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CAUSES OF JUVENILE DELINQUENCY IN JORDAN

by

Ayed A. Irfaifeh

A Dissertation
Submitted to the
Faculty of The Graduate College
in partial fulfillment of the
requirements for the
Degree of Doctor of Philosophy
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Western Michigan University
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CAUSES OF JUVENILE DELINQUENCY IN JORDAN

Ayed A. Irfaifeh, Ph.D.

Western Michigan University, 1990

This dissertation sought to examine the extent to which a set of social bonding factors were helpful in preventing delinquency in the Jordanian society. A sample of 147 juveniles (male eleventh-graders) from seven public high schools in the Tafielah Governate and its localities completed a self-reported survey. Their answers were useful in ascertaining whether or not Hirschi's (1969) social control theory was indeed applicable cross-culturally, especially in a society dissimilar to the United States. Within the theoretical confines of Hirschi's theory, the descriptive data suggest that Jordanian youth have similar cultural beliefs, values, attitudes, and affiliation to the convention order of the general society.

Based on their admissions of delinquency or non-delinquency, the respondents were assigned either to the deviant or non-deviant category. Four indices were constructed to measure the four elements of social bonding: (1) attachment to significant others, (2) commitment to conventional activities, (3) involvement in conventional activities, and (4) belief in the conventional order.

The four hypotheses of the dissertation were tested and the data suggested that the Jordanian youth do indeed maintain strong ties to the conventional order which, in a measure, is some support of Hirschi's assertion that a collective conscious exists regarding order

maintenance. However, the sample reported significant involvement in delinquent activities as 76.2% (n = 112) fell into the delinquent category and 23.8% (n = 35) fell into the nondelinquent category.

In sum, the analysis of the data revealed that while Jordanian youths preserved their ties to the conventional order, the ties were not sufficient enough to constrain their delinquency involvement. This finding casts serious doubt on the adequacy of Hirschi's theory in an attempt to explain juvenile delinquency in a cross-cultural context.

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CHAPTER I

INTRODUCTION

The subject of this dissertation is juvenile delinquency in Jordan. Juvenile delinquency as a social phenomenon is a popular topic in criminological literature. Youth crimes, especially among males are viewed to be a major social problem both in developed and developing societies throughout the world. Radzinowicz and King (1977) have stated that "no natural characteristics, no political regime, no system of law, police, justice, punishment, treatment or even terror, has rendered a country exempt from crime. In fact scarcely any can claim to have checked its accelerating momentum" (p. 30).

Criminological theories have been developed and tested in the main by either American criminologists or European criminologists. Western ideas concerning crime and juvenile delinquency have a considerable international prestige, thus the American theories of crime as well as textbooks are used all over the world. Midgley, (1977) and Chambers and Inciardi, (1971) have pointed out that although Western ideas and concepts have been used and transplanted freely, studies designed to replicate established Western theories of crime causation cross-culturally are relatively rare in the Third World and do not exist in some countries like Jordan.

In Third World countries, juvenile delinquency studies are mostly descriptive and include only a few attempts to comparatively

test basic theoretical propositions about crime. Most of these have shown the rapid increase in juvenile delinquency to be attributed to processes of urbanization, migration, decline in family control, faulty socialization, conflict between youth and adults, the decline in family roles because of increasing education and literacy, and the decline in moral standards of the societies (Chambers & Inciardi, 1971).

Clinard and Abbott (1973) pointed out a number of "asymmetries" found in developing countries which may contribute to the crime problems. They contend the imbalance between the: (a) highly modernized urban areas; (b) so-called "primitive" cities; and (c) backward rural areas is responsible for the increase in the rural-to-urban migration, which in turn breeds the growth of slums and high urban unemployment. Consequently, the imbalance between population growth and the inability of the economy to create jobs lead to despairingly high unemployment and dependency areas--the conditions which breed crime.

The Country

The official name of the country is the Hashemite Kingdom of Jordan which officially came into existence under its present name in 1947 and was enlarged in 1950 to include the West Bank as a result of the Jericho Conference. Jordan occupies a land mass of 37,738 square miles. It is bounded on the north by Syria, on the northeast by Iraq, on the east and south by Saudi Arabia, and on the west by the West Bank and Israel.

The state of Jordan has received a massive influx of population. Some 460,000 people were residents of the West Bank when Jordan was enlarged to become the Hashemite Kingdom of Jordan, but besides these people, an additional 350,000 to 500,000 refugees from Palestine had already fled into the West Bank area and TransJordan while the 1948 war was going on. When the armistice was signed in 1949, these refugees were never allowed to return to their lands in Israel. Thus, the population had risen 130%, from 375,000 in 1946 to at least 1.1 million in 1949 (Beaumont, Gerald, & Wagstaff, 1976).

By 1950, the population of Jordan, including refugees, was rising steadily at the rate of about 3% annually. Consequently, the population rose to approximately 2.1 million in 1967, just prior to the June war. Following the war of June 1967, when Israel took over Jordan's West Bank region, another 200,000 refugees fled from the area to the East Bank of the Jordan and so made the economic situation in the country even worse (Beaumont et al., 1976).

Jordan is one of the small Middle Eastern countries with very weak natural resources and a population estimated in 1983 at 2,495,000 (East Bank only), mostly concentrated in the industrial cities or the urban centers. Amman is the capital of the country with a population of 744,000, the city of Zarka has 255,500 residents, and Irbid 131,200 (Fisher, 1986). Forty-four percent of the population are urban dwellers; 40% are youth, 52% are below the age of 15; 750,000 are between the ages of 7-18 years. In addition, the labor force stood at 400,000 in 1977, with 20% in agriculture, 20% in industry, and 60% in trade and services. The illiteracy rate is 35% (Ministry of

Planning, 1986).

Socioeconomic development in Jordan has been hampered by a variety of difficulties and challenges. The most serious ones are Jordan's limited natural resources and the diverse effects of five centuries of Othman's rule, two wars with Israel, and the cut of external Arabic funds since 1979. The forced emigration of Palestinians generated serious problems with respect to emergency relief, the provision of employment opportunities and socioeconomic services. At the present time, the country is facing an economic crisis; the foreign debt exceeds 8.1 billion dollars.

Along with these crises, tens of thousands of Jordanians lost their jobs in the Gulf countries and came home looking for jobs and houses. Social work began in Jordan at the instigation of religious organizations and charitable groups which provided financial assistance as well as in-kind aid to the needy among the population. As Fisher (1986) correctly pointed out, of the three or four hundred thousand inhabitants, only about one-fifth were town dwellers, and these were confined to four small cities ranging in population from 10,000 to 30,000 inhabitants, thus assuring that the early years of Jordanian history would be peaceful. As a result of the two wars, 1948 and 1967, and the emigration of Circassians from the Caucasus of Russia who settled in Jordan as refugees during the 19th and 20th centuries, combined with the emigration of Armenians and Palestinians, urban centers grew rapidly to the present urban population of 60%.

Judicial System

Jordanian law is based on Islamic law (80% of the population are Sunni Muslims) for both civil and criminal matters. In the years of Othman's rule, certain aspects of continental law were introduced, especially French commercial law, and civil and criminal procedures. Due to the British occupation of TransJordan from 1917-1947, the TransJordanian area has adopted, either by statute or case law, much of the English common law. Prior to 1962, there were no juvenile courts or juvenile laws in Jordan. Its judicial system was based on five types of courts in Jordan: (1) The Court of Cessation, (2) the Court of Appeals, (3) the Court of First Instance, (4) the Magistrates' Court, and (5) the Religious Court.

Court of Cessation

The Court of Cessation consists of seven judges who sit in full panel for exceptionally important cases. In most appeals cases, however, only five members sit to consider the arguments. It is the highest court of justice to hear applications in the nature of habeas corpus, mandamus, and certiorari, i.e., dealing with complaints of citizens against abuses of governmental authority (Fisher, 1986).

Courts of Appeal

There are two Courts of Appeal, each consisting of three judges, whether for hearing of appeals or for dealing with Magistrates Courts' judgments in chambers. Appellate review of the Courts of Appeal extends to those judgments rendered in the Courts of First Instance, the

Magistrates Courts, and Religious Courts (Fisher, 1986).

Courts of First Instance

Courts of First Instance are courts of general jurisdiction in all matters civil and criminal except those specifically allocated to the Magistrates Courts. Three judges sit in all felony trials, while two judges sit for misdemeanor and civil cases (Fisher, 1986).

Magistrates' Courts

There are 14 Magistrates Courts, which exercise jurisdiction in civil cases involving no more than 250 JD (approximately 300 U.S. dollars), and in criminal cases involving maximum fines of 100 JD (approximately 120 U.S. dollars), or maximum imprisonment of one year.

Religious Courts

There are two types of religious courts: The Sharia Courts (Muslims) and the Ecclesiastical Courts (Eastern Orthodox, Greek Melkite, Roman Catholic, and Protestants). Jurisdiction extends to personal or family matters, such as marriage, divorce, alimony, inheritance, etc., for the Muslim community. When a dispute involves persons of different religious communities, the civil courts have jurisdiction in the matter unless the parties agree to submit to the jurisdiction of one or the other of the Religious Courts (Fisher, 1986).

Juveniles and Law

Prior to the 1950s, due to the social forces of the society that governed and regulated it, the extended family or the clan assumed full responsibility for its members, especially the young ones. In Durkheim's (1897/1951) words, in the mechanical Jordanian society, where the division of labor is minimal, people are generally involved in similar activities; consequently, people tend to develop similar ideas, values and goals, as well as a very strong collective conscience.

With respect to juvenile delinquency, before 1962 there were no juvenile laws, or juvenile courts, or even juvenile institutions except two homes, 80 capacity each, which were established in Jordan to serve children between the ages of 12-18. Broadly speaking, children over 12 years were incarcerated in prisons with adult criminals. The children below the age of 12 were either adopted by relatives or sent to social or charitable organizations.

Special juvenile laws were first enacted in 1962, later modified in 1968 and 1987, especially the laws concerning moral offenses such as rape. The Juvenile Department, according to the Juvenile Law, Article 24, 1968, (The Ministry of Work and Social Development, 1978) was established to provide the following services:

1. To prevent juvenile delinquency and crime by establishing rehabilitative institutions to house convicted individuals aged 12-18 years, and provide care, guidance, training, education, and a trained staff to supervise these institutions.
2. A juvenile, according to the criminal law is any individual aged 7-18 years who has committed an act which violates the Jordanian criminal law.

3. To prevent juvenile delinquency phenomenon by establishing preventive juvenile institutions for homeless children, orphans, and those at high risk for delinquency, and provide sufficient care.
4. To provide some care for juveniles living with their families (under probation) and provide counseling and supervision to their families as well.
5. Special care to be directed to prevent female delinquency by providing care in the "womens' house" and follow-up after their release from the institution. (p. 57)

With regard to delinquency, according to the juvenile laws of 1968, the law does not provide a clear definition of juvenile delinquency or a juvenile delinquent. Yet it does establish the age limits for defining types of juvenile offenders, and sets forth those measures which may be taken against a juvenile convicted of one offense punishable by law (Irfaifeh, 1988).

The Jordanian law has several features which will be familiar to Western criminologists and practitioners. According to Irfaifeh (1988) they are as follows:

1. All juvenile cases are to be held behind closed doors.
2. All juvenile misbehavior during the period from 7-18 years of age will not appear in the individual's record in the future.
3. No juvenile offender will be identified by name, address, photograph, school, or anything else which would point to his/her identity.
4. All juveniles have the right to counseling in the "observation center" prior to the trial.
5. In felony cases, there is no fixed sentence for each offense; it is up to the discretion of the judges.

6. Sentence is also up to the discretion of the probation officer's report. If the juvenile offender is viewed as a good person, s/he might be released after the judges sign the papers.
7. If a juvenile is accused of having committed more than one offense, s/he will be brought to trial only for the most serious offense and will be sentenced only with regard to that offense.
8. Probation instead of incarceration is an occurrence more in actuality than in philosophy.
(p. 5)

In summation, Jordanian law, Article 24 of 1968, reflects most of the modern perceptions of protection, treatment, and rehabilitation in dealing with juvenile offenders. In 1987, the Juvenile Law was modified concerning offenses related to honor and morality, such as rape, adultery, sodomy, as well as capital offenses such as murder or homicide. These changes represent a tougher policy in dealing with these issues. Unfortunately, the law did not go into detail about the sentencing process.

Since the establishment of juvenile system in Jordan in the 1960s, the authorities adopted a preventative rehabilitative model in corrections in setting up this institution. Thus, the Social Defense Department divides its institutions mostly into two major categories: (1) the preventative institutions, and (2) the rehabilitative institutions. With respect to the prevention institutions, the aims are to house orphans and homeless children, as well as individuals who might drift into delinquency. The rehabilitative institutions have the goals of providing care, supervision, guidance, vocational training, and academic education for those adjudged to be delinquents.

For juveniles, there are 12 institutions operating to serve the country with a total capacity of 605 residents. Of the 12 institutions, two are used to house the female offenders: one serves females aged 7-18 years with a capacity of 25 individuals, and the second is for females aged 15-45, with the same capacity as the first. The other nine institutions serve male offenders from 7-18 years-of-age.

By the end of 1979, the Ministry of Work and Social Development, through the Social Defense Department, had established a new institution with a capacity to serve 130 dangerous offenders and recidivists. This new institution is divided into three sections:

(1) the department of closed detainees, (2) partial detention, and (3) reception center (Irfaifeh, 1988). Accompanying the five-year plan for economic and social development (1986-1990), the establishment of this institution reflects the recent get tough policy of the Social Defense Department concerning recidivists and dangerous offenders.

The establishment of juvenile laws and juvenile institutions both predate the establishment of the juvenile courts in Jordan. The first juvenile court in the world was established in 1899 in Chicago, Illinois. The first juvenile court in Jordan was established in the capital of Amman in 1980. Currently, three juvenile courts are operating in the country. The Ministry of Work and Social Development had to ask the Ministry of Justice for judges and, in order to qualify these new judges, they were sent abroad to learn about juvenile delinquency. Also, special seminars were conducted, not

only for judges but also for other counselors and employees in the Ministry.

According to Touq's study (1980), discrepancy between the principles of juvenile law and their actual application is very obvious: delay of due process, absence of cooperation between the courts and the Social Defense Department, and distrust between judges (i.e., some of them are unqualified) and probation officers. There are judges who prefer that juvenile cases be solved either informally or through the police department. Touq explained this preference by describing the overcrowding of the court system and the lack of experience of the judges. Also, he pointed out that police departments solve approximately 15 juvenile cases monthly. It appears that only serious cases have the chance of reaching the juvenile courts, and minor offenses are either solved informally, as in the family context, or in the police stations.

Theoretical Formulation

Durkheim, an advocate of comparative sociology, emphasized the importance of testing theoretical propositions in a variety of social settings, and felt that the following issues should be considered carefully: First, a theory should be tested in a single culture at one point in time, such as in the United States; second, in societies generally similar such as Canada or the European countries which have comparable cultural, economic, and technological conditions; and third, in completely dissimilar societies (Clinard & Abbott, 1973).

Following Durkheim's suggestion, many criminologists have replicated Western theories. Among the better known cross-cultural studies which have utilized established Western theories of crime are Wolfgang and Ferracuti's (1967) theory of the subculture of violence, Downes' (1966) attempt to replicate Cloward and Ohlin's theory of differential opportunity in the East End of London; Weinberg's (1964) use of a differential association theory in Ghana; Defleur's (1967) analysis of juvenile gangs in Argentina in terms of subcultural ideas; Friday's (1970) replication of differential association and differential opportunity in Sweden; and Abbott's (1971) application of a differential association in Uganda. Abbott also tested Miller's theory regarding focal concerns, Cloward and Ohlin's differential opportunity theory, and Midgley's (1977) replication of differential opportunity in South Africa.

One of the most significant theoretical contributions in the study of delinquency in recent years has been the development of social control theory by Hirschi (1969). Krohn and Massey (1980) and Agnew (1985) agree that "Hirschi's theory has quickly become one of the dominant theories of delinquency. It is the guiding force behind much recent research on delinquency, as well as occupying a prominent place in most delinquency texts. Moreover, the policy implications of the theory are beginning to receive serious attention" (p. 47).

Hirschi's (1969) theory has been replicated by several scholars (Caplan & Leblanc, 1985; Hepburn, 1977; Hindelang, 1973; Jensen, 1972; Johnson, 1979; Krohn & Massey, 1980; Matsueda, 1982;

Wiatrowski, Griswold & Roberts, 1981). The most successful studies in explaining delinquency and crime are derived from the control theory of Hirschi, who, according to Shoemaker (1984), is able to explain from 25% to 50% of the variance in delinquency. Wiatrowski et al., (1981), explained 32.5% of the variance. While that leaves much variation to be explained, data suggest that Hirschi's theory provides a better explanation of delinquency than other leading theories (Cernkovich, 1978; Eve, 1978; Hepburn, 1977; Hindelang, 1973; Johnson, 1979; Knox, 1981).

Frazier (1976) pointed out that Hirschi's work enjoys "a dual distinction among the contributions to control theories. First, it is the clearest statement available on the variations in the control approach; second, it presents some of the most compelling data to be found in support of control theory; and third, it is more congruent with the Durkheimian formulation than any of the more recent variants of the control thesis" (p. 65). According to Durkheim's criteria, control theory has met the first two conditions. It has been tested in the U.S. by many scholars and it has also been tested in a different setting in Canada. Thus, the third--a dissimilar setting--is waiting for initiation.

Prior to the present study, however, Hirschi's theory has not been tested in the third setting, a dissimilar society. But before we proceed to the next section, it is necessary to explain the theoretical aspects of Hirschi's bonding theory. He proposed an alternative explanation of deviant behavior to theories of strain or cultural deviance which attempted to account for too much delinquency

quency (Briar & Piliavin, 1965; Matza, 1964). In other words, both strain and cultural theories have failed to explain maturational reform, the nondelinquent boy in a high delinquency area, or the many conforming activities of delinquency adolescents, among others. Rather than positing extraordinary circumstances which push an adolescent into deviance, Hirschi (1969) maintains that "the delinquent is a person relatively free of the intimate attachments, the aspirations, and the moral beliefs that bind most people to a life within the law" (p. i). The four bonding components as specified by Hirschi are: (1) the affective attachment to significant others, (2) a rational commitment to conventional activities, (3) involvement in in conventional activities, and (4) belief in the personal legitimacy of the law.

Attachment

In Hirschi's bonding theory, attachment is defined in terms of affection, respect and sensitivity to the opinions of others, or it is the respect between an individual and significant others. "If a person does not care about the wishes and expectations of other people, . . . then he is to that extent not bound by the norms. He is free to deviate" (Hirschi, 1969, p. 18). Ultimately, the more an individual is affected by, and the more he respects these significant others, the more he is attached to them. Of significant others, parents are viewed as the most important in determining either a positive or negative outlook on conventional values.

Antecedents to Hirschi's notion of attachment are found in

Reckless' (1961) idea of inner containment and Nye's (1958) internal control. Both are simply explanations of an individual internalizing the views and beliefs held by significant others. Their concept of attachment of children to their parents is an essential part of delinquency research, and is generally supportive of Hirschi's position. Empey (1978) also pointed out correctly that strong attachment leads an individual to an easy internalization of social norms, while the opposite or weak attachment leads an individual to social alienation. This point has been supported by Reiss (1951), Morris (1964), Glueck and Glueck (1950), Toby (1957), and others.

Commitment

The notion of commitment refers to the extent to which an individual is dedicated to the conventional order. In this instance, Hirschi pointed out that both aspirations and expectations of achieving higher education, and a high-status occupation were not related to delinquency. A commitment to this rationality is demonstrated by conforming behavior and the utilitarian notion that more is lost by engaging in delinquency activities than is gained. In sum, commitment reflects the cost factor involved in engaging in antisocial behavior. Hirschi's notion of commitment is similar to Toby (1957) and Briar and Piliavin's (1965) reactions that those with a higher stake in conformity (investment) will be more likely to resist deviant activities. This contradicts assertion of the cultural and strain theorists' (Cloward & Ohlin, 1960; Merton, 1937) contention that deviant behavior is fostered by frustrated ambition and blocked

opportunities (legal or illegal).

Involvement

The assumption here is that an individual who has considerable time invested in the pursuance of conventional activities does not have much time left to commit or engage in deviant activities. In other words, engagement in conventional activities should absorb time otherwise available for nonconforming activities. However, according to Hirschi's findings (1969) "involvement in conventional activities was not as important as the theory predicts in prevention of delinquency" (p. 230).

Belief

The last element of Hirschi's bonding theory is belief in conventional values and norms. He argues that belief in the legitimacy of the moral order will prevent or inhibit delinquency. On the other hand, the absence of such belief encourages it. If the individual believes he should not behave criminally, he probably will not. As a result, Hirschi (1969) suggested that "delinquency is not caused by beliefs that require delinquency, but is rather made possible by the absence of effective beliefs that forbid delinquency" (p. 198).

In sum, the four elements of the bond are the focal points of Hirschi's theory. Further elaboration of his work will be presented in the literature review chapter. The rationale for using social control theory in general, and Hirschi's viewpoint in particular,

will be presented in the next section of this chapter.

Study Rationale and Statement of the Problem

Many criminologists have focused attention on delinquency as a future provider of different types of criminals. In fact, most convicted offenders have prior juvenile records, and the life histories of many criminals show they started a life of crime as delinquents. The study of juvenile delinquency has always been dependent on official data as a source for analysis. The findings of some of these studies have been misleading because the volume, class, and role concentration of misconduct in police data are misleading (Arnold, 1983, pp. 42-43) quoted in Al-langawi (1987, p. 58).

In Jordan, the official statistics have shown an increase in crimes committed by juveniles in the last two decades: first, crimes against property increased from 677 in 1972 to 1,247 in 1982; second, aggravated assault crimes increased from 47 in 1972 to 411 in 1982; third, homicide crimes increased from 13 in 1972 to 27 in 1982; and fourth, sexual crimes such as rape, increased from 53 to 306 in that same period (Ministry of Interior Affairs, 1986). According to Touq (1980), "juvenile crimes increased 64% between the years 1972-1977 and also they have increased 142% between the years 1965-1977" (p. 22).

Furthermore, between the years 1975-1986, 39,503 juveniles either entered or had contact with the criminal justice system. In the period 1975-1979, 13,201 juveniles committed acts prohibited by criminal law. Between 1980-1986, another 26,302 juveniles entered

the delinquency population. Of the 39,503, 95% of the offenders were males, and 5% females, and the peak age for juvenile offenders in Jordan was between 12-15 years (Irfaifeh, 1988).

Touq (1980), a Jordanian psychologist, conducted a massive and comprehensive study of juvenile delinquency in Jordan (using official records), and concluded that crimes committed by juveniles over the last three decades have increased dramatically. He also predicts that juvenile offenses will increase in the future as well. In official Jordanian statistics, serious crimes are the most frequently reported, with minor crimes usually being solved informally even before being reported to police departments. As a result, most documented crimes are very serious. Touq (1980) has estimated that the police departments solve 15 reported cases monthly in the capital, while others either go undetected or are solved through family networks.

Because of the weaknesses associated with official statistics, many criminologists rely on self-reported delinquency as a substitute for official records. Arnold (1983) did an offense-by-offense check to find out the accuracy of a group's self-reported delinquencies in comparison with their official delinquent records. He concluded that 75% of the acts were accurately reported (cited in Al-Langawi, 1987, p. 13). The comparison led him to conclude that it is reasonable to assume that illegal acts are more memorable or easy to recall than routine behavior or legal acts, and that recent acts are more easily remembered than long past acts. Therefore, the present writer has chosen in this study to test Hirschi's (1969)

control theory, in a dissimilar setting (Jordan), through the use of self-reported delinquency involvement.

The present study will extend the replication of Western ideas to a Third World country (Jordan), and it also will widen the scope of studying unreported delinquency in Jordan. Thus, two questions will arise: (1) Why control theory? and (2) Why Hirschi's extension of the theory? With respect to the first part of the question, it is simply that control theory seems more consistent with the data on crime than either strain or cultural deviance theories. These latter theories account for such delinquency (Briar & Piliavin, 1965; Hirschi, 1969; Matza, 1969). They have failed to explain maturational reform, the non-delinquent boy in a high-delinquency area, or the many conventional activities of delinquent youth. Regarding the second part of the question, which deals with the bonding theories, Hirschi's extension is the most thoroughly developed and complete and it has best withstood empirical examinations (see Chapter II). Also, given the nature of Hirschi's bonding theory, its emphasis on the family and the conventional order, and its obvious testability, it is considered an appropriate theory for a better understanding of delinquency in the Jordanian society.

Durkheim (1897/1951) proposed "that abnormally high or low levels of social integration (altruism and egoism respectively) and of social regulation (fatalism and anomie respectively) generate high suicide rates. A society is integrated to the extent that its members are morally bonded to each other through interaction, a commitment to common societal goals, and sharing a collective

conscience or culture. We are moral beings to the extent that we are social beings" (p. 64).

CHAPTER II

LITERATURE REVIEW

In this chapter, a general and brief introductory statement will be provided about control theories in general. In addition, a highly selected series of replicated studies of Hirschi's (1969) theory will be emphasized, and the hypothesis of the study will be presented.

Control theories have unique and different ways of addressing the problem of deviant behavior. Ultimately, society is regulated to the extent that social control is exerted over the individuals by customs, tradition, mores, rules, laws, and other social constraints. On the other hand, the less integrated and less regulated the society, the higher the suicide rates. For Durkheim, "ineffective social control explains deviant behavior" (cited in Howell, 1977, p. 13).

