1993). In addition, another national study conducted in 1988 reported that 77 percent of young men and 66 percent of young women had experienced sexual intercourse compared to 10 percent and 17 percent respectively among LDS youth (The Alan Guttmacher Institute, 1994).

Consequently, asking the youth in our study how often they had committed each offense during the past year or two years would have produced little variation in delinquency. Because of this, we asked if the youth had "ever" committed the delinquent acts. Thus, delinquency was measured by 40 items that asked whether the youth had *ever* engaged in certain specific activities, and if so, how often he or she had *ever committed* each offense. In other words, the respondent first reported whether he or she had ever engaged in a particular activity; and if they had, then they recorded how often they had done so.

Offenses against others were determined by 15 items involving attacks on peers, school officials, and parents. **Offenses against property** were assessed by 11 items focusing on activities such as shoplifting, theft, and vandalism. **Status offenses** were measured by 14 items that focused on alcohol and drug use as well as premarital sexual behavior.

The frequency of committing the various offenses were used to compute a composite delinquency score for each respondent. Whether or not the youth had ever committed a delinquent act (0=never done/ 1=done) was added to the number of times they reported having committed each act. The computed delinquency items were then submitted to principle component factor analysis. As anticipated, factor analysis produced three delinquency scales—offenses against others, offenses against property, and status offenses. Consequently, the means of these items were used as indicators of the three delinquency scales in later analysis.

The factor weights and eigenvalues for the delinquency scales are presented for males and females in Table 1. The factor weights are fairly strong, ranging from .42 to .84. The eigenvalues for the delinquency scales ranged between 3.98 and 5.79. In addition, a Chronbach's alpha coefficient was computed for each delinquency scale by gender. The alpha coefficients for the delinquency scales ranged from .78 to .85. Thus, the factor weights, eigenvalues, and alpha coefficients indicate relatively strong, independent delinquency scales. Based on the factor analysis results, mean scores

calculated for offenses against others, offenses against property, and status offenses for each youth were entered in the LISREL model as separate indicators of delinquency.

— Table 1 about here —

Peer Influences

Peer pressure was determined by asking whether their friends had tried to get them to do 27 of the 40 deviant activities. The number of activities was reduced since peer pressure did not seem relevant for some activities such as being arrested. The response categories were "yes" or "no." The number of "yes" replies were summed to provide a measure of peer pressure. In addition, the youth were asked how many of their friends were LDS. Response categories ranged from one to five respectively and included "none", "a few", "about half", "most", and "all". It was anticipated that youth with higher number of LDS peers would experience less negative peer pressure, especially for activities against unique LDS standards, such as abstaining from tobacco, alcohol, and premarital sex.

The peer pressure items which were identical to the delinquency items were submitted to principle component factor analysis. Three independent factors related to offenses against others, offenses against property, and status offenses emerged. The factor weights, eigenvalues, and alpha scores are recorded in Table 2. The factor weights ranged from .50 to .80. The eigenvalues for the peer pressure scales ranged from 2.09 to 6.24. In addition, a Chronbach's alpha coefficient was computed for each peer pressure scale. The alpha coefficients ranged from .65 to .88. Again, these tests are evidence of

strong, unidimensional scales. Mean scores were calculated for peer pressure to commit offenses against others, property offenses, and status offenses and were entered in the LISREL model as indicators of peer pressure.

— Table 2 about here —

Peer example refers to having friends who actually had engaged in delinquent activities even though they may not pressure the youth to be involved in delinquency. It was measured by asking how many of the respondents' friends have engaged any of the 40 delinquent activities. The response categories were 1 "none", 2 "some", 3 "most", or 4 "all."

The peer example scales items were also submitted to principle component factor analysis. The three factors related to the three delinquency types emerged. The factor weights and eigenvalues for the peer example scales are presented by gender in Table 3. The factor weights ranged from .58 to .85. The eigenvalues for the peer example scales ranged between 6.01 and 9.68. Furthermore, Chronbach's alpha coefficients computed for each peer example scale ranged from .89 to .94. The mean values for the number of friends who had committed the three types of delinquent activities were used as indicators of friends' delinquent example in the LISREL model.

— Table 3 about here —

Religiosity

We included six dimensions of religiosity in the questionnaire (Chadwick & Top, 1993). **Religious beliefs** were measured by ten questions examining traditional Christian

beliefs as well as beliefs about unique LDS doctrines. **Private religious behavior** was assessed by four questions about the frequency of personal prayer, reading of the scriptures, fasting, and paying of tithing. Four questions about frequency of attendance at various church meetings gaged **public religious behavior**. Three questions also probed the youths' history of **spiritual experiences**. Eight items assessed youths' feelings about the **importance of religion** in their lives. **Social Integration** involved adolescents' feelings of acceptance by fellow church members and leaders and was measured by three items. Response categories for the attitudinal and belief items ranged on a five point scale from 1 "strongly disagree" to 5 "strongly agree". Five response categories for the frequency of private and public religious behavior ranged from 1 "never" to 5 "very often".

Replicating the procedures used in an earlier study, oblimin rotation factor analysis was performed on the religiosity scales (Chadwick & Top, 1993). As expected the six religiosity dimensions emerged as distinct, unidimensional scales. The factor weights, eigenvalues, and Chronbach's alpha scores are recorded in Table 4. The factor weights were relatively strong, ranging from .55 to .92. The eigenvalues for the religiosity scales ranged from 2.02 to 7.31. Moreover, the alpha coefficients ranged from .75 to .96. This is again evidence of strong scales. The mean values for each of the six dimensions were used as indicators of religiosity in the LISREL model.

— Table 4 about here —

Personality Traits

Self-esteem represented positive personality traits and was measured with two standard scales. First, Rosenberg's (1965) ten-item self-esteem scale was used as were eight items from Norwicki and Strickland's (1973) locus of control scale. The five response categories ranged from 1 "strongly disagree" to 5 "strongly agree". Five of the self-esteem and one of locus of control items were recoded to reflect a high self-esteem and internal locus of control score.

Rebelliousness represented more negative personality traits and was determined by items from three scales focusing on rebelliousness, risk taking, and impulsiveness. Eight items, five of which were adapted from Smith and Fogg (1979), gaged rebellious tendencies in the young people. A sample item is: "I like to shock or 'freak out' my parents or other adults just for the fun of it". Three risk-taking items, two of which were taken from Bachman, Johnston, and O'Malley (1990), were asked. An example is "I get a real kick out of doing things that are a little dangerous". Impulsiveness was gaged by three items adapted from the California Psychological Inventory (Gough, 1965). An example is "I often act on the spur of the moment without stopping to think". The response categories for the rebelliousness scales also ranged from 1 "strongly disagree" to 5 "strongly agree".

Table 5 shows the factor weights, eigenvalues, and reliability scores by gender for the personality scales. The factor weights ranged from .56 to .90. The eigenvalues for the personality scales ranged from 1.86 to 5.70. The Chronbach's alpha coefficients ranged from .69 to .91. Again, this is evident of strong, unidimensional scales. Mean

values for self-esteem and locus of control were used as indicators of self-esteem in the LISREL model. Likewise, rebelliousness, risk-taking, and impulsiveness were used as indicators of rebelliousness in the LISREL model.

— Table 5 about here —

School Experiences

Four dimensions of **school experiences** were included in the model. The youth were asked what **grades** they received in school. Eight response categories ranged from 8 "mostly A's" to 1 "D's and F's". The students were asked in which **extracurricular activities**, including sports, music, student government, student newspaper/yearbook, and various academic and vocational clubs, they were involved. They were asked to check all the activities in which they participated. Their responses were summed as an overall score of extracurricular participation. The **importance of school** was assessed using a single item which asked how important it was to them to receive good grades in school. Four response categories ranged from 1 "not important" to 4 "extremely important". **Educational aspirations** were also measured by a single item which asked the youth's educational expectations. Six possible responses ranged from 1 "I don't expect to finish high school" to 6 "I expect to get an advanced degree after graduation from college". These four items were entered as separate indicators of school experiences in the LISREL model.

Family Characteristics

Family Structure was measured by a single item which asked the youth with whom they lived. Six response categories included "mother and father", "mother and step father", "father and stepmother", "mother alone", "father alone", and "other". Responses were grouped for comparison into single- and two-parent families. **Perceived Family Conflict** was assessed by three questions concerning whether the adolescents' parents nagged and complained about each other around the house, often argued in front the youth, and yelled and screamed at each other when the youth was around. Possible responses included 1 "not true", 2 "somewhat true", and 3 "true". The mean score for these three items was entered into the model as an indicator of perceived family conflict. **Maternal employment** was measured by asking the youth if their mother was employed. Response categories included 1 "no", 2 "yes, part-time", and 3 "yes, full-time".

Parenting practices was assessed through measures of family connection, parental regulation, and psychological autonomy. The teenagers' feelings of **family connection** were measured by ten items originally developed by Schaefer (1965) and later tested by Barber et al. (1994). The items asked whether a specific activity describes the respondent's mother. A sample item is: "My mother is a person who makes me feel better after talking over my worries with her". The response categories were 1 "not like her," 2 "somewhat like her," and 3 "a lot like her". The ten connection items were repeated for the youths' perceptions of their father.

Parental regulation by mothers and fathers was determined using five items which assessed the degree parents monitor their children's activities (Barber et al., 1994;

Dornbusch et al., 1987; Steinberg, Fletcher, & Darling, 1994). This measure has been shown in research to be a reliable and powerful assessment of parental regulation (Patterson & Stouthamer-Loeber, 1984). The five monitoring questions asked the youth if their parents *really* know who are their friends, where they go at night, how they spend their money, what they do with their free time, and where they are most afternoons after school. The response categories included 1 "doesn't know," 2 "knows a little," and 3 "knows a lot". The five regulation items were asked for mother and then for father.

Psychological autonomy was measured by ten questions developed by Schaefer (1965) and recently used by Barber et al. (1994). These ten items focus on the degree mothers and fathers used psychological control as opposed to the parents' granting their child psychological autonomy. A sample item is "My mother is a person who will avoid looking at me when I have disappointed her". The response categories were the same three used for family connection, namely 1 "not like her(him)", 2 "somewhat like her (him)", and 3 "a lot like her (him)". The ten questions were first asked for the youth's mother and then repeated for their father. Responses were reverse coded to reflect the parents' granting of psychological autonomy.

Again, the items for the family scales were submitted to principle component factor analysis. The factor weights were strong ranging from .54 to .87. The eigenvalues for the family scales ranged from 2.33 and 6.47. Moreover, the alpha coefficients ranged from .78 to .95. This is again evidence of strong scales. The factor weights, eigenvalues, and alpha scores for family characteristics are reported in Table 6. The mean values of connection with father and with mother were entered as separate indicators of family

connection in the LISREL model. The same procedure was also used for family regulation and family autonomy.

— Table 6 about here —

Results

Delinquency

The percent of youth who *had ever* committed offenses against others, offenses against property, and status offenses are presented in Table 7 for both young men and young women living in the two religious ecologies. Tests of significance were performed to determine whether differences observed between young men and young women living in the Pacific Northwest and Utah Valley were significantly different.

Offenses Against Others. Offenses against others involve verbal or physical attacks against parents, peers, school officials, and church leaders. As expected, a significantly higher number of boys in both religious ecologies reported committing offenses against others compared to girls (see Table 7). Interestingly, similar rates for offenses against others were generally observed between LDS youth living in the Pacific Northwest and in Utah Valley. For example, in both religious ecologies, nearly 20 percent of the youth had cursed or sworn at their parents. One statistically significant exception, however, was that 52 percent of Pacific Northwest young men compared to only 41 percent of Utah Valley young men reported picking on or making fun of other kids.

Of those who had committed delinquent acts, the average number of times each act was committed is shown in Table 8. Answers such as "a lot" and "everyday" were entered as "50". Consequently, the average number of times specific delinquent acts

were committed are unfortunately less reliable than they would have been if respondents had given more precise, numerical estimates.

As expected, the young men from both religious ecologies who had committed offenses against others generally did so, on average, more often than young women (see Table 8). About half of the differences were statistically significant. Additionally, in most instances, the average number of times the youth had committed offenses against others were slightly higher for Utah Valley adolescents compared to those living in the Pacific Northwest. However, it is important to note that while the delinquent youth committed such acts fairly frequently, only a small proportion of the LDS youth in the sample were delinquent.

Offenses Against Property. Offenses against property refers to shoplifting, stealing, auto theft, and vandalism. Similar to offenses against others, a significantly higher percentage of young men reported committing offenses against property compared to young women in both religious ecologies (See Table 7). In addition, almost identical rates for offenses against property were reported between religious ecologies. For example, nearly 20 percent of the boys and approximately 10 percent of the girls in both religious ecologies reported purposely damaging or destroying things at a school, store, or other public building.

Moreover, the average number of times young men committed many of the offenses against property were significantly higher than young women (see Table 8). In addition, the average number of times offenses against property were committed by the

LDS youth were fairly similar between religious ecologies with young men from Utah county again committing these delinquent acts slightly more often.

Status Offenses. Status offenses refers to victimless delinquency, such as skipping school, drug and alcohol use, and premarital sexual activity. Similar to the other types of delinquency, significant gender differences were found between the percent of young men and young women living in Utah Valley who had committed status offenses (see Table 7). Moreover, a statistically higher percentage of Pacific Northwest girls committed status offenses, such as drinking alcoholic beverages, being drunk or high on drugs, and cheating on a test, compared to the girls living in Utah Valley.

Significant religious ecology differences were also found in several of the status offense items. For instance, a significantly higher percentage of Pacific Northwest males had read sexually explicit or pornographic material compared to Utah county males. Conversely, a larger percentage of Utah Valley boys reported skipping school without a legitimate excuse compared to boys living in the Pacific Northwest. Nineteen percent of Pacific Northwest girls compared to only nine percent of Utah Valley girls had ever smoked cigarettes. Similarly, a higher proportion of Pacific Northwest females indicated being involved in drug and alcohol use relative to Utah Valley females. Furthermore, a greater number of girls living in the Pacific Northwest reported being involved in heavy petting and having had sexual intercourse compared to any other group in the sample.

The average number of times the status offenses had been committed varied by religious ecology and gender (see Table 8). For example, young women from the Pacific Northwest who had been involved in heavy petting and had sexual intercourse reported a

higher incidence of this behavior than any other group. Likewise, young men from Utah county who used drugs and alcohol did so considerably more often than any other group.

— Tables 7 and 8 about here —

Peer Influences

Peer Pressure. It was anticipated that youth living in the Pacific Northwest would experience greater peer pressure because only 29 percent of the males and 32 percent of the females in this region indicated that "most" or "all" of their friends were LDS compared to 92 percent of the males and 94 percent of the females from Utah county.

As expected, a significantly greater number of LDS young men and young women living in the Pacific Northwest reported feeling pressure from their friends to engage in delinquent behavior compared to youth living in Utah Valley (See Table 9). This is especially true for peer pressure to engage in status offenses, and even more specifically, for those offenses which are closely linked to LDS religious values, such as smoking, drinking, and premarital sex. For example, 43 percent of boys and 36 percent of girls living in the Pacific Northwest report feeling pressured by their peers to smoke cigarettes compared to only 30 percent of boys and 22 percent of girls living in Utah Valley. Likewise, 40 percent of boys and 41 percent of girls living in the Pacific Northwest indicated feeling pressured by their peers to drink alcoholic beverages compared to 27 and 24 percent, respectively, of boys and girls living in Utah county. These differences are statistically significant.

Furthermore, in general, young men living in both the Pacific Northwest and Utah Valley expressed feeling significantly more pressure from their peers compared to young women living in these regions. For instance, 53 percent of males from the Pacific Northwest and 52 percent of males from Utah Valley received peer pressure to throw things at cars, people, or buildings while only 29 percent of females from the Pacific Northwest and 27 percent of females from Utah Valley reported similar peer pressure. One significant exception to this gender difference was that girls living in the Pacific Northwest reported greater peer pressure to be involved in heavy petting and to have sexual intercourse compared to any other group in the sample.

— Table 9 about here —

Peer Example. Distinct from peer pressure, peer example refers to having friends who, even though they do not pressure, actually *engage* in delinquent activities. In general, more young men than young women living in the Pacific Northwest had friends who had been involved in delinquent behavior (see Table 10). Notable exceptions to this, however, include the significantly greater number of Pacific Northwest girls' friends who had cursed or swore at their parents as well as pushed or shoved one of their parents compared to friends of Pacific Northwest boys. Similarly, a significantly higher proportion of girls compared to boys living in the Pacific Northwest had friends who had committed status offenses, such as drug and alcohol use, involvement in sexual activity, and running away from home.

Table 10 further shows that significantly more young men living in Utah Valley had friends who had committed offenses against others and offenses against property

compared to young women. The number of friends who had committed status offenses involving drugs, alcohol, and sexual activity were, in general, similar for both boys and girls living in Utah county. Exceptions to this included a greater number of Utah Valley males who had friends who used chewing tobacco and who read or watched sexually explicit or pornographic material compared to females in this region. In addition, a significantly higher percentage of Utah Valley young women had friends who had run away from home or were involved in heavy petting compared to Utah Valley young men.

A higher proportion of Pacific Northwest youth's friends, especially for young women, had been involved in delinquency compared to Utah Valley youth. Friends of girls living in the Pacific Northwest committed considerably more delinquent acts against others, property, and status offenses compared to friends of girls living in Utah county. This is, again, probably due to the significantly lower proportion of Pacific Northwest youth who had LDS friends compared to Utah Valley youth.

— Table 10 about here —

Religiosity

Religious Beliefs. As can be seen in Table 11, over 90 percent of the youth from both religious ecologies strongly believed in traditional Christian beliefs as well as unique LDS doctrine, such as God lives and is real, Jesus Christ is the divine Son of God, and the Book of Mormon is true. Moreover, young men and young women in both regions held these beliefs equally.