Some criminologists, as we will see, have developed theories or models of juvenile delinquency and criminal behavior based on Durkheim's notion of social control. According to Howell (1977), three major theoretical perspectives on deviant behavior could be listed under the social control model: control theories and societal structural disorganization theories result directly from Durkheim's model, while cultural disorganization is closely related. The common denominator of these three perspectives rests on the basic ideas that deregulation and malintegration are crucial to an explanation of deviant behavior, but each emphasizes different aspects of ineffective social control (p. 13).

Social control theories assert that deviant behavior occurs when an individual's moral bonds to the conventional order are weak, broken, absent or neutralized (Friday & Hage, 1976; Hirschi, 1969; Matza, 1964; Nye, 1958; Reckless, 1961; Reiss, 1951; Toby, 1957). Social structural disorganization theories assert that the frustrated desire to conform to the conventional order causes non-conformity (Cloward & Ohlin, 1960; Cohen, 1955; Merton, 1937). With respect to cultural disorganization theory, deviant behavior is a result of the desire to conform to cultural values which are in conflict with those of the dominant order (Miller, 1958; Shaw & McKay, 1942; Sutherland & Cressey, 1970). In this context, deviant behavior is caused by proper socialization within a deviant social group (for more details, see Hirschi's, 1969, Chapter I).

The three perspectives, however, have implicitly introduced the two major concepts of "rationality and solidarity" (Minor, 1975, p. 45). The sources of conformity or nonconformity can be found in either one of them. We believe that individuals are rational in their calculations to conform or not to conform to the conventional order. In this respect, structural disorganization, learning theory, and exchange theory, fit the rationality model, with the objective of either fulfilling desires and needs by rationally choosing illegitimate means, or rejecting the middle class cultural values and conforming to their own subcultures. On the other hand, control theories fit the solidarity model maintaining that social control is achieved through socialization and maintained through social constraints as mentioned earlier. Whenever the social bond is weak or absent,

individuals are more likely to commit crimes but not necessarily. In other words, when the integration or solidarity is weak, deviant behavior is highly expected but not necessary. However, control theory is the purest type of social control theory unlike social structural disorganization theory.

According to the above discussion, then we can classify the various theories which deal with social control under two major rubrics: (1) The social rationality model which subsumes the subcultural theories, the social disorganizational theory, the social learning theories, and exchange theories (especially Homans, 1961), and (2) The social solidarity model which benefits from containment theory, bonding theory and role relationship theory.

The Social Rationality Model

Subcultural Theories

According to Hirschi (1969) "social structural disorganization theories of delinquent behavior have been characterized as the result of 'good answers to a bad question.' It parallels the Hobbesian question, why do men obey the rules of society? The good answer is desire, while the Hobbesian answer is fear of the consequences of violating the laws. On the other hand, the Hobbesian individual is antisocial and immoral, whereas the concept of man which underlies structural disorganization theory is homoduplex suggesting that the individual has a self-interested and a social nature" (p. 4).

Merton (1937) borrowing from Durkheim, suggests that anomie and deviant behavior result from a disjunction between cultural goals and

socially approved means to their attainment. Limited means make it difficult to achieve the dominant goals of society, including material and financial rewards. Ultimately, this will lead to a loss of self-esteem and an attempt to achieve goals through illegitimate means (e.g., delinquent behavior). Success frustrated by blocked opportunities also leads to a sense of injustice, which can serve as a motivation and rationalization for engaging in deviant activities. (See, for example the work of Cloward & Ohlin; Cohen, 1955; , 1960; Merton, 1937; Miller, 1958).

Opportunity is a key concept in this set of theories (disorganization theories). It is most apparent in the differential opportunity theory of Cloward and Ohlin (1960) and, to a lesser extent, in the status deprivation theory of Cohen (1955). Both theories are built upon Merton's more general theory of crime.

Cohen (1955), quoted in Howell (1977), proposes that:

The motivation to engage in delinquent behavior is generated out of the experiences of lower class kids in the middle class dominated institution of the school. School authorities define success and award status according to middle class standards which are basic to the curriculum, methods of teaching, and selection of personnel. This process of selection and awards creates unequal opportunity in the competition for the status rewards that the school has to offer in exchange for adjustment through conformity. The delinquent youth, according to Cohen, will reject the middle class criteria and conform to the values of a subgroup of delinquent peers. (pp. 16-17)

Cloward and Ohlin (1960) extended and revised the general social structural disorganization theory and attempted to integrate it with cultural disorganization theory in their differential opportunity structure theory of juvenile delinquency. They suggested two important additions to social disorganization theory. First is the notion

that in addition to differential access to legitimate means to success goals, there is also a differential access to illegitimate means. The second aspect makes the claim that different types of delinquent groups are generated in different types of community cultural contexts. According to Howell (1977):

They propose that there are two opportunity structures (legitimate and illegitimate) and that youngsters who cannot achieve economic success in the legitimate opportunity structure may find that it is not universally achievable nor easily achieved in the illegitimate opportunity structure. Accordingly, the delinquent solution to the frustration created by blocked access to legitimate opportunity is not automatic, thus, the ability to utilize illegitimate means depends on the organization of the community and the type of illegitimate opportunity structure determines the model type of delinquent behavior that is available to youngsters in a community. (p. 17).

According to Ohlin and Cloward (1973), the behaviors of the young are encompassed within a system of social controls that originates in both legitimate and illegitimate sectors of the community. On one hand, conventional adults (middle class authorities) control the distribution of legitimate rewards for conformity to the conventional order. On the other hand, criminal adults control the distribution of illegitimate rewards for conformity to the criminal culture in the community, and individuals use their motivation and rational thinking to conform to or deviate from the rules.

Cultural Disorganization Theory

This perspective conceptualizes delinquent behavior as an outgrowth of conformity to a distinctive set of cultural beliefs, values, or definitions. The concept of the individual which underlies cultural disorganization theory is homo sanctus, that is, the individual

has a social nature which borders on the holy. An individual desires to conform because of his/her almost hypermoral nature.

Cultural disorganization theory proposes that juvenile delinquency is a result of the desire to conform to cultural values which are in conflict with those of the dominant order (Shaw & McKay, 1942; Sutherland & Cressey, 1970). Hirschi (1969) suggests that in some cultural disorganization theories "the criminal ends up just a little more moral than the law-abiding citizen because his actions are based on consideration of social solidarity rather than personal achievement" (p. 12). According to this perspective, delinquent behavior is caused by proper socialization within a "deviant" social group or culture.

Shaw and McKay (1942) propose that culture conflict explains the distribution of delinquency by area and cultural transmission explains the persistence of delinquency rates over time. A youngster growing up in a neighborhood characterized by its conflicting conventional and criminal value systems (disorganized culture) where social controls are ill-defined will adapt to one of the systems of social control. In areas with high delinquency rates, the criminal controls are stronger than conventional controls. Unfortunately, Shaw and McKay did not specify the individual learning processes involved in cultural transition.

Social Learning Theories

According to Akers, (1973) "The basic premise of the social learning approach is that both conforming and deviant behavior are learned in the same way; the substance and direction of the learning are different,

but the general process is the same for both conforming and deviant behavior" (p. 29). Social behavior, according to the social learning theory, is thus controlled through punishment and reward, hence, the emphasis on the rationality element more than that of social solidarity.

Sutherland's (1947) theory of differential association was probably the first leading statement in this area. Hirschi (1969) labeled or considered his theory, "a cultural deviance theory" in which both original formulation and empirical examination tend to emphasize association with delinquent others as the primary causal factor in delinquency. The subsequent reformulation of Sutherland's theory by Jeffery (1965), Burgess and Akers (1966), and Adams (1973) have all emphasized that the process of learning criminal behavior involves all the mechanisms that are involved in any other learning (Sutherland & Cressey, 1970, p. 76), (cited in Minor, 1975, p. 46).

Nettler (1974) has suggested that at least three major principles are involved in human learning: "classical conditioning, operant conditioning, and modeling" (p. 222). The classical condition can be traced to the experiments of Pavlov (1927/1960). Eysenck (1964) and Scott (1971) have suggested that according to this principle that "conscience is a conditioned reflex which thwarts crimes. As a deterrent, therefore, we must consider that the autonomic reaction, the conditioned conscience of the criminal has it all the way over the forces of law and order" (Eysenck, pp. 110-111). Eysenck's formulation has been criticized for its narrow focus on classical conditioning and for ignoring the importance of operant conditioning, schedules of

reinforcement, and modeling (Hamilton, 1965).

Proponents of operant conditioning, on the other hand, have linked a response with a subsequent stimulus. Nettler (1974) argues that "what happens when we act determines how we act" (p. 224). In fact, operant principles relate to voluntary behavior, compared to the relatively limited range of reflexive behavior involved in respondent conditioning. Moreover, operant learning theory applies to a wide range of social behaviors as Akers (1973) and Skinner (1953) pointed out.

Bandura and Walters, (1963), and Bandura, (1969) have suggested that an individual may also exhibit learning behaviors through imitation or modeling, or, in other words, by observing the punishment or reinforcement, which would follow the behavior of another person. Most recent literature about social learning has attempted to combine modeling and operant principles. (See Akers, 1973; Bandura, 1969; Kunkel & Nagaswa, 1973, cited in Minor, 1975, p. 47).

Social learning has gained a slight acceptance among sociologists. Traub and Little (1985) have cited dozens of criticisms of Sutherland's (1947) theory of differential association claiming that:

It omits consideration of free will, is based on a psychology assuming rational deliberation, ignores the role of the victim, does not explain the origin of crime, does not define terms such as systematic and excess, does not take biological factors into account, is of little or no value to practical men, is not comprehensive enough because it is not interdisciplinary, is not allied closely enough with more general sociological theory and research, is too comprehensive because it applies to non-criminals, and assumes that all persons have equal access to criminal and anti-criminal behavior pattern. (p. 22)

Burgess and Akers (1966a) have cited two major weaknesses of

learning theory in general: reductionism and tautology. Homans (1961) has responded to these criticisms by attacking structural explanations of human behavior as not being explanations at all, that propositions about aggregates have little generality. Moreover, Homans attacked Durkheim's paradigm of social facts by arguing that social facts could be related in causal terms only through intervening psychological processes.

It is important to observe the general reluctance of sociologists to accept the principles of social learning in general and behaviorism in particular for psychological explanations of human behavior. However, differential association theory and subsequent formulations and modifications have enriched our understanding of human behavior. Another theory, exchange theory, has generated a considerable interest among sociologists (Minor, 1975) and will be discussed in the next section.

Exchange Theory

Exchange theories have a diverse intellectual heritage, drawing from sources in economics (see Turner, 1974), psychology, (Emerson, 1969), anthropology (see Frazer, 1919; Levi-Straus, 1949/1969; Malinowski, 1922; and Mauss, 1925/1954), and sociology. The authors of the best known exchange theory are Homans (1961) and Blau (1964). The Hobbesian question of order is central to these theories, and exchange theory is a control theory in the sense that it either emphasizes the rationality of the exchange processes (Homans, 1961) or the resultant social solidarity (Blau, 1964; Minor, 1975).

According to the basic assumption of exchange theory, people seek rewarding statuses, relationships, and experiences and try to avoid costs, pain, and punishment. Consequently, people choose those from whom they expect the most profit, rewards, or satisfaction and avoid those relationships that are not profitable, rewarding, or satisfying. Homans (1961) acknowledged his intellectual debt to behavioral psychology and classical economics. However, Homans is responsible for originating exchange theory, and represents a perspective consistent with that of behavioral psychologists who believe that behavior can be explained in terms of rewards and punishments (i.e., rationality).

Homans (1961) presented five propositions which he considered sufficient for the explanation of human behavior:

1. If in the past the occurrence of a particular stimulus situation has been the occasion on which a man's activity has been rewarded, then the more similar the present stimulus-situation is to the past one, the more likely he is to emit the activity, or some similar activity now.
2. The more often within a given period of time a man's activity rewards the activity of another, the more often the other will emit the activity.
3. The more valuable to a man a unit of the activity another gives him, the more often he will emit activity rewarded by the activity of the other.
4. The more often a man has in the recent past received a rewarding activity from another, the less valuable any further unit of that activity becomes to him.
5. The more to a man's disadvantage the rule of distributive justice fails of realization, the more likely he is to display the emotional behavior we call anger. (pp. 53-55, 75)

As a result of these five propositions, Homans was able to

explain a variety of social behavior, including small group interaction, and status and conformity to norms. Homan's theory has been severely criticized by Ekeh (1974), and Turner (1974). The major four criticisms deal with the following areas: (1) reductionism, (2) tautology, (3) logical adequacy, and (4) paradigm compatibility. It is not the purpose of this research to review and defend these criticisms in spite of this theory's weaknesses. The purpose here is to share Homan's contributions and to acknowledge his theory as the dominant paradigm of social exchange theories (Minor, 1975), not to defend his work against the critics.

While Homans is the leading advocate of behavioral psychology, Peter Blau (1964), another exchange theorist, has acknowledged his debt to Mead or to symbolic interactionism (the term is coined by Blumer). Because the exchange is more subjective and interpretative and that the exchange occurs on the symbolic level, Blau sought to go beyond small interactional networks to the analysis of larger and more complex social systems. Turner (1974) has identified this attempt as follows:

1. The more profit a person expects from another in emitting a particular activity, the more likely he is to emit that activity.
2. The more a person has exchanged rewards with another, the more likely are reciprocal obligations to emerge and guide subsequent exchanges among three persons.
3. The more reciprocal obligations of an exchange relationship are violated, the more are deprived parties disposed to sanction negatively those violating the norm of reciprocity.
4. The more expected rewards have been forthcoming from

the emission of a particular activity, the less valuable the activity, and the less likely its emission.

5. The more exchange relations have been established, the more likely they are to be governed by norms of fair exchange.
6. The less norms of fairness are realized in an exchange, the more are deprived parties disposed to sanction negatively those violating the norms.
7. The more stabilized and balanced some exchange relationships among social units, the more likely other exchange relations are to become imbalanced and unstable. (pp. 267-268)

Blau has incorporated elements from a variety of sources, such as functionalism, interactionism, conflict, and other exchange theories as Turner (1974) points out. Blau's theory came under attack because of eclecticism, vagueness, and non-systematic presentation which have apparently hindered both theoretical refinement and empirical research.

For both theorists (Blau and Homans), what is important is that each party receives in the exchange something perceived as equivalent to that which is given: for Homans, it is distributive justice; for Blau, it is fair exchange.

The Social Solidarity Model

Containment Theories

While the above theories have stressed the importance of the rational component of social control, containment theories (e.g., Nye, 1958; Reckless, 1961; Reckless & Dinitz, 1967; Reiss, 1951) and bonding theorists (Hirschi, 1969), as well as role relationship

theory (Friday & Hage, 1976; Toby, 1957) have stressed the solidarity component of social control. Control theorists have drawn upon the writings of 18th and 19th century social philosophers who viewed human beings as basically antisocial. Thus, deviance is part of the natural order in society, and norm violations are basically attractive and exciting to most people. Consequently, most people are naturally motivated to deviate, and our task is to explain their conformity.

Reiss (1951) has stated that "delinquency may be defined as the behavior consequent to the failure of personal and social controls to produce behavior in conformity with the norms of the social system to which legal penalties are attached" (p. 196). Thus, Reiss presented a tautological definition of delinquency, based on the failure of integrating individuals to the society. In other words, deviance is a result of society's failure.

The best known containment theory was presented in a classic paper in 1961 by Reckless, and later by Reckless and Dinitz (1967). Reckless (1961) sought to explain delinquency in terms of both external and internal factors. He described these factors as follows:

Inner containment consists mainly of self-components such as self-control, good self-concept, ego strength, well-developed superego, high frustration tolerance, high resistance to diversions, high sense of responsibility, goal orientation, ability to find substitute satisfactions, tension-reducing rationalization, and so on. These are the inner-regulators. On the other hand "outer containment" represents the structural buffer in the person's immediate social world which is able to hold him within bounds. It consists of such items as a presentation of a consistent moral front to the person, institutional reinforcement of his norms, goals, and expectations, the existence of a reasonable set of social expectations, effective supervision and discipline (social controls), provision for reasonable scope of activity (including limits and responsibilities) as well as for alternatives and

safety-valves, opportunity for acceptance, identification, and belongingness. (pp. 44-45)

As a result of this scheme of theorizing, Reckless and Dinitz (1967) sought to verify their premises by conducting a series of studies, aiming to demonstrate that self-concept (a concept missing in Reiss' theory) played a significant role in preventing delinquency. Tangri and Schwartz (1967) have cited three major deficiencies in Reckless' theory: (1) methodological, (2) measurement problem of self-concept, and (3) inadequate theoretical linkage between self-concept and delinquency. In spite of these deficiencies, Reckless' containment theory has provided an alternative interpretation of deviance to the deterministic image, or class-biased interpretation of Cohen, (1955), Miller, (1958), and Cloward and Ohlin (1960).

Bonding Theories

According to this group of theories, conformity is the consequence of the social bond, and crime occurs only when the bonds to society are weak or broken (Hirschi, 1969; Nye, 1958; Toby, 1957). Crime or delinquency also occurs with loss of role relationships (Friday & Hage, 1976; Hage & Marwell, 1968; Marwell & Hage, 1970); neutralized behavior (Sykes & Matza, 1957); episodically released bonds (Matza, 1964); or being overcome by situational inducements (Briar & Piliavin, 1965). The description of the relationship between an individual and society has been defined using many terms (e.g., bond, role relationship, attachment, neutralization, etc.). In spite of these different terms, the above mentioned theorists have sought to explain the linkage interaction between individual and society.

Nye (1958) has suggested that parent-adolescent relationships are especially significant for social control and the prevention of delinquency. He proposed a multi-causal theory which focuses upon inadequate social control in accounting for delinquency among youth. He stated that "when internal and external controls are weak and alternate routes to goal achievement are restricted, delinquent behavior can be anticipated" (p. 4). Toby (1957) has described teenagers as differing in terms of their "stage in conformity" or, in other words, what a person risks losing by being detected in deviant behavior. Toby suggested that all of us are tempted by what we resist to the extent that we feel we have much to lose by deviant behavior.

Hage and Marwell (1968), Marwell and Hage (1970), and Friday and Hage (1976) have pointed out the importance of understanding the patterns of role relationships of adolescents and how these role relationships affect a youth's integration into society. Instead of the term "bond," they used the term "role" which seems more dynamic. However, Friday and Hage (1976) argued that their "approach is quite different from that of Hirschi (1969), who was also inspired by Durkheim but put most of the emphasis on attitudes, such as attachment, rather than behavior, as represented by role relationship variables, although a role relationship perspective is implied in Hirschi's study of juvenile delinquency" (p. 349).

Friday and Hage (1976) have cited five major patterns of role relationships. These are:

- (1) kin relationships--including the extended family, (2) community or neighbors, (3) school, (4) work, and (5) peers not otherwise defined by the four other categories.

Subsequently, if an individual has intimate role relationships in all five roles, they are much less likely to engage in youth crime, or as the intimacy declines (parallel to bond) both within certain areas and across all of them, the youth is less integrated into society and more likely to be involved in various kinds of crime. (p. 350)

According to Sykes and Matza (1957), much delinquency is based on what is essentially an unrecognized extension of defenses to crimes, in the form of justification or rationalization for deviance that is seen as valid by the delinquent but not by the legal system. For Sykes and Matza, delinquency is the individual's ability to rationalize or justify the moral order expressed by the law. These justifications either precede or follow deviant behavior to protect the individual from self-blame and the blame of others after the act.

Sykes and Matza have labeled these justifications "techniques of neutralization" which they divide into five major types: (1) the denial of responsibility, (2) the denial of injury, (3) the denial of the victim, (4) the condemnation of the condemners, and (5) the appeal to higher loyalties (Sykes & Matza, 1957, pp. 664-670). See literature review on Hirschi (1969) later in this chapter.

Matza (1964) severely attacked the positivistic paradigm in understanding delinquency. For him, the delinquent is an individual, much like his peers, who swings or drifts between conformity and deviance. Thus, he rejected the deterministic explanation of deviant behavior by stating that:

The periodic breaking of the moral order bind to law arising from neutralization and resulting in drift does not assure the commission of a delinquent act. Drift makes delinquency possible or permissible by temporarily removing the restraints that ordinarily control members of society, but of itself supplies no irreversible commitment or compulsion that would

suffice to thrust the person into the act--I wish to suggest that the missing element which provides the thrust or impetus by which the delinquent act is realized is will. (p. 181)

Of the preceding versions of control theory, Hirschi's (1969) is the most thoroughly developed. Hirschi's theory and its empirical testing will be discussed next in more detail.

Drawing upon the writings of Durkheim, Nye, Toby, and others, Hirschi specified four elements of the bond to society: (1) the effective attachment to conventional others, (2) a rational commitment to conventional activities, (3) involvement in conventional activities, and (4) belief in the personal legitimacy of the law.

In Hirschi's theory, attachment is defined as sensitivity to the opinions of others. Hirschi (1969) stated, "if a person does not care about the wishes and expectations of other people--then he is to that extent not bound by the norms. He is free to deviate" (p. 18). Respondents in Hirschi's study were asked many questions to explore the relationship between attachment to parents and delinquency involvement: (a) time spent with parents; (b) supervision by parents; (c) intimate communication between parents and child; (d) affectional identification by the juvenile with his/her parents; and (e) emotional support by the parents (Hirschi, 1969, pp. 88-93). However, he discounted time as relatively unimportant and was slightly displeased with the emotional support items in his study as being too vague. Supervision was important as well as affectional identification by the juvenile with his/her parents. The following question was asked to examine identification with parents and delinquent behavior: "Would you like to be the kind of person your father is?" He found

64% of those who answered in "every way" compared to 41% who answered "not at all" to the question, scored low on the delinquency index. Hirschi (1969) also found that "among his males the relationship between affection for mother and self-reported delinquency is stronger than the relationship between affection for father and self-reported delinquency" (p. 92).

Hirschi (1969) argues that attachment to the school is an artifact of successful bonding to the conventional order; and he postulates that attachment to school is similarly related to delinquency. Here he argues that "the boy who sees himself as capable of doing well in school will find school tolerable regardless of his ability as measured in a more objective fashion" (p. 117). In order to test this hypothesis, the subjects were asked to rate their academic ability in relation to other students in the school. He found that 13% of those who rated themselves "among the best" and 35% of those who rated themselves "below average" scored high on the delinquency index.

In order to assess the bond to school, Hirschi asked the respondents to respond to the following questions: "In general, do you like or dislike school?" (possible responses were "like," "neither like nor dislike," and "dislike"). According to his findings, 68% of those who reported "liking school," reported no delinquent behavior, compared to 33% of those who reported "disliking school."

In connection with the school, and in order to test the bond (attachment) to conventional figures, Hirschi asked the respondents to answer the following question: "Do you care what teachers think

of you?" (possible responses were "a lot," "some," and "not much"). According to his findings, 66% who reported "caring a lot" reported low delinquent involvement, and 35% who reported "caring not much" reported low delinquent involvement. Therefore, the findings which focused on attachment or the bond with the teacher seem significant in deterring delinquency.

Hirschi (1969) stated that "both differential association and control theory predict that the delinquent behavior of one's own friends is strongly related to one's own delinquency behavior" (p. 98). This hypothesis confirmed or supported his expectations because 73% of his subjects who reported having "no close friends picked up by the police" scored low on reported delinquency behavior, and 25% who reported having "four or more friends picked up by the police" scored low on reported delinquency behavior.

The fact that the significant others of any individual are parents or friends is relevant. If an individual is strongly attached to his/her peers, that individual is also more likely to be strongly attached to his/her parents. Hirschi's results have supported his position; as attachment to mother increases, so does attachment to peers. Hirschi postulated that the greater the peer attachment, the lower the reported delinquency involvement. Sixty-four percent of those who reported identifying "in most ways" with their friends reported low delinquent involvement, and 47% of those who reported identifying least closely and "not at all" with their friends reported low delinquent involvement.

According to Hirschi's theory, both aspirations and

expectations of achieving higher education or a high-status occupation wererelated to nondelinquency. These hypotheses were interpreted as supporting the contentions of Toby (1957) and Briar and Piliavin (1965) that those with a higher stake in conformity will be more likely to resist delinquent temptations, which contradict the strain theorists (Cloward & Ohlin, 1960; Cohen, 1955; Merton, 1937).

Hirschi argued that involvement in adult activities including smoking, drinking and dating are related to delinquent involvement. Among those who reported having begun smoking before age 13, 25% scored low on reported delinquent involvement; 64% who reported not smoking scored low on reported delinquent involvement. Also, Hirschi argued that drinking is more strongly related to delinquency than smoking and that dating is also strongly related to delinquency.

On the other hand, Hirschi speculated that involvement in adult activities is indicative of commitment to the conventional student status. Hirschi's argument (1969) is that "evidence of involvement in school is traditionally measured by time spent in and concern for homework" (p. 191). In general, there is a monotonic increase in the proportion of those scoring medium or high on reported delinquent involvement as the number of hours per day spent on homework decreases from one and one-half hours (34%) to one hour (48%), one-half hour (52%), and to less than one-half hour (64%). The second measure to test the commitment to academic activities is the importance that the respondent personally attaches to achieving good grades. Among those who reported viewing grades as being very important to

themselves personally, 64% reported low delinquent involvement, and among those who reported viewing grades as unimportant, 21% reported low delinquent involvement. Thus, those who have a stake in school performance are less likely to engage in delinquent activities.

Engrossment in conventional activities should absorb time available for delinquent activities. However, as mentioned above, of several measures of involvement, only time spent on homework had a consistent and reasonably strong inverse relationship with delinquency (see commitment to school). Other measures of involvement (working for pay, dating, feeling that "there is nothing to do," and time spent watching television, reading comic books, talking with friends, and riding around in cars) were related to delinquency only weakly, spuriously, or in the wrong direction. Hirschi concluded that "we must consider, then, what the child is doing, and assiduously avoid the idea that doing 'something'--anything--is better than, that is, inhibitive of, the commission of delinquent acts" (Hirschi, 1969, pp. 190-191). The problem with such measures of involvement is that they also may be conceptualized as measures of attachment or commitment.

The final element of the social bonding theory is belief. Hirschi argued that belief in the legitimacy of the moral order inhibits delinquency, while the absence of such belief encourages it. "Belief in the moral validity of the law is consistently related to the measures of attachment and commitment discussed earlier" (Hirschi, 1969, p. 203).

Except for the appeal to higher loyalties (which was not tested)

and the denial of the victim, Hirschi's findings supported his theory. He found that each of the techniques of neutralization (Sykes & Matza, 1957) was related to delinquency. He asked his subjects to respond to the statement, "It is all right to get around the law if you can get away with it." Controlling for various measures of attachment and commitment suggested that the relationship between the various techniques of neutralization and deviant behavior were genuine. Seventy percent of those who strongly agreed with that statement scored medium or high on reported delinquent behavior.

Respect for the police was another measure of belief. Twenty-nine percent of those who strongly agreed that they have a lot of respect for the police, and 66% of those who strongly disagreed scored medium or high on reported delinquent behavior. Another technique of neutralization is denial of responsibility. An item designed to measure this is the statement, "Most criminals should not be blamed for the things they have done." A second item to measure denial of responsibility is "I cannot seem to stay out of trouble no matter how hard I try." Fifty-one percent of those who reported strong agreement with the first item scored medium on reported delinquent involvement, and 39% of those who reported strong disagreement with the second item of denial of responsibility reported medium or high delinquent involvement. With respect to denial of injury, Hirschi (1969, p. 208) asked for responses to the statement, "Most things people call delinquency don't really hurt anyone." The results of this statement are as follows: Those most strongly agreeing with the statement reported most delinquent involvement (72%);

and those who strongly disagreed with the statement reported least delinquent involvement (31%).

Denial of the victim was measured by the following item: "The man who leaves his keys in the car is as much to blame for its theft as the man who steals it." Results for this item (mentioned earlier) did not support Hirschi's theory: the percentages reported were 44% and 37% respectively. And the final item of technique of neutralization reported by Hirschi is condemning the condemners. Hirschi tested this by stating "policemen try to give all kids an even break." The results showed a moderate relationship between agreement with the item and reported delinquent behavior: 35% and 58% respectively.

In a quasi-replicated study of Hirschi's bonding theory, Hindelang (1973) conducted research on groups of male and female students in grades six through twelve of one school in a rural area in upstate New York. The county in which the school studied is located has no town with a population greater than 4,400 and has a population density of 39 inhabitants per square mile. This is contrasted with Contra Costa, California which is a city with a population of 8,500 and a density of 756 inhabitants per square mile (Hirschi's study). Hindelang had 978 students respond to a self-report questionnaire. Nine hundred and forty one produced a usable questionnaire.

According to Hindelang's findings, attachment to parents and reported delinquent involvement were related. Sixty-one percent of the rural males who wanted to be like their parents "in every way" and 36% of those who answered "not at all" scored low on the delinquency index. With respect to affection for mother and self-reported

delinquency, Hindelang's findings indicated that affection for mother is a stronger deterrent than affection for father in predicting delinquent behavior. Seventy-nine percent of those who answered that they wish to be like their mothers "in every way" but only 36% of those who answered "not at all" scored low in self-reported delinquency. Moreover, Hindelang did not find any differences with respect to parental attachment--whether to mother or father. Thus, among Hindelang's rural students, attachment to parents was related to reported delinquent behavior as Hirschi expected.

As mentioned earlier, Hirschi assessed the bond to the school with the question, "In general, do you like school or dislike school?" Hindelang's subjects' responses were: 63% of the rural males who reported liking school and 45% of the rural males who reported disliking school reported low delinquent involvement. At the same time, 67% of the rural females who reported liking school and 41% of the rural females who reported disliking school reported low delinquent involvement. Also, Hindelang assessed the bond between teachers and students as part of the school setting by asking the question, "Do you care what teachers think of you?" Responses could vary from "a lot" to "not much." Among Hindelang's subjects, 70% of the rural males and 67% of the rural females who reported "caring a lot", reported low on delinquent involvement. Thus, Hindelang concluded that the bond with the teacher is closely related to self-reported delinquent involvement.

Hirschi predicts that the delinquent behavior of one's own friends is strongly related to one's own delinquent behavior.

Hirschi and Hindelang's findings supported this position. Eighty percent of the rural males who reported having no close friends picked up by the police scored low on self-reported delinquent involvement, while 26% of the rural males who reported having four or more friends picked up by the police scored low on delinquent involvement. Figures for rural females were weaker: 75% and 31% respectively. Moreover, Hirschi suggested that the greater the peer attachment, the lower the reported delinquent involvement.

The results of Hindelang's study did not support Hirschi's position. Of those who reported identifying most closely with their friends, 49% reported low delinquent involvement while 67% of those identifying least closely with their friends reported low delinquent involvement. Hirschi's figures were 64% and 47% respectively. Hindelang (1973) speculated "that among rural subjects the characteristics of those to whom one is attached may be necessary before a consistent relationship will emerge" (p. 479).

Hirschi stated that aspirations to achieve conventional goals constrain delinquency, unlike the assumptions of strain theory. Thus, Hirschi assessed involvement in adult activities by adolescents, predicting that activities such as smoking, dating, and drinking could lead to illegal behavior. With respect to Hindelang's findings, 28% of the rural males and 30% of the rural females who reported having begun smoking before age 13 scored low on reported delinquent involvement; and for those who reported not smoking, 68% of the rural males and 71% of the rural females scored low on reported delinquent involvement.

Combining the three adult activities for rural males, only 16% of those who did not report any of these activities scored medium or high on reported delinquent involvement while 73% of those who smoked, drank, and dated reported medium or high delinquent involvement. Thus, Hindelang questioned this aspect of Hirschi's theory.

Furthermore, Hirschi examined the commitment to academic activities and delinquent involvement by testing the importance that the subject attaches to good grades. Both Hirschi and Hindelang's findings confirmed this position. Sixty-six percent of Hindelang's rural males who reported viewing grades as being very important and 65% of rural females who reported the same also reported low delinquent involvement. For those who reported grades as completely unimportant, 21% of the rural males, and 39% of the rural females reported low delinquent involvement. Thus, those who have a stake in school performance for which delinquent behavior may endanger that status are less inclined to engage in delinquent activities, as Hirschi predicted.

Hirschi measured involvement in school activities by time spent on homework, as well as participation in nonacademic school activities which he predicted are inversely related to delinquent involvement. Hindelang pointed out that there is a monotonic increase in the proportion of those who scored medium or high on reported delinquent involvement as the number of hours per day spent on homework decreased from one and one-half hours to one hour, to one-half hour, and to less than one-half hour. Hindelang's (1973) findings are 39%, 40%, 55%, 53% for rural males; and 35%, 45%, 45%, 67% for rural females--very similar to Hirschi's findings (34%, 48%, 52%, 64%).

In another study, Linden and Hackler (1973) have developed a delinquency model based on differential association theory, control theory and affective ties theory that predict delinquent involvement. They obtained data on 200 boys, ranging in age from 13-15 years, who resided in four low-cost housing projects in Seattle, Washington. They divided them into experimental and control groups for the program, but they used both groups.

They measured attachment or ties to parents with 23 questions dealing with closeness within the family. An average of these 23 responses was used as an indicator of the closeness of the boy and his parents. On the other hand, ties to peers was measured by asking respondents how they felt about deviant and conventional peers, respectively. As Hirschi predicted on the basis of control theory, 48.5% of those boys having weak or nonexistent ties with both conventional peers and parents were delinquent while only 16.8% of those who reported moderate or strong ties with both parents and peers were delinquent.

Moreover, according to their findings, 42.9% of those who reported weak or nonexistent ties to any of the three groups (delinquent peers, nondelinquent peers, and parents) reported themselves as delinquent. And of those boys with weak ties to conventional associates but with moderate or strong ties to deviant peers, 58.3% were delinquent as self-reported.

Linden and Fillmore (1981) undertook a parallel study to Hirschi's based on a sample of all tenth-grade students ($n = 1152$) attending the two senior high schools serving the highest

socioeconomic area of the city, Edmonton, Alberta, Canada, ($n = 1152$). Their primary aim was to demonstrate that studies of delinquency done in one modern society could be generalized to other modern societies and their secondary goal was to more adequately combine elements of control and differential association theories of delinquency.

According to the two Canadian scholars, differential association has failed to explain why some teenagers have delinquent friends and others do not. Also, differential association suffered from research evidence that teenagers often begin their delinquent activities before they begin substantial association with other delinquents. On the other hand, Hirschi found that having delinquent friends had no impact on some teenagers (considering other bonds or roles in Friday and Hage's theory). Linden and Fillmore sought to repair these shortcomings of differential association by combining it with control theory. According to their model, teenagers with low stakes in conformity have little to lose by association with other delinquents, and that such association will further amplify their delinquency as they learn new criminal techniques and are reinforced for new acts of deviance.

Linden and Fillmore compared the delinquency of Richmond, Ontario, Canada and Edmonton, Alberta, Canada teenagers based on self-reported data. They found more serious offenses reported by Richmond's sample than in Edmonton (e.g., auto thefts 10.8 to 5.9 in Edmonton). But generally, the data are very similar.

Stakes in conformity are measured on the basis of attachment

to parents and liking school. They found that in both Edmonton and Richmond these items were negatively correlated with being delinquent and with having delinquent friends, and in both nations, those with delinquent friends were more apt to be delinquents. Finally, their reformulated model fit those data well. In both Canada and the United States low stakes in conformity seemed to lead to the formation of attachments to delinquent peers. The correlation for Richmond males was .30 and females .24, but for the Canadian teenagers the correlations were .11 and .20 respectively.

Jensen (1972) reanalyzed Hirschi's (1969) data, focusing on the relationship among parents, peers, and delinquency, but used more extensive measures of availability of delinquent patterns. He tried to go beyond Hirschi to a more explicit test of differential association theory. Two major hypotheses were investigated: (1) does parental control affect delinquency directly as Hirschi predicted or indirectly by influencing the probability of learning delinquent definitions as differential association suggested? and (2) do delinquent peers foster delinquency directly as suggested by the group process and situationally induced motive theories (Briar & Piliavin, 1965; Short & Strodtbeck, 1965), or indirectly by exposing a boy to delinquent behavior patterns as differential association theorists have argued.

In order to measure the availability of delinquent patterns, Jensen (1972) used official delinquency rates in schools, perceptions of trouble in the neighborhood and number of delinquent friends. Furthermore, he used four items to represent Sutherland's (1947)

definitions favorable to violation of the law.

According to his findings, with respect to the first hypothesis, when the differential association variables are held constant, the parental control variables (father's supervision and father's support) still depressed delinquency. Jensen (1972) concluded that "control theory is supported over differential association" (p. 574). With reference to the second hypothesis, he found that "the number of delinquent friends affected delinquency independently of the effect of delinquent definitions. Again, he concluded that group process and situational motives theories are empirically superior to differential association theory" (p. 574).

However, Jensen's findings should be approached carefully with the realization that he didn't intend to test both theories explicitly. Moreover, Matsueda (1982) pointed out that Jensen's study left several questions unanswered:

First, does measurement error in the indicators of the ratio of delinquent and antidelinquent definitions seriously attenuate their effects on delinquency? Second, given that Sutherland (1947) invented the differential association principle in part to account for certain variations in crime rates--variations according to age, social class, broken homes, and neighborhoods--can it in fact do so? And third, is the substantive picture distorted because Jensen's three tables fail to capture more complex relationships among relevant variables? (p. 491).

Caplan and Leblanc (1985) replicated Hirschi's study on a sample of 1,472 male adolescents attending public high schools on the Island of Montreal, Canada. According to their findings with respect to attachment to parents, a negative relationship between affectional identification with father and delinquency ($\gamma: -.24$), and affectional identification with mother and delinquency ($\gamma: -.12$), was

very similar. They also found that adolescents with positive attitudes toward school demonstrated the greatest variation in their delinquent involvement, suggesting that a positive attitude toward school had the greatest impact on delinquent involvement ($\gamma = .26$, in Hirschi's study, it was $-.41$) (p. 126).

With respect to attachment to teachers in the Canadian study, whether an individual expressed concern about teachers' opinions of him/her or did not, those opinions had little effect on his/her involvement in delinquent acts. Twenty-one percent of those who cared "a lot" reported involvement in two or more acts, while for those subjects who reported "not much" concern, 28% admitted two or more delinquent acts. In sum, the Canadian findings with respect to the level of concern for teachers' opinions did not affect the adolescent's involvement in delinquent acts ($\gamma = -.04$).

Caplan and Leblanc examined the distribution of delinquent friends in their study, and found certain differences across samples. In the American studies (Hindelang, 1973; Hirschi, 1969), 48.1% of Hirschi's sample had delinquent friends, and 63% of Hindelang's sample also had delinquent friends. This was in contrast with the Canadian study in which only 27.1% had delinquent friends. Moreover, less than 25% of all three samples listed one or two delinquent friends.

With respect to involvement in conventional activities, Caplan and Leblanc found a negative relationship between time spent doing homework and involvement in delinquent activities. They found 62% of the adolescents who reported spending less than one half hour a

day on their homework admitted one or more delinquent acts, compared to 64% of Hirschi's sample who reported the same level of delinquent involvement. The second aspect of involvement is participation in adult activities in which they found that 42% of those adolescents not involved in smoking, drinking and dating were not involved in delinquent behavior, while 55% of those who dated and drank committed one or more delinquent acts.

Finally, the belief component explains the highest proportion of the variance with the variable of moral duty to obey the law consistently being the most powerful belief item with all four independent variables. In sum, by examining the overall explanatory power of the theory for four items in the deviant behavior scale: (1) frequency of alcohol and marijuana use, (2) frequency of use of stronger drugs, (3) minor delinquent behavior (e.g., vandalism), and (4) serious delinquent behaviors, moderate support for the theory was reported.

Conger (1976) utilized data collected from two surveys. The first was done in Seattle, Washington at the Seattle Atlantic Street Center in 1964. A total of 374 seventh graders in two schools were surveyed; 221 blacks, 104 whites, 38 orientals, and 11 of mixed racial background. The second survey was done in 1965 and the sample was comprised of 1,588 white males out of the original sample of 5,545 (the same data used by Hirschi, 1969).

Conger's (1976) study attempted to go beyond the social control perspective. Specifically, he tried to show how social interaction processes can affect delinquent behavior. The joint influences of

parents and peers and how they relate to delinquent behavior was explored. However, as Conger pointed out, his study didn't intend to test the two models. As a result, his findings should be approached very carefully.

According to Conger's (1976) findings, attachment and delinquency supported the social learning theory's assertion that no real prediction can be made unless the type of peer is taken into account. In other words, attachment to conventional peers tends to decrease delinquency involvement and attachment to delinquent peers increases delinquency involvement. The same principle is applicable for attachment to parents.

Conger (1976) found that "the actual parental behavior, not the simple existence of juvenile communication or identification with parents, is the most important part of the bond between parent and child which protects against delinquency involvement" (p. 36). However, Conger didn't use the five elements of the bond between parent and child to test attachment to parents and delinquency involvement; only communication and identification were used. However, Hirschi (1969) addressed the shortcomings of his study by stating that "control theory is supported with two exceptions. First, involvement in conventional activities was not as important as the theory predicts in delinquency prevention. Second, the influence of delinquent peers has an importance in the commission of delinquent acts not predictable from the current formulation of control theory" (pp. 230-231). The importance of Conger's study stems from addressing peer attachment and delinquency involvement.

Hepburn (1977) combined the causal structure of social control theory (Hirschi, 1969) and Sutherland's (1947) theory of differential association by using correlational data of 139 males, aged 14-17 in a medium-sized industrial city. He used four variables to test the two models: (1) lack of family support, (2) delinquent definitions, (3) delinquent associates, and (4) delinquent behavior.

According to Hepburn's (1977) findings, Sutherland's (1947) causal structure depends upon delinquent associates to mediate between poor family support and delinquent definitions. Empirical support was not found for such a position. On the other hand, the findings supported Hirschi's (1969) view that delinquent definitions, whether using behavioral constraint or willingness to engage in delinquency, precede having delinquent associates in terms of importance. Moreover, Hepburn praised the affective model presented by Linden and Hackler (1973) mentioned above, which provides greater clarity for reformulating Hirschi's causal model of delinquency.

In an attempt to explain the differential rates of delinquency between rural and urban areas, Lyerly and Skipper (1981) have used the social control theory of Hirschi, not only to investigate the differences, but also to measure the extent of delinquency involvement and degree of commitment to five institutional orders: (1) family, (2) church, (3) school, (4) peers, and (5) formal authority. The combination of these institutional orders and of the individual's perception of his/her relationship to them comprised the social bond which insulates the youth from delinquency.

Lyerly and Skipper's data were drawn from anonymous self-reported

reported questionnaires administered by the principle researchers to urban and rural teenagers who were being officially detained (institutionalized) and held in two separate juvenile detention centers in Southwestern Virginia. The first center serves the rural counties of Giles, Pulaski, and Montgomery. The second facility is located in Roanoke and serves both the city and the county. One hundred white male juveniles participated in the study; blacks and females were excluded because of their small numbers.

According to their findings, among the sample of rural and urban offenders, a strong inverse relationship was found between the composite commitment scores and deviant behavior. Only commitment to family did not prove to be statistically significant. Lyerly and Skipper explained these findings by indicating that only 33% of the total sample lived with parents. Commitment to school and legal authority was most strongly associated with delinquent behavior, and rural offenders were more strongly committed to conformity than urban offenders. No difference was reported between rural and urban youngsters with respect to legal authority, but rural boys reported less serious and less frequent involvement in delinquent activity than did urban boys. Justification for these findings included the idea "that the urban sample may be more typical of the majority of urban youngsters who live in the metropolitan sections of the nation" (Lyerly & Skipper, 1981, p. 398). In sum, the two researchers concluded that both theory and data suggest that control theory remains a promising one to explain delinquent behavior in different settings.

Krohn and Massey (1980) replicated Hirschi's (1969) study on a

sample of 3,065 male and female adolescents in grades 7 through 12 in six communities in three midwestern states to examine the overall and relative effects of social bonding theory on four separate measures of deviance.

Attachment was measured by three scales: (1) maternal attachment, (2) paternal attachment, and (3) peer attachment. The questions comprising these scales were similar to those used by Hirschi and represent the components of supervision, praise, discouragement, closeness, and satisfaction. The findings concerning attachment to friends, and attachment to mother and father are small. The commitment element was measured by the following activities: (a) school work, (b) athletics, (c) musical groups, (d) pep groups, (e) other school activities, and (f) community clubs.

Responses ranged from "very important" to "not important at all" and when combined generated a range of scores from high commitment (28) to low commitment (7). Furthermore, the G.P.A. (Grade Point Average) as an indicator of commitment was included. Other measures of commitment, such as educational aspirations and the importance of a good career were similar to Hirschi's. However, Krohn and Massey (1980) included the element of involvement within the element of commitment, arguing that both involvement and Hirschi's notion of attachment to school should be one concept.

With respect to their findings concerning commitment, with the exception of the minor substance use scale, the commitment component explained a higher proportion of the variance than did attachment and belief. And among the most powerful indicators were the commitment

index and G.P.A.

The final element of the social bond is belief and it was measured by three items related to the degree of agreement or disagreement respondents have with parental norms, legal norms, and belief in the value of education. From the findings, for minor substance use, the belief component explains the highest proportion of the variance with the variable of moral duty to obey the law consistently being the most powerful belief item with all dependent variables (frequency of alcohol and marijuana use, use of stronger drugs, minor delinquent behavior, e.g., running away), and serious delinquent behavior (e.g., theft of things worth \$2 to \$50).

In sum, for alcohol and marijuana use, the theory accounts for 29% of the variance, whereas for more serious forms of substance use, the theory accounts for 17% of the variance. Finally, for hard drug use, 16% of the variance was explained and for serious delinquency, 18% of the variance was explained by Krohn and Massey's (1980) study.

In contrast with Hirschi's study, the findings of the Krohn and Massey study moderately supported the theory for all four deviant behavior scales. It should be considered that attachment was the weakest predictor while the new conceptualization of commitment was the most powerful predictor of deviance, as well as the element of belief. However, Krohn and Massey also demonstrated that the elements of the bond were more predictive of minor offenses than serious offenses; and moreover, the commitment and belief elements were more strongly related to female's deviant behavior than male's deviant behavior.

Using the same criterion as Krohn and Massey (1980) to measure social bonding theory, Krohn, Lanza-Kaduce, and Akers (1984) combined it with social learning perspective. They argued that social bonding theory and social learning theory can be differentiated in terms of the former's emphasis on the weakening of conventional bonds and the latter's emphasis on the importance of the process of acquiring and maintaining deviant definitions and behaviors.

Krohn's et al. (1984) data were collected as part of a larger study of adolescent drug use and drinking: 3,065 male and female students in 22 schools in seven midwestern communities representing four different settings (rural farm community, rural non-farm community, suburb, and city) participated in this study.

Krohn's et al. objective was to examine the differences across the rural-urban continuum on the variable suggested by both theories on rates of deviant behavior, and to see the significant interaction between social context and the variables in both theories. They assumed that social learning variables will explain deviant behavior equally across community contexts, and that any differences in rates of delinquency will merely reflect different levels of reinforcement, association with deviant others, and definitions favorable to deviance found in the respective communities. On the other hand, the social bonding variable might account for any delinquency differences found across communities.

According to Krohn's et al. (1984) reported findings, with respect to the social learning perspectives, the combination of the following variables: (a) peer-association scale, (b) respondent's

own definitions, and (c) the reinforcement balance of good versus bad consequences of use--explained 52% of the variance for marijuana use and 68% of alcohol use. Also, the interactions between the definitions of both farm and city variables were significant in the analysis for the four communities. The explained variance for the farm and city was increased, due to the contribution of the definitions variable. Consequently, "the assumption that there would be no significant interaction in terms of the social learning analysis was only partially true" (Krohn et al. 1984, p. 362).

With respect to the bonding variable, Krohn et al. regressed alcohol and marijuana on bonding variables in each of the communities with separate regression runs, and found that for alcohol use, the social bonding variables accounted for the most variance in the farm community and the least in the nonfarm community. Similar analyses of marijuana use were run, and they found the bonding variables were slightly less effective in the farm community than in the nonfarm and suburban communities. In contrast with the social learning theory, they found a higher explained variance for marijuana use than for alcohol use in the farm community. In sum, "almost all of the bonding variables showed a significant relationship to the dependent variable in some, but not all cases. Community context and social learning variables didn't interact with context, and finally, the farm and suburban areas were similar, and the nonfarm and urban areas were more alike than either of the other two contexts" (1984, p. 361).

Virtually most replications of Hirschi's (1969) theory have used cross-sectional data. According to Agnew (1985), "this is a serious

problem, because, as many researchers have noted, there is good reason to believe that delinquency has a causal impact on social bonds" (p. 49). Agnew points out that delinquency may lead to family and school problems, thereby lowering attachment. Delinquency may also jeopardize the adolescent's current and future involvement in conventional activities, thereby lowering commitment. Finally, delinquency may reduce the adolescent's belief in conventional values through a hardening process of the type described by Minor (1984). It is possible that a large part of the "correlation between delinquency and the social bonds is due to the causal impact of delinquency" (p. 48). Agnew (1985) concluded that cross-sectional research has exaggerated the importance of the theory's capability to explain delinquency. The alternative as suggested by him, is a longitudinal study.

Agnew (1985) used data from the Youth in Transition Survey, a national longitudinal survey of adolescent boys conducted by the Institute of Social Research at the University of Michigan. The first wave of data collection started in the fall of 1966 when the subjects were beginning the 10th grade, using a multistage sampling procedure. An unbiased sample of 2,213 tenth grade boys was selected in public high schools throughout the nation. The second wave of data collection started in the spring of 1968, near the end of the 10th grade for the selected subjects. The total sample was 1,886 boys, which was 85.2% of the Time 1 Sample.

Agnew (1985) measured delinquency by two self-report scales adopted from Gold (1966). The first was the 26-item "Total

Delinquency" scale used by Wiatrowski et al. (1981). This scale included a variety of delinquent acts including interpersonal aggression, theft, and vandalism. Agnew (1985) wanted to verify the findings of Krohn and Massey (1980) which indicated that control theory best explains minor delinquency. To facilitate this attempt he used another scale. The second scale was called "Seriousness of Delinquency." In this scale, 20 items were used which dealt with minor and serious offenses: (a) theft, (b) fighting, (c) arson, and (d) robbery. According to his findings, total variance explained by the total delinquency scale was 28.5% and 14.7% of the variance was explained by the seriousness of delinquency scale. The results of the total delinquency scale were similar to Wiatrowski's et al. (1981). Both studies were based on the same sample. However, Wiatrowski et al. (1981) were able to explain slightly more of the variance through the use of the Total Delinquency Scale. Agnew (1985) attributed that to the inclusion of the SES variable. At any rate, the findings supported Krohn and Massey's conclusions (1980), that control theory is most effective in explaining minor delinquency.