Private Religious Behavior. The youth in the sample also reported remarkably high levels of private religious behavior. Moreover, while private religious behavior was in general almost identical between the religious ecologies, significant gender differences were found. For instance, girls from the Pacific Northwest and Utah Valley indicated significantly higher levels of participation in praying privately and reading scriptures compared to boys from the same region.

Public Religious Behavior. Youth from both regions reported high levels of public religious behavior. Over 80 percent of the youth attended Sunday church meetings regularly. Likewise, over 80 percent participated in church social activities "very often" or "often/sometimes". One notable exception to this was the low proportion of youth who publically shared their beliefs in church. Worship services on the first Sunday of each month is a time for members to share their religious feelings with the congregation and to testify of Jesus Christ. Young people from both religious ecologies, however, reported a rather low rate of doing so. Quite similar public religious behavior was observed between males and females. Interestingly, youth from the Pacific Northwest attended their church meetings significantly more often then their Utah county counterparts.

Importance of Religion. The majority of the youth also viewed religion as important in their lives. For example, over 90 percent plan on marrying in an LDS temple and to be active in the Church. For LDS members, temples are sacred sanctuaries in which only the most obedient members may enter to make religious covenants, including marriage. Significant gender differences were again found in both religious

ecologies with young women placing a higher importance on religion. For instance, more females than males in both religious ecologies reported being a good example of living the gospel. In addition, girls in the sample more often strongly disagreed that they seldom think about religion and that there are more important things in life than religion compared to the boys. Moreover, a higher proportion of youth living in the Pacific Northwest strongly disagreed that they seldom think about religion compared to youth living in Utah county.

Spiritual Experiences. The majority of the youth in the sample indicated having felt the Holy Ghost (Spirit), having repented and been forgiven of sins, and having been guided by the Spirit in solving their problems or making important decisions. Moreover, the mean spiritual experiences scores were significantly different between religious ecologies for both young men and young women with Utah Valley youth reporting having had more spiritual experiences compared to the Pacific Northwest youth.

Social Integration. In general, the LDS youth in the sample felt accepted in their church congregations. However, significant gender and regional differences were observed. For example, boys in the Pacific Northwest felt significantly more integrated into their church congregation compared to girls from that region. Furthermore, a significantly higher proportion of Pacific Northwest males felt accepted in their church congregation compared to Utah county males.

— Table 11 about here —

Personality Traits

Self-Esteem. Table 12 shows that a large proportion of the youth from both religious ecologies have a positive attitude about themselves and feel they are able to do things as well as most people. Young men from both religious ecologies reported significantly higher levels of self-esteem compared to young women.

Locus of Control. Most of the youth in the sample indicated an internal, as opposed to external, locus of control (see Table 12). In other words, the youth did not feel hopeless about their circumstances at home or at school nor that change was beyond their control. For example, over 80 percent of the youth felt that if someone studied hard enough he or she could pass any subject and less than 10 percent of the youth strongly agreed or agreed that it is useless to try in school because other kids were just plain smarter than they are. Additionally, significant mean gender differences were found in Utah Valley with young women indicating higher levels of internal locus of control compared to young men.

Rebelliousness. Less than one-fourth of the sample expressed strong feelings of rebelliousness (see Table 12). In both religious ecologies, boys reported significantly higher levels of rebelliousness compared to girls. Conversely, relatively similar levels of rebelliousness were reported between regions.

Risk-taking. Compared to rebelliousness, a slightly higher proportion of the youth reported having risk-taking tendencies. For instance, over forty percent of the young men and approximately 25 percent of the young women get a real kick out of doing things that are a little dangerous. As might be expected, males indicated significantly

higher levels of risk-taking compared to females in the sample. Again, almost identical risk-taking tendencies were reported between the two religious ecologies.

Impulsiveness. In general, a fairly low proportion of youth from both regions reported being impulsive. For example, less than 25 percent of the youth felt that they were one of those people who blurts out things without thinking. Similar levels of impulsiveness were also reported between the males and females in the sample as well as between the two religious ecologies.

— Table 12 about here —

School Experiences

School Performance. Table 13 compares grades for males and females from both regions. As can be seen, the majority of the youth earned above average grades in school with approximately only ten percent of the youth in either religious ecology receiving less than C grades. Girls from Utah Valley earned significantly higher grades than anyone else in the sample with over 50 percent earning mostly A grades.

Importance of Grades. Likewise, a large majority of the youth in the sample placed relatively high importance on achieving high grades (see Table 13). Similar to school performance, girls from Utah Valley also attributed the highest level of importance to receiving good grades in school.

Educational Aspirations. Over 80 percent of the sample expected to graduate from college or receive advanced degrees. Relatively similar aspirations were reported between gender and religious ecologies.

Extracurricular Involvement. The youth reported high levels of involvement in extracurricular activities with less than 15 percent not involved in any activity (see Table 13). Significant gender differences were found in extracurricular involvement in both religious ecologies. More young men were involved in sports compared to young women. Conversely, the young women reported being more involved in music, student government, academic clubs, and other school clubs compared to the young men. Significant differences were also found in extracurricular participation between young women living in the Pacific Northwest and Utah Valley.

— Table 13 about here —

Family Characteristics

As can be seen in Table 14, the family characteristics in the two religious ecologies were amazingly similar. For example, a high number of youth (over 85 percent) in both the Pacific Northwest and Utah county lived with both biological parents. This is similar to Litchfield et al. (1997) who reported that over 90 percent of the LDS adolescents in their sample lived with both biological parents. In addition, 93 percent of the youths' parents were "married or sealed in the temple" which generally indicates high levels of religiosity for both parents. The majority of the youth did not perceive their parents in conflict with each other. Moreover, over 35 percent of the youths' mothers were not employed while nearly two-thirds of the youths' mothers were employed either part- or full-time. Thus, the majority of the youth in the sample lived in happy, highly religious, two-parent families.

— Table 14 about here —

Family Connection. Connection refers to emotional attachments and positive interpersonal relationships between parents and children. The youth from both regions felt fairly connected to, loved, and supported by their parents, especially their mothers (see Table 15). For instance, over two-thirds of the youth indicated their mothers often smiled at them and enjoyed doing things with them. On the other hand, even though a majority felt that both parents believed in showing their love for them, only approximately one-third of the youth perceived that they were the most important person in their parents' lives. Youth were significantly more connected to their mothers than their fathers in both the Pacific Northwest and Utah Valley.

Parental Regulation. Regulation refers to parents setting rules, monitoring their teenager's activities, and administering appropriate discipline. As can be seen in Table 15, the majority of the youth in both religious ecologies also thought that their mothers knew who their friends were, where they went at night, and how they spent most afternoons after schools. Similar to connection, the youth felt that their fathers were significantly less involved in the regulation of their activities compared to their mothers. For example, the youth believed that over 70 percent of their mothers knew where they were most afternoons after school compared to less than half of their fathers.

Psychological Autonomy. As described earlier, psychological autonomy refers to the degree to which parents allow their youth the freedom to think for themselves and the avoidance of psychologically controlling techniques such as guilt induction and love withdrawal. Unlike family connection and parental regulation, the youth perceived with fathers granted their teens overall significantly more autonomy than mothers (see Table

14). For example, the youth indicated for more fathers than mothers that it was "not like her(him)" to always try to change them nor to always tell the youth how they should behave. The majority of the youth, however, did not feel that their parents used psychological control.

— Table 15 about here —

Table 16 shows a correlation matrix for all of the dimensions measured in the study for the entire sample. It appears that peer pressure, peer example, rebelliousness, and religiosity were strongly correlated with delinquency in the bivariate correlations. Moreover, parental regulation, school experiences, psychological autonomy, and family connection were moderately correlated with delinquency. In addition, the parenting practices variables are moderately correlated with peer influences, religiosity, personality traits, and school experiences which supports the testing of the hypothesized indirect effects of family on delinquency.

In general, there seems to be no major problems with multicolinearity between variables. The only anticipated problems with multicolinearity included fairly high correlations between peer pressure and peer example (β=.626) as well family connection and parental regulation (β=.549). However, in specifying the LISREL model, we freed up the correlations between these latent variables' disturbance terms which overcame the potential multicolinearity problems.

— Table 16 about here —

LISREL Analysis

LISREL (Linear Structural Relations) was used in this study because of its capability to estimate and correct measurement error whereas other statistical methods, such as multiple regression, assumes the error is zero (LISREL VII, Jorskog & Sorbom, 1989). LISREL also combines, in one step, elements of both factor analysis and multiple regression to produce measurement and structural equation models. Furthermore, it has the capacity to estimate both direct and indirect effects of the independent variables on the dependent variable.

Measurement Model. The measurement model estimates the appropriateness of the observed variables used as indicators of the latent variables in the model. LISREL performs confirmatory factor analysis on the latent variables. As can be seen in Table 17, the Lambda X's and Lambda Y's for the latent variables appear to be very strong. Additionally, the generally accepted minimum requirement for a R^2, or the explained variance for the indicators that constitute a latent variable, is .20. All but one of the R^2's for each of the indicators in the study far exceeded the minimum. The only exception was a school experience indicator for the number of extracurricular school activities the youth were involved in. Consequently, this item was removed as an indicator for the latent variable. Furthermore, because almost identical questions were asked in assessing youth's delinquency and whether their friends had pressured them or been involved in the same delinquent acts, the error terms (theta epsilons) for these latent variables were highly correlated. Because of this, we freed the error terms of these variables in the measurement model.

— Table 17 about here —

Goodness of Fit. A valuable component assessed by LISREL is the fit between the hypothesized model and the observed data. One standard measure of this fit is a Chi-square test. Generally, the lower the χ^2 the better the fit of the model. However, the larger the sample size, the larger the χ^2 will be which reduces the utility of this measure. The revised delinquency model had a high χ^2 of 523 with 151 degrees of freedom mainly due to the large sample size. This high χ^2 raises some concerns about the fit of the model and the data.

Another indicator of the quality of fit between the hypothesized model and the data is LISREL's goodness of fit index (GFI). This index determines the relative amount of variance and covariance explained jointly by the model. The GFI ranges from zero to 1.0 with values approaching 1.0 representing a good fit. In this study, the final model's GFI of .971 denotes a relatively good fit between the model and the data. Moreover, when the degrees of freedom are considered, the adjusted goodness of fit index (AGFI) of .956 still indicates an acceptable goodness of fit.

A third indicator of fit between the proposed model and the observed data is the root mean square residual (RMSR). This measure estimates the average difference of each indicator between the hypothesized and measured models. The lower the RMSR, the better the fit. Consequently, a RMSR of .017 in the revised model suggests a well designed model. Thus, these indicators for the goodness of fit signify a relatively good fit between the hypothesized model and the data collected from the LDS youth.

Structural Model. In the structural modeling procedures, LISREL estimates the direct and indirect causal relationships between the independent and dependent variables. The results of this test for the total sample are presented in Figure 2. Because initial analyses failed to find personality traits, school experiences, and several of the family characteristics, such as family structure, family happiness, and maternal employment, as significant predictors of delinquency, they were removed from the model. Although many of these variables were strongly related to delinquency in the bivariate correlations, their influence was reduced to insignificance when the model controlled for all of the variables. Consequently, because these factors were strongly related to the other significant measures in the model, their influence on delinquency may have been mediated through parenting practices, peer influences, and religiosity. For example, the importance of family structure and maternal employment in predicting delinquency may be insignificant as long as other parenting practices, such as connection, parental regulation, and psychological autonomy, are found in the home. Moreover, because we allowed the initial analyses to guide the structure of the final model, this may have biased the study's findings, and additional samples should be tested to validate the revised model.

— Figure 2 about here —

As proposed by differential association theory, the strongest predictor of delinquency in the total sample was peer pressure. The beta coefficient between peer pressure and delinquency was .421. A beta coefficient ranges from ±1.0, with zero denoting absolutely no link between variables and ±1.0 indicating a perfect relationship.

Generally, it is agreed that in structural equation modeling a beta over .05 represents a statistically significant relationship, and a beta over .10 suggests a meaningful relationship. Similarly, a positive beta signifies a positive relationship while a negative beta denotes an inverse one. Thus, a beta of .421 reveals a strong positive relationship between peer pressure and delinquency. In other words, as peer pressure increases, delinquency also increases. However, because the error terms for peer influences and delinquency were so highly correlated, the strong relationship found between peer pressure and delinquency may be at least partially explained as an artifact of the data.

Although not as strong, peer example significantly predicted adolescent delinquency (β=.145) in the total sample which also supports differential association theory. As expected, the more delinquent friends associated with, the greater the youth's involvement in delinquent behavior. Thus, having friends who commit delinquent acts also influenced delinquency independent of whether or not these friends pressure the youth to do so.

Religiosity also had a fairly strong direct effect on delinquency even after controlling for peer influences in the total sample which supports social control theory (see Figure 2). A beta of -.192 indicates that as religiosity increases, involvement in delinquency decreases. Consequently, youth who held strong religious beliefs, participated in public and private religious behavior, had spiritual experiences, placed a high importance on religion in their lives, and felt socially integrated into their church congregation did not report as much participation in delinquent behavior.

Furthermore, in accordance with the theories discussed earlier, it was anticipated that the family would have both a *direct* (social control theory) and *indirect* (differential association theory) effects on delinquency. In other words, the family would not only directly influence delinquency but would also impact it indirectly through fostering religiosity in the youth, providing support to resist peer pressure, and encouraging them to choose socially desirable friends. None of the family variables had a significant direct effect on predicting delinquency in the total sample. However, family characteristics did produce strong indirect effects in deterring delinquency.

As can be seen in Figure 2, the findings for the entire sample revealed a strong positive correlation between connection, or youth's feelings of support and closeness to their parents, and religiosity (β=.255), which in turn, is negatively related to delinquency. Surprisingly, family connection was not significantly associated with either of the peer influences. Regulation, or youth's perception of their parents monitoring of their activities, also produced a strong indirect effect on delinquency. Specifically, parental regulation had a strong positive relationship with religiosity which again was negatively related to delinquency. Moreover, parental regulation produced a strong negative link to both peer pressure and peer example which were positively associated with delinquency. Moreover, it appears that, compared to the other parenting variables, parental regulation had the strongest influence in deterring delinquency through its impact on peer pressure and the selection of delinquent friends.

Likewise, psychological autonomy, or the freedom allowed the youth in their feelings and ideas, also had significant indirect effects on delinquency for the total sample

(see Figure 2). Similar to parental regulation, psychological autonomy had a strong positive influence on religiosity (β=.265) and a strong negative influence on peer pressure (β=-.245) and peer example (β=-.207) all of which, in turn, predicted delinquency.

In summary, family connection had a strong positive relationship with religiosity but no significant relationship with either of the peer influences. Parental regulation and psychological autonomy, on the other hand, were strongly associated with religiosity, peer pressure, and peer example. We can see from the high correlation between family connection and regulation that families who are highly connected are also more likely to have parents who regulate their children's activities. This relationship may account for the disappearance of the effect of family connection on peer influences when controlling for parental regulation.

The structural model for the total sample explained nearly 41 percent of the variance found in adolescent delinquency (R^2=.408). In other words, we included most factors identified by theory and the literature as related to delinquency and explained 40 percent of the variance. The remaining 60 percent of the variance not explained by this model can be accounted for by error in measuring the variables as well as unknown factors excluded from the model which explain delinquency. Family connection, parental regulation, and psychological autonomy also produced strong indirect effects in predicting delinquency. The family variables in the model explained approximately 25 percent of the variance in religiosity, 22 percent of the variance in peer pressure, and nearly 14 percent of the variance in peer example.

Religious Ecology Differences. Visual inspection of Figures 3 thru 6 reveals that peer pressure followed by religiosity exerted the strongest direct influence in predicting delinquency for young men and young women in both religious ecologies. Surprisingly, comparisons between religious ecologies revealed that religiosity appears to have a stronger impact in deterring delinquency for males (β=-.318) and females (β=-.261) living in the Pacific Northwest compared to males (β=-.188) and females (β= n.s.) living in Utah county. The Pacific Northwest sample was chosen because it has an extremely low LDS population and overall religious ecology while the central Utah sample was selected because of its extremely high LDS population and overall religious ecology. Thus, this finding contradicts the argument that religiosity is related to delinquency only in highly religious environments where social pressures to conform are high (e.g., Stark, 1984, 1996). Instead, our study found that religiosity had a stronger, not weaker, impact in predicting delinquency for low religious ecologies compared to high religious ecologies. On the other hand, this finding supports social control theory's "Hellfire Hypothesis" (Hirschi & Stark, 1969) discussed earlier.

Likewise, there appears to be a stronger association between peer pressure and delinquency for young women (β=.627) and young men (β=.477) in the Pacific Northwest compared to Utah county young women (β=.290) and young men (β=.378). According to differential association theory, this is probably due to the fact that youth living in the Pacific Northwest had fewer LDS friends and associated with more delinquent peers, especially from an LDS perspective, compared to youth living in Utah Valley.

The findings further suggest that, for Utah Valley girls, psychological autonomy was a stronger predictor of religiosity (β=.381), peer pressure (β=-.388), and peer example (β=-.299) compared to the other groups in the sample. The gender difference between Utah Valley youth may be explained by the fact that girls are generally given less independence in families; hence, when the Utah Valley young women were allowed more autonomy by their parents this strengthened their decisions surrounding their religious beliefs and participation as well as the negative influence of their peers. Furthermore, because Utah Valley young women had a religiously homogenous group of friends, this may have intensified their need to feel like they were making their own decisions or to assert autonomy as it relates to religiosity and peer influences. On the other hand, Pacific Northwest youth had fewer LDS friends, and thus, perceptions of independent thought were most likely not as powerful of an issue for these youth.

Omnibus tests for statistical differences in the LISREL models (which allowed all of the parameters in the model except the one being tested to vary) revealed significant religious ecology differences for young women in the correlations between the parenting variables and the other variables in the model (gamma pathways). Moreover, significant religious ecology differences in the gamma pathways were again found when the measurement model parameters were set as invariant which indicates that the religious ecology differences were not due only to differences in the measurements used in the study. Exploratory testing of the gamma pathways indicted only a significantly different path between family connection and delinquency with the pathway being significant for young women from the Pacific Northwest but not Utah Valley.