Agnew's (1985) regression results indicated that only three of the control variables have a significant effect on Time 2 Total Delinquency, with one effect significant at only the .05 level. Grades and beliefs have a negative effect on delinquency and dating has a positive effect. By examining the amount of variance explained by the control theory variables over and above Time 1 delinquency, Agnew found that these variables account for 1.5% of the variance in

Time 2 seriousness of delinquency and 1.8% of the variance in Time 2 total delinquency. Thus, longitudinal regressions have a very small impact on Time 2 delinquency.

Further testing and different interpretations were reported to explain the low amount of variance explained. Agnew (1985) reported the "panel analysis was subjected to a number of sources of bias, and certain of these biases may account for the small effect of control theory" (p. 54). However, Agnew concluded after presenting his three different explanations that they are not mutually exclusive and the findings should be approached very carefully. Longitudinal regression results were very damaging, yielding support for his argument that the importance of the theory was exaggerated, and its ability to explain minor delinquency as Krohn and Massey (1980) concluded is supported. Also, Agnew indicated that social control theory is unimportant in predicting delinquency among middle to older adolescents, but may be more important in predicting delinquency among younger adults. Moreover, the regressions indicated that the control variables were able to explain only from 1-2% of the variance in future delinquency. Finally, Agnew (1985) suggested that "the small effect of the control variable was attributed to such things as the causal impact of delinquency on social control, the high stability of delinquency among the adolescents in the sample, and the declining importance of Hirschi's social control variable among older adolescents" (p. 54).

A longitudinal study was conducted by Wiatrowski et al. (1981), using the same data that Agnew (1985) used. Wiatrowski et al. (1981)

suggested that Hirschi's (1969) study "raised three crucial issues: (1) the extent to which Hirschi's four elements represent empirically distinct components of socialization is unclear, (2) why are only four elements of the bond identified when additional elements of the bond could be considered, and (3) Hirschi fails to incorporate constructs such as family socioeconomic level, ability, and significant others influenced that research has determined to be important in the development for their aspiration" (p. 526).

In order to overcome these three weaknesses, Wiatrowski et al. (1981) constructed measures of each of Hirschi's four elements and estimated how much each element contributes over and above the others to the explanation of delinquent behavior. Additionally, Wiatrowski et al. (1981) examined the structure of the social bond very closely by using factor analysis to discover and define new elements. Two multivariate analyses were used, incorporating measures of social class, ability, and grades as well as elements of the social bond. The objectives of this study were twofold: (1) to extend and replicate Hirschi's study, and (2) to develop and evaluate a revised model.

According to Wiatrowski's et al. (1981) findings, "parental attachment and school attachment have a strong negative relation with delinquent, whereas for grades the coefficient was moderately negative, as would be predicted by control theory. Dating was strongly related to delinquency as would be predicted by control theory" (p. 536). With respect to commitment variable, it did not exhibit the strong negative effects predicted by Hirschi's control theory. The

strength of the involvement relationship was significant and in the right direction. With respect to the belief variable, a moderate and significant negative path coefficient was found. Moreover, "in the context of statistical controls for ability, social class, and grades in school, the bond elements which emerge as important explanatory variables are attachment to parents, dating, attachment to school, belief, and involvement" (p. 537).

When Wiatrowski et al. (1981) examined how the four elements of the bond operate simultaneously, the zero-order correlations indicated that larger correlations with Hirschi's four bond elements do exist, with one exception, "the element of commitment to college and a high status career" (p. 538). By examining how the four elements of the bond operate simultaneously and with controls for ability and school grades several components were found more important than others, such as school, which meant that "the bond not only found in the family, as Hirschi argues, but in part in an educational context" (p. 539). Wiatrowski et al. (1981) found that social class and ability affect both parental attachment and a set of school-related components of the social bond which in turn affect belief (Hirschi found no relationship between social class and delinquency).

Wiatrowski et al. (1981) pointed out several limitations:

First, the causal ordering implied in the research is questionable, in the sense that their measurement of the delinquent behavior asked for reports on behavior over the last three years (Hirschi asked about behavior over the last academic year). A second potential limitation is the use of a single, global measure of delinquency. This measure contains some items pertaining to delinquent behavior in school, and it is possible that apparent influence of attachment to school and other school-linked variables on delinquency may

be due to the inclusion of these items. (p. 536)

Finally, the Wiatrowski et al. (1981) revised model was able to explain 32.5% of the variables in delinquency, unlike Krohn and Massey (1980) and Agnew (1985) who suggested that control theory is able to explain only about 15% of the variance in moderately serious forms of delinquency.

Another longitudinal study was conducted by Paternoster, Saltzman, Waldo, and Chiricos (1983) on a sample of three hundred college students selected randomly from a list of freshmen enrolled at a major state university who were interviewed by trained student interviewers between January and June of 1975 (time 1) and one year later (time 2).

Paternoster et al. (1983), combined deterrence, social bonding and social learning theories to explain deviant behavior. With respect to deterrence, respondents were asked to estimate their own chances of getting arrested for each of five offenses, with response options ranging on a five-point continuum from "very likely" to "very unlikely." Social bonding elements were measured as follows: Commitment was measured by the G.P.A. in the university as an indicator of past investment. For future commitment, respondents were asked a series of questions about whether they thought their involvement in each of five illegal behaviors would reduce their chances of achieving: (a) good grades, (b) a college degree, (c) a high paying job, (d) a secure job, (e) a position of leadership in school, (f) a good marriage partner, (g) material well-being, and (h) peer acceptance. To measure attachment, two scales were constructed. One measured

parental attachment, the second measured attachment to peers. Respondents were asked to indicate how important it was that their mothers, fathers, best friends, boy/girlfriends approve of the things they do, how much influence the disapproval of these others would have on their behavior, and finally, whether they would like to be the same kind of person that these others are.

The third element is involvement, and Paternoster et al. (1983) measured it by summing the number of hours per week that the respondents reported that they spent studying, attending classes, or participating in athletics, church affairs, and similar conventional activities. And finally, belief was measured by asking respondents to indicate if they thought it was always wrong to commit each of five deviant acts. Response options for the five belief items ranged on a five-point scale from "strongly agree" to "strongly disagree."

For the social learning perspective, they measured the degree to which the respondent risked informal sanctions for five illegal behaviors by asking them to indicate the reactions that their mothers, fathers, best friends, boy/girl friends would have if the respondent were to commit each of them. Response options ranged from "highly disapprove" to "highly approve" with a high score indicating disapproval should the respondent commit the deviant act.

Paternoster et al. (1983) measured the dependent variable by five behaviors, including: (1) theft under \$10, (2) theft under \$100, (3) property damage, (4) writing a check with insufficient funds, and (5) marijuana use. They gave a score of 1 if participants reported committing the act in the past year and a score of 0

if they didn't.

Paternoster's et al. (1983) model did a fair job and provided reasonable support for control theory. The full model with Time 2 criminal involvement as the dependent variable explained 34% of the variance, a proportion consistent with other studies of social control (Krohn & Massey, 1980; Wiatrowski et al., 1981). With the exception of grades and attachments to parents, the other endogenous variables were well explained within the model. Secondly, it should be observed that the best predictors of time 2 criminal involvement were, in order of importance: Time 1 criminal involvement ($B = -.381$), beliefs ($B = -.111$), informal sanctions ($B = -.167$), grades ($B = -.140$), and sex ($B = .078$).

They also found that informal sanctions and beliefs were good predictors of criminal involvement which is consistent with Krohn and Massey (1980); Wiatrowski et al. (1981); and Tittle and Villemez (1977). In sum, Paternoster et al. found that prior delinquency had a moderate effect on most social bonds. However, they did not control for prior levels of social control in their analysis, unlike Krohn and Massey's study.

Poole and Regoli (1979) utilized data collected from 72 respondents ranging in age between 14-17 years of age in order to test the effect of parental support and delinquent friends on delinquency. They placed the primary emphasis of delinquency control theory on the correlation between the adolescent's attachment to his/her parents and subsequent deviant behavior. Control theory hypothesized that delinquent behavior is the outcome of a weak or broken association of

the delinquent adolescent with society. Along with this notion, lack of family support is viewed as a correlation factor to delinquency. In addition, the study found that subjects having low family support engaged in more frequent, serious and varied delinquent activities than did subjects having a higher family support.

Cernkovich (1978) utilized data collected from anonymous self-report questionnaires administered to a sample of 412 male students, ranging in age from 14 to 18, in a predominantly white high school located in a midwestern city. Cernkovich examined variables derived from structural theory (socioeconomic status, and perception of limited opportunities) as well as control theory (conventional value orientation and subterranean value orientation) and their relationship to reported delinquency involvement.

The findings indicated that of the two theories, control theory was the most robust in terms of explaining the most variance in delinquency involvement (12.5%) while the structural model explained only 8% of the variance. Furthermore, Cernkovich indicated that by using both models, the amount of explained variance increased to 14.5%. In sum, the control theory was supported empirically over structural theory in terms of explaining delinquency.

Linden and Currie (1977) applied social control theory to test the relationship between religiosity and drug use. "Social control theory maintains that the greater an individual's stake in conformity, the stronger his/her ties to conventional others and to conventional institutions, the lower the likelihood will be of his/her committing a delinquent act" (pp. 346-347). In other words, church

is one of the major social institutions and the theory would predict that ties to the church would provide adolescents with a stake in conformity which would reduce the likelihood of their engaging in delinquent behavior.

Linden and Currie's (1977) data were gathered as part of a larger study carried out by Currie (1973) and consisted of a city-wide sample of 750 Calgary, Alberta, Canada youths between the ages of 15-24. Seven hundred and eight individuals completed a useful questionnaire. According to their reported findings, and unlike the Hirschi and Stark study (1969), church attendance was not found to be related to delinquency involvement. The Linden and Currie (1977) study indicated that those who attended church most frequently had the lowest degree of illicit drug use. Thus, the present study (Linden & Currie) supported social control theory by showing that ties to conventional institutions (church) are a major factor in reducing the likelihood of involvement in illicit drug use.

Linden and Currie (1977) indicated the major difference between their study and Hirschi and Stark's (1969) study concerning the following: (a) dependent variable, (b) dates on both studies, and (c) changes of the meaning of church attendance which have occurred during that period. With respect to the first factor, the dependent variable in Hirschi and Stark's study was deviant behavior, while in Linden and Currie's study it was illicit drug use. The second factor is that during the 1960s the influence of religion in both the U.S.A. and Canada had declined. In sum, the Canadian study supported social control theory by concluding that church attendance

has a direct impact and acts as a constraint against drug use, and that it provides an individual with a stake in conformity as the theory predicted.

Eve (1978) utilized a questionnaire on 300 eleventh and twelfth-graders in a county-operated public high school located on the edge of a southeastern city of about 100,000 people. Males represented 34.7% of the sample and females constituted 55.2%. Twenty percent of the respondents were black, and 79.2% were white. Eve aimed to test the efficacy of strain theories, cultural theories, and control theories to explain delinquent behavior (drug use and traditional deviance).

While the three theories have the ability to explain variance in the dependent variables, social control theory has substantially greater explanatory power than either of the other two theories. In both strain and cultural theories, equal amounts of variance were explained. Eve (1978) indicated that "high levels of social control were strongly related to lower levels of drug use, but less strongly related to lower levels of traditional deviance" (p. 124). In sum, Eve's findings suggested that while all three theories have some significant explanatory power, social control manifested the greatest explanatory power, followed by culture and strain theories.

Chuen (1988) replicated social control theory by using self-reported data collected from 3717 Chinese junior and senior high school students in northern Taiwan. Both schools are located in a high delinquent area and Chuen's findings have a profound implication

for social control theory.

Chuen assessed the bond to the school with the question, "Do you like to go to school (dislike/mixed/like)?" Fifty-one percent of those who responded as disliking school reported high in self-reported delinquency, and 22.5% of those who responded as liking school scored low on self-reported delinquency. With respect to educational aspiration, Chuen asked the question, "How much education do you hope to receive?" Fifty percent of those who hoped to receive only a junior high school education scored high on self-reported delinquency, while 31.9% of those who aspired to finish graduate school or over scored low in self-reported delinquency. With respect to involvement in conventional activities, Chuen asked the question, "How much time do you spend doing homework?" Forty-three percent who reported one hour or less and 25.5% of those who reported three hours or more scored high on self-reported delinquency. Finally, with respect to the belief variable, Chuen asked the respondents to respond to the statement, "It is all right to take advantage of the law, if you can be exempt from punishment." Forty-four percent who agreed and 23.7% who very strongly disagreed scored high in self-reported delinquency.

Chuen did not report on all of the items he used in his study, but it is very obvious that his findings are consistent within the proportions of control theory.

Research Hypothesis

Hirschi (1969) did not develop a hypotheses to test his theory. However, the four components of the social bond (attachment to significant others, commitment to conventional activities, involvement in conventional activities, and belief in the conventional order) have been explicitly tested by Hirschi and other criminologists, as we have seen in this chapter.

The following four hypotheses will be tested in this dissertation to determine the relevance of Hirschi's control theory on Jordanian juvenile respondents. These are:

1. There are no significant differences between delinquents and nondelinquents with respect to attachment to significant others.
2. There are no significant differences between delinquents and nondelinquents with respect to commitment to the conventional activities.
3. There are no significant differences between delinquents and nondelinquents with respect to involvement in the conventional activities.
4. There are no significant differences between delinquents and nondelinquents with respect to belief in the conventional order.

These hypotheses are simply the components of social bond formulated in a test of significance format. Although Hirschi did not test hypotheses as mentioned above, his study certainly implies an examination of this nature.

This is an exploratory study which takes place in another cultural setting, and the essential purpose is to find out if the

original theoretical model is applicable or not in Jordanian society. Thus, the reconceptualization of the theory is irrelevant to the present study. However, the theory's shortcomings will be addressed and the results of the present study will be compared to those of Hirschi's work.

Summary

Chapter II presented a brief statement about control theories in general and an extensive review of the literature, specifically replicated studies of Hirschi's (1969) theory. Finally, the hypotheses of this study were presented.

Control theories were classified into four groups: (1) social structural disorganization, (2) cultural disorganization, (3) learning theories, and (4) exchange theories. According to this set of theories people deviate either to enhance their economic position (Merton, 1937), social status (Cohen, 1955), or conform to a different subculture. Finally, people deviate with expectations of distributive justice (Homans, 1961) or fair exchange (Blau, 1964). The suggestion was made to place these theories under the rationality model. In this sense people deviate or conform after rationally calculating what they stand to lose or gain by their behavior. The second set of theories are: (1) the containment theory, (2) the bonding theory, and (3) the role relationship theory. According to this group of theories, people don't need motivation to deviate, as deviance is part of the natural order. Our task is to explain why they don't deviate instead of asking why they do it.

As mentioned earlier, the bonding theory is the purest type in this cluster of theories. No other theory has received attention like Hirschi's (1969) theory. The general theoretical framework of this theory is to answer the question "why don't they do it" (deviate)? Thus, Hirschi explains lack of deviance by social integration, or the social solidarity in the society. Whenever the ties of the individual to his/her society become weak, the chances of deviance increase. Moreover, as we have mentioned earlier, Hirschi (1969) and others thoroughly investigated this relationship by examining the four major premises of the theory. Thus, this cluster of theories was placed under the solidarity model in the sense that solidarity or social integration is a key concept to link all these theories together.

CHAPTER III

RESEARCH METHODS

The purpose of this chapter is to present the methodological aspects of this research in four sections. The first section provides a description of the setting and the sample. The second section explains the methodology involved in the data collection. The third section offers a description and measurement of variables in the study. The fourth section focuses on the statistical techniques utilized in analyzing the collected data.

The Setting: The City of Tafielah

Tafielah is an ancient city located in the southern part of Jordan, inhabited by 16,120 people, according to the 1985 Jordanian Census Bureau report (Public Census Bureau, 1985). Tafielah's governate has six major localities (districts), administered by the city, but each locality has its own municipality or center. The total population of the governate is 42,820 inhabitants according to the 1987 Census Bureau report; 16,700 are urban (as defined by the Census Bureau as a population of 5,000 in 1979), and 26,120 are rural (Public Census Bureau, 1987).

The six major districts of Tafielah's governate are the following: "(1) Bsaira is the largest, and it is inhabited by 10,070 people; (2) El-Hesa ranks second in terms of population and is inhabited by 5,540 persons. Most of its population work in the phosphate

fields; (3) Qadisiyyeh is inhabited by 4,700 people; (4) Ain El-Baidha has a population of 3,085; (5) Emah is inhabited by 1,250 people; (6) Gharandel is inhabited by 1,555 people" (Public Census Bureau, 1987, p. 50).

During the last two decades, the kingdom has witnessed a rapid increase of services in terms of social organizations, social centers, cooperative societies, etc. Tafielah's governate has 295 agricultural cooperative societies (it is mainly a rural city); 72 saving and lending societies; and 383 multiple purpose societies (such as eight charitable organizations; four motherhood centers, etc.). Along with these organizations, the Jordanian government has paid increased attention to the health services as evidenced by the establishment of nine public health centers, two dental clinics, two pharmacies, nine post-offices and the government hospital. In sum, 23 governmental services have been established in the city employing 1,156 persons.

From an administrative point of view, six municipalities were founded to serve the needs of the people residing in villages of less than 5,000 people. Also one public library in the city was established in addition to a library in every school. To summarize, the Tafielains in terms of occupation and profession, are mostly farmers, governmental employees, and construction workers. Thousands of them migrated to the capital in the fifties and early sixties and established their own section (community) in an attempt to find better conditions in the city. The above information suggests that the majority of Tafielains have similar incomes, occupations, and

government services as compared with any city in the country, with the exception of the more abundant opportunities available in the capital. Therefore, it can be inferred that the population of Tafielah have similar levels of education, and share equal rungs on the socio-economic ladder.

The Sample

As with most public schools serving specific geographic areas in the country, the student body of Tafielah Governate is a microcosm of the city and its environs. In the academic year beginning in September, 1989, 13,303 students enrolled in Tafielah's Governate School and its localities. These students were distributed into 29 male schools (7,231), 23 female schools (6,072), and 36 mixed schools, but the student body registered in the Ministry of Education is 13,303 students only (private schools are excluded). These students are enrolled in elementary schools, preparatory schools, and secondary schools (Ministry of Planning--Jordan, 1989).

Because Tafielah's Governate is divided into six localities, each locality or district has a secondary school which serves that specific locality (except Gharandel's locality which does not have a secondary school). Tafielah's city has two secondary schools (male schools). The sample consisted of what are known in Jordan as the second secondary classes (males, comparable to eleventh grade in the U.S.A.) of Tafielah's secondary schools, Ain El-Baidha, Aimeh, Bsaria, Prince Hasan, Qadisiyyeh, and Hesa schools. These seven schools represent the city and its localities. It should be mentioned here

that the classes varied in size from one locality to another. The sample included 147 pupils in the eleventh grade in the seven schools (The Annual Book, 1989).

Methodology

Questionnaire

As mentioned earlier, the research instrument was derived from Hirschi's (1969) study. However, Hirschi's original instrument was determined to be too long, and therefore, too time consuming for the purposes of the investigation. All 107 items included in this instrument came directly or indirectly from Hirschi's instrument, with the exception of the graffiti item, which was borrowed from Elliott and Ageton (1980).

The criteria of selecting the items were based on how well these items fit the Jordanian society. Thus, items related to race, sex, and school activities such as human relations clubs, art and dance clubs, etc., were excluded. Moreover, items related to leisure activities such as drive-in restaurants, and riding around in a car were also excluded.

Only items related to family, peers, values, and academic work were included in this study. Some alterations were needed to use this instrument, such as the different grading system used in Jordan. The grades of A, B, and C were exchanged for 90s, 80s and 70s, respectively, to fit the Jordanian society.

The 107 items used in this research were screened very carefully, and each element of the social bond was measured by several

items.

The researcher, fluent in Arabic, translated the instrument into very simple and understandable Arabic. Then the English copy was given to two Jordanian doctorate students in order to translate it to Arabic. Having three copies of the questionnaire in Arabic provided the researcher with an indication if there was any genuine inconsistency. The subjects responded to a questionnaire in very simple and understandable Arabic, and the students answered individually and anonymously by marking (X) or by writing the answer. The researcher and the other two students reviewed the questionnaire item by item. Moreover, a pretest of the instrument was conducted on a small sample which matched the characteristics of the targeted population.

Pretest

The research design of this study called for the use of a pretest for the purposes of time estimation and difficulties in understanding the questionnaire and to ascertain what, if any, refinements should be made with respect to the research instrument. Thus, the pretest was viewed as a means of testing materials, methods, and instruments before embarking on the data collection phase of this study.

The population for the pretest consisted of 10 eleventh graders in a nearby city, matching the characteristics of the original sample. Information was gathered by self-administered questionnaire (107 questions). With respect to the time factor, 45 minutes were needed to finish the questionnaire. The pretest sample didn't experience any

problem in answering the questions. The pretest was encouraging and viewed as a reliable criteria reference.

The Questionnaire Administration

The director of the educational department in the Tafielah Governate was contacted by telephone, requesting his permission and assistance. A copy of the questionnaire was sent to his office, with a letter apprising him that he would be contacted by telephone again. The director contacted each principal in the seven schools, and no objection was raised by them. However, each principal was contacted individually in order to set a time table to conduct the survey.

On January 15, 1990, the data collection process began with the assistance of three trained individuals while in the presence of some of the school personnel. Each person involved in data collection read a letter to the students which included instructions as well as reminding them that their information and cooperation in the study was very important for their community's future and also for the success of the research. Moreover, it was made clear that their information was confidential and nobody would know who participated in the survey.

A self-reported questionnaire was given utilizing items selected from a test instrument previously used in Hirschi's (1969) study. Each student in the eleventh grade in each school in the Governate was asked to voluntarily respond to the questionnaire (containing 107 questions, see Appendix A). Respondents were asked to answer the items on the questionnaire in an honest way in order to measure their

attitudes, values, and beliefs. There were no right or wrong answers.

The questionnaire which contained 107 questions included items about values, attitudes, beliefs, or examined the pupil's ties to his community, parents, schools, and peers.

Given the time constraints and financial burden placed on the investigators, females were excluded from this study. Based on the outcome of this study, however, the investigator will include them in future works. Moreover, females were excluded from this study for the following three reasons:

1. Official data have shown that young Jordanian males are more likely to commit criminal acts than young Jordanian females, 95% and 5% respectively.

2. Males and females have different socialization growth rates. We expect stronger parental attachment for females because research has shown that parents are more responsive to female children which is consistent with the control theory premises (Lewis, 1972), and parents are less likely to use physical punishment techniques on female children (Duncan & Duncan, 1978).

3. It has been mentioned earlier that in Jordan only two female institutions were found to serve the needs of nonconforming females, which gives us an idea that female delinquency is not as serious a problem.

To assure anonymity and confidentiality, the subjects were asked to deposit their completed surveys in a box placed in the same room. Then, the researcher screened them (not in the research place) to see if there was any problem or an incomplete questionnaire. However,

none of these difficulties or problems was found.

Measurement Problems and Description of Variables

Caplovitz (1983) asserts that when deciding which indicators to select to measure a concept, the researcher is confronted with the problem of assessing the adequacy of the indicator. How good a job does it do in measuring the concept?

Elaborate statistical procedures have evolved for deciding which cluster of indicators hang together to measure a concept, but the amateur and even the more advanced researcher are well advised to avoid factor analysis and rely instead on simple procedures for constructing indices. However, we expect the items to be related but we do not want to find too strong a correlation between the indicators. (p. 223).

One dependent variable was used to test the hypothesis with four major independent variables. However, many variables were measured by a single item such as father's occupation, family status, father's education, age, mother's education, occupation, number of sisters, brothers, etc.

Of initial concern was the measurement of delinquent behavior, as was the case in Hirschi's (1969) original work. Hirschi did not develop a scale to measure delinquent behavior, but rather borrowed from two different scales: Nye and Short's (1957) seven item delinquency scale, and Dentler and Monroe's (1961) five item theft scale. The Jordanian study borrowed five items from Hirschi's scale. Those items were: theft of 3 JD, theft of 3-30 JD, theft of over 30 JD, battery, and vandalism. One item (graffiti) was borrowed from Elliott and Ageton (1980). Thus, the Jordanian study demanded a more thorough analysis of an individual's criminal activities.

Some consideration was given to applying the Sellin and Wolfgang (1964) seriousness weighing schema to the reported deviant activities. This idea was rejected because the current literature had questioned the validity of applying a weighing scale to self-reported delinquency. Of major concern here is the fallacy of a universal consensus with regard to how serious or not serious any offense actually is (Bennett & Lynch, 1990; Okada, 1987).

The Sellin and Wolfgang (1964) scale requires knowledge of degree of danger, either actual or perceived, specific dollar amount of damage, and degree of severity of offense that simply are not available in this study. However, the lack of this information need not be viewed as a shortcoming of the current research.

Miethe (1982) argues that perceptions of crime seriousness are simply not universally recognized. "In reality, research that addresses perceptions of crime seriousness, generally derive their findings by some methodological artifact or by some underlying investigator-generated normative structure, and therefore are not the product of empirical evidence" (quoted in Okada, 1987, p. 66).

One of the major criticisms of Hirschi's (1969) scale is the issue of trivial offenses which is also of major concern in this study. Generally, most research in the area of criminology relies either on criminal justice statistics or information collected from school boys. In both cases, the researcher will confront a problem: in the former instance, the issue of random sampling will be of concern, and for the latter, the issue of trivial offenses will emerge. Okada (1987) reported that middle-class boys consistently reported offenses that

were either status offenses or minor offenses. These included:

"lied about age, cheating on tests, skipping classes, drunkenness, consuming alcohol, evading payments, and stole from family" (p. 66).

The issue of trivial offenses, however, is not a problem in the present research. After consulting the frequencies of 13 items in this study, serious offenses were reported more than trivial offenses: battery (67.4%) was first, vandalism was second (14.1%), theft up to three JD was third (13.5%), theft of 3-30 JD was fourth (9.9%), graffiti was fifth (6.8%), and theft of over 30 JD was sixth (6.2%).

Surprisingly, when asked if they ever thought of themselves as being a delinquent, 52.4% of the respondents responded no, 24.1% did not know what the word "delinquent" meant, and only 23.5% thought of themselves as delinquent. This difference suggests that even though these boys actively participated in delinquent behavior, the majority (76.5%) did not consider themselves delinquent.

Measurement of Delinquent Behavior

Actual delinquent behavior was measured by responses to the abbreviated version of Hirschi's (1969) scale adapted for this dissertation. The 13 offenses were screened and six items were adapted as mentioned earlier. The selection of the items was based on empirical tests (reliability). Responses were as follows: (a) never, (b) one to three times, (c) four to six times, and (d) seven times or more.

A dichotomous dependent variable of not delinquent or delinquent was created for analytic purposes. The six items (battery, vandalism,

graffiti, and three types of theft) included were recognized as being punishable by the law. Therefore, in constructing specific delinquent categories a somewhat arbitrary, but methodologically adequate method was utilized. The six items were empirically tested before the final decision was made. ALPHA is .6870 and standardized ALPHA item is .7254, (see Appendix B), and none of the items was found to be very highly or weakly correlated. Therefore, the researcher concluded that a valid index was used to measure delinquent behavior in Jordanian society.

The four independent variables which are described in this section are: (1) attachment to significant others (parents, schools, and peers); (2) commitment to the conventional order (education and occupation); (3) involvement in conventional activities (education); and (4) belief in the conventional order. These variables are the major independent variables explored for the purpose of this research.

Attachment to significant others. This variable was subcategorized into three parts: (1) attachment to parents, (2) attachment to school, and (3) attachment to peers. Attachment to parents was divided into two parts: (1) attachment to mother, and (2) attachment to father. Attachment to mother is operationally measured by the following items: (a) Does your mother know where you are when you are away from home? (b) Does your mother know who you are with when you are away from home? These two items were correlated (.3982). The responses for these two questions were: Usually, sometimes, never and these responses were coded 3, 2, 1 and zero for nonresponse

respectively. This index was called Mother's Index I.

Several items on the questionnaire were chosen to measure the intimacy of communication between mother and child. The items were: (a) Does your mother ever ask about what you are doing in school? (b) Do you share your thoughts and feelings with your mother? Again the responses were: Usually, sometimes, never and were coded high, medium, and low respectively. This index was called Mother's Index II. These two items were correlated .1504.

Another index to measure intimacy of communication between mother and child was constructed, distinguished from Index II by the fact that the flow of communication was from the mother to the child. The items were: (a) When you don't know why your mother makes a rule, will she explain the reason? (b) Does your mother make rules that seem unfair to you? The same responses were used for this index which was called Mother's Index III. The correlation for these two items is .3279.

Identification with mother was measured by the following question: "Would you like to be the kind of person your mother is?" Responses were in every way, in most ways, in some ways, in just a few ways, not at all. These responses were recorded as follows: high = in every way and in most ways; medium = in just a few ways, and low = not at all (3-1). ALPHA for mother's attachment index is .5029 and standardized item ALPHA is .4535.

All these previous items were tested for reliability and correlation in order to justify combining them together (see Appendix B). Particularly when a high correlation was found, items were deleted

from the analysis.

Attachment to father was measured by the following items:

(a) Does your father know where you are when you are away from home?
 (b) Does your father know who you are with when you are away from home? The responses for these two questions were: usually, sometimes, never and coded 3, 2, 1 and zero for nonresponse, respectively. This index was called Father's Index I. These two items were correlated .243.

In order to measure the intimacy of communication between the father and the child, the following items were used: (a) Does your father ever ask about what you are doing in school? (b) Do you share your thoughts and feelings with your father? The responses were treated the same as in the mother's case. This index was called Father's Index II and the items were correlated (.2792).

In order to measure intimacy of communication between the child and the father (father to child) the items were: (a) When you don't know why your father makes a rule, will he explain the reason?
 (b) Does your father make rules that seem unfair to you? The same responses were used for this index which was called Father's Index III. Correlation of these two items is .4832.

Finally, identification with father was measured by the following item "would you like to be the kind of person your father is?" The responses were: in every way, in most ways, in some ways, in just a few ways, not at all. These responses were recorded as follows: high = in every way and in most ways; medium = in just a few ways, and low = not at all (3, 2, 1).

Thus, attachment to parents was measured by 14 items. All these items were coded the same for statistical reasons. Again, all these were empirically tested before using them. For father's index, ALPHA is .47 and standardized item ALPHA is .43.

Attachment to peers was measured by the following five items:

1. "How much do you think most teachers like the group of friends you are with?" The responses ranged from "very much" to "I don't know." The seven responses were recoded as follows: High (3) = "very much," medium (2) = "fairly well," and low (1) = "not much, not at all, I have no friends and I don't know."

2. "Would you like to be the kind of person your best friends are?" Again responses were recoded as follows: High (3) = "in most ways," medium (2) = "in a few ways," and low (1) = "not at all and I have no best friends."

3. "How much do you think most students like the group of friends you go with?" The responses were treated as in item number 1.

4. "Do you respect your best friends' opinions about the important things in life?" The five responses were recoded from high (3) = "completely," medium (2) = "pretty much," and low (1) = "a little, not at all," and "I have no best friends."

5. "Have any of your close friends ever been picked up by the police?" Responses ranged from high (3) = "four or more," medium = (2) "1-3" and low (1) = "nobody."

These five items were combined to form an index of attachment to peers, after being empirically tested (ALPHA = .4580, standardized item ALPHA = .4191).

Attachment to school. The following seven items were used to measure this variable:

1. "What kind of grades do you think you are capable of getting?" The possible responses to this question were seven ranked from high to low. These responses were recoded as follows: high (3) = "80-100," medium (2) = "69-79," and low (1) = "49 and below."

2. "In general, do you like or dislike school?" The responses to this question were "I like it," "like/dislike it about equally," and "dislike it." These responses were recoded 3, 2, 1 respectively.

3. "Do you care what teachers think of you?" The responses were: "I care a lot," "I care some," "I don't care much." Again, these responses were recoded 3, 2, 1 respectively.

4. "Teachers pick on me."

5. "I feel nervous and tense in school."

6. "It is none of the school's business if a student wants to smoke outside of the classroom."

The responses to items 4, 5, and 6 ranged from "strongly agree" to "strongly disagree." If a student strongly agreed, one point was given. On the other hand, if he strongly disagreed, three points were given.

7. "How do you rate yourself in school ability compared with other students?" Six responses were used to answer this question. These responses were recoded as follows: High = "among the best" and "above the average," medium = "about average," and low = "below average," "among the worst" and "I don't know" (3, 2, 1 respectively). From highest to lowest (ALPHA = .51 and standardized ALPHA item = .53).

Commitment to conventional activities was measured by the following items:

1. "How much schooling would you like to get?"

2. "How much schooling do you actually expect to get?"

Three responses were used to answer these two questions. These responses were coded as follows: High school or less = 1, Junior College = 2, and College graduation = 3.

3. "What kind of grades do you think you are capable of getting?" This question was coded as mentioned earlier.

4. "How important is getting good grades to you personally?" Four responses were used from high to low as mentioned earlier.

5. "How important do you think grades are for getting the kind of job you want when you finish high school?" Five responses were used and they were recoded as follows: High = "very important," medium = "somewhat important," and low = "unimportant," "I have no idea," and "I don't plan to work when I finish high school."

6. "As you see it now, do you plan to graduate from high school?" Three responses were used to answer this question. These responses were recoded as follows: high (3) = "yes," medium (2) = "yes, but leave for a while and come back," and low (1) = "no."

7. "The only reason to have a job is money?" Five responses were used to answer this question. These responses were recoded as follows: high (3) = "disagree" and "strongly disagree," medium (2) = "undecided," and low (1) = "agree" and "strongly agree" (3, 2, 1, respectively). (ALPHA = .3820, standardized ALPHA item = .3647).

Involvement in conventional activities was measured by the subjects' responses to eight questions:

1. "How much time do you spend doing homework?" Values range from 3 to 1, highest to lowest. The responses were: 3 indicates 1-1/2 hours or more, 2 indicates 1 hour, and 1 indicates a half hour or less.

2. "How often do you work in the garden with your mother?"

3. "How often do you work in the garden with your father?"

Three responses were used to answer these two questions. These responses were coded as follows: high (3) = "usually," medium (2) = "sometimes," and low (1) = "never" (3, 2, 1, respectively).

4. "Kinds of grades you are capable of getting." Values range from 3 to 1, highest to lowest. The response of 3 indicates 80-100, 2 indicates 60-79, and 1 indicates 59 and below.

5. "Do you finish your homework?"

6. "Do your teachers check your homework?" Values range from 3 to 1 (highest to lowest). The response of 3 indicates "always," 2 indicates "seldom," and 1 indicates "never" and "we are not given any homework."

7. "Have you ever been suspended from school?" Values range from 3 to 1, with 1 indicating "often," 2 indicating "a few times," and 3 indicating "once or twice," and "never."

8. "On the average, how many times do you go to the Mosque?" Responses were: (a) "daily," (b) "every Friday," (c) "once a month," (d) "only on occasions," (e) "I don't go at all." Possible values range from 3 to 1. A value of 3 was assigned to responses (a), (b)

and (c). Response d was given a value of 2, and the last response (e) was given a 1 (highest to lowest). ALPHA = .3820, and standardized ALPHA item = .3696.

Belief in the conventional order was measured by subject response to the questions:

1. "I have a lot of respect for the Tafielah police."
2. "It is alright to get around the law if you can get away with it."
3. "Most criminals really should not be blamed for the things they have done."
4. "Most people in government are not really interested in the problems of families like mine."
5. "Suckers deserve to be taken advantage of."
6. "I can't seem to stay out of trouble no matter how hard I try."
7. "The man who leaves the keys in his car is as much to blame for its theft as the man who steals it."
8. "Policemen try to give all kids an even break."

Items 1 and 8 were recoded as follows: "strongly agree" and "agree" = 3 points; undecided = 2 points, and "disagree" and "strongly disagree" = 1 point; items 2, 3, 4, 5, 6 and 7 were recoded as follows: "Strongly agree" and "agree" = 1 point, "undecided" = 2 points, and "disagree" and "strongly disagree" = 3 points. Reliability for these items was .26 and (standardized ALPHA item = .21).

Data Analysis Procedures

In order to test the research hypothesis and answer other related questions, a variety of summary statistics were computed for descriptive purposes. Analysis of ordinal data was made with the assistance of appropriate statistics for each level. Cross-tabulation was computed and all analysis was done at the .05 critical value. T-test was calculated for test of differences for ordinal data, and the difference between means of the two groups was used to test the null hypothesis. Correlation also was used to find out about the direction and strength of the relationship between the dependent and the independent variables.

CHAPTER IV

FINDINGS

The purpose of the present chapter is threefold: First, to present a descriptive profile of the 147 boys that comprise the sample for this investigation, how they are distributed in terms of schools, age, parent's occupation and education, delinquent activities, broken homes, family status, religiosity, etc.; second, to compare the present study's results with Hirschi's (1969) study, and third, to test the four hypotheses formulated to ascertain the degree to which they are supportive of Hirschi's four bonding factors: attachment to significant others, commitment to the conventional activities, involvement in the conventional activities, and, finally, belief in the conventional order.

Profile of the Sample

Examination of the descriptive data revealed that the subjects were unevenly divided among the seven schools. The distribution of the subjects was as follows:

Table 1

The Sample Distribution According to School's Name

School Name	Frequency	%
Tafielah Secondary School	35	23.8
Emah Secondary School	12	8.2

Table 1--Continued

School Name	Frequency	%
Besara Secondary School	29	19.7
Al-Gaddesyah Secondary School	13	8.8
Ein-Elbedeh Secondary School	7	4.8
El-Hesa Secondary School	31	21.1
Prince Hasan Secondary School	18	12.2
Total	147	100.0

Respondents ranged in age from 15 to 18 with a mean age of 16.9.

Table 2 shows the age distribution of the population of the study.

Table 2
The Respondents' Distribution According to Their Age

Age	Frequency	%
15	2	1.4
16	33	22.4
17	83	56.5
18	29	19.7
Total	147	100.0

According to this table, 78.9% of the subjects were 16 and 17 years of age at the time of the study, 19.7% of the students were 18 and

only 1.4% (2 students) were 15 years old at that time.

The parents of this population were reported to be in the following occupations: 78.9% of their fathers were unskilled and semi-skilled laborers (peasants, construction workers), 16.3% were skilled laborers (machine operators, merchants, governmental employees), 2.7% were professionals (physicians, lawyers). With respect to their mothers' occupations, 94.6% were unskilled laborers (housewives) and only 4.1% were professional (physicians, school teachers).

The parents of this population were generally uneducated, especially the mothers, of whom 91.2% had no formal education. Only 3.4% finished four year colleges and 5.4% had some high school. In looking at the fathers' educational level, 37.4% had no formal education, 46.3% had some high school education, 8.8% finished high school, 6.1% had four years of college, and 1.4% had two years (i.e., graduated from junior colleges). According to the traditional belief in Jordanian society, the men have the responsibility of supporting their families, and thus it is no surprise that fathers had a better education, especially in a small conservative town.

In describing the delinquent activities of the subjects, 23.8% never committed any delinquent act, while 76.2% had committed one or more delinquent acts. The dependent variable was dichotomized into delinquent or nondelinquent for statistical analysis. When subjects asked if they ever thought of themselves as delinquents, 52.4% reported they did not, 24.5% didn't know what the word meant, and only 22.1% thought of themselves as delinquents (mentioned earlier). Regarding contact with police, 91.2% had never been picked up by the police and

only 8.8% had had contact with police.

That crime is a group phenomenon is a common observation in the literature. When subjects were asked about their friends' behavior with respect to police contact, 63.2% reported that they never had any friends picked up by the police, 34.0% reported having 1-3 friends who had contact with the police, and only 2.8% had four or more friends picked up by the police.

With regard to their natural parents, 98% of the sample reported living with their natural fathers, only 2.0% reported living with their stepfathers, 91.8% reported living with their natural mothers, 4.8% reported living with their stepmothers. Only 3.4% reported their natural mothers were not living with them. Therefore, it can be assumed that a stable traditional nuclear family exists for this population.

With respect to siblings, 95.9% reported having more than one brother, 96.0% reported having more than one sister, 39.5% reported having no older brothers and sisters, while 60.5% reported having more than one brother and sister.

One of the early assumptions of this research was that the residents of Tafielah Governate and its localities, by and large, shared an equivalent economic status. When asked the question, "comparing your family with other families in your neighborhood, how would you relate yours in terms of living style?" It was a real surprise that the data did not support this assumption, in that 59.2% of the respondents answered that their families were "better off" and only 20.4% of the respondents indicated that they were the same,

15.0% of the respondents answered "less well off," "worse than others," and "I don't know." However, 8 subjects (5.4%) did not answer this question.

In examining religiosity in the population, when asked the question "on an average, how many times do you go to the Mosque?", 32.7% reported going daily, 59.2% every Friday, 7.5% once a month, and less than 1% (.6%) reported not going at all. Therefore, it could be assumed that the subjects are regular Mosque goers.

In describing their interest in school, well over half (57.8% of the sample) said they liked school, an additional (36.1%) answered that they like it and dislike it equally, and only 6.1% disliked school. In further addressing this group's interest in academia, 72.1% were planning to attend a four year college, while 2.0% wanted to finish high school only.

Comparison to Hirschi's Causes of Delinquency

In this section the writer will compare the responses of the Jordanian subjects with Hirschi's respondents in the United States. Analyses were conducted to see whether or not Hirschi's theory provided a reasonable explanation of juvenile delinquency in Jordan. Some variables were selected from Hirschi's work that represent the elements of the social bond and they were compared to the dependant variable (nondelinquent/delinquent) that was constructed for this dissertation.

Hirschi (1969) suggested that attachment to parents is very important in deterring delinquency. He argues that "when parental

attachment is strong, parental values are more readily accepted" (p. 83). To assess the bond of parental attachment, the subjects were asked: "Would you like to be the kind of person your father is?" The possible responses to this question were: "In every way," "in most ways," "in some ways," "in just a few ways," and "not at all."

For purposes of comparison, the five responses above were collapsed into the following categories: High = "in every way" and "in most ways"; Medium = "in some ways"; Low = "in just a few ways" and "not at all." The reader should note that the data in the following table represent the percent of the comparison that involves the number of subjects in each study whose responses place them in the high category and who reported no delinquency or some delinquency involvement, followed by the number (again shown in percentages) of subjects whose responses place them in the medium category and who reported no delinquency or some delinquency involvement. A similar comparison will be made for those who fall in the low category.

Table 3

Self-Reported Delinquency by Identification With Father:
"Would you Like to be the Kind of Person Your Father is?"

Reported Acts	High	Medium	Low
Nondelinquents	HM 65%* IM 31%	HM 55%* IM 25%	HM 41%* IM 21%
Delinquents	HM 35%* IM 69%	HM 45%* IM 75%	HM 59%* IM 79%

Table 3--Continued

Reported Acts	High	Medium	Low
Total HM*	(525)	(387)	(311) 1223
IM	(26)	(44)	(77) 147

HM = Hirschi's male subjects

IM = Irfaifeh's male subjects

*The results for Hirschi's males were derived from his Table 20 (1969, p. 92).

According to Table 3, of Hirschi's 1223 subjects, 525 were in the high category. Of the 525, 340 (65%) respondents were placed in the high category and reported no delinquency involvement. However, 184 (35%) were also found in the high category and they did report one or more delinquency involvements.

In the present study, of the 147 subjects, 26 were in the high category. Of the 26, 8 (31%) of the respondents were placed in the high category but with no delinquency involvement, while 18 (69%) were in the high category and each reported one or more delinquent acts. This comparison shows that of the subjects with a high attachment to their fathers, a much higher percentage of those in this (Irfaifeh's) study reported being involved in delinquency (69% vs. 35%).

Further comparison was made in the medium and low categories in much the same fashion as noted in the above example. For example, of Hirschi's 1223 subjects, 387 were in the medium category. Of the 387, 213 (55%) respondents were placed in the medium category and reported no delinquency involvement. However, 174 (45%) were also found in the medium category and they did report one or more delinquent acts. Of

Irfaifeh's 147 subjects, 44 were in the medium category. Of the 44, 11 (25%) respondents were in the medium category but reported no delinquency involvement, while 33 (75%) in the medium category and each reported one or more delinquent acts. This comparison shows that of the subjects with a medium attachment to their fathers, a much higher percentage of those in Irfaifeh's study reported being involved in delinquency (75% vs. 45%).

For the low category, of Hirschi's 1223 subjects, 311 were in the low category. Of the 311, 139 (41%) respondents were in the low category and they reported no delinquency involvement. However, 172 (59%) were also found in the low category and they did report one or more delinquent acts. Of Irfaifeh's 147, 16 (21%) respondents were in the low category and reported no delinquency involvement. However, 61 (79%) were also found in the low category and they did report one or more delinquent acts. This comparison shows that of the subjects with a low attachment to their fathers, a much higher percentage of those in Irfaifeh's study reported being involved in delinquency (79% vs. 59%).

In summary, with respect to Irfaifeh's subjects, 18 (69%) of the respondents who identified themselves as being highly attached to their fathers reported one or more delinquent acts and 77 (79%) of the respondents who did identify themselves wanting to be like their father in a few ways or not at all in the low category did report delinquent acts. Hirschi's percentages were 184 (35%) and 173 (59%) respectively. Therefore, the Jordanian data were consistent theoretically with Hirschi's theory.

Identification with mother was measured by the same question and the same response was used. Interestingly enough, none of the Jordanian subjects identified himself in every way or in most ways with his mother. The whole sample was placed either in the medium or the low category. Of Irfaifeh's 147 subjects, 65 were in the medium category. Of the 65, 18 (28%) respondents in the medium category did not report any delinquency involvement. However, 47 (72%) respondents in the medium category did report one or more delinquent acts.

With respect to the low category, of Irfaifeh's 147 subjects, 17 (20%) respondents did not report any delinquency involvement, while 65 (80%) did report one or more delinquent acts. Comparing father's to mother's percentages, it was noticed that identification with father and self-reported delinquency is slightly stronger in deterring delinquency than identification with mother, contrary to Hindelang's (1973) findings "that affection for mother and self-reported delinquency is stronger than the relation between affection for father and self-reported delinquency" (p. 476). Hirschi (1969) did discuss this matter by stating that "the relation between identification with the mother and delinquency is somewhat stronger than the relation between identification with the father and delinquency" (p. 92). However, Hirschi did not provide any data to sustain his statements. In sum, the Jordanian data with respect to identification with mother and delinquency did not support Hirschi's theory.

Attachment to School

Hirschi (1969) stated that attachment to school is related to delinquency, i.e., "those who do poorly in school reduce their interests in school and hence, are free to the extent of their reduced attachment to, commitment to, and involvement in school-related activities, to commit delinquent acts" (pp. 122-124). A comparison between Hirschi's subjects and this dissertation's subjects was made to assess the bond to the school (see Table 4).

Table 4

Self Reported Delinquency by Perceived Academic Ability:
"How Do You Rate Yourself in School Ability Compared With
Other Students in Your School?"

Self-Reported Acts	High	Medium	Low
Nondelinquents	HM 59%* IM 51%	HM 57%* IM 33%	HM 36%* IM 6%
Delinquents	HM 41%* IM 49%	HM 43%* IM 67%	HM 64%* IM 94%
Total HM*	(514)	(619)	(94) 1227
Total IM	(103)	(27)	(17) 147

*The results for Hirschi's males were derived from his Table 31, (1969, p. 118).

For purposes of comparison, the four possible responses to the above question were collapsed into three categories: High = "among the best" and "above the average"; Medium = "average"; and Low = "below average." Of Hirschi's 1227 subjects, 514 were in the high category. Of the 514, 303 (59%) respondents in the high category did not report

any delinquency involvement, while 211 (41%) respondents in the same category did report one or more delinquent acts. Of Irfaifeh's 147 subjects, 103 were in the high category. Of the 103, 53 (51%) respondents in the high category did not report any delinquency involvement. However, 50 (49%) respondents in the same category did report delinquency involvement. This comparison means that of the subjects with a high attachment to their schools, a much higher percentage of those in Irfaifeh's study reported being involved in delinquency (49% vs. 41%).

For the medium category, of Hirschi's 1223 subjects, 619 were in the medium category. Of the 619, 353 (57%) respondents were placed in the medium category and they did not report any delinquency acts. However, 266 (43%) respondents in the same category did report one or more delinquent acts. Of Irfaifeh's 147 subjects, 27 were in the medium category. Of the 27, 9 (33%) in the medium category did not report any delinquency involvement, while 18 (67%) did report one or more delinquent acts. As with the high category, Table 4 shows that of the subjects with a medium attachment to their school, a much higher percentage of those in Irfaifeh's study reported being involved in delinquency (67% vs. 43%).

Finally, with respect to the low category, of Hirschi's 1227 subjects, 94 were in the low category. Of the 94, 34 (36%) respondents who were placed in the low category did not report any delinquency involvement, while 60 (64%) respondents in the same category did report one or more delinquency acts. Of Irfaifeh's 147 subjects, 17 were in the low category. Of the 17, one (6%) subject was in this

category and did not report any delinquent acts. However, 16 (94%) respondents who were in the low category did report one or more delinquent acts. This comparison shows that of the subjects with a low attachment to their schools, a much higher percentage of those in Irfaifeh's study reported being involved in delinquency (94% vs. 64%). In sum, according to Irfaifeh's findings, the results are consistent with the theory, 49% of the respondents who were highly attached to their school reported delinquent acts, while 94% of the respondents who were weakly attached to their schools reported delinquency involvement.

Another item to assess the bond to school was examined with the question: "In general, do you like or dislike school?" (Like/neither like nor dislike it/dislike it). These responses were categorized as: High = "like it"; Medium = "neither like nor dislike school"; and Low = "dislike it." Table 5 illustrates the comparison of the two studies.

Table 5

Self-Reported Delinquent Acts by Attitudes Toward School:
"In General, do you Like or Dislike School?"

Self-Reported Acts	High	Medium	Low
Nondelinquents	HM 68%* IM 58%	HM 48%* IM 25%	HM 33%* IM 11%
Delinquents	HM 32%* IM 42%	HM 52%* IM 75%	HM 67%* IM 89%

Table 5--Continued

Self-Reported Acts	High	Medium	Low
Total HM*	(580)	(648)	(72)
Total IM	(85)	(53)	(9)

*The results for Hirschi's males were derived from his Table 33, (1969, p. 121).

Of Hirschi's 1300 subjects, 580 were in the high category. Of the 580, 394 (68%) of respondents who reported liking school did not report any delinquent acts, while 186 (32%) respondents from the same category did report delinquent acts. For Irfaifeh's 147 subjects, 85 were in the high category. Of the 85, 49 (58%) respondents who were in the same category (high attachment to school) did not report any delinquent acts. However, 36 (42%) respondents who were in the same category did report delinquent acts. This comparison shows that of the subjects with a high attachment to their schools, a much higher percentage of those in Irfaifeh's study reported being involved in delinquency (42% vs. 32%).