The omnibus test, however, failed to find significant differences in the paths testing the influence of religiosity, peer pressure, and peer example on delinquency (beta pathways) for young women living in the Pacific Northwest compared to Utah Valley. Additional omnibus tests also failed to find significant differences for either gamma or beta pathways for males between living in the two religious ecologies.

Thus, while visual inspection of the models' beta coefficients suggested religious ecology differences in religiosity and peer pressure, the omnibus tests of these pathways did not indicate statistically significant differences for boys or girls. Moreover, while the relationship between the parenting practices and the other variables in the model was found to be significantly different between girls in the two religious ecologies, exploratory testing did not reveal significant differences in the influence of psychological autonomy which was anticipated by the initial LISREL findings.

The models explained more variance in delinquency for Pacific Northwest youth compared to Utah Valley. For the Pacific Northwest sample, the model explained 47 percent of the variance in delinquency for boys and a little over 56 percent of the variance in delinquency for girls. In comparison, the model explained nearly 37 percent of the variance in delinquency for boys in Utah and only 32 percent of the variance for girls in Utah.

— Figures 3 thru 6 about here —

Gender Differences. In comparing Figures 3 thru 4, there appear to be several gender differences among Pacific Northwest youth. For example, the findings suggest that religiosity had a stronger negative influence on the delinquency for young men

(β=-.318) compared to young women (β=-.261) living in this religious ecology. Conversely, peer pressure seems to have a stronger influence on Pacific Northwest girls' delinquency (β=-.627) compared to boys' delinquency (β=-.477). Moreover, peer example did not significantly predict delinquency for girls, but it did for boys. It may be, however, that for boys, peer pressure and peer example combined to produce the same effect as peer pressure for girls.

For Pacific Northwest girls, but not boys, a direct negative relationship (β=-.171) was found between connection to parents and delinquency. Family connection also deterred delinquency for Pacific Northwest girls but not boys through its negative influence on peer pressure (β=-.131). Likewise, parental regulation had a strong positive association with Pacific Northwest girls' (β=.214) religiosity but not for boys. The results further suggest that parental regulation produced a stronger indirect effect on delinquency through peer pressure for boys (β=-.404) compared to girls (β=-.271) living in this religious ecology. Furthermore, while psychological autonomy had a strong positive influence on religiosity for both Pacific Northwest boys and girls, significant paths were found between psychological autonomy and peer influences for young women but not young men.

Omnibus tests for statistical differences between the Pacific Northwest's LISREL models revealed significant gender differences in the gamma (parenting practices) paths, but not in the beta (religiosity and peer influences) paths, for youth living in the Pacific Northwest. However, when the measurement model parameters were set to be invariant, gender differences in the Pacific Northwest models were not significant. Thus, the

observed gender differences may be due to differences in measurement as much as actual effect differences. Exploratory testing of the gamma pathways indicated significant gender differences in the path between family connection and delinquency, with the path being significant for young women but not young men. In addition, significant gender differences were found in the path between parental regulation and peer pressure, with parental regulation having a stronger negative influence on peer pressure for boys compared to girls living in this region.

In general, similar paths were found in predicting delinquency for both young men and young women living in Utah Valley (see Figures 5 and 6). For example, for both genders, peer influences were positively linked to predicting delinquency. The findings suggested, however, that peer pressure produced a stronger influence for Utah young women (β=.378), and peer example produced stronger influence for Utah young men (β=.225). Moreover, the path between religiosity and delinquency proved to be significant for Utah county males (β=-.188) but not females. This may be due to the lack of variation found among Utah Valley girls who reported extremely high levels of religiosity and much lower levels of delinquency compared to the boys.

Similarly, connection between youth and their parents were negatively associated with peer pressure for Utah country boys (β=-.142); however, this path proved to be insignificant for Utah country girls. Moreover, it appears that parental regulation had a much stronger influence on religiosity for Utah young men whereas psychological autonomy produced a much stronger relationship with religiosity and peer influences for

Utah young women. As mentioned earlier, it seems that psychological autonomy is especially important for girls living in Utah country.

Omnibus tests examining gender differences in Utah county again found statistically significant differences in the correlations between parenting practices and the other variables in the model. Confirmatory analyses, which fixed the measurement model parameters, also revealed significant differences in the gamma pathways which again supports that the found gender differences were not merely due to differences in measurement. Exploratory testing of the gamma pathways indicated that parental regulation had a significantly stronger positive effect on religiosity for Utah county boys compared to girls while psychological autonomy had a greater positive influence on religiosity and a greater negative influence on peer pressure for Utah county girls compared to boys. However, no statistically significant gender differences in Utah Valley youth were found in religiosity and peer influences in predicting delinquency.

In summary, the findings supported differential association theory's emphasis on the importance of peers. For youth from both religious ecologies, peer pressure exerted the strongest influence in predicting delinquency. Moreover, independent of peer pressure, having friends who are delinquent also significantly predicted delinquency for all of the youth except Pacific Northwest girls. In addition, even after controlling for peer influences, the findings supported the social control theory's argument that the higher the religiosity, the lower the delinquency. The results showed an inverse association between religiosity and delinquency for youth living in the Pacific Northwest and Utah county which contradicts the argument that social control theory only holds true in highly

religious ecologies. As suggested by differential association theory, family characteristics *indirectly* predicted delinquency through its positive relationship to religiosity and its negative associations with peer influences. Thus, while the family did not directly predict delinquency, it did exert a strong indirect influence in deterring adolescent delinquent behavior which should not be ignored.

Discussion and Conclusion

In recent years, society has experienced a dramatic and continual increase in juvenile delinquency rates. One purpose of this study was to examine in a multivariate model both the direct and indirect influences of family characteristics on juvenile delinquency while controlling for other factors suggested by differential association and social control theories as well as previous research, such as peer influences, religiosity, personality traits, and school experiences. A second purpose of this study was to compare differences in these variables between young men and young women living in a high compared to a low religious ecology and test how these similarities or differences influenced their delinquent involvement. Specifically, as argued against by Stark (1984, 1996) and Cochran et al., (1994), we wanted to test the significance of religiosity in predicting delinquency while controlling for these other factors in both religious ecologies. Findings from this study revealed four important insights.

One insight gained from this study was the importance of the family in guarding against delinquency. While several studies have found mixed or weak associations between family and delinquency, especially when controlling for peer influences, theory and previous research suggest that the family may play a more indirect role in predicting delinquency. Findings from this study revealed that family connection, parental regulation, and psychological autonomy granted within the family have significant *indirect* relationships with delinquency through heightening levels of religiosity, protecting against peer pressure, and encouraging the selection of non-delinquent friends.

In other words, establishing an environment within the home where feelings of love and connection between family members exist, where parents monitor their youth's activities and friendship formations, and where agency is granted to the adolescent in expressing their feelings and developing their own sense of identity can be a powerful protection against delinquent involvement for LDS youth. Moreover, it seems that other family characteristics, such as family structure, family conflict, and maternal employment do not have as strong an impact on delinquency when these other parenting practices are in place. As mentioned earlier, however, this may also be attributed as an artifact of the data. Consequently, additional research is needed to confirm these findings.

The second insight gained from this study was that religious ecology does not seem as important as previously suggested in understanding the link between religiosity and juvenile delinquency (Stark, 1984, 1996). Similar delinquency rates, especially for offenses against others and property, were reported by LDS youth living in high and low religious ecologies despite the extreme differences in the number of LDS friends, the amount of peer pressure they received to engage in delinquent activity, and the number of friends involved in delinquency. Overall, the youth also indicated similar personality traits and school experiences, such as grades in school and involvement in extracurricular activities. LDS youth from the two religious ecologies also came from almost identical family backgrounds, such as family structure, maternal employment, and perceived conflict in their parents' marriage. In addition, youth from both religious ecologies expressed similar perceptions of family love and support, parental monitoring of activities, and psychological autonomy granted within their families. It appears that the

morals and standards guiding the decisions and experiences of LDS youth and their families are the same regardless of religious ecology.

Likewise, youth from the Pacific Northwest and Utah Valley both reported high levels of religiosity which had a strong impact in deterring delinquency. Consequently, it seems that it was not where the youth lived that mattered *but what they did,* such as developing strong religious beliefs, attending church meetings, praying and reading their scriptures, placing importance on religion, and having spiritual experiences. In other words, religious environments (social contexts) did not determine whether or not a youth became involved in delinquency; instead, it appears that what mattered was what happened within the adolescent's family (e.g., love and support between family members, parental regulation, and granting of psychological autonomy) and within themselves (e.g., personal levels of religiosity).

Similar to the second insight, a third insight which emerged from this study was the significance of religion even after controlling for other factors. Our findings contradict Cochran et al.'s (1994) findings which suggested that the relationship between religiosity (measured by religious salience and church attendance) and delinquency is spurious after controlling for arousal theory (personality traits, such as risk-taking and impulsiveness) and social control theory (internalized control, such as self-esteem and socialization; parental control, such as parental supervision and family structure; and institutional control, such as school attachment and commitment). Our study included measures for these same items identified by Cochran et al. (1994) as well as peer influences and more extensive measures of religiosity. When peer influences were

included in the model, religiosity still emerged as significant while none of Cochran et al.'s (1994) measures proved to be significantly related to delinquency. Not only does this finding emphasize the significant role that youth's religiosity plays in deterring delinquency, but it also stresses the importance of examining several dimensions of religiosity in testing its relationship with delinquency.

The fourth insight gained from this study is support for components of both differential association and social control theories. For instance, the powerful influence of peers in predicting delinquency supported differential association theory's assertion that youth learn deviant behavior patterns through their peer associations. The effect of religiosity in reducing delinquency was consistent with social control theory's "hellfire hypothesis" which emphasized conformity to religious values. Furthermore, the strong indirect effects of the family in decreasing delinquency supported differential association theory's argument that youth's selection of peers and the time spent with peers are determined primarily by their families.

One strength of this study compared to previous research was its multivariate design which included several socialization factors, such as peers, religiosity, personality traits, school experiences, and family characteristics, that have been associated with delinquency. Most past studies have controlled for only a few of these dimensions simultaneously in predicting delinquent involvement. In contrast, our study allowed for all of these dimensions of socialization to compete against each other in order to assess the relative strengths of these variables in understanding delinquency.

Additionally, while several studies have found a direct impact of the family in predicting delinquency, others have found mixed or weak results. Recent studies which have found a direct effect of family have often not controlled for other important social influences, such as religiosity and peer groups (e.g., Barber, Thomas, & Proskauer, 1997; Litchfield, Thomas, & Li, 1997) or have weak measures of these social forces (e.g., Barber & Shagle, 1992). Consequently, because theory argues for the importance of family in adolescent socialization, this study's design tested for the indirect effects of family through peers, religiosity, personality traits, and school experiences which comparatively fewer studies have examined. Furthermore, another strength of this study was the extensive measures and several indicators used in assessing delinquency, peer influences, religiosity, personality traits, school experiences, and parenting practices. Few previous research designs have included such extensive measurements in their delinquency models.

This study also suffered from several limitations related to the generalizability of its findings. One limitation of the study was that the sample consisted of only LDS adolescents. Consequently, their path to delinquency may be different than youth of other or no religious faiths. Additionally, the LDS youth in the sample reported extremely high levels of religiosity and rather low levels of delinquency which may indicate a bias in the return of the survey. Consequently, factors predicting these youths' delinquent behavior may differ from less active, more delinquent LDS teens. Moreover, this low variation in the youths' religiosity and delinquency reduced what could be explained by the model. In addition, because the measurement errors between the delinquency and peer influences

variables were highly correlated, the strong relationship found between these variables may be an artifact of the data. Future research is needed to improve upon these limitations and validate our findings in order to better understand predictors of delinquent involvement. In conclusion, despite these minor limitations, this study provided important understanding of the direct and indirect roles peers, religiosity, and the family play in deterring delinquent behavior among two, distinct religious ecologies.

References

Agnew, R. (1991). The interactive effects of peer variables on delinquency. Criminology, 29(1), 47-72.

Agnew, R. (1993). Why do they do it? An examination of the intervening variables between "Social Control" variables and delinquency. Journal of Research in Crime and Delinquency, 30(3), 245-266.

The Alan Guttmacher Institute, (1994). Sex and America's Teenagers. New York: Guttmacher Institute, p. 20

Albrecht, S. L, Chadwick, B. A., & Alcorn, D. S. (1977). Religiosity and deviance: Application of an attitude-behavior contingent consistency model. Journal of the Scientific Study of Religion, 16, 263-274.

Armistead, L., Wierson, M., & Forehand, R. (1990). Adolescents and maternal employment: Is it harmful for a young adolescent to have an employed mother? Journal of Early Adolescent, 10(3), 260-278.

Aseltine, R. H. Jr. (1995). A reconsideration of parental and peer influences on adolescent deviance. Journal of Health and Social Behavior, 36(June), 103-121.

Bachman, J. G., Johnston, L. D., & O'Malley, P. M. (1990). Monitoring the Future: Questionnaire responses from the nation's high school seniors. Ann Arbor, MI: University of Michigan.

Bachman, J. G., O'Malley, P. M., & Johnston, L. D. (1991). Monitoring the Future Project after seventeen years: Design and Procedures. (Occasional Paper #33). Ann Arbor, MI: Institute for Social Research.

Bachman, J. G., Kahn, R. L., Mednick, M.T., Davidson, T. N., & Johnson, L. D. (1972). Youth in Transition, Vol. 1, Blueprint for a Longitudinal Study of Adolescent Boys, Ann Arbor, MI: Institute for the Social Sciences.

Bahr, S. J., Marcos, A. C., & Maughn, S. L. (1995). Family, educational, and peer influences on the alcohol use of female and male adolescents. Journal of Studies on Alcohol, 56, 457-469.

Baker, P. (1981). A multi-theoretical approach to delinquency. Social Thought, 7(4), 39-52.

Barnes, G. M. & Farrell, M. P. (1992). Parental support and control as predictors of adolescent drinking, delinquency, and related problem behaviors. Journal of Marriage and the Family, 54 (November): 763-776.

Barber, B. K. (1996). Parental psychological control: Revisiting a neglected construct. Child Development (Under review).

Barber, B. K. (1997). Adolescent socialization in context: The role of connection, regulation, and autonomy. Journal of Adolescent Research, 12(1), 5-11.

Barber, B. K., Olsen J. E., & Shagle, S. C. (1994). Associations between parental psychological and behavioral control and youth internalized and externalized behaviors. Child Development, 65, 1120-1136.

Barber, B. K. & Shagle, S.C. (1992). Adolescent problem behaviors: A social-ecological analysis. Family Perspective, 26(4), 493-515.

Barber, B.K., Thomas, D. L., & Proskauer, S. (1997). Refining parent-child research: Identifying central dimensions and testings for independent and interactive effects. Manuscript submitted for publication.

Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. Journal of Early Adolescence, 11, 56-95.

Benda, B.B. & Corwyn, R. F. (1997). Religion and delinquency: The relationship after considering family and peer influences. Journal for the Scientific Study of Religion, 36(1), 81-92.

Bowen, M. (1978). Family therapy in practice. New York: Jason Aronson.

Brody, G. H. & Forehand, R. (1993). Prospective associations among family form, family processes, and adolescents' alcohol and drug use. Behavior Research and Theory, 31(6), 587-593.

Brownfield, D. & Sorenson, A. M. (1991). Religion and drug use among adolescents: A social support conceptualization and interpretation. Deviant Behavior: An Interdisciplinary Journal, 12, 259-276.

Center for Human Resource Research (1988). NLS Handbook 1988: The National Longitudinal Surveys of Labor Market Experience. Columbus: Ohio State University.

Chadwick, B. A. & Top, B. L. (1993). Religiosity and delinquency among LDS adolescents. Journal for the Scientific Study of Religion, 32 (1), 51-67.

Cloward, R. A. & Ohlin, L. E. (1960). Delinquency and opportunity: A theory of delinquent gangs. New York: Free Press.

Cochran, J. K. & Akers, R. L. (1989). Beyond hellfire: An exploration of the variable effects of religiosity on adolescent marijuana and alcohol use. Journal of Research in Crime and Delinquency, 26(3), 198-225.

Cochran, J. K., Wood, P. B., & Arneklev, B. J. (1994). Is the religiosity-delinquency relationship spurious? A test of arousal and social control theories. Journal of Research in Crime and Delinquency, 31(1), 92-123.

Davidson, L. & Swensen, J. (1996). Salt Lake sees another boom--in crime. Deseret News, Salt Lake City, UT, May 6, No, 327.

Dishion, T. J., Andrews, D. W., & Crosby, L. (1995). Antisocial boys and their friends in early adolescence: Relationship characteristics, quality, and interactional processes. Child Development, 66, 139-151.

Dornbusch, S. M., Carlsmith, J. M., Bushwall, S. J., Ritter, P. L., Leiderman, H., Hastorf, A. H., & Gross, R. T. (1985). Single parents, extended households, and the control of adolescents. Child Development, 56, 326-341.

Dornbusch, S. M., Ritter, P., Liederman, P., Roberts, D., & Fraleigh, M. (1987). The relation of parenting style to adolescent school performance. Child Development, 58, 1244-257.

Elliott, D. S., Huizinga, D., & Ageton, S. S. (1985). Explaining Delinquency and Drug Use. Beverly Hills, CA: Sage.

Evans, R. C., Levy, L., Sullenberger, T., & Vyas, A. (1991). Self-concept and delinquency: The on-going debate. Journal of Offender Rehabilitation, 16 (3/4), 59-74.

Free, M. D., Jr. (1994). Religiosity, religious conservatism, bonds to school, and juvenile delinquency among three categories of drug users. Deviant Behavior: An Interdisciplinary Journal, 15, 151-170.