With regard to the medium category, of Hirschi's 1300 subjects, 648 were in the medium category. Of the 648, 311 (48%) respondents did not report any delinquent acts. However, 337 (52%) respondents in the same category did report delinquent acts. Of Irfaifeh's 147 subjects, 53 were in the medium category. Of the 53, 13 (25%) respondents in the medium category did not report any delinquent acts, while 40 (75%) respondents from the same category did report delinquent acts. The comparison shows that of those moderately attached

to their school, a much higher percentage of Irfaifeh's subjects reported being involved in delinquent acts (75% vs. 52%).

Finally, with respect to those placed in the low category, of Hirschi's 1300 subjects, 72 were placed in the low category. Of the 72, 24 (33%) respondents did not report any delinquent acts. However, 48 (67%) respondents did report one or more delinquent acts. Of Irfaifeh's 147 subjects, 9 students were in the low category. Of the 9, one student (11%) did not report any delinquent act, while 8 (89%) respondents did report one or more delinquent acts. The comparison shows that for those subjects who had low attachment to their school, a much higher percentage of Irfaifeh's subjects reported being involved in delinquency (89% vs. 67%). To sum up this table, Irfaifeh's findings were consistent with Hirschi's theory, that the higher the attachment to a conventional figure (school) the less likely the delinquency, and the lower the attachment, the more likely the delinquency.

Further testing was conducted to assess the bond to the conventional figure (school). Respondents were asked the following question: "Do you care what teachers think of you?" (A lot/somewhat/not much), or high, medium and low. Table 6 illustrates the comparison of the two studies.

Table 6

Self-Reported Delinquent Acts by Concern for Teacher's Opinions:
 "Do You Care What Teachers Think of You?"

Self-Reported Acts	High	Medium	Low
Nondelinquents	HM 66%* IM 85%	HM 53%* IM 43%	HM 36%* IM 34%
Delinquents	HM 34%* IM 15%	HM 47%* IM 57%	HM 64%* IM 66%
Total HM*	(588)	(503)	(209) 1300
Total IM	(21)	(53)	(73) 147

*The results for Hirschi's males were derived from his Table 34, (1969, p. 123).

Hirschi (1969) stated that "the less a boy cares about what teachers think of him, the more likely he is to have committed delinquent acts" (p. 123). Of Hirschi's 1300 subjects, 588 were in the high category. Of the 588, 388 (66%) respondents who were placed in the high category did not report any delinquent acts. However, 200 (34%) respondents in the same category did report one or more delinquent acts. Of Irfaifeh's 147 subjects, 21 were in the high category. Of the 21, 18 (85%) respondents who were in the high category did not report any delinquent acts, while 3 (15%) respondents from the same category did report one or more delinquent acts. The comparison shows that for those who were highly attached (care a lot) about their teacher's opinions, a much higher percentage of Hirschi's subjects were involved in delinquency (34% vs. 15%).

For the second category (medium), of Hirschi's 1300 subjects,

503 were in the medium category. Of the 503, 267 (53%) respondents who were placed in this category did not report any delinquent acts. However, 236 (47%) respondents from the same category did report one or more delinquent acts. Of Irfaifeh's 147 subjects, 53 were in the medium category. Of the 53, 23 (43%) respondents in the medium category did not report any delinquent acts, while 30 (57%) respondents from the same category did report one or more delinquent acts. The comparison shows that of the subjects with medium attachment to their teachers, a much higher percentage of Irfaifeh's subjects reported being involved in delinquency (57% vs. 47%).

Finally, regarding the subjects in the low category: of Hirschi's 1300 subjects, 209 were in the low category; of the 209, 75 (36%) respondents who were placed in the low category did not report any delinquent acts; however, 134 (64%) respondents did report one or more delinquent acts. For Irfaifeh's 147 subjects, 73 were in the low category. Of the 73, 25 (34%) respondents who were placed in the low category did not report any delinquent acts, while 48 (66%) respondents from the same category did report one or more delinquent acts. The comparison shows that of the subjects with a low attachment to their teachers, almost the same percentage in both studies reported being involved in delinquency (66% vs. 64%). In sum, Irfaifeh's findings supported Hirschi's theory, that the higher the attachment to the conventional figure (teacher), the less likely the delinquency involvement.

Attachment to Peers

Hirschi stated that delinquent behavior of one's own friends is strongly related to one's own delinquent behavior. Respondents were asked the following question: "Have any of your close friends ever been picked up by the police?" The six possible responses were: "No," "one," "two," "three," "four or more," and "I don't know." These were collapsed into three categories: None, 1-3 Friends, and 4 or more Friends. The "I don't know" response was excluded from the comparison. Table 7 illustrates the comparison.

Table 7

Self-Reported Delinquency by Friends, Contact With the Police:
"Have any of Your Close Friends Ever Been
Picked up by the Police?"

	None	1-3 Friends	4-More Friends
Nondelinquents	HM 73%* IM 0%	HM 45%* IM 8%	HM 25%* IM 33%
Delinquents	HM 27%* IM 100%	HM 55%* IM 92%	HM 75%* IM 67%
Total HM*	(520)	(323)	(208)
Total IM	(2)	(52)	(93)

*The results for Hirschi's males were derived from his Table 24 (1969, p. 99).

Of Hirschi's 1051 subjects, 52 were 520 were in the high category. Of the 520, 380 (73%) respondents who did not have any close friends picked up by the police did not report any delinquent acts. However, 140 (27%) of subjects who were in the same category did report one

or more delinquent acts. Of Irfaifeh's 147 subjects, no one reported delinquent acts among those who had no close friends picked up by the police, while only two students (100%) who did not have any friends picked up by the police reported one or more delinquent acts. The comparison of the two studies shows that of the subjects with no friends picked up by the police, a much higher percentage of those in Irfaifeh's study reported being involved in delinquency (100% vs. 27%).

With respect to the second category (1-3 friends), of Hirschi's 1051 subjects, 323 were in the medium category. Of the 323, 145 (45%) respondents who had one to three friends who had had contact with the police did not report any delinquent acts. However 178 (55%) respondents who had had one to three friends picked up by the police reported one or more delinquent acts. Of Irfaifeh's 147 subjects, 52 were in the medium category. Of the 52, 4 (8%) of respondents who had had one to three friends picked up by the police did report one or more delinquent acts, while 48 (92%) respondents who had had one to three friends picked up by the police reported one or more delinquent acts. The comparison shows that of the subjects who had one to three friends picked up by the police, a much higher percentage of those in Irfaifeh's study reported being involved in delinquency (92% vs. 55%).

Finally, for those who had four or more friends picked up by the police, of Hirschi's 1051 subjects, 208 were in the third category. Of the 208, 52 (25%) respondents who were in this category did not report any delinquent acts. However, 156 (75%) respondents in this category (four or more friends) did report one or more delinquent acts. Of Irfaifeh's 147 subjects, 83 were in the third category. Of

the 83, 31 (33%) of respondents who were placed in this category did not report any delinquent acts, while 52 (67%) respondents did report one or more delinquent acts. In sum, the findings of Irfaifeh's study did not support Hirschi's theory on this item.

Hirschi went further to suggest that the greater the attachment to friends, the lower the reported delinquent involvement. Table 8 illustrates the comparison for the two studies.

Table 8

Self-Reported Delinquency by Identification With Best Friends:
"Would you like to be the Kind of Person
Your Best Friends Are?"

Self-Reported Delinquency	In Most Ways	In Few Ways	Not At All
Nondelinquents	HM 64%* IM 14%	HM 54%* IM 27%	HM 47%* IM 25%
Delinquents	HM 36%* IM 86%	HM 46%* IM 73%	HM 53%* IM 75%
Total HM*	(353)	(748)	(160)
Total IM	(28)	(34)	(85)

*The results for Hirschi's males were derived from his Table 44 (1969, p. 146).

Of Hirschi's 1261 subjects, 353 were in the first category. Of the 353, 226 (64%) respondents who reported "in most ways" in their attachment to their best friends did not report any delinquent acts. However 127 (36%) respondents, who were placed in this category did report one or more delinquent acts. Of Irfaifeh's 147 subjects, 28 were in the first category. Of the 23, 4 (14%) respondents who

reported "in most ways" with respect to their identification with their best friends did not report any delinquent acts, while 24 (86%) respondents in the same category did report one or more delinquent acts. The comparison shows that of the subjects who identified with their best friends in most ways, a much higher percentage of those in Irfaifeh's study reported being involved in delinquency (86% vs. 36%).

With respect to those in the second category, "in a few ways," of Hirschi's 1261 subjects, 748 were in the second category. Of the 748, 404 (54%) respondents did not report any delinquent acts. However, 345 (46%) of respondents in this category did report one or more delinquent acts. Of Irfaifeh's 147 subjects, 34 were in the second category. Of the 34, 10 (27%) respondents who identified with their best friends in a few ways did not report any delinquent acts, while 24 (73%) respondents in the same category did report one or more delinquent acts. Again, the comparison of the two studies with respect to this category shows that of the subjects in Irfaifeh's study, a much higher percentage reported being involved in delinquency (73% vs. 46%).

For those who did not identify themselves at all with their best friends, of Hirschi's 1261 subjects, 160 were in the third category. Of the 160, 75 (47%) respondents did not report any delinquent acts, while 85 (53%) respondents in this category did report one or more delinquent acts. Of Irfaifeh's 147 subjects, 85 were in the third category. Of the 85, 21 (25%) of the respondents did not report any delinquent acts. However, 64 (75%) of respondents who did not

identify themselves at all with their friends did report one or more delinquent acts. Again, the comparison of the two studies with respect to this issue shows a much higher percentage of Irfaifeh's subjects who reported being involved in delinquency (75% vs. 53%). In sum, according to Table 8, Irfaifeh's findings did not support Hirschi's theory on this item.

Commitment to Conventional Activities

Hirschi (1969) suggested that commitment to conventional activities such as doing well in school, achieving good grades, etc., constrain delinquency. On the other hand, involvement in adult activities such as smoking, dating, drinking is related to delinquent behavior.

Involvement in adult activities was measured by many items such as: "Do you smoke cigarettes?" There were four possible responses to this question: (1) "Yes, began before 13"; (2) "Yes, began 13-15"; (3) "Yes, began after 15 years old"; and (4) "No." For purposes of comparison the four responses were collapsed into two responses: "yes" = Responses 1, 2, and 3; and "no" = Response 4. Table 9 illustrates the comparison between the two studies.

Table 9

Self-Reported Delinquency by Smoking:
"Do You Smoke?"

Self-Reported Acts	Yes	No	
Nondelinquents	HM 30%* IM 26%	HM 65%* IM 10%	
Delinquents	HM 70%* IM 74%	HM 35%* IM 90%	
Total HM*	(300)	(952)	1251
Total IM	(126)	(21)	147

*The results for Hirschi's males were derived from his Table 55 (1969, p. 167).

Of Hirschi's 1252 subjects, 300 were in the "yes" category. Of the 300, 89 (30%) respondents who were placed in the "yes" category did not report any delinquent acts. However, 211 (70%) respondents from the same category did report one or more delinquent acts. For Irfaifeh's 147 subjects, 126 were in the "yes" category. Of the 126, 33 (26%) from the "yes" category did not report any delinquent acts, while 93 (74%) of respondents who were in the same category did report one or more delinquent acts. The comparison shows that of those subjects who reported smoking, the percentages of the two studies were very close (70% for Hirschi's study and 74% for Irfaifeh's study) with regard to reported delinquent acts.

With respect to the second category, non-smokers, of Hirschi's 1252 subjects, 952 were in the "no" category. Of the 952, 619 (65%) respondents who did not smoke reported no delinquency involvement,

while 333 (35%) respondents from the same category did report one or more delinquent acts. Of Irfaifeh's 147 subjects, 21 were in the "no" category. Of the 21, 2 (10%) respondents of the non-smokers did not report any delinquent acts. However, 19 (90%) of respondents in this category did report one or more delinquent acts. The comparison shows that of those subjects who did not smoke, a much higher percentage of Irfaifeh's study reported being involved in delinquency. Thus, Hirschi's theory with respect to this type of adult activity (smoking) was not supported.

With respect to alcohol consumption and dating as forms of adult activities, of Irfaifeh's 147 subjects, 2 (40%) respondents who never consumed alcohol did not report any delinquent acts, while 3 (60%) respondents from the same category did report one or more delinquent acts.

With respect to the second category, ("yes"), 33 (24%) respondents who had had alcohol in the last academic year did not report any delinquent acts. However, 109 (76%) respondents from the same category did report one or more delinquent acts. Therefore, drinking was related to delinquency involvement. Hirschi did not give figures about drinking, but he suggested that drinking was more strongly related to delinquency than smoking, and also dating was strongly related to delinquency as well. However, as we have seen in Table 7, smoking among Irfaifeh's subjects was not related to delinquency involvement in contrast to Hirschi's theory, but drinking was found to be strongly related.

The final item of adult activities to be tested here was dating.

The possible responses were "yes" or "no." Of Irfaifeh's 147 subjects, 7 were in the "no" category. Of the 7, one (14%) respondent who never dated in the last academic year did not report any delinquent acts. However 6 (86%) respondents who were placed in the same category of "no" did report one or more delinquent acts. With respect to the second category of "yes", of Irfaifeh's 147 subjects, 140 were in the "yes" category. Of the 140, 34 (24%) respondents did not report any delinquent acts, while 106 (76%) respondents from the same category did report one or more delinquent acts. Therefore, dating was not found to be strongly related to delinquency in the sense that 86% of those who never dated reported being involved in delinquency vs. 76% of respondents who were dating and reported being involved in delinquency. Thus, with respect to dating, Hirschi's theory was not supported. Hirschi did not give figures about dating and delinquency in his study.

Commitment to conventional activities such as the importance of getting good grades and time devoted to do homework were also related to delinquency as Hirschi suggested. In order to measure commitment to conventional activities, the respondents were asked the following question: "How important is getting good grades to you personally?" There were four possible responses to this question: (1) "very important," (2) "somewhat important," (3) "fairly important," and (4) "completely unimportant." These four responses were collapsed into three categories for comparison purposes. High = (1); Medium = (2) & (3); and Low = (4). Table 10 illustrates the comparison of the two studies.

Table 10

Self-Reported Delinquency by Perceived Importance of Good Grades:
 "How Important is Getting Good Grades to You Personally?"

Self-Reported Acts	High	Medium	Low	
Nondelinquents	HM 64%* IM 0%	HM 50%* IM 2%	HM 21%* IM 32%	
Delinquents	HM 36%* IM 100%	HM 50%* IM 91%	HM 79%* IM 68%	
Total HM*	(674)	(585)	(38)	1297
Total IM	(4)	(45)	(98)	147

*The results of Hirschi's males were derived from his Table 94 (1969, p. 224).

According to Table 10, of Hirschi's 1297 subjects, 674 were in the high category. Of the 674, 432 (64%) respondents who were placed in the high category did not report any delinquent acts. However, 243 (36%) respondents from the same category did report one or more delinquent acts. Of Irfaifeh's 147 subjects, 4 were in the high category. Of the 4, no one was found in the high category and therefore, no delinquency involvement was reported, while 4 (100%) respondents who were placed in the high category did report one or more delinquent acts. With respect to the medium category, of Hirschi's 1297 subjects, 585 were in the medium category. Of the 585, 293 (50%) respondents did not report any delinquent acts, while the other half did report one or more delinquent acts. Of Irfaifeh's 147 subjects, 45 were in the medium category. Of the 45, 4 (9%) respondents did not report any delinquent acts, however, 41 (91%)

respondents who were found in the same category, medium, did report one or more delinquent acts. Finally, in the low category of Hirschi's 1297 subjects, 38 were in the low category. Of the 38, 8 (21%) respondents did not report any delinquent acts, while 30 (79%) respondents did report one or more delinquent acts. Of Irfaifeh's 147 subjects, 98 were in the low category. Of the 98, 32 (32%) respondents of those in the low category did not report any delinquent acts. However, 66 (68%) respondents from the same category did report one or more delinquent acts. The comparison shows that of those who were weakly committed to achieving good grades, a higher percentage of Hirschi's subjects reported being involved in delinquency. However, Irfaifeh's findings were not consistent with Hirschi's theory with respect to this item.

Involvement in Conventional Activities

Time devoted to doing homework as a measure of both commitment and involvement in conventional activities was measured by the number of hours per day of involvement from one and one-half hours or more, one hour, one-half hour, and less than one-half hour. Table 11 illustrates the comparison of the two studies.

Table 11
Percent Committing One or More Delinquent Acts
by Time Devoted to Homework

Time Reported	1-1/2 Hours	1 Hour	1/2 Hour	Less Than 1/2 Hour	
Delinquents	HM 34%* IM 66%	HM 48%* IM 71%	HM 52%* IM 80%	HM 64%* IM 80%	
Total HM*	(593)	(361)	(199)	(117)	1270
Total IM	(6)	(5)	(41)	(60)	112

*The figures for Hirschi's males were derived from his Table 71 (1969, p. 191).

According to Table 11, of Hirschi's 1270 subjects who reported being involved in delinquency 593 (34%) respondents did report one or more delinquent acts. Of Irfaifeh's 112 subjects who reported being involved in delinquency from the first category, one and one-half hours or more, 6 (66%) respondents did report one or more delinquent acts. The comparison shows that of the subjects who devoted one and one-half hours or more a much higher percentage of Irfaifeh's subjects reported being involved in delinquency (66% vs. 34%).

With respect to the second category, those who devoted one hour to do their homework, of Hirschi's 1270 subjects who reported being involved in delinquency, 361 (48%) respondents devoted one hour only. Of Irfaifeh's 112 subjects, 5 (71%) respondents of those from the same category did report one or more delinquent acts. Again, comparing the two studies, a much higher percentage of Irfaifeh's subjects reported being involved in delinquency (71% vs. 48%).

For the third category containing those subjects who spent one-half hour and reported being involved in delinquency, of Hirschi's 1270 subjects, 199 (52%) respondents did report one or more delinquent acts. Of Irfaifeh's 112 subjects who reported being involved in delinquency, 41 (80%) respondents from the same category did report one or more delinquent acts. Again, comparing the two studies with respect to this category, one-half hour, a much higher percentage of Irfaifeh's subjects reported being involved in delinquency (80% vs. 52%). Finally, regarding those subjects who devoted less than one-half hour to doing homework, and who reported being involved in delinquency, of Hirschi's 1270 subjects, 60 (64%) respondents did report delinquent acts. With respect to Irfaifeh's subjects 60 (80%) respondents being placed in this category did report one or more delinquent acts. The comparison shows that in all four categories, a much higher percentage of Irfaifeh's subjects reported being involved in delinquency. Moreover, no big differences were found among the four categories with respect to time devoted to homework and delinquency. Thus, Hirschi's theory was not supported by Irfaifeh's study on this item.

Besides testing the relationship between academic involvement and reported delinquency behavior, another non-academic item of school-related activities was tested in Irfaifeh's sample only. The following question was used to assess the bond between non-academic school activities and delinquency behavior.

Table 12

Self-Reported Delinquency by Involvement in School-Related Activities:
"Are You Active in School Activities?"

Self-Reported Delinquency	Very Active	Somewhat Active	Not Active At All	I Don't Know
Nondelinquents	6 (15%)	23 (29%)	4 (27%)	2 (13%)
Delinquents	33 (85%)	50 (71%)	11 (73%)	11 (73%)
Total	39	73	15	13

According to Table 12, 39 were in the very active category. Of the 39, 6 (15%) respondents who reported being very active in school-related activities did not report any delinquent behavior. However, 33 (85%) respondents from the same category did report one or more delinquent acts. Comparing the two groups (85% vs. 15%) of nondelinquents vs. delinquents the data was not supportive of Hirschi's theory. With respect to the second category the somewhat active group, 73 were in the somewhat active category. Of the 73, 23 (29%) respondents did not report any delinquent behavior, however, 50 (71%) respondents did report one or more delinquent acts. With respect to the third group of not active at all, 15 were in the not active at all category. Of the 15, 4 (27%) respondents did not report any delinquent acts, compared to 11 (73%) of respondents who did report one or more delinquent acts. Finally, of the "I don't know" category, 13 were in that category. Of the 13, 2 (13%) respondents did not report any delinquent acts, while 11 (73%) of respondents did report one or more delinquent acts. The overall comparison among the four

categories did not support Hirschi's theory, as illustrated in the table where 85% of respondents who reported being very active committed one or more delinquent acts versus 73% of respondents who reported being not active at all reported one or more delinquency acts. However, seven students did not respond to this question.

Belief

Hirschi (1969) claimed that "delinquency behavior does not result from beliefs which require delinquency but instead that delinquency is made possible by the absence of beliefs that forbid delinquency" (p. 198). Hirschi used many items to assess the relationship between belief in the conventional order and involvement in delinquent activities. These items were: respect for police, attitudes toward the law, belief in individual responsibility, helplessness to avoid trouble, denial of injury, denial of the victim, and finally, condemnation of the condemner.

The possible responses for these items were the following: "strongly agree," "agree," "undecided," "disagree," and "strongly disagree." For comparison purposes the five responses were collapsed into three responses: (1) "agree and "strongly agree," (2) "undecided," and (3) "disagree" and "strongly disagree." Table 13 illustrates the comparison of the two studies.

According to Table 13, of Hirschi's subjects who agreed with the statement "I have a lot of respect for the police," 769 (35%) respondents did report one or more delinquent acts. While in Irfaifeh's study, 25 (83%) respondents did report one or more delinquent acts.

Table 13
 Percent Committing One or More Delinquent Acts
 By Hirschi's Belief Items

Belief	Agree	N**	Undecided	N**	Disagree	N**
1. I have a lot of respect for the Richmond police.	HM 35%*	769	54%*	325	63%*	187
	IM 83%	25	88%	22	71%	65
2. It is alright to get around the law if you can get away with it.	HM 69%*	142	54%*	219	73%*	919
	IM 84%	16	82%	18	74%	78
3. Most criminals shouldn't be blamed for the things they have done.	HM 51%*	154	48%*	177	41%*	952
	IM 74%	63	92%	11	76%	38
4. I can't seem to stay out of trouble no matter how hard I try.	HM 66%*	150	49%*	176	38%*	842
	IM 76%	78	78%	32	50%	2
5. Most things people call delinquency don't really hurt anyone.	HM 59%*	310	49%*	432	36%*	540
	IM 73%	19	81%	22	75%	71
6. The man who leaves his keys in his car is as much to blame for its theft as the man who steals it.	HM 43%*	852	49%*	131	43%*	313
	IM 78%	78	60%	14	83%	20
7. Policemen try to give all kids an even break.	HM 50%*	720	56%*	255	79%*	311
	IM 100%	57	91%	36	68%	19

*The results for Hirschi's males were derived from his Tables 78, 80, 82, 83, 84, 85, 86 (1969, pp. 201-211).

**Those who committed delinquent acts.

The comparison shows that a much higher percentage of Irfaifeh's subjects reported being involved in delinquency (83% vs. 35%). For those in the second category of undecided, of Hirschi's subjects, 325 (54%) respondents did report one or more delinquent acts compared to 22 (88%) respondents in Irfaifeh's study. Again, the comparison shows a much higher percentage of Irfaifeh's subjects who reported being involved in delinquency (88% vs. 54%).

Finally, of Hirschi's subjects, 187 (63%) respondents who either disagree or disagree strongly committed one or more delinquent acts. Of Irfaifeh's subjects, 22 (71%) respondents in the same category did report one or more delinquent acts. The comparison shows a much higher percentage of Irfaifeh's subjects reported being involved in delinquency. In sum, according to Irfaifeh's findings, Hirschi's theory was not supported in the sense that we expected those in the first category to have less delinquent acts reported versus the last category. With respect to the second item, attitudes toward the law, of Hirschi's subjects, 142 (69%) respondents who agreed with the statement did report one or more delinquent acts, compared with Irfaifeh's subjects 16 (84%) respondents from the same category did report one or more delinquent acts. The comparison shows that of those who agreed with the statement "it is all right to get around the law if you can get away with it," a much higher percentage of Irfaifeh's subjects reported being involved in delinquency (84% vs. 69%). With respect to those subjects in the undecided category, of Hirschi's subjects, 219 (54%) respondents reported one or more delinquent acts, compared to 18 (82%) respondents in Irfaifeh's study. Again, the

comparison shows a much higher percentage of Irfaifeh's subjects who reported being involved in delinquency, (82% vs. 54%).

With respect to the final category, of Hirschi's subjects who disagreed with the above statement, 919 (73%) respondents reported one or more delinquent acts compared to Irfaifeh's subjects, 78 (74%) respondents did report one or more delinquent acts. The comparison shows that Hirschi's theory was not supported by his study nor by the present one.

The third item to assess the relationship between belief and involvement in delinquency was: "Most criminals should not be blamed for the things they have done." Of Hirschi's subjects, 154 (51%) respondents who agreed with the statement did report one or more delinquent acts. The comparison shows of those subjects who agreed with the above statement, a much higher percentage of Irfaifeh's study reported being involved in delinquency (74% vs. 51%).

With respect to the second category of undecided, 177 (48%) respondents in Hirschi's study reported one or more delinquent acts. In Irfaifeh's study, 11 (92%) of respondents in the same category did report one or more delinquent acts. Again, the comparison shows a much higher percentage of Irfaifeh's subjects reported being involved in delinquency (92% vs. 48%).