Finn, J., Stott, M., & Zarichny, K. (1988). School performance of adolescents in juvenile court. Urban Education, 23(2), 150-161.

Gerstein, L. H. & Briggs, J. R. (1993). Psychological and sociological discriminants of violent and nonviolent serous juvenile offenders. Journal of Addictions and Offender Counseling, 14, 2-13.

Gough, H. G. (1965). California Psychological Inventory. Palo Alto, CA: Consulting Psychologists Press, Inc..

Grotevant, H. D. & Cooper, C. R. (1986). Individuation in family relationships: A perspective on individual differences in the development of identity and role-taking skill in adolescence. Human Development, 29, 82-100.

Hillman, S. B., Sawilowsky, S. S., & Becker, M. J. (1993). Effects of maternal employment patterns on adolescents' substance use and other risk-taking behaviors. Journal of Child and Family Studies, 2(3), 203-219.

Hindelang, M. J. (1973). Causes of delinquency: A partial replication and extension. Social Problems, 20(4, Spring), 471-487.

Hirschi, T. (1969). Causes of Delinquency. Berkeley: University of California Press.

Hirschi, T. & Stark, R. (1969). Hellfire and delinquency. Social Problems, 17, 202-213.

Jarjoura, R. G. (1993). Does dropping out of school enhance delinquent involvement? Results from a large-scale national sample. Criminology, 31(2), 149-171.

Johnson, R. E. (1979). Juvenile Delinquency and Its Origins. Cambridge, MA: Cambridge University Press.

Johnson, V. & Pandina, R. J. (1991). Effects of the family environment on adolescent substance use, delinquency, and coping styles. American Journal of Drug and Alcohol Abuse, 17(1), 71-88.

Johnston, L. D., Bachman, J. G., & O'Malley, P. M. (1993). Monitoring the Future. Ann Arbor, MI: Survey Research Center, Institute for Social Research, University of Michigan, pp. 250, 277.

Jorskog, K. G. & Sorbom, D. (1989). LISREL VII: A guide to the program and applications (2nd Edition), Chicago, IL: SPSS, Inc.

Krueger, R. F., Schmutte, P. S., Caspi, A., Moffitt, T. E., Campbell, K., & Silva, P. A. (1994). Personality traits are linked to crime among men and women: Evidence from a birth cohort. Journal of Abnormal Psychology, 103(2), 328-338.

Kurdek, L. A. & Fine, M. A. (1994). Family acceptance and family control as predictors of adjustment in young adolescents: Linear, curvilinear, or interactive effects? Child Development, 65, 1137-1146.

Lamborn, S. D., Mounts, N. S., Steinberg, L., & Dornbusch, S. M. (1991). Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. Child Development, 62, 1049-1065.

LeFlore, L. (1988). Delinquent youth and family. Adolescence, 23, 629-642.

Licitra-Kleckler, D. M. & Waas, G. A. (1993). Perceived social support among high-stress adolescents: The role of peers and family. Journal of Adolescent Research, 8(4), 381-402.

Litchfield, A. W., Thomas, D. L., & Li, B. D. (1997). Dimensions of religiosity as mediators of the relations between parenting and adolescent deviant behavior. Journal of Adolescent Research, 12(2), 199-226.

Maccoby, E. E. & Martin, J. A. (1983). Socialization in the context of the family: Parent-child interaction. In M. E. (Ed.), P H. Mussen (Series Ed.), Handbook of child psychology: Vol. 4, Socialization, personality, and social development (pp. 1-101). New York: Wiley.

Maguire, K. & Pastore, A. L. (Eds.), (1995). Sourcebook of Criminal Justice Statistics, 1994. U.S. Dept. Of Justice, Bureau of Justice Statistics, Washington, D.C.: USGPO.

McBride, A. A., Joe, G. W., & Simpson, D. D. (1991). Prediction of long-term alcohol use, drug use, and criminality among inhalant users. Hispanic Journal of Behavioral Sciences, 13(3). 315-323.

McCord, J. (1979). Some child-rearing antecedents of criminal behavior in adult men. Journal of Personality and of Social Psychology, 37(9), 1477-1486.

Minuchin, S. (1974). Families and family therapy. Cambridge, MA: Harvard University Press.

Matsueda, R. L. (1982). Testing Control theory and Differential Association: A causal modeling approach. American Sociological Review, 47, 489-504.

Norwicki, S. & Strickland, B. R. (1973). Locus of Control Scale for Children. Journal of Consulting and Clinical Psychology, 40, 146-152.

Ollendick, T. H., Elliott, W., & Matson, J. L. (1980). Locus of control as related to effectiveness in a behavior modification program for juvenile delinquents. Journal of Behavior Therapy and Experimental Psychiatry, 11, 259-262.

Orthner, D. K. (1990). Parental work and early adolescence: Issues for research and practice. Journal of Early Adolescence, 10(3), 246-259.

Osgood, D. W., Wilson, J. K., O'Malley, P. M, Bachman, J. G., & Johnston, L. D., (1996). Routine activities and individual deviant behavior. American Sociological Review, 61(August), 635-655.

Patterson, G. R. & Stouthamer-Loeber, M. (1984). The correlation of family management practices and delinquency. Child Development, 55, 1299-1307.

Peterson, G. W. (1995). Autonomy and connectedness in families. In R. D. Day, K. R. Gilbert, B. H. Settles, & W. R. Burr (Eds.), Research and theory in family science (pp. 20-41). Pacific Grove, CA: Brooks/Cole Publishing Co.

Quay, H. C. & Peterson, D. R. (1987). Manual for the Revised Behavior Problem Checklist. Miami, FL: University of Miami Press.

Rollins, B. C. & Thomas, D. L. (1979). Parental support, power, and control techniques in the socialization of children. In W. R. Burr, R. Hill, F. Ivan Nye, & I. L. Reiss, Contemporary Theories about the Family, Vol. 1. New York: The Free Press.

Rosenberg, M. (1965). Society and the Adolescent Self-Image. New Jersey: Princeton University Press.

Rosenberg, F. R. & Rosenberg, M. (1978). Self-esteem and delinquency. Journal of youth and adolescence, 7(3), 279-291.

Rosenberg, M., Schooler, C., & Schoenbach, C. (1989). Self-esteem and adolescent problems: modeling reciprocal effects. American Sociological Review, 54, December, 1004-1018.

Rowe, D. C. (1985). Sibling interaction and self-reported delinquent behavior: A study of 265 twin pairs. Criminology, 23:223-40.

Rowe, D. C. & Flannery, D. J. (1994). An examination of environmental and trait influences on adolescent delinquency. Journal of Research in Crime and Delinquency, 31(4), 374-389.

Schaefer, E. (1965). Children's reports of parental behavior: An Inventory. Child Development, 36, 413-424.

Simons, R. L., Wu, C., Conger, R. D. & Lorenz, F. O. (1994). Two routes to delinquency: Differences between early and late starters in the impact of parenting and deviant peers. Criminology, 32(2), 247-275.

Smith, G. M. & Fogg, C. P. (1979). Psychological antecedents of teenage drug-use. Research in Community and Mental Health, 1, 87-102.

Stark, R. (1984). Religion and conformity: Reaffirming a sociology of religion. Sociological Analysis, 45, 273-281.

Stark, R. (1996). Religion as context: Hellfire and delinquency one more time. Sociology of Religion, 57(2), 163-173.

Stark, R., Kent, L., & Doyle, D. (1980). Religion and delinquency: The ecology of a "lost" relationship. Journal of Research in Crime and Delinquency, 19, 4-24.

Statistical Abstract of the United States, 1994. U. S. Department of Commerce, Table: 626.

Statistical Abstract of the United States, 1996. U. S. Department of Commerce, Tables: 14, 325.

Steinberg, L. (1987). Single parent, stepparents, and the susceptibility of adolescents to antisocial peer pressure. Child Development, 58, 269-275.

Steinberg, L. (1990). Autonomy, conflict, and harmony in the family relationship. In S.S. Feldman & G. R. Elliott (Eds.), At the threshold: The developing Adolescent (pp. 255-276). Cambridge, MA: Harvard University Press.

Steinberg, L., Fletcher, A., & Darling, N. (1994). Parental monitoring and peer influences on adolescent substance use. Pediatrics, 93(6, June), 1060-1064.

Sutherland, E. H. (1947). Principles of Criminology, Fourth Edition. Philadelphia: Lippincott.

Sutherland, E. H. & Cressey, D. R. (1978). Criminology, Tenth Edition. Philadelphia: Lippincott.

Thornberry, T. P., Lizotte, A. J., Krohn, M. D., Farnworth, M., & Jang, S. J. (1994). Delinquent peers, beliefs, and delinquent behavior: A longitudinal test of interactional theory. Criminology, 32(1), 47-83.

Tygart, C. E. (1992). Do public schools increase juvenile delinquency? Urban Education, 26(4), 359-370.

Warr, M. (1993). Parents, peers, and delinquency. Social Forces, 72(1), 247-264.

Warr, M. & Stafford, M. (1991). The influence of delinquent peers: What do they think or what do they do? Criminology, 29(4), 851-865.

Welch, M. R., Tittle, C. R., & Petee, T. (1991). Religion and deviance among adult Catholics: A test of the "moral communities" hypothesis. Journal for the Scientific Study of Religion, 30: 159-172.

Wells, L. E. & Rankin, J. H. (1991), Families and delinquency: A meta-analysis of the impact of broken homes. Social Problems, 38(1), 71-93.

Wood, P. B., Cochran, J. K., Pfefferbaum, B., & Arneklev, B. J. (1995). Sensation-seeking and delinquent substance use: An extension of learning theory. The Journal of Drug Issues, 25(1), 173-193.

Figures

Figure 1
Conceptual Model with Peer Influences, Religiosity, Personality Traits, School Experiences and Family Characteristics Predicting Adolescent Delinquency

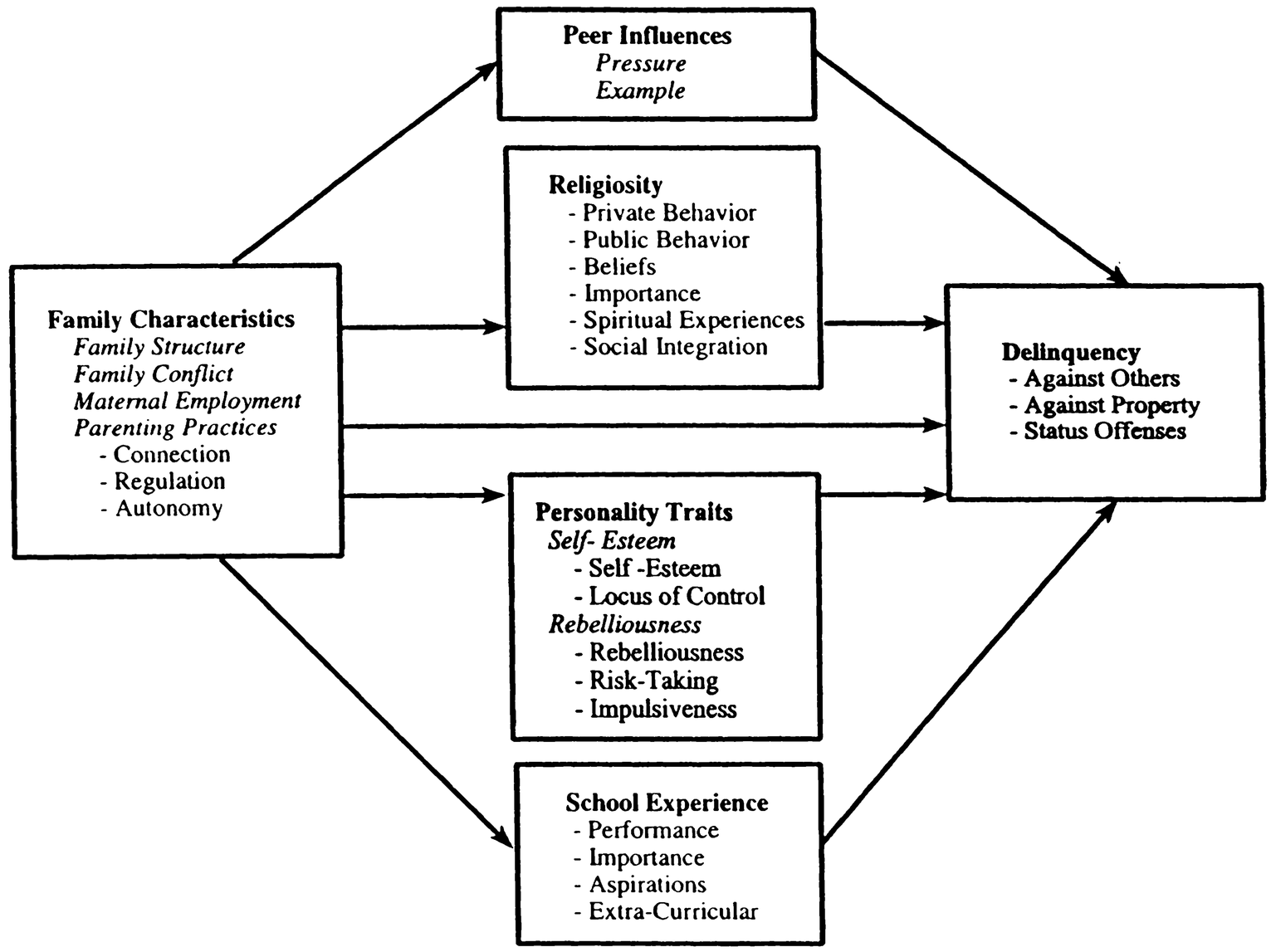
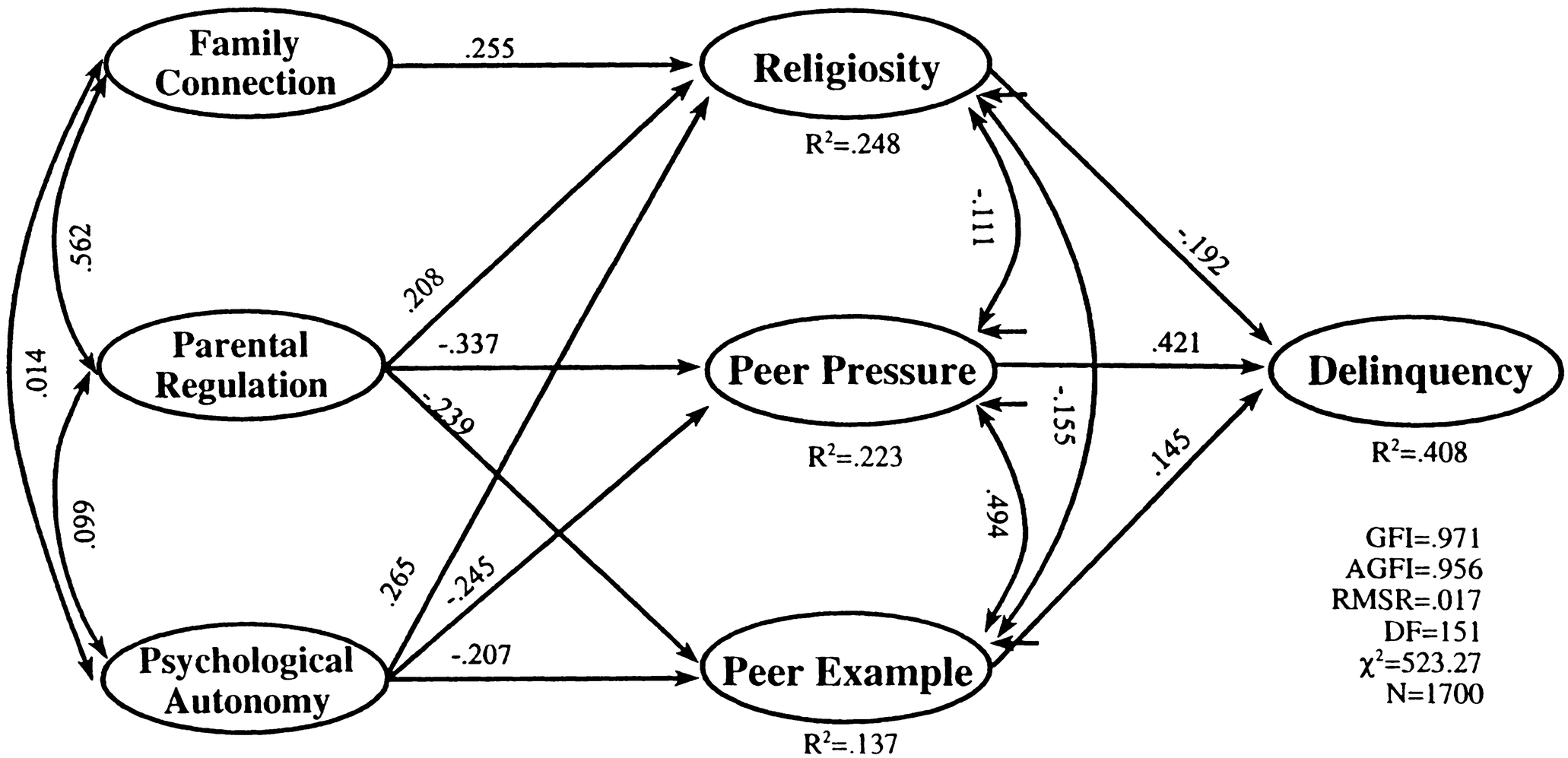
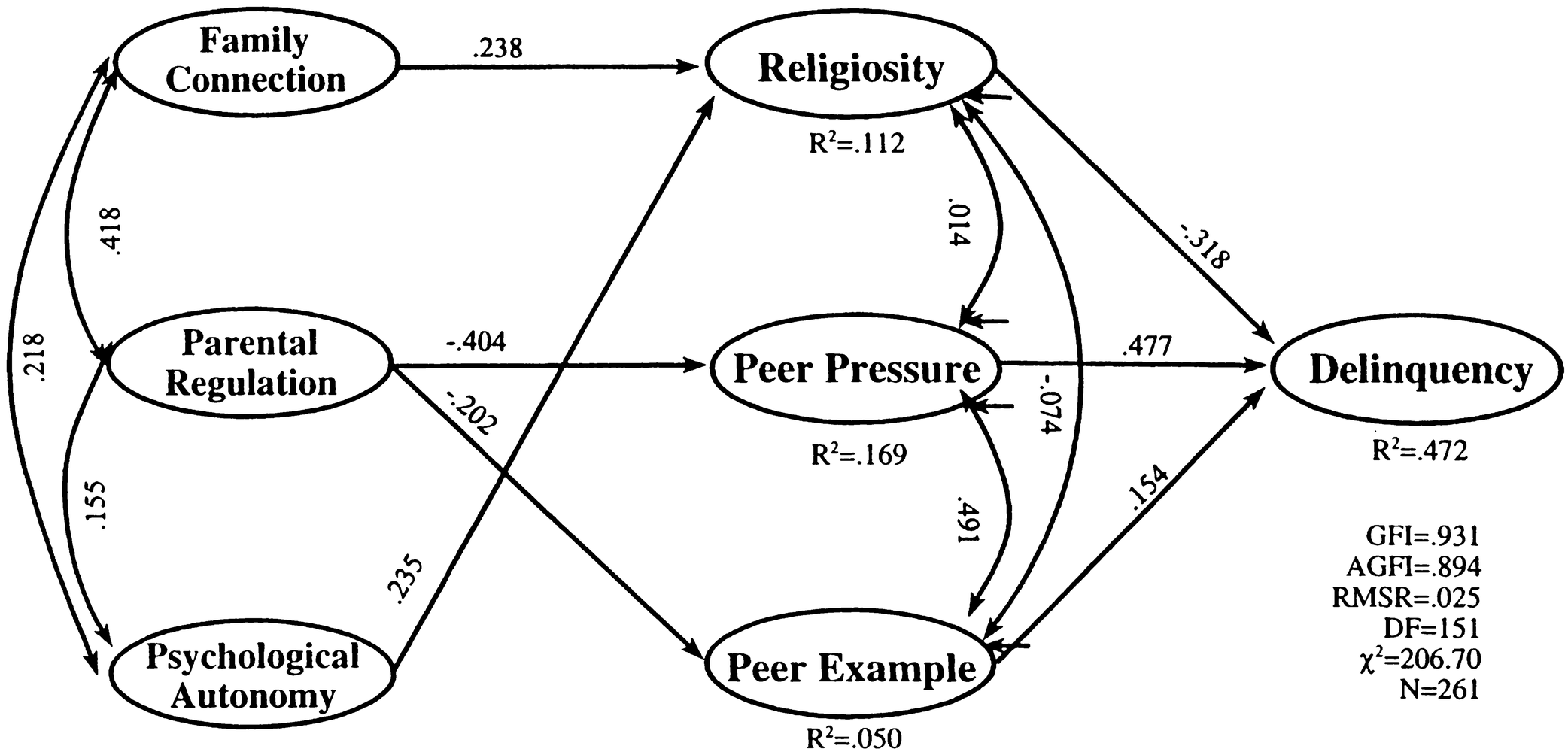


Figure 2
Structural Equation Model for Religiosity, Peer Influences, and Family Characteristics Predicting Adolescent Delinquency for the Total Sample



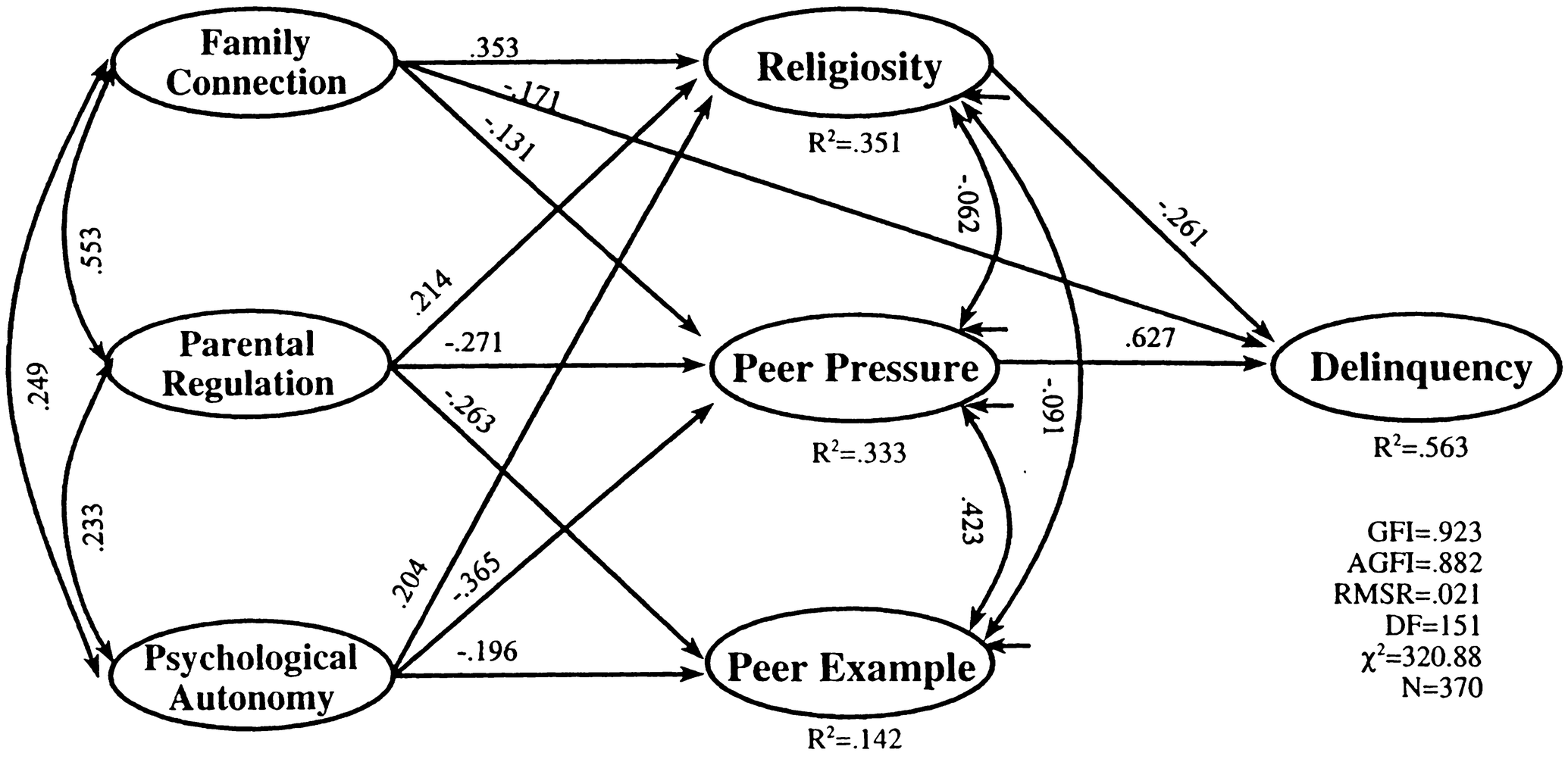
All Coefficients are signficant at the .05 level or lower

Figure 3
Structural Equation Model for Religiosity, Peer Influences, and Family Characteristics Predicting Adolescent Delinquency for Pacific Northwest Boys Only



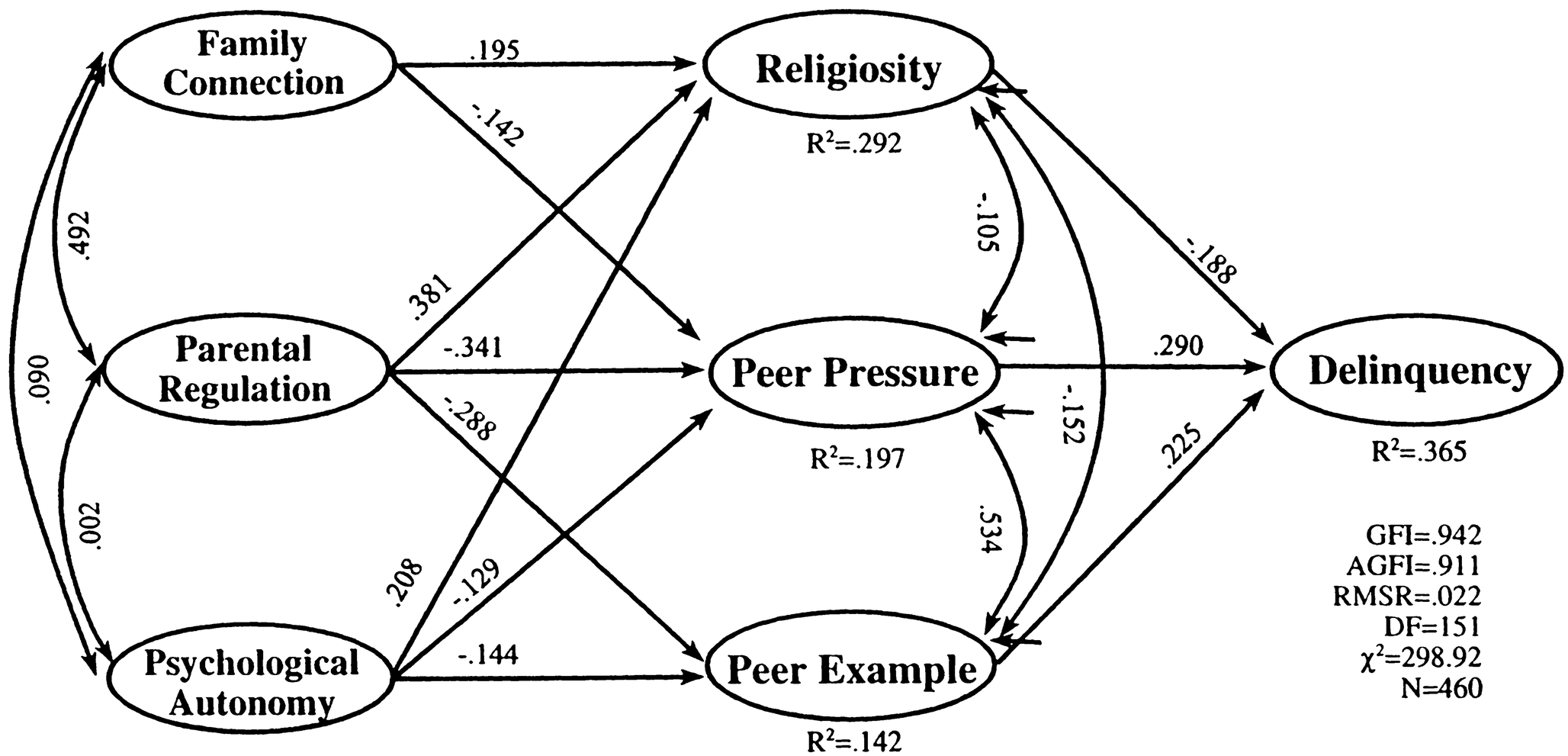
All Coefficients are signficant at the .05 level or lower

Figure 4
Structural Equation Model for Religiosity, Peer Influences, and Family Characteristics Predicting Adolescent Delinquency for Pacific Northwest Girls Only



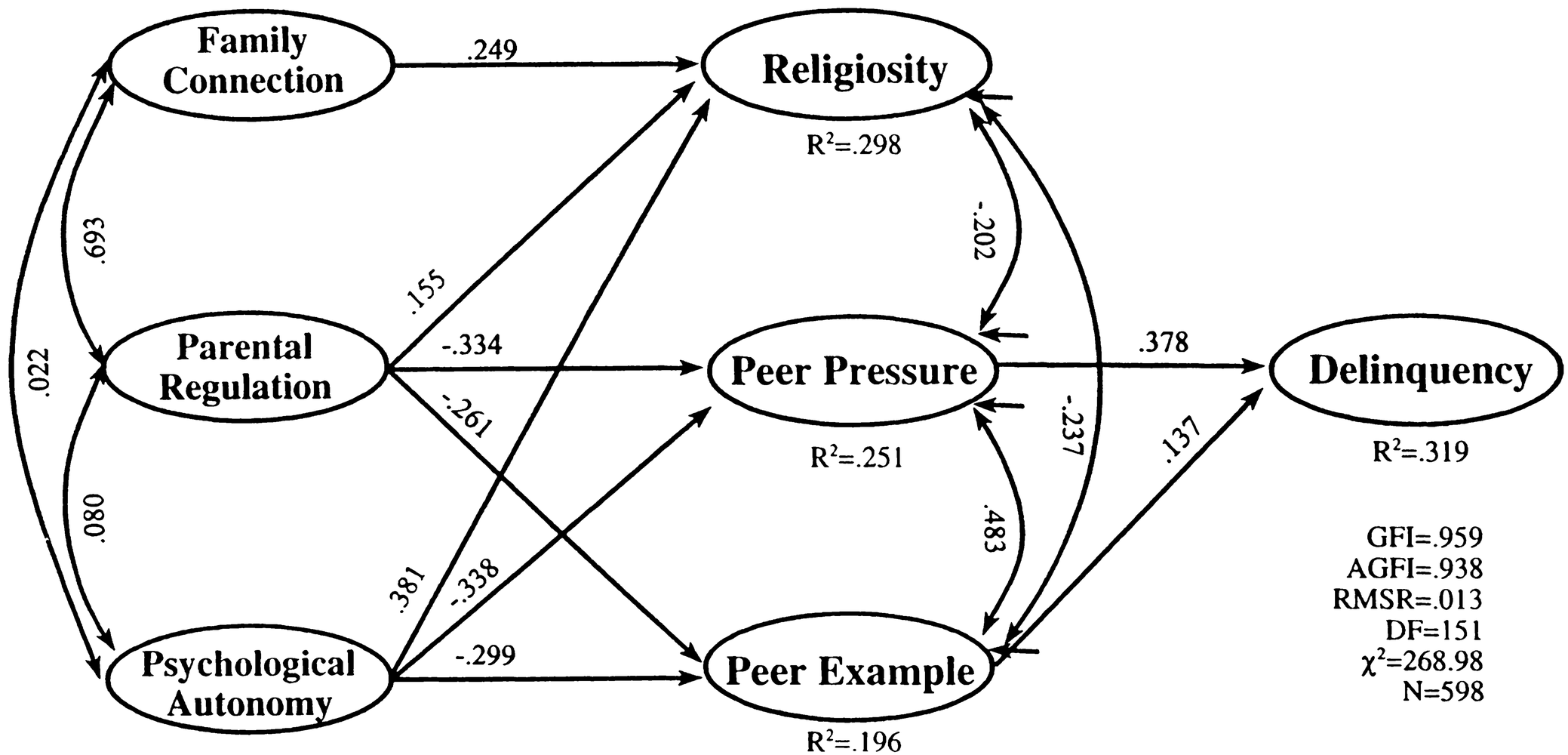
All Coefficients are signficant at the .05 level or lower

Figure 5
Structural Equation Model for Religiosity, Peer Influences, and Family Characteristics Predicting Adolescent Delinquency for Utah County Boys Only



All Coefficients are signficant at the .05 level or lower

Figure 6
Structural Equation Model for Religiosity, Peer Influences, and Family Characteristics Predicting Adolescent Delinquency for Utah County Girls Only



All Coefficients are signficant at the .05 level or lower

Tables

Table 1
Factor Weights and Reliability Scores for Delinquency Scales, by Gender

Dimension/Item	Factor Weights	
	Males	Females
Offenses Against Others		
Physically beat up other kids.	.686	.642
Hurt someone badly enough that they had to go to a doctor.	.684	.770
Threatened or attacked someone with a knife, gun, or other weapon.	.656	.764
Been in a gang fight.	.631	.601
Taken money or other things from someone else by using force or threats.	.605	.767
Picked a fight with other kids.	.590	.581
Openly defied a teacher or official at school.	.568	.588
Openly defied a teacher or leader at church.	.565	.587
Pushed, shoved, or hit one of your parents.	.548	.561
Been suspended or expelled from school.	.450	—
Cursed or sworn at one of your parents.	—	.522
Eigenvalue=	4.700	4.779
Alpha=	.805	.778
Offenses Against Property		
Stolen anything worth between $5 and $50.	.728	.684
Stolen anything worth less than $5.	.724	.740
Purposely ruined or damaged someone else's property or possessions.	.721	.627
Taken something from a store without paying for it.	.710	.672
Stolen something from someone else's locker, desk, purse, etc.	.685	.660
Purposely damaged or destroyed things at school, store, etc.	.676	.639
Thrown things (rocks, bottles, eggs, garbage, etc.) at cars, people, or buildings.	.646	.527
Gone on someone's property when you weren't supposed to be there.	.613	.496
Stolen anything worth more than $50.	.508	.533
Taken a car or other motor vehicle without the owner's permission.	.500	.417
Broken into a building, car, house, etc.	.499	.541
Eigenvalue=	4.553	3.976
Alpha=	.847	.805

Table 1 Continued

Dimension/Item	Factor Weights	
	Males	**Females**
Status Offenses		
Drank alcoholic beverages (beer, wine, liquor).	.838	.777
Used marijuana ("grass," "pot").	.837	.758
Been drunk or high on drugs.	.833	.796
Smoked cigarettes.	.817	.729
Used other drugs (heroine, LSD, amphetamines, etc.)	.715	.583
Used "smokeless" or chewing tobacco.	.657	.550
Been involved in heavy petting.	.644	.645
Used cocaine ("crack," "coke")	.502	—
Had sexual intercourse.	.474	.585
Eigenvalue=	5.785	4.898
Alpha=	.843	.798

Table 2
Factor Weights and Reliability Scores for Peer Pressure Scales, by Gender