The third category, those subjects who disagreed with the above statement, 952 (41%) respondents of Hirschi's subjects reported one or more delinquent acts versus 38 (76%) respondents in Irfaifeh's study. The comparison shows that for those subjects who disagreed with the statement, a much higher percentage of Irfaifeh's subjects reported

being involved in delinquency. In sum, with respect to the third item, attitudes toward the law, Hirschi's theory was not supported by Irfaifeh's study.

The fourth item, "I can't seem to stay out of trouble no matter how hard I try," of Hirschi's subjects 150 (66%) who agreed with the above statement reported one or more delinquent acts versus 78 (76%) respondents in Irfaifeh's study who agreed with the statement, and reported one or more delinquent acts. The comparison of the two studies shows that of those subjects who agreed with the above statement, a much higher percentage of Irfaifeh's subjects reported being involved in delinquency (76% vs. 66%).

With respect to the second category, undecided, Hirschi's 176 (49%) respondents who were undecided reported one or more delinquent acts. For Irfaifeh's subjects, 32 (78%) respondents in the same category did report one or more delinquent acts. The comparison shows that of those subjects who were undecided about the statement, a much higher percentage of Irfaifeh's subjects did report one or more delinquent acts (78% vs. 48%).

The final category, those subjects who disagreed with the statements, of Hirschi's subjects, 842 (38%) respondents did report one or more delinquent acts. In Irfaifeh's study 2 (50%) respondents from the same category did report one or more delinquent acts. The comparison shows of those subjects who disagreed with the fourth statement, a much higher percentage of Irfaifeh's subjects reported being involved in delinquency. However, Irfaifeh's findings did support Hirschi's study with respect to the fourth item.

The fifth item to assess the relationship between the bond and involvement in delinquency was, most criminals shouldn't really be blamed for the things they have done. Of Hirschi's subjects, 310 (59%) respondents who agreed with the statement did report one or more delinquent acts. With respect to Irfaifeh's findings, 19 (73%) respondents who were in this category reported being involved in delinquency. The comparison shows that of those subjects who agreed with the statement, a much higher percentage of Irfaifeh's study did report one or more delinquent acts (73% vs. 59%).

For the undecided category, 432 (49%) respondents in Hirschi's study reported one or more delinquent acts, compared to 22 (81%) respondents in Irfaifeh's study. Therefore, a much higher percentage of Irfaifeh's subjects who were undecided about the statement reported being involved in delinquent behavior (81% vs. 49%).

Finally, with respect to the subjects who disagreed with the above statements, 540 (36%) respondents of Hirschi's study did report one or more delinquent acts. Compared to Irfaifeh's subjects, 71 (75%) respondents who were placed in the same category did report one or more delinquent acts. The comparison shows that of those subjects who disagreed with the above statements, a much higher percentage of Irfaifeh's subjects reported being involved in delinquency (75% vs. 36%). Thus, with respect to this item, no support was found for Hirschi's theory in Irfaifeh's study.

The sixth item, the man who leaves his keys in his car is as much to blame for its theft as the man who steals it, of Hirschi's respondents 852 (43%) who agreed with the statement did report one or

more delinquent acts. For Irfaifeh's subjects, 78 (78%) of respondents who did agree with the statement reported one or more delinquent acts. The comparison shows that of those subjects who agreed with the above statements, a much higher percentage of Irfaifeh's subjects reported being involved in delinquency (78% vs. 43%).

For the undecided category, 131 (49%) respondents in Hirschi's study reported one or more delinquent acts. Compared to Irfaifeh's findings, 14 (60%) respondents did report one or more delinquent acts. Again, the comparison shows that of those subjects who were undecided, a much higher percentage of Irfaifeh's subjects reported being involved in delinquency.

Finally, those subjects who disagreed with the above statement, 313 (43%) respondents in Hirschi's study did report one or more delinquent acts, compared to 20 (83%) of respondents in Irfaifeh's study. The comparison shows that of those subjects who disagreed with the above statement, a much higher percentage of Irfaifeh's subjects reported being involved in delinquency. In sum, with respect to this item, Hirschi's theory was supported in the sense that 78% of respondents who agreed with the statement did report one or more delinquent acts versus 83% of respondents who disagreed with the statement and did report one or more delinquent acts.

Finally, the last item to assess the relationship between the bond and involvement in delinquency was that policemen try to give all kids an even break. Of Hirschi's subjects, 720 (50%) of respondents who agreed with the statement did report one or more delinquent acts. In Irfaifeh's study, 57 (100%) respondents who agreed

with the statement reported one or more delinquent acts. Therefore, a much higher percentage of Irfaifeh's subjects reported being involved in delinquency.

With respect to the second category of undecided, 255 (56%) respondents in Hirschi's study did report one or more delinquent acts versus 36 (91%) of respondents in Irfaifeh's study. Again, the percentage of those subjects in Irfaifeh's study was much higher than Hirschi's study.

The last category consisting of those subjects who disagree with the statement, 311 (79%) respondents of Hirschi's subjects did report one or more delinquent acts. For Irfaifeh's study, 19 (68%) respondents who were placed in the same category reported one or more delinquent acts. The comparison shows that of those who disagreed with the above statement, a much higher percentage of Hirschi's subjects reported being involved in delinquency. However, Hirschi's theory was not supported with respect to this item.

In sum, two items (4, 6) were found to be supportive of Hirschi's theory, while the rest of the items did not support the theory at all.

Summary

The aim of this section was to determine the degree to which the univariate relationship found and reported in Hirschi's study hold for the Jordanian society. It was clear from the overall correspondence between Hirschi's results and the results in this research, that there was an inconsistency between the two studies with some

minor exceptions.

Attachment to father was supported and consistent with Hirschi's findings and even further, attachment to father was found to be stronger and more effective in deterring delinquent behavior than attachment to mother. In fact, attachment to mother was not consistent at all. Attachment to school as measured by "how do you rate yourself in school ability compared with other students in your school" and "in general do you like or dislike school" were related to delinquent involvement.

Attachment to peers as measured by friends' contact with the police was not supported and attachment to peers measured by identification with friends was inconsistent with the theory. Therefore, attachment to significant others, with three exceptions "attachment to fathers, teachers, and schools" were found inconsistent to Hirschi's findings.

Commitment to conventional activities as measured by the importance of getting good grades was inconsistent with Hirschi's theory. Concerning commitment to adult activities--smoking, drinking and dating, the research results with respect to smoking and dating were not consistent with Hirschi's theory, while drinking was found related to delinquent involvement.

With respect to involvement in conventional activities and delinquency behavior as measured by time devoted to homework, the research findings were inconsistent and did not support Hirschi's theory. Regarding involvement in non-academic, school-related activities, the research findings were also inconsistent with Hirschi's

theory.

Looking at the element belief, the following aspects were found to be inconsistent with Hirschi's results: (a) respect for police, (b) attitudes toward the denial of responsibility, (c) denial of injury, and (d) equitability of police treatment. Helplessness to avoid trouble, and denial of injury, were the only two items were consistent with the theory.

Further analysis was conducted to test the four hypotheses of this research. The results are reported in the next section.

Test of the Research Hypotheses

In this section test of the research hypotheses were conducted using the t-test. The statistical analyses were computed in testing the nondirectional hypotheses using .05 critical value for committing a type 1 error (alpha). However, before we proceed to talk about the research hypotheses, the writer believes that the reader should be acquainted with the indices used to test the hypotheses.

Each independent variable was measured by several items, as mentioned in the third chapter. Thus, attachment to mother was measured by a seven-item index, and "an index is a variable which is a composite of other variables that are assumed to reflect some underlying construct" (Bohrnstedt & Kroke, 1982, p. 359). In this case the attachment to mother index is the sum of each individual's responses to seven items. The seven items deal with intimacy of communication between mother and child, identifications with mother, and supervisor. Each item in this index has a score which ranges from 1 to 3.

Thus, each individual total scores ranges from 7-21. Attachment to father was treated in the same fashion.

With respect to attachment to peers, a five-item index was constructed as also mentioned in the third chapter. The five items deal with identification with best friends, teachers, attitudes toward one's friends, respect best friends, and finally friends' contact with police. Each item has a score which ranges from 1 to 3. The total scores of each individual score ranges from 5-15.

Attachment to school was measured by a seven-item index. The seven items deal with attitudes toward school, teachers, self-scholastic ability, self-rating in school ability, school-generated emotional tension. Each item has three responses which range from 1 to 3. Consequently, each individual total scores ranges from 7-21.

Commitment to conventional activities was measured by a seven-item index. Each item has these responses: high to low. The seven items deal with educational aspiration, educational expectation, and GPA. The range of each individual's total scores ranges from 7-21.

Involvement in conventional activities was measured by an eight-item index. Each item has three responses (high to low). The eight items deal with time devoted to homework, religiosity, housework, and attitudes toward school. The index score ranges from 8 to 24 for each individual's total scores.

Finally, with respect to belief, an eight-item index was used to measure this variable. The eight items deal with attitudes toward police, law, and individual's responsibility; each item has three responses from high (agree) to low (disagree). Thus, the total

individual's scores range from 8 to 24.

The following hypotheses were tested:

1. There are no significant differences between delinquents and nondelinquents with respect to attachment to significant others.
2. There are no significant differences between delinquents and nondelinquents with respect to commitment to conventional activities.
3. There are no significant differences between delinquents and nondelinquents with respect to involvement in the conventional order.
4. There are no significant differences between delinquents and nondelinquents with respect to belief in the conventional order.

With respect to the first hypothesis, attachment to significant others, four subhypotheses were created: attachment to mother, father, school and peers. The reader should notice in the following pages that the writer will start an overall test of the whole index, then an individual test will be conducted for each item in the four indices.

Hypothesis 1

There are no significant differences between delinquents and nondelinquents with respect to attachment to significant others.

The data presented in Table 14 did support the relationship stated in H1. According to the data in Table 14, the mean scores of nondelinquents on the attachment's index was slightly higher than the total scores of delinquents, 57.6 vs. 56.7, respectively.

Table 14

Results of t-test Comparison Between Delinquents and Nondelinquents
on Attachment to Significant Others Index

Nondelinquents			Delinquents			df	t	p
Mean	SD	N	Mean	SD	N			
57.6	6.1	35	56.7	5.3	109	142	.84	.4

The mean differences between the two groups (delinquents and non-delinquents) of self-reported behavior on the attachment index was not significant at alpha level .05 ($t = .8$; $p = .4$). Therefore, the null hypothesis was accepted, and the alternative hypothesis had to be rejected.

Individual Tests

According to Table 15, the total scores of the nondelinquents and delinquents on all attachment indices (mother, father, school, and peers) with the exception of attachment to father index was higher than the mean scores of delinquents on each of the attachment indices.

Table 15

T-test Comparison Between Nondelinquents and Delinquents
on Attachment Indices

Attachment To Signifi- cant Others	Nondelinquents			N	Delinquents		df	t	p
	N	Mean	SD		Mean	SD			
Father	35	13.9	3.07	112	14.4	3.07	145	-.89	.37

Table 15--Continued

Attachment To Signifi- cant Others	Nondelinquents			N	Delinquents		df	τ	p
	N	Mean	SD		Mean	SD			
Mother	35	14.6	2.90	112	14.3	2.5	145	.63	.5
School	35	16.5	2.40	112	15.9	2.5	145	1.26	.2
Peers	35	12.5	2.11	112	12.1	1.9	145	1.14	.2

No significant differences were found at .05 level, between the two groups. The mean score of nondelinquents on the attachment to father index was 13.9, less than the mean score of nondelinquents on the attachment to mother index. The mean score of delinquents on the attachment to father index was slightly higher than the mean score of delinquents on the attachment to mother index, 14.42 and 14.25, respectively.

Regarding attachment to school index, nondelinquents had higher mean score (16.5) than the delinquents (15.9), which indicates that attachment to school might have had some effect on their behavior. However, no significant differences were found between the two groups. Finally, nondelinquents had a higher mean score (12.5) than the delinquents (11.11) on the attachment to peers index. Again, although the differences between the two groups were not significant, even so, attachment to peers for the nondelinquents was higher according to their total scores on the index. In sum, no significant differences were found between the two groups on the four attachment indices.

Hypothesis 1a

There are no significant differences between delinquents and nondelinquents with respect to attachment to mother in each item in the mother's attachment index.

The data presented in the previous table (15) indicated no significant differences between the two groups with respect to attachment to mother index. Now we turn to each item on the attachment to mother index in order to see if the mean score of the two groups are the same or different.

As mentioned earlier, a seven-item index was constructed to measure attachment to mother, and each item ranged from low (1) to high (3). The data presented in Table 16 indicated that the mean score of nondelinquents was less than the mean score of delinquents on items 1, 2, 5, 7, while they had the same mean score on the rest of the items 3, 4, 6. The actual alpha for items 1, 2, 5 and 7 was .3, .5, .4 and .3 respectively. Thus, attachment to mother had no significant effect on the self-reported behavior of the two groups. Consequently, the null hypothesis was accepted, and the alternative hypothesis had to be rejected.

Hypothesis 1b

There are no significant differences between delinquents and nondelinquents with respect to attachment to father in each item in the father attachment index.

It was revealed in Table 15 that no significant differences were found between delinquents and nondelinquents mean score on the

Table 16

T-test Comparison Between Nondelinquents and Delinquents
on Mother's Attachment Index (Item by Item)

Item # Regarding Mother	Nondelinquents			N	Delinquents		df	t	p
	N	Mean	SD		Mean	SD			
1. Unfair rules.	35	1.3	.63	112	1.5	.67	145	-1.10	.3
2. Explanation of rules.	35	1.7	.9	112	1.8	.8	145	-.66	.7
3. Knows where you are.	35	2.4	.9	112	2.4	.7	145	-.32	.8
4. Know who you are with.	35	2.3	.8	112	2.3	.8	145	-.90	.4
5. Concern about schoolwork.	35	2.3	.8	112	2.5	.7	145	-.20	.8
6. Share thoughts and feelings with mother.	35	1.8	.8	112	1.8	.8	145	-.98	.3
7. Identifi- cation with mother.	35	2.5	.5	112	1.6	.5	145	1.14	.2

attachment to father index. However, there was a practical importance of the reported differences between the two groups. In other words, there was a weak effect on the behavior of those who were nondelinquents. Their mean scores were 13.9 and 14.4, respectively.

Table 17 shows what happened when each item was tested to find out if there was any significant differences between the two groups regarding the father attachment index.

According to the data presented in the above table, attachment to father as measured by the seven items had no significant effect on the reported delinquency or nondelinquency of the two groups. However, three of the items (2, 5, 6) had the same mean score for both delinquents and nondelinquents (1.8, 2.4, 1.7). The mean scores, however, for the nondelinquents on items 3 and 4 were slightly larger than the scores of delinquent group (2.4 vs. 2.2; 2.3 vs. 2.2)., but of no significant effect. Finally, the mean scores of the delinquents were slightly larger than the nondelinquents on items 1 and 7 (1.6 vs. 1.5; 2.4 vs. 2.2, respectively).

In sum, all items were supportive of the null hypothesis of no significant differences between the mean score of the two groups. In other words, attachment to father had no effect on the self-reported behavior of the two groups.

Hypothesis 1c

There are no significant differences between delinquents and nondelinquents with respect to attachment to school on each item in the school attachment index.

Table 17
T-test Comparison Between Nondelinquents and Delinquents
on Father's Attachment Index (Item by Item)

Item # Regarding Father	Nondelinquents			N	Delinquents		df	t	p
	N	Mean	SD		Mean	SD			
1. Unfair rules.	35	1.5	.74	112	1.5	.70	145	-.14	.9
2. Explanation of rules.	35	1.8	.85	112	1.8	.77	145	.28	.8
3. Knows where you are.	35	2.4	.77	112	2.2	.74	145	1.16	.24
4. Know who you are with.	35	2.3	.76	112	2.2	.79	145	1.07	.3
5. Concern about schoolwork.	35	2.4	.77	112	2.4	.73	145	-.40	.7
6. Share thoughts and feelings with father.	35	1.7	.70	112	1.7	.76	145	.01	.9
7. Identifi- cation with father.	35	2.2	.80	112	2.4	.75	145	-1.05	.3

The data presented in Table 15 indicated no significant differences between delinquents and nondelinquents mean score on the total attachment to school index, 15.9 and 16.5, respectively. However, each item in the seven-item index was tested in order to find out if out if any of these items was significant.

According to Table 18, two items (1 and 2) were found to be significant, .03 and .05, respectively. Thus, attitudes toward school and perceived scholastic ability were effective with respect to the self-reported behavior of nondelinquents and delinquents. The mean score of nondelinquents were larger than the mean scores of delinquents (2.7 vs. 2.5, 2.8 vs. 2.6 respectively). However, attachment to school as measured by the other five items did not indicate any significant differences between the two groups. Thus, attachment to school as measured by grades, concern for teachers' opinions, perception of teachers' treatment, and scopes of school authority did not indicate any significant effect with respect to the self-reported behaviors of the two groups.

In sum, the null hypothesis was accepted partially in the sense that only two out of seven items supported the hypothesis, while five of them did not give any significant differences. The reader might be confused here about the reported result of this subhypothesis, due to the fact that either we reject or accept the null hypothesis. However, the purpose of testing these subhypotheses was to find out the significance of each item. In other words, which item was more effective than others on the reported-self behavior of the two groups.

Table 18
 T-test Comparison Between Nondelinquents and Delinquents
 on Attachment to School Index (Item by Item)

Item #	Nondelinquents			N	Delinquents		df	t	p
	N	Mean	SD		Mean	SD			
1. Like/dislike school.	35	2.7	.52	112	2.5	.62	145	2.21	.03
2. Rate yourself in school.	35	2.8	.53	112	2.6	.64	145	1.92	.05
3. Kinds of grades.	35	2.4	.49	112	2.4	.49	145	-.04	.9
4. Care what teachers think of you.	35	2.05	.48	112	2.06	.47	145	-.06	.9
5. None of school's business.	35	2.02	.99	112	1.9	.88	145	.64	.5
6. Nervous in school.	35	2.3	.85	112	2.1	.89	145	.76	.4
7. Teachers pick on me.	35	2.3	.82	112	2.4	.81	145	-.92	.4

Hypothesis 1d

There are no significant differences between delinquents and nondelinquents with respect to attachment to peers on each item in the school attachment index. According to the data presented in Table 15, the overall test of attachment to significant others, no significant differences were found between the two groups, delinquents and nondelinquents.

As mentioned in the beginning of this chapter, a five-item index was constructed to measure attachment to peers. According to Table 19, only one item, 3, was significant, while the other four items were not significant at all. Thus, friends' contact with police was very effective on the reported self-behavior of the two groups.

As reported in the above table, students' attitudes toward one's friends, teachers' attitudes toward one's friends, identification and respect for best friends did not have a significant effect on the behavior of the subjects, while a number of friends picked up by the police was significant at any alpha level. Thus, control theory should reconsider the kinds of friends one has instead of assuming the more attached the person is the less likely he will be delinquent. However, nondelinquents had a larger mean score on items 1, 3, and 4 and lower mean score on item 5, when compared to their counterparts, and both groups had the same scores on item 2.

In sum, attachment to friends as measured by the five-item index, was supportive of the null hypothesis partially, or with one exception, Item 3.

Table 19
 T-test Comparison Between Nondelinquents and Delinquents
 on Attachment to Peers Index (Item by Item)

Item #	Nondelinquents			Delinquents			df	t	p
	N	Mean	SD	N	Mean	SD			
1. Students like your friends.	35	2.4	.88	112	2.3	.88	145	.78	.4
2. Teachers like your friends.	35	2.5	.78	112	2.5	.81	145	.08	.9
3. Friends picked up by police.	35	2.9	.32	112	2.5	.53	145	3.66	.000
4. Identification with friends.	35	2.5	.70	112	2.4	.81	145	.84	.4
5. Respect best friend's opinions.	35	2.3	.98	112	2.5	.83	145	.25	.4

Summary of First Hypothesis

The analysis of the data as presented in Tables 14 through 19 consisted of using the t-test to find out if there were any significant differences between the delinquents and nondelinquents mean scores of their reported self-behavior on the overall attachment index, and the individual items in the index.

The overall test of the first hypothesis was supportive, and consequently, the null hypothesis was accepted, and the alternative hypothesis was rejected. However, further testing was conducted on index items (mother, father, school, and peers) to find out if there were any significant differences between delinquents and non-delinquents with respect to each item. The analysis revealed some slight difference in the mean score of the two groups on most items in the four indices. However, two items in the attachment to school index were significant (items 1 and 2) and only item number 3 was found to be significant on the attachment to peers index.

Hypothesis 2

There are no significant differences between delinquents and nondelinquents with respect to commitment to conventional activities.

As mentioned in the introduction to this chapter, commitment to conventional activities was measured by a seven-item index. According to Hirschi's theory, delinquents are not aspirers. He argues that aspiration to achieve conventional goals constrains delinquent behavior. Thus, delinquents were expected to be significantly different in their conventional commitment to education and occupation than

nondelinquents.

The overall test of the commitment index supported Hirschi's stand that delinquents are significantly different from nondelinquents. According to Table 20, alpha was significant at .02.

Table 20

Results of t-test Comparison Between Delinquents and Nondelinquents With Respect to Commitment to Conventional Activities

Nondelinquents			Delinquents			df	t	p
Mean	SD	N	Mean	SD	N			
19.5	2.03	35	18.4	2.8	112	145	2.3	.02

The mean score of nondelinquents was larger than the mean score of delinquents (19.5 vs. 18.4). Therefore, the null hypothesis was not accepted and the alternative hypothesis is considered. Now we turn to examine each item in the commitment index in order to see which items were significant on the self-reported behavior of the two groups.

According to the data presented in Table 21, items 2 and 6 were significant at .002 and .005 level. With respect to item 2, importance of good grades, the mean score of nondelinquents was larger than the mean score of delinquents (2.9 vs. 2.6), while for item 6, school expectation, the mean score of nondelinquents was larger than the mean score of delinquents (2.8 vs. 2.4). Thus, individuals who were concerned about their grades and expected to finish from college scored lower on the delinquency index than those who were not concerned.

Table 21

T-test Comparison Between Nondelinquents and Delinquents
With Respect to Commitment to Conventional Activities
(Item by Item)

Item #	Nondelinquents			N	Delinquents		df	t	p
	N	Mean	SD		Mean	SD			
1. Kinds of grades.	35	2.4	.50	112	2.4	.48	145	-.04	.9
2. Importance of good grades.	35	2.9	.32	112	2.6	.56	145	3.21	.002
3. Importance of good grades.	35	2.6	.69	112	2.4	.83	145	1.45	.2
4. Job-money is the only reason.	35	2.9	1.4	112	3.07	1.4	145	-.69	.5
5. Plan to graduate from high school.	35	3.00	.16	112	2.9	.24	145	1.52	.1
6. Schooling-- expect to get.	35	2.8	.51	112	2.4	.92	145	2.8	.005
7. Schooling-- would like to get.	35	3.00	.17	112	2.6	.76	145	2.8	.006

However, the rest of the items did not indicate any significant differences between the two groups. In fact, for items 1 and 5 both groups had almost the same mean score, which means that graduation from high school and the kinds of grades had no significant effect on the subjects behavior. It is interesting to notice that on item number 7, although it was not significant, the mean score of non-delinquents was larger than the mean score of delinquents. In sum, two items (1 and 6) were found to be effective on the subjects' behavior, while the rest of the items were not significant.

Summary of Second Hypothesis

The data presented in Tables 20 and 21, indicated that commitment to conventional activities was significant in deterring delinquency. The null hypothesis was not accepted, and the alternative hypothesis had to be accepted. The individual test of the items, as presented in Table 21 indicated that importance of getting grades and school expectations were significant, the other five items did not indicate any significant differences between the two groups.

Hypothesis 3

There are no significant differences between delinquents and non-delinquents with respect to involvement in conventional activities.

An eight-item index was constructed to measure involvement in conventional activities. Hirschi (1969) argued that "analysis of involvement in conventional activities parallels analysis of attitudinal commitments to conventional success goals. Such activities are

presumably in large part consequences of such commitment" (p. 191).

Table 22

Results of t-test Comparison Between Delinquents and Nondelinquents
With Respect to Involvement in Conventional Activities Index

Nondelinquents			Delinquents			df	t	p
Mean	SD	N	Mean	SD	N			
18.9	1.8	35	19.1	1.9	112	145	.9	.3

According to the data presented in Table 22, the overall test of the null hypothesis indicated no significant differences between the two groups (delinquents and nondelinquents). The mean score of nondelinquents and delinquents was 18.9 vs. 19.1. Consequently, the null hypothesis had to be accepted, and the alternative hypothesis was rejected. We turn now to examine each item in the involvement to conventional activities index.

The data presented in Table 23 indicated that no significant differences were found between the two groups with respect to their mean score. However, nondelinquents had larger mean scores on items 2, 3, 7 and 8, while both groups had the same mean score on items 1, 4, 5 and 6. Thus, involvement in conventional activities as measured by kinds of grades, finish homework, time devoted to homework, attending religious services, and working around the house had no significant effect on the self-reported behavior of the two groups.