Dimension/Item	Factor Weights	
	Males	**Females**
Offenses Against Others (Pressure to:)		
Physically beat up other kids.	.744	.634
Purposely pick on other kids, make fun of them, or call them names.	.683	—
Make obscene phone calls.	.662	—
Take money or other things from someone by using force or threats.	.603	.575
Curse or swear at one of your parents.	.518	.565
Join in a gang fight.	—	.585
Shove or hit one of your parents.	—	.569
Eigenvalue=	2.090	6.235
Alpha=	.646	.877
Offenses Against Property (Pressure to:)		
Take something from the store without paying for it.	.789	.783
Steal anything worth less than $20.	.785	.776
Purposely ruin or damage someone else's property or possessions.	.666	.595
Steal anything with more than $20.	.658	.639
Throw things (rocks, bottles, eggs, etc.) at cars, people, or buildings.	.633	.586
Break into a building, car, house, etc.	.583	—
Take a car or other motor vehicle without the owner's permission.	.561	.524
Eigenvalue=	3.170	2.814
Alpha=	.796	.736

Table 2 Continued

Dimension/Item	Factor Weights	
	Males	Females
Status Offenses (Pressure to:)		
Drink alcoholic beverages (beer, wine, liquor).	.779	.795
Use marijuana ("grass," "pot").	.747	.752
Smoke cigarettes.	.728	.744
Use "smokeless" or chewing tobacco.	.677	.601
Use other drugs (heroin, LSD, amphetamines, etc.)	.669	.576
Be involved in heavy petting.	.665	.691
Watch sexually explicit or pornographic movies, videos, or television programs.	.638	.479
Read sexually explicit or pornographic books or magazines.	.615	—
Have sexual intercourse.	.610	.669
Use cocaine ("crack," "coke").	.579	—
Skip school without a legitimate excuse.	.521	.500
Run away from home.	—	.517
Sell marijuana, cocaine, or other drugs.	.500	—
Eigenvalue=	4.808	6.235
Alpha=	.864	.877

Table 3
Factor Weights and Reliability Scores for Peer Example Scales, by Gender

Dimension/Item	Factor Weights	
	Males	Females
Peer Example		
Offenses Against Others		
Picked a fight with other kids.	.800	.773
Taken money or other things from someone by using force or threats.	.777	.710
Physically beat up other kids.	.774	.779
Hurt someone badly enough that they had to go to a doctor.	.771	.731
Openly defied a teacher or leader at school.	.726	.692
Been in a gang fight.	.711	.684
Threatened or attacked someone with a knife, gun, or other weapon.	.709	.692
Purposely picked on other kids, made fun of them, or called them names.	.698	.650
Cursed or sworn at one of their parents.	.687	.623
Pushed, shoved, or hit one of their parents.	.681	.657
Called someone on the telephone to threaten or bother them.	.675	.609
Openly defied a teacher or leader at church.	.665	.609
Eigenvalue=	6.672	6.011
Alpha=	.912	.888
Peer Example		
Offenses Against Property		
Stolen anything less than $5.	.846	.801
Purposely ruined or damaged someone else's property or possessions.	.835	
Stolen anything worth between $5 and $50.	.835	.820
Taken something from the store without paying for it.	.819	.782
Purposely damaged or destroyed things at school, store, etc.	.796	.755
Stolen something from someone else's locker, desk, purse, etc.	.774	.769
Thrown things (rocks, bottles, eggs, garbage, etc.) at cars, people, or buildings.	.766	.712
Gone on someone else's property when they weren't supposed to be there.	.759	.653
Stolen anything worth more than $50.	.752	.743
Broken into a building, car, house, etc.	.702	.719
Taken a car or other motor vehicle without the owner's permission.	.661	.674
Eigenvalue=	6.669	6.144
Alpha=	.932	.916

Table 3 Continued

Dimension/Item	Factor Weights	
	Males	Females
Peer Example		
Status Offenses		
Drank alcoholic beverages (beer, wine, liquor).	.847	.846
Been drunk or high on drugs.	.842	.842
Smoked cigarettes.	.814	.838
Used marijuana ("grass," "pot").	.811	.814
Been involved in heavy petting.	.797	.798
Used "smokeless" or chewing tobacco.	.771	.725
Read sexually explicit or pornographic books or magazines.	.768	.719
Had sexual intercourse.	.764	.760
Watched sexually explicit or pornographic movies, videos, or television programs.	.755	.686
Used other drugs (heroine, LSD, amphetamines, etc.)	.737	.717
Been suspended or expelled from school.	.719	.649
Used cocaine ("crack," "coke").	.715	.686
Skipped school without a legitimate excuse.	.708	.648
Created a disturbance by being loud, unruly, or disorderly at school or in some other public place.	.696	.628
Cheated on a test.	.631	.639
Run away from home.	.592	.582
Eigenvalue=	9.683	9.119
Alpha=	.944	.938

Table 4
Factor Weights and Reliability Scores for Religiosity Scales, by Gender

Dimension/Item	Factor Weights	
	Males	**Females**
Religious Beliefs		
The Book of Mormon is the word of God.	.912	.867
Joseph Smith actually saw God the Father and Jesus Christ.	.909	.856
Jesus Christ is the divine Son of God.	.898	.782
The Lord guides the Church today through revelations to Church leaders.	.878	.843
There is life after death.	.860	.689
The president of the LDS Church is a prophet of God.	.858	.836
God lives and is real.	.834	.707
Satan actually exists.	.818	.552
The Bible is the word of God.	.788	.760
God really does answer prayers.	.784	.700
Eigenvalue=	7.310	5.853
Alpha=	.957	.916
Private Religious Behavior		
I read the scriptures by myself.	.815	.809
I pray privately.	.812	.798
I pay tithing on the money I earn.	.768	.797
I fast on Fast Sunday.	.748	.735
Eigenvalue=	2.472	2.468
Alpha=	.793	.790
Public Religious Behavior		
I attend Sacrament Meeting.	.921	.911
I attend Priesthood Meeting or Young Women's Meeting on Sunday.	.918	.885
I attend Sunday School.	.909	.862
I participate in Church social activities.	.712	.740
Eigenvalue=	3.024	2.904
Alpha=	.875	.864

Table 4 Continued

Dimension/Item	Factor Weights	
	Males	Females
Importance of Religion		
I plan to be active in the Church.	.843	.769
I plan to marry in the temple.	.823	.763
I have a strong testimony of the truthfulness of the gospel.	.803	.784
I am a good example of living the gospel to my friends.	.781	.770
During the past year, I have really tried to live the standards of the Church.	.778	.764
My relationship with God is an important part of my life.	.687	.648
In my life there are more important things than religion.	—	-.681
I very seldom think about religion.	—	-.528
Eigenvalue=	4.719	4.129
Alpha=	.871	.852
Spiritual Experiences		
I have been guided by the Spirit with some of my problems with my life.	.870	.847
There have been times in my life when I felt the Holy Ghost.	.844	.814
I know what it feels like to repent and to be forgiven.	.843	.801
Eigenvalue=	2.181	2.020
Alpha=	.810	.751
Social Integration into Congregation		
I am well liked by members of my ward.	.864	.861
I seem to fit in very well with the people in my ward.	.858	.872
I sometimes feel like an outsider in the Church.	-.750	-.782
Eigenvalue=	2.045	2.115
Alpha=	.753	.776

Table 5
Factor Weights and Reliability Scores for Personality Scales, by Gender

Dimension/Item	Factor Weights	
	Males	**Females**
Self-Esteem		
I take a positive attitude about myself.	.837	.839
All in all, I am inclined to feel like I am a failure.	-.804	-.772
I feel like I have a number of good qualities.	.795	.795
On the whole, I am satisfied with myself.	.791	.786
At times, think I am no good at all	-.772	-.761
I feel I do not have much to be proud of.	-.750	-.751
I wish I could have more respect for myself.	-.714	-.686
I feel that I'm a person of worth at least on an equal plane with others.	.697	.729
I certainly feel useless at times.	-.688	-.649
I am able to do things as well as most people.	.686	.590
Eigenvalue=	5.701	5.463
Alpha=	.914	.905
Locus of Control		
I feel that most of the time it doesn't pay to try hard because things never turn out right anyway.	.814	.744
I believe that when bad things are going to happen they just are going to happen no matter what I try to do to stop them.	.748	.689
I feel that it's almost useless to try in school because most other kids are just plain smarter than I am.	.728	.656
I feel that when someone doesn't like you there's little you can do about it.	.698	.618
Most of the time I find it useless to try to get my own way at home.	.664	.649
I feel that it's nearly impossible to change my parents' mind about anything.	.622	.562
I am often blamed for things that just aren't my fault.	.609	.621
I believe that if somebody studies hard enough he or she can pass any subject.	-.586	-.496
Eigenvalue=	3.782	3.182
Alpha=	.838	.782

Table 5 Continued

Dimension/Item	Factor Weights	
	Males	**Females**
Rebelliousness		
When rules or regulations get in my way I just ignore them.	.838	.807
I enjoy doing things I shouldn't--just for the fun of it.	.826	.814
I enjoy seeing how much I can get away with.	.824	.805
When I break the rules, it really doesn't bother me.	.791	.769
If I feel like doing something I've been told not to, I usually just go ahead and do it anyway.	.786	.793
If something tells me I shouldn't do something, it just makes me want to do it all the more.	.768	.742
I like to shock or "freak out" my parents or other adults just for the fun of it.	.665	.682
It's easier to ask for forgiveness afterward than to get permission in the first place.	.643	.620
Eigenvalue=	4.751	4.583
Alpha=	.899	.891
Risk Taking		
I like to take chances or do things on a dare.	.898	.890
I like to test myself every now and then by doing something a little risky.	.895	.876
I get a real kick out of doing things that are a little dangerous.	.888	.887
Eigenvalue=	2.396	2.346
Alpha=	.874	.860
Impulsiveness		
I am one of those people who blurts out things without thinking.	.855	.830
I often act on the spur of the moment without stopping to think.	.837	.797
I am often said to be hotheaded or bad-tempered.	.749	.732
Eigenvalue=	1.992	1.858
Alpha=	.746	.692

Table 6
Factor Weights and Reliability Scores for Family Scales, by Gender

Dimension/Item	Factor Weights	
	Males	**Females**
Connection with Father		
My Father is a person who. . .		
Cheers me up when I am sad.	.850	.845
Is able to make me feel better when I am upset.	.825	.832
Makes me feel better after talking over my worries with him.	.825	.798
Gives me a lot of care and attention.	.824	.825
Believes in showing his love for me.	.807	.803
Enjoys doing things with me.	.796	.801
Makes me feel like the most important person in his life.	.779	.775
Smiles at me often.	.775	.786
Often praises me.	.773	.773
Is easy to talk to.	.774	.802
Eigenvalue=	6.446	6.470
Alpha=	.938	.939
Connection with Mother		
My Mother is a person who. . .		
Cheers me up when I am sad.	.820	.820
Gives me a lot of care and attention.	.794	.783
Is able to make me feel better when I am upset.	.790	.806
Makes me feel better after talking over my worries with her.	.770	.789
Is easy to talk to.	.747	.783
Believes in showing her love for me.	.743	.770
Enjoys doing things with me.	.741	.732
Smiles at me often.	.740	.735
Makes me feel like the most important person in her life.	.730	.685
Often praises me.	.674	.714
Eigenvalue=	5.714	5.818
Alpha=	.946	.919

Table 6 Continued

Dimension/Item	Factor Weights	
	Males	Females
Father Regulation		
Knows what you do with your free time.	.831	.870
Knows where you go at night.	.811	.836
Knows how you spend your money.	.803	.812
Knows where you are most afternoons after school.	.766	.828
Knows who your friends are.	.716	.788
Eigenvalue=	3.093	3.422
Alpha=	.845	.864
Mother Regulation		
Knows what you do with your free time.	.795	.841
Knows where you go at night.	.759	.792
Knows how you spend your money.	.737	.767
Knows where you are most afternoons after school.	.735	.746
Knows who your friends are.	.637	.706
Eigenvalue=	2.697	2.977
Alpha=	.784	.829
Father Psychological Autonomy		
My Father is a person who. . .		
Is always trying to change me.	.765	.742
Would like to be able to tell me what to do all the time.	.764	.778
Is always telling me how I should behave.	.746	.727
Wants to control whatever I do.	.744	.795
Is less friendly with me, if I do not see things his way.	.694	.719
If I have hurt his feelings stops talking to me until I please him again.	.631	.652
Only keeps rules when it suits him best.	.602	.638
Will avoid looking at me when I have disappointed him.	.583	.607
Says, if I really cared for him, I would not do things that cause him to worry.	.559	.609
Tells me of all the things he has done for me.	.548	.597
Eigenvalue=	4.471	4.759
Alpha=	.859	.875

Table 6 Continued

Dimension/Item	Factor Weights	
	Males	Females
Mother Psychological Autonomy		
My Mother is a person who. . .		
Wants to control whatever I do.	.762	.792
Would like to be able to tell me what to do all the time.	.743	.794
Is always trying to change me.	.734	.720
Is always telling me how I should behave.	.713	.704
Is less friendly with me, if I do not see things her way.	.628	.677
Only keeps rules when it suits her best.	.584	.582
If I have hurt her feelings stops talking to me until I please her again.	.577	.543
Says, if I really cared for her, I would not do things that cause her to worry.	.562	.543
Tells me of all the things she has done for me.	.553	.546
Eigenvalue=	3.868	3.954
Alpha=	.830	.836
Perceived Family Conflict		
I often see my parents arguing.	.902	.912
My parents often yell and scream at each other when I'm around.	.873	.894
My parents nag and complain about each other around the house.	.872	.874
Eigenvalue=	2.334	2.395
Alpha=	.853	.871

Table 7
Percent of LDS Youth Who Have Committed Offenses Against Others, Offenses Against Property, and Status Offenses, by Religious Ecology and Gender

	Pacific Northwest		Utah Valley	
	Males (N=261)	Females (N=370)	Males (N=460)	Females (N=598)
Offenses Against Others [CD]				
Cursed or swore at parent.	19%	20%	21%	20%
Pushed, shoved, or hit parent.	12	10	9	8
Openly defied church teacher/leader.	12	10	16[a]	12
Openly defied school teacher/official.	34[a]	22	27[a]	18
Created a disturbance in public place.	39	34	42[a]	33
Been suspended or expelled from school.	19	7	13[a]	5
Forced or pressured sexual activities.	6	3	6	4
Called on telephone to threaten/bother.	32	27	27	27
Picked on kids/made fun of/called names.	52[ab]	34	41[a]	31
Picked a fight with other kids.	26[a]	11	23[a]	10
Physically beat up other kids.	25[a]	6	19[a]	5
Took money by using force or threats.	6[a]	1	4[a]	1
Hurt someone badly enough to need doctor.	10[a]	1	9[a]	2
Threatened or attacked with knife, gun, or other weapon.	6[a]	1	5[a]	1
Been in a gang fight.	6	3	6[a]	2
Offenses Against Property [CD]				
Took something from a store without paying for it.	39[a]%	22%	34[a]%	19%
Stole from a locker, desk, purse, etc.	17	12	18[a]	11
Stole anything more than $50.	6	4	6	4
Stole anything worth between $5 and $50.	22[a]	12	19[a]	10
Stole anything less than $5.	40[a]	21	33[a]	19
Took car or motor vehicle without owner's permission.	10	8	12	12
Threw things at cars, people, or buildings.	40[a]	14	40[a]	17
Broke into a building, car, house, etc.	11[a]	5	13[a]	6
Went onto someone's property without permission.	51[a]	34	51[a]	37
Purposely ruined/damaged someone else's property or possessions.	29[a]	11	29[a]	13
Purposely damaged or destroyed things at a school, store, etc.	20[a]	9	20[a]	10

Table 7 Continued

	Pacific Northwest		Utah Valley	
	Males (N=261)	Females (N=370)	Males (N=460)	Females (N=598)
Status Offenses [BD]				
Smoked cigarettes.	18%	19[b]%	17[a]%	9%
Used "smokeless" or chewing tobacco.	10	5[b]	10[a]	2
Drank alcoholic beverages (beer, wine, liquor).	13	19[b]	16	13
Used marijuana ("grass," "pot").	8	9[b]	8[a]	4
Used cocaine ("crack," "coke").	2	1	2	1
Used other drugs (heroin, LSD, etc.).	4	3	5[a]	2
Been drunk or high on drugs.	8	11[b]	8	7
Run away from home.	10	13	13	12
Skipped school without a legitimate excuse.	41[b]	48	52	46
Cheated on a test.	66	71[b]	69	65
Read sexually explicit or pornographic books/magazines.	48[ab]	16[b]	37[a]	11
Watched sexually explicit/ pornographic movies, videos, or television programs.	46[a]	21[b]	39[a]	16
Been involved in heavy petting.	23[a]	29[b]	19	19
Had sexual intercourse.	6	9[b]	6	5

[B] Significant difference in the mean delinquency measure between young women living in the Pacific Northwest and Utah Valley at $p \leq .05$.

[C] Significant difference in the mean delinquency measure between young men and women from the Pacific Northwest at $p \leq .05$.

[D] Significant difference in the mean delinquency measure between young men and young women from Utah Valley at $p \leq .05$

******

[a] Significant difference between young men and women living in the same religious ecology for specific delinquency item at $p \leq .05$.

[b] Significant difference between Pacific Northwest and Utah Valley for the same gender in specific delinquency item at $p \leq .05$.

Table 8
Average Number of Times LDS Delinquent Youth Have Committed Offenses Against Others, Offenses Against Property, and Status Offenses, by Religious Ecology and Gender

	Pacific Northwest		Utah Valley	
	Males[1]	Females	Males	Females
Offenses Against Others				
Cursed or swore at parent.	5.2	2.8[b]	8.5	5.8
Pushed, shoved, or hit parent.	2.2	3.5	4.1	4.6
Openly defied church teacher/leader.	4.7	3.4	4.1	4.9
Openly defied school teacher/official.	5.6	3.3	5.5	4.8
Created a disturbance in public place.	8.4	5.0	7.5	5.3
Been suspended or expelled from school.	2.0	1.4[b]	4.0	3.6
Forced or pressured sexual activities.	3.5	3.7	4.1	3.6
Called on telephone to threaten/bother.	6.5[a]	3.6[b]	4.9	6.0
Picked on kids/made fun of/called names.	10.4	6.7	9.6[a]	6.1
Picked a fight with other kids.	2.9	2.7	4.0	3.9
Physically beat up other kids.	2.2[b]	1.8	4.4	3.1
Took money by using force or threats.	5.6	1.3	7.3	6.0
Hurt someone badly enough to need doctor.	1.9	1.7	3.6	5.9
Threatened or attacked with knife, gun, or other weapon.	1.4	1.0[b]	5.7	7.9
Been in a gang fight.	1.7[b]	2.5	5.7	7.6
Offenses Against Property				
Took something from a store without paying for it.	4.7	5.8	5.1	3.3
Stole from a locker, desk, purse, etc.	2.8[b]	3.0	6.1	3.4
Stole anything more than $50.	2.4	1.6	4.5	3.9
Stole anything worth between $5 and $50.	3.5	7.0	5.7[a]	3.4
Stole anything less than $5.	4.5	4.4	5.8[a]	3.3
Took car or motor vehicle without owner's permission.	2.1	1.8	3.6	3.3
Threw things at cars, people, or buildings.	5.7[a]	2.6	6.7[a]	3.6
Broke into a building, car, house, etc.	1.6[b]	1.4	2.8	3.6
Went onto someone's property without permission.	5.0[a]	2.8	5.7[a]	3.3
Purposely ruined/damaged someone else's property or possessions.	3.5	4.6	4.1	3.7
Purposely damaged or destroyed things at a school, store, etc.	3.2	3.3	4.8	3.6

Table 8 Continued

	Pacific Northwest		Utah Valley	
	Males[1]	Females	Males	Females
Status Offenses				
Smoked cigarettes.	6.4[a]	12.7	11.8	6.6
Used "smokeless" or chewing tobacco.	2.3[b]	2.7	6.9	7.4
Drank alcoholic beverages (beer, wine, liquor).	6.6[b]	6.1	9.6[a]	4.9
Used marijuana ("grass," "pot").	6.8	7.4	21.5[a]	9.6
Used cocaine ("crack," "coke").	6.0	1.0	17.2	9.2
Used other drugs (heroin, LSD, etc.).	3.3	3.6	14.9	5.6
Been drunk or high on drugs.	12.2	8.3	23.1[a]	8.8
Run away from home.	7.4	2.6	3.6	2.0
Skipped school without a legitimate excuse.	8.8	7.7	10.4	8.4
Cheated on a test.	5.9	4.9	5.8[a]	3.8
Read sexually explicit or pornographic books magazines.	5.2[a]	2.4	6.1[a]	3.1
Watched sexually explicit/ pornographic movies, videos, or television programs.	4.8[a]	2.9	5.1[a]	3.4
Been involved in heavy petting.	2.9[ab]	9.3[b]	7.5	5.1
Had sexual intercourse.	1.3[ab]	20.1[b]	10.5	6.0

[1] Sample size varies according to the number of youth who *had ever* committed each specific delinquent act.

******

[a] Significant difference between young men and women living in the same religious ecology for specific delinquency item at $p \leq .05$.

[b] Significant difference between Pacific Northwest and Utah Valley for the same gender in specific delinquency item at $p \leq .05$.

Table 9
Percent of LDS Youth Whose Friends Have Pressured Them to Commit Offenses Against Others, Against Property, and Status Offenses, by Religious Ecology and Gender

	Percent With Friends Who Have Pressured			
	Pacific Northwest		Utah Valley	
	Males (N=251)	Females (N=363)	Males (N=460)	Females (N=598)
Offenses Against Others (pressure to):[ABCD]				
Curse or swear at parent.	16%	17%	12%	13%
Push, shove, or hit parent.	6	4	5	5
Make obscene phones calls.	47[b]	42[b]	36	30
Purposely pick on/make fun of, or call other kids names.	73[ab]	60[b]	59[a]	48
Physically beat up other kids.	46[ab]	12	34[a]	10
Take money or other things by using force or threats.	14[ab]	5	8[a]	4
Join in a gang fight.	8	4	9[a]	3
Offenses Against Property (pressure to):[CD]				
Take something from a store without paying for it.	47[ab]%	26%	36[a]%	21%
Steal anything more than $20.	22[ab]	10	15[a]	7
Steal anything less than $20.	49[ab]	27[b]	38[a]	20
Take a car or other motor vehicle without the owner's permission.	13	10[b]	17	18
Throw things at cars, people, or buildings.	53[a]	29	52[a]	27
Break into a building, car, house, etc.	14[a]	6	19[a]	8
Purposely ruin or damage someone else's property or possessions.	53[ab]	28	41[a]	25

Table 9 Continued

	Percent With Friends Who Have Pressured			
	Pacific Northwest		Utah Valley	
	Males (N=251)	Females (N=363)	Males (N=460)	Females (N=598)
Status Offenses (pressure to):[ABD]				
Smoke cigarettes.	43[b]%	36[b]%	30[a]%	22%
Use "smokeless" or chewing tobacco.	36[ab]	16[b]	18[a]	6
Drink alcoholic beverages (beer, wine, liquor).	40[b]	41[b]	27	24
Use marijuana ("grass," "pot").	23[b]	25[b]	17[a]	12
Use cocaine ("crack," "coke").	10[b]	7	5	5
Use other drugs (heroin, LSD, amphetamines, etc.).	10	10[b]	9	6
Run away from home.	11	17	13	16
Skip school without a legitimate excuse.	61[ab]	72[b]	68	61
Cheat on a test.	72	75	67	68
Read sexually explicit or pornographic books or magazines.	60[ab]	26[b]	44[a]	15
Watch sexually explicit/ pornographic movies, videos, or television programs.	53[ab]	35[b]	42[a]	21
Be involved in heavy petting.	28[ab]	39[b]	20	25
Have sexual intercourse.	16	21[b]	11	12

[A] Significant difference in the mean peer pressure measure between young men living in the Pacific Northwest and Utah Valley at $p \leq .05$.
[B] Significant difference in the mean peer pressure measure between young women living in the Pacific Northwest and Utah Valley at $p \leq .05$.
[C] Significant difference in the mean peer pressure measure between young men and women from the Pacific Northwest at $p \leq .05$.
[D] Significant difference in the mean peer pressure measure between young men and young women from Utah Valley at $p \leq .05$

******

[a] Significant difference between young men and women living in the same religious ecology for specific peer pressure item at $p \leq .05$.
[b] Significant difference between Pacific Northwest and Utah Valley for the same gender in specific peer pressure item at $p \leq .05$.

Table 10
Percent of LDS Youth whose Friends have Committed Offenses Against Others, Offenses Against Property, and Status Offenses, by Religious Ecology and Gender

	Pacific Northwest						Utah Valley					
	Males (N=261)			Females (N=370)			Males (N=460)			Females (N=598)		
Offenses Against Others [BD]	None	Some	Most/ All	None	Some	Most/ All	None	Some	Most/ All	None	Some	Most/ All
Called someone on the telephone to threaten or bother them.	46%	38%	16%	45[b]%	41%	14%	56%	32%	12%	54%	34%	12%
Purposely picked on other kids, made fun of them, or called them names.	22[ab]	45	33	31[b]	46	23	31[a]	47	22	41	44	10
Picked a fight with other kids.	40[a]	48	12	53	42	5	41[a]	46	12	60	34	6
Physically beat up other kids.	47[a]	45	8	67[b]	31	2	51[a]	40	9	75	22	3
Taken money or other things from someone using force or threats.	78[a]	20	2	88	12	1	83[a]	16	1	90	9	0
Hurt someone badly enough that they had to go to a doctor.	80	18	1	84[b]	16	0	77[a]	21	2	88	11	1
Threatened or attacked someone with a knife, gun, or other weapon	89	10	2	88[b]	12	1	87[a]	13	1	93	7	0
Been in a gang fight.	84	14	1	83	15	2	83	15	2	88	11	2
Cursed or sworn at one of your parents.	52[a]	37	11	41[b]	43	16	52	40	8	53	38	9
Pushed, shoved, or hit one of your parents.	77	21	2	72[b]	26	3	78	20	2	78	20	2
Openly defied a teacher or leader at church.	64	33	3	65	32	3	64	30	6	67	30	3
Openly defied a teacher or official at school.	36	49	14	36[b]	52	12	42[a]	45	12	54	38	8
Forced or pressured someone to engage in sexual activities with you	85	14	1	82	17	2	85	14	1	84	13	2

Table 10 Continued

	Pacific Northwest						Utah Valley					
	Males (N=261)			Females (N=370)			Males (N=460)			Females (N=598)		
Offenses Against Property [BCD]	None	Some	Most/ All	None	Some	Most/ All	None	Some	Most/ All	None	Some	Most/ All
Taken something from a store without paying for it.	31[ab]%	55%	13%	41[b]%	52%	7%	43[a]%	47%	10%	63%	34%	4%
Stolen something from someone's locker, desk, purse, etc.	50[a]	43	7	61[b]	34	4	57[a]	37	6	72	25	3
Stolen anything worth *more than $50.*	69	28	3	74[b]	25	1	73[a]	24	3	85	13	2
Stolen anything worth between *$5* and *$50.*	48	41	11	53[b]	41	6	55[a]	37	8	71	25	4
Stolen anything worth *less than $5.*	32[a]	49	19	41[b]	48	10	39[a]	46	14	60	33	7
Taken a car or other motor vehicle without the owner's permission.	71	28	1	72[b]	26	2	67	29	4	65	29	5
Broken into a building, car, house, etc.	75	24	2	79	19	1	68[a]	28	4	81	18	1
Gone on someone else's property when you weren't supposed to be there.	31[a]	46	23	39[b]	48	13	38[a]	40	22	50	35	15
Purposely ruined or damaged someone else's property or possessions.	41[ab]	49	10	62	32	6	50[a]	40	10	68	28	4
Purposely damaged or destroyed things at school, stores, etc.	50[a]	40	10	59[b]	35	5	55[a]	37	7	70	26	4
Thrown things (rocks, bottles, eggs, garbage, etc.) at cars, people, or buildings.	36[ab]	46	18	49[b]	42	9	43[a]	35	22	57	34	9

Table 10 Continued

	Pacific Northwest						Utah Valley					
	Males (N=261)			Females (N=370)			Males (N=460)			Females (N=598)		
Status Offenses[AB]	None	Some	Most/ All	None	Some	Most/ All	None	Some	Most/ All	None	Some	Most/ All
Smoked cigarettes.	38%	50%	12%	33[b]%	50%	17%	62%	32%	7%	63%	31%	6%
Used "smokeless" or chewing tobacco.	50[b]	44	6	56[b]	38	6	74[a]	22	3	83	15	2
Drank alcoholic beverages (beer, wine, liquor).	37[ab]	49	15	27[b]	48	25	59	33	8	60	34	6
Used marijuana ("grass," "pot").	59[ab]	36	6	49[b]	40	11	72	23	5	75	21	4
Used cocaine ("crack," "coke").	84[a]	15	1	74[b]	24	1	86	14	0	86	13	2
Used other drugs (heroine, LSD, amphetamines, etc.).	80	18	2	72[b]	25	3	82	16	2	84	13	2
Been drunk or high on drugs.	47[ab]	43	10	39[b]	45	16	66	28	6	66	29	5
Been involved in heavy petting.	40[ab]	45	15	32[b]	42	26	60	31	9	54	36	10
Had sexual intercourse.	52[ab]	41	6	41[b]	47	12	72	25	3	70	27	3
Read sexually explicit or pornographic books or magazines.	32[ab]	48	20	54[b]	39	7	50[a]	37	13	76	21	3
Watched sexually explicit or pornographic movies, videos, or television programs.	31[ab]	50	19	49[b]	41	10	46[a]	40	13	68	28	4
Run away from home.	71[a]	27	2	57[b]	40	3	66[a]	31	3	60	34	3

Table 10 Continued

	Pacific Northwest						Utah Valley					
	Males (N=261)			Females (N=370)			Males (N=460)			Females (N=598)		
Status Offenses (Cont'd)	None	Some	Most/ All	None	Some	Most/ All	None	Some	Most/ All	None	Some	Most/ All
Created a disturbance by being loud, unruly, or disorderly at school in some other public place.	33%	47%	20%	29[b]%	51%	20%	36%	42%	22%	39%	44%	17%
Skipped school without a legitimate excuse.	20	43	37	16[b]	42	43	25	35	40	27	37	36
Cheated on a test.	10	60	30	9[b]	56	35	16	57	27	18	60	24
Been suspended or expelled from school.	46[a]	49	5	61[b]	37	2	52[a]	42	6	68	29	3

[A] Significant difference in the mean peer example measure between young men living in the Pacific Northwest and Utah Valley at $p \leq .05$.
[B] Significant difference in the mean peer example measure between young women living in the Pacific Northwest and Utah Valley at $p \leq .05$.
[C] Significant difference in the mean peer example measure between young men and women from the Pacific Northwest at $p \leq .05$.
[D] Significant difference in the mean peer example measure between young men and young women from Utah Valley at $p \leq .05$

******

[a] Significant difference between young men and women living in the same religious ecology for specific peer example item at $p \leq .05$.
[b] Significant difference between Pacific Northwest and Utah Valley for the same gender in specific peer example item at $p \leq .05$.

Table 11
Frequency of Six Religious Dimensions, by Religious Ecology and Gender

	Percent who "Strongly Agree" or "Agree"			
	Pacific Northwest		Utah Valley	
Dimension/Item	Males (N=261)	Females (N=370)	Males (N=460)	Females (N=598)
Religious Beliefs				
God lives and is real.	97%	98%	94%	96%
Jesus Christ is the divine Son of God.	97	99	96	98
Satan actually exists.	97	98	97	98
There is life after death.	96	93[b]	94	97
God really does answer prayers.	90	92	90	90
Joseph Smith actually saw God the Father and Jesus Christ.	96	95	94	96
The book of Mormon is the word of God.	96	95	94	95
The Bible is the word of God.	93	94	91	94
The president of the LDS Church is a prophet of God.	96	97	96	97
The Lord guides the Church today through revelations to Church leaders.	95	95	93	95

Table 11 Continued

	Pacific Northwest						Utah Valley					
	Males (N=261)			Females (N=370)			Males (N=460)			Females (N=598)		
Dimension/Item	Very Often	Often/ Sometimes	Rarely/ Never	Very Often	Often/ Sometimes	Rarely/ Never	Very Often	Often/ Sometimes	Rarely/ Never	Very Often	Often/ Sometimes	Rarely/ Never
Private Religious Behavior[CD]												
I fast on Fast Sunday.	37%	39%	24%	37%	41%	22%	40%	39%	21%	45%	33%	21%
I pay tithing on the money I earn.	53	35	12	60	27	13	53	31	16	57	30	13
I read the scriptures by myself.	32[a]	41	28	42	38	20	27[a]	47	27	43	38	19
I pray privately.	45[a]	39	16	56[b]	30	14	50[a]	35	15	65	25	10
Public Religious Behavior[AB]												
I participate in church social activities.	42[a]%	46%	12%	47[b]%	28%	24%	35[a]%	49%	16%	39%	47%	14%
I attend Priesthood meeting or Young Women's meeting on Sunday.	83[b]	16	1	82[b]	15	3	76	18	6	76	17	8
I attend Sacrament meeting.	88[b]	11	1	86[b]	13	2	81	16	3	81	15	4
I attend Sunday School.	82[b]	15	2	80[b]	15	5	74	19	7	68	22	10
I bear my testimony in church.	6[b]	23	70	7	27	66	5[a]	20	76	5	30	64

Table 11 Continued

Dimension/Item	Pacific Northwest						Utah Valley					
	Males (N=261)			Females (N=370)			Males (N=460)			Females (N=598)		
	Strongly Agree/ Agree	Mixed Feelings	Strongly Disagree/ Disagree	Strongly Agree/ Agree	Mixed Feelings	Strongly Disagree/ Disagree	Strongly Agree/ Agree	Mixed Feelings	Strongly Disagree/ Disagree	Strongly Agree/ Agree	Mixed Feelings	Strongly Disagree/ Disagree
Importance of Religion[CD]												
I plan to marry in the temple.	92%	7%	1%	91[b]%	8%	1%	92%	7%	2%	93%	6%	1%
I plan to be active in the Church.	94	4	2	92	6	2	91	7	2	92	7	1
During the past year, I have really tried to live the standards of the Church.	81	15	4	79	14	7	79[a]	15	6	82	11	7
I have a strong testimony of the truthfulness of the gospel.	76	18	7	78[b]	16	6	74[a]	20	6	81	15	4
I seldom think about religion.	14[ab]	17	70	7[b]	9	84	24[a]	16	60	14	12	74
My relationship with God is an important part of my life.	81	16	4	84	13	4	81	13	6	83	11	7
In my life there are more important things than religion.	18[a]	23	58	10	23	67	20[a]	21	59	13	18	69
I am a good example of living the gospel to my friends.	55[a]	31	14	66	24	10	56[a]	31	13	69	22	9

Table 11 Continued

Dimension/Item	Pacific Northwest						Utah Valley					
	Males (N=261)			Females (N=370)			Males (N=460)			Females (N=598)		
	Strongly Agree/ Agree	Mixed Feelings	Strongly Disagree/ Disagree	Strongly Agree/ Agree	Mixed Feelings	Strongly Disagree/ Disagree	Strongly Agree/ Agree	Mixed Feelings	Strongly Disagree/ Disagree	Strongly Agree/ Agree	Mixed Feelings	Strongly Disagree/ Disagree
Spiritual Experiences[AB]												
There have been times in my life when I felt the Holy Ghost.	84%	10%	5%	86%	11%	3%	86%	10%	5%	88%	10%	3%
I know what it feels like to repent and to be forgiven.	60[b]	27	12	66	25	10	72	20	7	70	23	8
I have been guided by the Spirit with some of my problems or decisions.	76	18	6	79	17	4	76[a]	19	5	83	14	4
Social Integration[AC]												
I sometimes feel like an outsider in the Church.	23[a]%	18%	59%	32%	20%	47%	25%	15%	60%	31%	17%	52%
I seem to fit in very well with the people in my ward.	70[ab]	15	14	58	22	20	61	17	22	58	23	19
I am well liked by members of my ward.	79[ab]	16	5	69	24	7	67	22	11	65	26	9

A Significant difference in the mean religiosity measure between young men living in the Pacific Northwest and Utah Valley at $p \leq .05$.
B Significant difference in the mean religiosity measure between young women living in the Pacific Northwest and Utah Valley at $p \leq .05$.
C Significant difference in the mean religiosity measure between young men and women from the Pacific Northwest at $p \leq .05$.
D Significant difference in the mean religiosity measure between young men and young women from Utah Valley at $p \leq .05$

****

a Significant difference between young men and women living in the same religious ecology for specific religiosity item at $p \leq .05$.
b Significant difference between Pacific Northwest and Utah Valley for the same gender in specific religiosity item at $p \leq .05$.