Table 23

Results of t-test Comparison Between Delinquents and Nondelinquents
With Respect to Involvement in Conventional Activities (Item by Item)

Item #	Nondelinquents			N	Delinquents		df	t	p
	N	Mean	SD		Mean	SD			
1. Kinds of grades.	35	2.4	.50	112	2.4	.48	145	-.04	.9
2. Finish homework.	35	2.4	.54	112	2.3	.54	145	.81	.4
3. Teachers check your homework.	35	2.1	.47	112	2.04	.36	145	.92	.4
4. Time devoted to homework.	35	2.5	.60	112	2.5	.50	144	-.64	.5
5. Suspension from school.	35	2.7	.61	112	2.71	.57	145	.25	.81
6. Going to religious services.	35	2.9	.35	112	2.9	.24	145	-1.5	.13
7. Working with mother in the home.	35	1.9	.80	112	2.14	.73	145	-1.77	.07
8. Working with father in the home.	35	1.9	.76	112	2.09	.74	145	-1.08	.3

Summary of Third Hypothesis

The data presented in Tables 22 and 23 indicated no significant differences between delinquents and nondelinquents. Therefore, the null hypothesis was accepted and the alternative hypothesis had to be rejected. Furthermore, the individual test of the items did not indicate any significant differences between the two groups. It was expected that juveniles, who were involved in conventional activities, such as getting good grades, doing their homework, mosque-goers, and helping their families around the house, had less of a chance to engage in delinquent behavior. Hirschi suggested that involvement in conventional activities is the consequence of commitment to educational and occupational goals. However, the above findings suggested that Hirschi's conception of involvement should be reconsidered as some criminologists have already noted (Krohn & Massey, 1980).

Hypothesis 4

There are no significant differences between delinquents and nondelinquents with respect to belief in the conventional order.

Hirschi (1969, p. 203) argues that "belief in the moral validity of the law is consistently related to the measures of attachment and commitment discussed earlier: the child with little intimate communication with his parents, the child who does not like school, the child who is unconcerned about the opinions of teachers, the child who has little respect for the police, the child who feels little desire for success in conventional terms, is unlikely to feel that the demands of law are binding on his conduct."

The overall test of the null hypothesis of no significant differences between delinquents and nondelinquents with respect to belief in the conventional order was accepted. The mean scores of delinquents vs. nondelinquents were 15.4 vs. 15.8, respectively.

Table 24

Results of t-test Comparison Between Nondelinquents and Delinquents With Respect to Belief in the Conventional Order

Nondelinquents			Delinquents			df	t	p
Mean	SD	N	Mean	SD	N			
15.8	2.20	35	15.4	2.4	112	145	.94	.3

Table 24 reveals the differences to be insignificant ($p = .3$) when the index mean scores were compared. Consequently, the alternative hypothesis of significant differences between the two groups was rejected.

Each item in the belief index was examined in order to see if there were any significant differences between the mean scores of delinquents and nondelinquents with respect to their self-reported behavior.

According to the data in Table 25, none of the belief items were found to be statistically significant at the .05 alpha level. Also, none of the mean scores of the two groups, delinquents and nondelinquents were found to be identical. In items 1, 3, 5, 6, 7 and 8 the mean scores of nondelinquents were slightly larger than the mean scores of delinquents.

Table 25
 Results of t-test Comparison Between Nondelinquents and Delinquents
 With Respect to Belief in the Conventional Order (Item by Item)

Item #	Nondelinquents			N	Delinquents		df	t	p
	N	Mean	SD		Mean	SD			
1. Victim of theft is equally responsible.	35	1.8	.70	112	1.5	.78	145	.02	.90
2. Perception of equitability of police treatment.	35	1.5	.61	112	1.66	.75	145	-.84	.40
3. Attitudes toward the law.	35	2.7	.62	112	2.6	.73	145	1.17	.24
4. Denial of responsibility.	35	1.71	.95	112	1.8	.93	144	-.35	.73
5. Respect for the Tafilah Police.	35	2.6	.73	112	2.4	.82	145	1.74	.08
6. Perception of equitability of government treatment.	35	1.9	.83	112	1.8	.83	145	.34	.73
7. Denial of the victim.	35	2.5	.81	112	2.4	.82	145	.41	.67
8. Helplessness to avoid trouble.	35	1.37	.59	112	2.32	.50	145	.49	.62

Summary of Fourth Hypothesis

The final null hypothesis of no significant differences between the mean score of the two groups was accepted. An examination of the belief element items, one-by-one, showed none to be significant. Contrary to Hirschi's theory, the hypothesis of no significant differences was accepted and consequently, the alternative hypothesis of significant differences between the two groups was rejected.

The analysis of the data as presented in Tables 14 through 25 dealt with the four research hypotheses and four research subhypotheses proposed in this research. These research hypotheses and subhypotheses are:

1. There are no significant differences between delinquents and nondelinquents with respect to attachment to significant others (mother, father, school and peers).

1a. There are no significant differences between delinquents and nondelinquents with respect to attachment to mother in the total index, and in each item in the index.

1b. There are no significant differences between delinquents and nondelinquents with respect to attachment to father in the total index, and in each item in the index.

1c. There are no significant differences between delinquents and nondelinquents with respect to attachment to school on the total index, and on each item in the index.

1d. There are no significant differences between delinquents and nondelinquents with respect to attachment to peers on the total index and on each item in the index.

2. There are no significant differences between delinquents and nondelinquents with respect to commitment to the conventional activities.

3. There are no significant differences between delinquents and nondelinquents with respect to involvement in the conventional activities.

4. There are no significant differences between delinquents and nondelinquents with respect to belief in the conventional order.

Hypotheses 1a, 1b, 1c and 1d stress that delinquents are not significantly attached to their significant others (mother, father, school, and peers) as is true for nondelinquents. Delinquents were not found to be significantly different from nondelinquents in their attachment to significant others. The null hypothesis was accepted and the alternative hypothesis was retained.

Hypothesis 2 stresses that delinquents are not significantly different from nondelinquents in their commitment to the conventional activities. Delinquents were found to be significantly different from nondelinquents in their commitment to the conventional activities. The null hypothesis was not accepted, and the alternative hypothesis had to be accepted.

Hypothesis 3 stresses that delinquents are not significantly different from nondelinquents in their involvement in conventional activities. The null hypothesis was accepted, and the alternative hypothesis was retained.

Hypothesis 4 stresses that delinquents are not significantly different from nondelinquents in their belief in the conventional

order. The null hypothesis was accepted, and the alternative hypothesis was retained.

In analyzing the four major hypotheses and the four subhypotheses, only commitment to conventional activities was found to be significant, the rest of the hypotheses and subhypotheses were not supportive of Hirschi's theoretical model. In the next section, a comparison between this dissertation's findings and Hirschi's findings will shed some more light on Hirschi's theory and its utility and applicability in another cultural setting, the Jordanian society.

Summary of the Chapter

In Chapter IV, three aspects were addressed: (1) profile of the sample, (2) a comparison of Hirschi's cause of delinquency and (3) the testing of the research hypothesis was conducted.

The data revealed that 147 students completed a usable questionnaire. The subjects were unevenly distributed in the seven schools. Seventy-eight percent of the students were 16 and 17 years old. The parents of the students were mainly unskilled laborers in which 37.4% of the fathers had no formal education and 91.2% of the mothers had no formal education with the majority of them (94.6%) housewives.

The subjects in general came from unbroken homes, 98% of the subjects lived with their natural fathers, and 91.8% reported living with their natural mothers. Furthermore, 95.9% of the subjects reported having more than one brother and 96.6% reported having more than one sister. In terms of religiosity, 93% reported going to the

Mosque.

In describing their interest in school, well over half of the sample reported liking school, and 72.1% planned to finish four years of college.

From the sample profile we can assume that the subjects of this study are attached to their parents, committed to education, and involved in conventional activities, as well as having faith in pursuing education. However, over two-thirds of them reported being involved in various activities.

The overall comparison between the results of this study and Hirschi's findings revealed that with respect to attachment to significant others, only attachment to father was consistent with Hirschi's findings. Commitment to conventional activities was inconsistent with Hirschi's findings, but commitment or involvement in adult activities such as drinking and dating were consistent with the theory. Smoking was another exception.

With respect to the involvement element, both involvement in conventional and nonconventional activities were found to be inconsistent with the theory. Finally, concerning the belief items, five out of the seven items were inconsistent with Hirschi's findings; only two were consistent.

Testing of the four major hypotheses revealed that only commitment to conventional activities was found significant at .02 level. At the same time, attachment to significant others, involvement in conventional activities and belief were not significant at the .05 alpha level. It clearly shows through the t-test that attachment to

significant others, involvement in conventional activities, and belief in the conventional order had no effect on the mean scores of delinquents or nondelinquents in Jordan.

CHAPTER V

DISCUSSION AND CONCLUSION

This chapter presents a summary of this research, its findings as they relate to a replication of Hirschi's (1969) control theory in the Jordanian society, and the results of the research hypotheses which were examined. Additionally, the limitations of this research and recommendations for future research will be discussed.

The purpose of this research was to apply Hirschi's (1969) control theory in a cultural setting dissimilar to the one found in the United States. Hirschi's theory was selected for replication in Jordan for several different reasons. First, Hirschi's theory is quantifiable which made it possible to construct an instrument to measure objectively the core bonding elements of social control. Second, according to Shoemaker (1984), control theory has enjoyed a remarkable success record, as research adopting this theoretical model has been able to explain an average of 40% of the delinquency examined. Third, it was believed that the extended family in Jordan still plays a significant role in the socialization process as well as in virtually all other areas of life. Therefore, attachment to family, peers, and schools was expected to be significant in deterring delinquent behavior. Consequently, Hirschi's theory was seen as a very appropriate model for studying deviant behavior among Jordanian adolescents. Fourth, it was the writer's sincere belief that in traditional, conservative societies, people sharing common values, attitudes and

beliefs would be reflected in the responses of a sample of Jordanian youth. Fifth, whether in small towns or villages, the assumption was made that Jordanian adolescents are strongly attached, committed to conventional activities, involved in conventional lives, and share a strong belief in the society and its social order.

Summary

In Chapter I, a brief introduction was given about the country, its juvenile delinquency problems, the judicial system, criminal law as applied to juveniles, theoretical formulation, and the rationale for the study with the statement of the problem.

Chapter II focused on the control theories in general, selected replications of control theory and other criminological models, and the hypotheses of the research. Control theories were divided into two major models. First, the rationality model was presented which included the following theories: social disorganization theory, subcultural theories, social learning theories, and exchange theories (especially Homans, 1961). Second, the social solidarity model was presented which included the following theories: (a) containment theory, (b) bonding theory, and (c) role relationship theory.

The literature review provided a remarkable record of success for Hirschi's theory not only in terms of understanding juvenile delinquency in the United States, but also its international reputation. The theory has been replicated in Canada (Caplan & Leblanc, 1985; Linden & Currie, 1977; Linden & Fillmore, 1981). Chuen (1988) used Hirschi's theory in Taiwan and his partial replication was consistent

with the theory.

Chapter III reported on the setting, the sample, the construction of the research instrument used in this study, data collection procedures, measurement problems, description of the variables, and data analysis procedures. The subjects in this study were male eleventh graders in seven schools in the Tafielah Governate. The total sample was composed of 147 male subjects. The subjects answered a self-reported survey consisting of 107 questions. The items in the questionnaire dealt with attitudes, beliefs, values, and experiences of the subjects, among others.

Five different indices were constructed to test the hypotheses of the research. The dependent variable consisted of a six-item index, and it was dichotomized into delinquent or nondelinquent sub-headings. The index of "Attachment to father" was constructed from seven items (7-21 total possible scores from the lowest to the highest); "Attachment to mother" was treated in the same fashion as the father's index. "Attachment to peers" was constructed from five items (5-15 total possible scores, from lowest to highest). "Attachment to school" was constructed from seven items (ranging from 7-21 total possible scores from the lowest to the highest). Therefore, the "Attachment to significant others" item ranged from 26-78 total possible scores.

The "Commitment to conventional activities" index was measured by seven items (ranging from 7-21 total possible scores). The "involvement in conventional activities" index was measured by eight items (ranging from 8-24 total possible scores). Finally the

"Belief" index was constructed from eight items (ranging from 8-24 total possible scores). Each index was empirically tested by using the Cronbach alpha. The level of significance was determined at the .05 level.

Discussion of Findings

The main questions to be answered by the data are: Is Hirschi's theoretical model an appropriate one for understanding deviancy, i.e., delinquency, among adolescents in Jordanian society? Do the data support the research hypotheses? Are Jordanian adolescents attached to their significant others, committed to conventional activities, involved in conventional activities, and share a strong belief in the society's laws and values?

Regarding the above questions, the findings from the Jordanian sample appear to suggest that the youth are indeed attached to conventional things, committed to conventional things, involved in conventional things, as well as believe in conventional things. Theoretically, one would expect little or no delinquency involvement among these young Jordanians. This assertion is based on the fact that this study found that 52.4% of the subjects said they wanted to be like their fathers in every way or in most ways; 58% liked their schools; 70.1% rated themselves above average compared to other students; 57.2% cared a lot about what their teachers think of them, 77.6% claimed to have never cheated on an exam, 57.8% would like to be like their friends in every way, 55.8% said they wanted to be like their mothers in some ways; 93% go to religious services; 90.5%

planned to graduate from high school; 72.1% expected to finish a four-year college, 82.3% said they would like to graduate from a two-year college, 71.4% said that they believe in law and order, that people who break the law should be punished, and almost 60% said that going to the Juvenile Court would bother them. Although these descriptive statistics appear to suggest that control theory, as formulated by Hirschi, is appropriate for understanding delinquency and nondelinquency in Jordanian society, they do not provide the total picture of the theory's appropriateness or adequacy as revealed in the t-test results.

While the figures are consistent with Hirschi's model of social control, methods used to test the four major hypotheses and the subsequent set of four subhypotheses cast some doubt on the utility of Hirschi's theory as the theory of best fit for explaining deviancy in Jordan.

With one exception, the t-test conducted to test the four major hypotheses and the subsequent set of four subhypotheses did not support Hirschi's theory. The exception was commitment to conventional activities. In this instance, a significant difference was found between the delinquent and nondelinquent subjects.

The first hypothesis stated that "There are no significant differences between delinquents and nondelinquents with respect to attachment to significant others." With regard to the first hypothesis, attachment to significant others, the mean scores of the nondelinquents were not significantly different from the mean score of the delinquents, 57.6 vs. 56.7 respectively. Thus, attachment to

significant others had no significant effect on the reported behavior of the subjects. Based on the descriptive figures discussed earlier, it was expected that those subjects who reported liking school, wishing to be like their mothers, fathers, and friends in every way or in most ways, would not engage themselves in delinquent activities. However, further test of the individual indices (father, mother, school, peers) did not support the theory. The mean score of nondelinquents and delinquents were as follows; 13.9 vs. 14.4; 14.6 vs. 14.3; 16.5 vs. 15.9; and 12.5 vs. 12.1 respectively. While nondelinquents had slightly higher mean scores than delinquents on all attachment indices, no significant differences were found, hence, control theory was not supported. Consequently, the null hypothesis was accepted.

The individual tests of both attachment to mother and attachment to father did not support the theory. None of the individual index items in the two indices was found to be significant. However, two items were found to be significant in the attachment to school index while only one item was found to be significant in the attachment to peers index.

The second hypothesis stated that "There are no significant differences between delinquents and nondelinquents with respect to commitment to conventional activities." With regards to this hypothesis, commitment to conventional activities, the mean scores of nondelinquents and delinquents were 19.5 vs. 18.5, respectively. The nondelinquents had larger mean scores than their delinquent counterparts which resulted in a significant group difference.

Consequently, commitment to conventional activities affected the self-reported behavior of the two groups. The null hypothesis was rejected ($p = .03$). The test of the individual items in the commitment index showed that "importance of good grades" and "schooling one expects to complete" (aspiration) were the two significant items.

The third hypothesis stated that, "There are no significant differences between delinquents and nondelinquents with respect to involvement in conventional activities." Concerning this hypothesis, involvement in conventional activities, the mean score of nondelinquents and the mean score of delinquents were 18.9 and 19.1, respectively. No significant differences were found. Consequently, the null hypothesis was accepted. Thus, involvement in conventional activities had no effect on the self-reported behavior of the subjects. Furthermore, none of the items comprising this index was significant.

The fourth hypothesis stated that "There are no significant differences between delinquents and nondelinquents with respect to belief in the conventional order." The mean scores of nondelinquents and delinquents were 15.8 and 15.4, respectively. According to the t-test, no significant difference was found between the two groups. Therefore, the null hypothesis was accepted. The individual test of the items in the belief index did not support the theory as none of the items were found to be statistically significant.

In sum, with one exception, the t-test conducted to test the four major hypotheses and the subsequent set of the four subhypotheses did not support Hirschi's theory. However, the hypothesis

regarding commitment to conventional activities was significant, thus supporting one aspect of Hirschi's theory. These and other findings (see percentages) suggest that, on the one hand, Jordanian youth are bonded to their society (i.e., parents, schools, peers, etc.) while, on the other hand, they were also involved in various delinquent activities (see hypotheses). This pattern of behavior is contrary to the central thesis of Hirschi's theory.

Limitations of This Study

The findings of this study were limited by the very nature of the sample. Only 147 eleventh-grade students were asked to participate in the study. Students in other grades were not part of the study, therefore, the findings cannot be generalized beyond the eleventh-grade level. Moreover, it was initially thought that the sample size of the eleventh-graders would have been much larger given the population size of the Governate. However, the investigators later learned the class size for eleventh-graders was very small throughout the Governate in Jordan, as there were only 147 students in all of the seven schools selected for this investigation.

Another limitation stemmed from employing a theory devised in one society to explain delinquent behavior in a different culture. As Midgley (1977) correctly pointed out, "unless there is clear-cut evidence of concrete beliefs and values being either indigenous to a particular setting or having been diffused into it, then the ready application of concepts derived from a distant source is fraught with difficulty" (p. 246). Since Hirschi's theory reflects the culture in

which it originates, (i.e., the United States in particular and Canada in general), its relevance to a dissimilar culture is questionable.

Conclusion

Delinquency and criminal behavior have been of concern to sociologists, and others who attempted to answer the question of why people commit or don't commit crimes. Theories have been proposed, accepted and rejected, each in its own time and under its own unique circumstances. Most of these theories have originated and been tested in the industrial world which make their applicability to Third World countries questionable.

The theory of social control, as advanced by Hirschi, suggests that individuals are prevented from engaging in delinquency by four social bonds: (1) attachment to significant others; (2) commitment to conventional activities; (3) involvement in conventional activities; and (4) belief in the central value system of the society. When these social bonds are weak, the individual is free to engage in delinquency. Hirschi's theory does not appear to be particularly appropriate when explaining juvenile delinquency in Jordan.

In comparing Hirschi's study with this study, the data indicated that the four social bonds were not effective in deterring delinquency; "commitment to conventional activities" was the only exception. Therefore, based on the data used in this research, as well as knowledge of the societal conditions in Jordan, the conclusion is that Hirschi's theory does not appear to be the most suitable one to explain deviancy, i.e., delinquency, in the Jordanian society. This assertion

is offered as a tentative conclusion because of the limitations of this study.

Future Study

It seems that most of the theories developed by Americans and Europeans appear to be applicable not only to these countries in general, but are even more specific to certain areas within those countries. Unless theories can withstand testing cross-culturally, it is doubtful that there is any value in basing governmental policies or programs on them.

The data presented in this study were sufficient to shed doubt on the appropriateness of Hirschi's theory for this population. Researchers wishing to replicate his theory should seek to understand how bonds (both inner and outer) have been created and strengthened. For example, why does one village school produce large numbers of boys who go on to college, while another in the same area of the village produces only a few? What are the reasons that one poor family from a particular village functions well and inspires commitment from its children, while the family next door does not?

Answers to these and other questions would go a long way toward a better understanding of how bonds are created, sustained, and strengthened. Moreover, researchers should reconceptualize Hirschi's theory with commitment and involvement formulated as one construct. Furthermore, the items to measure these concepts should be pretested thoroughly. Random samples must be taken and adequate control groups must be established to see what factors are important in explaining

delinquency and crime in Jordan.

Much research is needed in developing broader theories of juvenile delinquency, and Jordan is particularly appropriate for this type of investigation because of its homogeneous population and its urban development.

In conclusion, this dissertation should serve as a prelude to more comprehensive and significant research in the cross-cultural applications of theories of juvenile delinquency. Countries like Jordan could serve as excellent sites on which to test the various theoretical paradigms, and, until they can withstand a cross-cultural analysis, it is questionable if they can be particularly helpful in expanding our knowledge in the area of juvenile delinquency.

Appendix A

Research Instruments

RESEARCH INSTRUMENTS

This study aims to find ways to make life better for the young people in the Tafielah Governate and its localities. In order to plan useful programs we need to know a great deal about your opinions, plans, experience, and problems.

Nobody will know your answers at the school. At the university we will count how many students answer questions each way. Your names are not required for this research to conceal your identity.

Dear Student:

The questionnaire is quite long, so please work as rapidly as possible. Answer the questions frankly and honestly, even if you think there are people who disagree with you. Also, all the questions should be answered on a separate sheet where you can write your answers. Please if you can't read or understand a question, raise your hand and the researcher will answer anything you need.

Please answer the questions the way you feel. It is important for us to know what students think. When you have finished these questions, raise your hand and the researcher will take care of it.

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Correlation Matrix of Each Index

- I. Attachment to father Index.
1. Would you like to be like father.
 2. Father makes unfair rules.
 3. Father explains the rules.
 4. Father knows where you are.
 5. Father knows who you are with.
 6. Father's concern about your school work.
 7. Do you share your feelings with father.

	1	2	3	4	5	6	7
1	1.000						
2	-.12	1.000					
3	-.05	.35	1.000				
4	.18	.23	.24	1.000			
5	.25	.12	.22	.57	1.000		
6	.35	.09	.26	.28	.30	1.000	
7	.22	-.01	.12	.25	.28	.26	1.000

II. Attachment to mother Index.

1. Would you like to be like mother.
2. Mother makes unfair rules.
3. Mother explains the rules.
4. Mother knows where you are.
5. Mother knows who you are with.
6. Mother's concern about your school work.
7. Do you share your feelings with mother.

	1	2	3	4	5	6	7
1	1.000						
2	.08	1.000					
3	.09	.26	1.000				
4	-.17	.09	.15	1.000			
5	-.13	.04	.23	.44	1.000		
6	-.04	.05	.09	.18	.29	1.000	
7	-.14	.07	.08	.09	.21	.19	1.000

III. Attachment to peers Index.

1. Students like your friends.
2. Teachers like your friends.
3. Friends picked up by police.
4. Would you like to be like your best friends.
5. Respect best friend's opinion.

	1	2	3	4	5
1	1.000				
2	.29	1.000			
3	.17	.14	1.000		
4	.21	.13	.21	1.000	
5	-.07	-.11	-.17	-.34	1.000

IV. Attachment to school Index.

1. Do you like school.
2. Rate yourself in school.
3. Kinds of grades.
4. Teachers care about you.
5. None of school's business.
6. Teachers pick on me.
7. Nervous in school.

	1	2	3	4	5	6	7
1	1.000						
2	.13	1.000					
3	.03	.29	1.000				
4	.11	-.06	-.02	1.000			
5	.04	.15	-.09	-.18	1.000		
6	.20	.32	.27	.15	.09	1.000	
7	.24	.19	.19	.03	.28	.61	1.000

V. Commitment Index.

1. Kinds of grades.
2. Importance of getting good grades.
3. Importance of grades for job.
4. The only reason to have a job is money.
5. Planning to graduate from high school.
6. Schooling expect to get.
7. Schooling would like to get.

	1	2	3	4	5	6	7
1	1.000						
2	.12	1.000					
3	.03	.29	1.000				
4	.11	-.06	-.02	1.000			
5	.04	.15	.09	-.18	1.000		
6	.20	.32	.27	.15	.08	1.000	
7	.24	.18	.19	.03	.27	.62	1.000

VI. Involvement Index.

1. Kinds of grades.
2. Do you finish your homework.
3. Do teachers check your homework.
4. Time devoted to homework.
5. Suspension from school.
6. Mosque.
7. Do you work with your mother in the house.
8. Do you work with your father in the house.

	1	2	3	4	5	6	7	8
1	1.000							
2	.03	1.000						
3	-.08	.20	1.000					
4	.09	.16	.13	1.000				
5	.07	.18	-.01	-.04	1.000			
6	.17	.12	.18	.04	.07	1.000		
7	-.08	.05	.12	.05	.02	-.07	1.000	
8	-.01	-.01	.13	.05	.02	-.07	.65	1.000

VII. Belief Index.

1. Leaves the keys.
2. Policemen try to give all kids a break.
3. Alright to get around the law.
4. Criminals should not be blamed.
5. Respect for the police.
6. Government does not care.
7. Suckers deserve to be taken advantage of.
8. Stay out of trouble.

	1	2	3	4	5	6	7	8
1	1.000							
2	.21	1.000						
3	-.03	-.02	1.000					
4	-.09	-.08	.05	1.000				
5	-.11	.02	.16	-.15	1.000			
6	-.09	-.05	-.06	-.04	.15	1.000		
7	-.03	.20	.09	-.03	.10	.13	1.000	
8	-.09	.05	-.09	.04	.02	-.03	-.12	1.000

VIII. Delinquency Index.

1. Theft of 3 JD.
2. Theft of 3-30 JD
3. Theft of more than 30 JD.
4. Fights.
5. Written on school restroom walls.
6. Damaged a street sign.

	1	2	3	4	5	6
1	1.000					
2	.68	1.000				
3	.73	.65	1.000			
4	.22	.08	.06	1.000		
5	.26	.24	.26	.37	1.000	
6	.22	.15	.13	.15	.39	1.000

جامعة ميتشغان الغربيه
"دراسه حول سلوك واتجاهات شباب الصف
الثانى الثانوى في محافظة الطفيله وقراها"

اعداد عايد وريكات
كلامازو- ميتشغن
١٩٩٠/١/١٥م

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