Table 12
Comparison of Personality Traits, by Religious Ecology and Gender

	Pacific Northwest						Utah Valley					
	Males (N=261)			Females (N=370)			Males (N=460)			Females (N=598)		
Dimension/Item	Strongly Agree/ Agree	Mixed Feelings	Strongly Disagree/ Disagree	Strongly Agree/ Agree	Mixed Feelings	Strongly Disagree/ Disagree	Strongly Agree/ Agree	Mixed Feelings	Strongly Disagree/ Disagree	Strongly Agree/ Agree	Mixed Feelings	Strongly Disagree/ Disagree
Self-Esteem [CD]												
I take a positive attitude about myself.	78[a]%	12%	11%	61%	26%	13%	70[a]%	19%	11%	59%	27%	13%
All in all, I am inclined to feel like I am a failure.	9	9	82	9	13	78	11	13	77	10	14	76
I feel like I have a number of good qualities.	89	8	4	81	13	6	84[a]	10	6	76	15	9
On the whole, I am satisfied with myself.	74	18	8	66	21	13	72	17	11	63	25	12
At times, think I am no good at all.	20[a]	19	62	33	23	45	26[a]	20	54	34	25	41
I feel I do not have much to be proud of.	15	14	71	12	19	69	14	18	69	12	21	67
I wish I could have more respect for myself.	25[a]	26	49	35	24	41	34	24	42	37	22	40
I feel that I'm a person of worth at least on an equal plane with others.	78	15	6	72	22	6	80[a]	11	9	73	19	8
I certainly feel useless at times.	32[a]	29	40	41[b]	28	31	34[a]	30	36	47	26	27
I am able to do things as well as most people.	81[a]	14	5	70	24	6	78[a]	15	17	66	26	9

Table 12 Continued

Dimension/Item	Pacific Northwest						Utah Valley					
	Males (N=261)			Females (N=370)			Males (N=460)			Females (N=598)		
	Strongly Agree/ Agree	Mixed Feelings	Strongly Disagree/ Disagree	Strongly Agree/ Agree	Mixed Feelings	Strongly Disagree/ Disagree	Strongly Agree/ Agree	Mixed Feelings	Strongly Disagree/ Disagree	Strongly Agree/ Agree	Mixed Feelings	Strongly Disagree/ Disagree
Locus of Control [D]												
I feel that most of the time it doesn't pay to try hard because things never turn out right anyway.	12%	17%	72%	13%	17%	69%	12%	19%	69%	14%	21%	65%
I believe that when bad things are going to happen they just are going to happen no matter what I try to do to stop them	15	26	59	16	28	56	18	29	52	13	32	56
I feel that it's almost useless to try in school because most other kids are just plain smarter than I am.	9	12	80	7	12	81	9	12	79	9	13	78
I feel that when someone doesn't like you there's little you can do about it.	24[a]	27	49	17	29	54	23[a]	27	50	17	23	60
Most of the time I find it useless to try to get my own way at home.	24	30	46	22	28	50	23[a]	33	43	19	25	55
I feel that it's nearly impossible to change my parents' mind about anything.	38	26	37	29	35	36	33	31	36	29	29	41
I am often blamed for things that just aren't my fault.	32[a]	24	44	26	27	48	33	26	41	29	26	45
I believe that if somebody studies hard enough he or she can pass any subject.	87	10	4	82	13	5	84	11	6	85	9	5

Table 12 Continued

Dimension/Item	Pacific Northwest						Utah Valley					
	Males (N=261)			Females (N=370)			Males (N=460)			Females (N=598)		
	Strongly Agree/ Agree	Mixed Feelings	Strongly Disagree/ Disagree	Strongly Agree/ Agree	Mixed Feelings	Strongly Disagree/ Disagree	Strongly Agree/ Agree	Mixed Feelings	Strongly Disagree/ Disagree	Strongly Agree/ Agree	Mixed Feelings	Strongly Disagree/ Disagree
Rebelliousness [CD]												
When rules or regulations get in my way I just ignore them.	10[a]%	24%	67%	8%	16%	76%	11[a]%	26%	63%	10%	16%	74%
I enjoy doing things I shouldn't--just for the fun of it.	11[a]	15	74	8	10	82	12[a]	17	70	9	13	79
I enjoy seeing how much I can get away with.	18[a]	25	58	12	18	70	19[a]	21	59	14	15	71
When I break the rules, it really doesn't bother me.	11[a]	24	65	5	14	81	13[a]	23	64	8	16	76
If I feel like doing something I've been told not to, I usually just go ahead and do it anyway.	15	29	56	8	19	73	14[a]	22	64	10	18	72
If something tells me I shouldn't do something, it just makes me want to do it all the more.	12	17	71	17	23	60	17	26	57	17	27	56
I like to shock or "freak out" my parents or other adults just for the fun of it.	17[a]	19	64	4	14	82	15[a]	18	67	7	13	80
It's easier to ask for forgiveness afterward than to get permission in the first place.	16[a]	15	69	8	15	77	11	25	64	11	16	73

Table 12 Continued

Dimension/Item	Pacific Northwest						Utah Valley					
	Males (N=261)			Females (N=370)			Males (N=460)			Females (N=598)		
	Strongly Agree/ Agree	Mixed Feelings	Strongly Disagree/ Disagree	Strongly Agree/ Agree	Mixed Feelings	Strongly Disagree/ Disagree	Strongly Agree/ Agree	Mixed Feelings	Strongly Disagree/ Disagree	Strongly Agree/ Agree	Mixed Feelings	Strongly Disagree/ Disagree
Risk Taking [CD]												
I like to take chances or do things on a dare.	24[a]%	26%	50%	16%	22%	62%	28[a]%	26%	46%	17%	23%	60%
I like to test myself every now and then by doing something a little risky.	42[a]	24	34	25	21	54	40[a]	26	34	23	23	55
I get a real kick out of doing things that are a little dangerous.	48[a]	28	24	24	25	51	42[a]	28	29	23	28	49
Impulsiveness												
I am one of those people who blurts out things without thinking.	23%	28%	49%	25%	28%	47%	24%	25%	52%	22%	29%	49%
I often act on the spur of the moment without stopping to think.	29	33	38	28	26	46	32[a]	32	36	26	29	45
I am often said to be hotheaded or bad-tempered.	16[a]	24	60	13	17	70	17	20	62	13	21	66

[C] Significant difference in the mean personality measure between young men and women from the Pacific Northwest at $p \leq .05$.
[D] Significant difference in the mean personality measure between young men and young women from Utah Valley at $p \leq .05$

******

[a] Significant difference between young men and women living in the same religious ecology for specific personality item at $p \leq .05$.
[b] Significant difference between Pacific Northwest and Utah Valley for the same gender in specific personality item at $p \leq .05$.

Table 13
Comparison of School Experience, by Religious Ecology and Gender

	Pacific Northwest		Utah Valley	
School Experience	**Males (N=261)**	**Females (N=370)**	**Males (N=460)**	**Females (N=598)**
School Performance (Grades)[BCD]				
Mostly A's	27%	32%	36%	51%
A's and B's	34	34	27	30
Mostly B's	16	14	11	7
B's and C's	12	15	18	8
Mostly C's	4	2	3	2
C's and D's	6	1	3	2
Mostly D's	1	1	1	1
D's and F's	0	0	2	1
Importance of Grades[BD]				
Not Important	2%	1%	3%	1%
Somewhat Important	19	14	16	10
Important	42	46	40	40
Extremely Important	38	39	42	50
Educational Aspirations				
Graduate from high school	3%	0%	4%	3%
Attend trade or vocational school	4	3	3	2
Attend some college	8	13	10	10
Graduate from college	43	52	34	53
Receive advanced degree	42	32	48	31
Extra Curricular Involvement[BCD]				
Not Involved in Any	13%	13%	13%	15%
Sports	69	49	56	34
Music/Band/Dance	30	48	33	46
Language Clubs	9	14	19	26
Student Newspaper/Yearbook	4	8	3	6
Student Government	8	12	4	7
Cheerleader/Pep Club	3	11	2	10
Vocational Clubs	8	8	11	15
Academic Clubs	18	30	13	19

[B] Significant difference in the school experience measure between young women living in the Pacific Northwest and Utah Valley at $p \leq .05$.
[C] Significant difference in the school experience measure between young men and women from the Pacific Northwest at $p \leq .05$.
[D] Significant difference in the school experience measure between young men and young women from Utah Valley at $p \leq .05$.

Table 14
Family Characteristics of LDS Youth, by Religious Ecology

Family Characteristics	Pacific Northwest (N=632)	Utah Valley (N=1078)
Family Structure		
Live with both parents	88%	87%
Live with parent and stepparent	7	7
Live with one parent	5	7
Parents Married in Temple or Sealed	93%	93%
Perceived Family Conflict		
My parents nag and complain about each other around the house.		
Not True	65%	62%
Somewhat True	27	31
True	8	7
I often see my parents arguing.		
Not True	68%	63%
Somewhat True	24	27
True	8	10
My parents often yell and scream at each other when I'm around.		
Not True	84%	81%
Somewhat True	11	13
True	6	5
Maternal Employment		
Not employed	36%	39%
Employed part time	33	30
Employed full time	31	32

Table 15
LDS Youth's Perception of Family Connection, Parental Regulation, and Psychological Autonomy, by Religious Ecology

	Mothers		Fathers	
	Pacific Northwest (N=622)	Utah Valley (N=1056)	Pacific Northwest (N=612)	Utah Valley (N=1026)
Family Connection[AB]				
My Mother (Father) is a person who . . .	Percent who said "A lot like her (him)"			
Makes me feel better after talking over my worries.	54[ab]%	58%	35%	40%
Smiles at me often.	65	67	49	50
Is able to make me feel better when I am upset.	54	53	40	40
Enjoys doing things for me.	70	68	67[a]	63
Cheers me up when I am sad.	49	52	40	42
Gives me lots of attention.	62	64	47	48
Makes me feel like the most important person in her (his) life.	31[a]	37	28	32
Believes in showing her (his) love for me.	71	72	57	57
Often praises me.	48	51	38	40
Is easy to talk to.	49	51	30	32
Parental Regulation[AB]				
How much does your Mother (Father) REALLY know . . .	Percent who said "Knows a lot"			
Who your friends are?	61%	63%	31%	34%
Where you go at night?	74	72	52[a]	47
How you spend your money?	47	48	27	27
What you do with your free time?	57	55	39[a]	34
Where you are most afternoons after school?	80[a]	74	45[a]	39

Table 15 Continued

	Mothers		Fathers	
	Pacific Northwest (N=622)	Utah Valley (N=1056)	Pacific Northwest (N=612)	Utah Valley (N=1026)
Psychological Autonomy[AB]				
My Mother (Father) is a person who. . .	Percent who said "Not like her (him)"			
Tells me all the things she (he) has done for me.	31%	30%	42[a]%	37%
Says if I really cared for her (him), I would not do things that cause to worry.	63	62	70[a]	68
Is always telling me how I should behave.	37	36	42[a]	40
Would like to be able to tell me what to do all the time.	52[a]	55	53[a]	54
Wants to control whatever I do.	60	63	61	62
Is always trying to change me.	67	64	70[a]	67
Only keeps rules when it suits her (him) best.	61	56	61	57
Is less friendly with me if I do not see things her (his) way.	52	50	51	48
Will avoid looking at me when I have disappointed her (him).	67	65	68	67
If I hurt her (his) feelings, stops talking to me until I please her (him) again.	69	69	74	74

[A] Significant difference between mother and father means in Pacific Northwest youth at $p \leq .05$.

[B] Significant difference between mother and father means in Utah Valley youth at $p \leq .05$.

[a] Significant difference between young men and women living in the same religious ecology for specific family experience item at $p \leq .05$.

[b] Significant difference between Pacific Northwest and Utah Valley for the same gender in specific family experience item at $p \leq .05$.

Table 16
Correlation Matrix Between all the Variables in the Model

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. **Delinquency**	1.000	.068*	.090*	.057*	-.164*	-.226*	-.175*	.547*	.485*	-.089*	-.343*	-.120*	.344*	-.219*
Family Characteristics														
2. Structure	—	1.000	-.068*	.152*	-.212*	-.192*	.080*	.016	.025	-.047	-.101*	-.054*	.005	-.092*
3. Conflict	—	—	1.000	.056	-.146*	-.097*	-.341*	.087*	.091*	.017	-.092*	-.139*	.125*	-.019
4. Maternal Employment	—	—	—	1.000	-.078*	-.078*	-.039	.056*	.043	-.011	-.104*	-.092*	.069*	-.085*
5. Connection	—	—	—	—	1.000	.549*	.023	-.194*	-.168*	.107*	.331*	.310*	-.265*	.180*
6. Parental Regulation	—	—	—	—	—	1.000	.073*	-.304*	-.248*	.120*	-.319*	.227*	-.346*	.163*
7. Psychological Autonomy	—	—	—	—	—	—	1.000	-.208*	-.192*	.058*	.205*	.266*	-.328*	.139*
Peer Influences														
8. Pressure	—	—	—	—	—	—	—	1.000	.626*	-.180*	-.291*	-.135*	.405*	-.153*
9. Example	—	—	—	—	—	—	—	—	1.000	-.198*	.319*	-.109*	.383*	-.149*
10. LDS	—	—	—	—	—	—	—	—	—	1.000	.268*	.094*	-.143*	.159*
11. **Religiosity**	—	—	—	—	—	—	—	—	—	—	1.000	.484*	-.371*	.444*
Personality														
12. Self-Esteem	—	—	—	—	—	—	—	—	—	—	—	1.000	-.121*	.287*
13. Rebelliousness	—	—	—	—	—	—	—	—	—	—	—	—	1.000	-.246*
14. **School**	—	—	—	—	—	—	—	—	—	—	—	—	—	1.000

* significant at $p \leq .05$

Table 17
Lambda Y's, Lambda X's, and R^2's for Latent Variables Used in Model

Variable	Lambda Y	R^2
Dependent Variable		
Delinquency		
Offenses Against Property	.816	.666
Offenses Against Others	.807	.651
Status Offenses	.801	.641
Independent Variables		
Religiosity		
Importance of Religion	.888	.789
Spiritual Experiences	.712	.507
Private Religious Behavior	.685	.469
Religious Beliefs	.612	.375
Social Integration	.589	.347
Public Religious Behavior	.526	.277
Peer Pressure		
Status Offenses	.812	.659
Offenses Against Property	.791	.625
Offenses Against Others	.753	.568
Peer Example		
Status Offenses	.941	.886
Offenses Against Property	.937	.878
Offenses Against Others	.890	.792
Self-Esteem		
Locus of Control	.966	.934
Self-Esteem	.717	.515
Rebelliousness		
Rebelliousness	.952	.907
Risk-taking	.782	.612
Impulsiveness	.653	.426
School Experiences		
Grades	.702	.492
Importance of Grades	.647	.418
Educational Aspirations	.558	.311
Extracurricular Involvement	.377	.143

Table 17 Continued

Variable	Lambda X	R^2
Independent Variables		
Family Connection		
Mother Connection	.861	.742
Father Connection	.634	.402
Parental Regulation		
Mother Regulation	.930	.865
Father Regulation	.618	.381
Psychological Autonomy		
Father Autonomy	.745	.551
Mother Autonomy	.743	.856

A Model of Delinquency Among L.D.S. Adolescents: The Effect of Peer Influences, Religiosity, Personality Traits, School Experiences, and Family Characteristics

Janice Garrett

Department of Sociology

M.S. Degree, August 1997

ABSTRACT

This study tested a multivariate model, which included peer influences, religiosity, personality traits, school experiences, and family characteristics, in predicting juvenile delinquency. The model compared two samples of youth belonging to The Church of Jesus Christ of Latter-day Saints (L.D.S.). A mail questionnaire and three follow-up mailings were sent to 1,078 youth living in the Pacific Northwest and 1,849 youth living in Utah county. The overall response rate for the sample was 63 percent. Extensive measures were used in assessing the variables included in the model. Structural equation modeling (LISREL) was used in the analysis because of its capacity to assess measurement error as well as to test the hypothesized direct and indirect effects of family characteristics. The results indicated that peer pressure is the strongest predictor of delinquency. Moreover, even after controlling for peer influences, internalized religiosity had a significant negative association with delinquent involvement. Personality traits, school experiences, and several of the family variables, such as family structure, family conflict, and maternal employment, did not prove to be significant predictors of delinquency after control for the other variables in the model. While no significant direct effects were found, family characteristics did strongly predict delinquency indirectly through heightening levels of youth's religiosity, protecting against peer pressure, and encouraging the selection of non-delinquent peers. Furthermore, gender and religious ecology differences were found in predicting delinquency.

COMMITTEE APPROVAL:

Bruce A. Chadwick, Committee Chair

Brian K. Barber, Committee Member

Stephen J. Bahr, Committee Member

Stephen J. Bahr, Department Chair