SOCIAL CAPITAL AND DELINQUENCY AMONG TURKISH JUVENILES

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This study examined the relationship between aspects of social capital and self-reported delinquency among Turkish juveniles by using a secondary dataset, which is a part of the European Youth Survey. The survey was conducted among tenth graders in 2007 in Bağcılar, Istanbul. The dependent variable of this study, delinquency, was divided into two groups, minor and major, according to the stipulations of the Turkish Penal Code. Social capital was measured by assessing adolescents’ reports of their direct interactions with their parents, peers and community. In order to predict the likelihood of major and minor delinquency independently, two different subsets (N: 1879 and 1837, respectively) of the data set were used. The findings of the multivariate analyses suggest that a low level of social capital contributed significantly to Turkish juveniles’ engagement in major and minor delinquent activities. Among the social capital items, adolescents’ affiliation with delinquent peers had the strongest correlation with both dependent variables.
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# TABLE OF CONTENTS

ACKNOWLEDGEMENTS........................................................................................................iii

LIST OF TABLES..........................................................................................................................vii

CHAPTER I INTRODUCTION ........................................................................................................1
  Statement of the Problem ............................................................................................................1
  Purpose of the Study ..................................................................................................................3
  Research Questions ....................................................................................................................4
  Significance of the Study ............................................................................................................5
  Plan of Work ...............................................................................................................................5

CHAPTER II LITERATURE REVIEW ............................................................................................7
  Social Capital Theory ................................................................................................................7
    Theoretical Origin of Social Capital ......................................................................................8
    Bourdieu and Social Capital ..................................................................................................11
    Coleman and Social Capital ................................................................................................12
    Putnam and Social Capital ....................................................................................................14
  Social Capital, Youth and Delinquency ..................................................................................17
    Family Social Capital and Delinquency ..............................................................................20
    Peer Relations and Delinquency ..........................................................................................22
    Community Social Capital and Delinquency ......................................................................28
  Conclusion ................................................................................................................................35

CHAPTER III DATA AND METHODOLOGY ............................................................................37
  Data Source ..............................................................................................................................37
LIST OF TABLES

Table 1  Dependent Variables: Major and Minor Delinquency ......................................................... 41
Table 2  Independent Variables: Family Social Capital ........................................................................ 44
Table 3  Peers influence: Delinquent Peers (Major and Minor Delinquency) .................................... 46
Table 4  Independent Variables: Community Social Capital ................................................................. 49
Table 5  Control Variables ................................................................................................................... 50
Table 6  Descriptive Statistics for Study Variables (Full Sample) ....................................................... 57
Table 7  Logistic Regression Estimates Predicting the Odds of Major Delinquency, Turkish
Adolescents, 2007 (N = 1879) .......................................................................................................... 60
Table 8  Logistic Regression Estimates Predicting the Odds of Minor Delinquency, Turkish
Adolescents, 2007 (N = 1837) .......................................................................................................... 68
CHAPTER I

INTRODUCTION

Statement of the Problem

As empirical studies reveal, adolescents are involved in more criminal activities than any other age groups in the US (Moffitt, 2003). According to Greenberg (1993), “more than half of those arrested for the seven FBI index offenses have been 18 or under” (p. 334). Similar to the United States, the number of adolescents involved in criminal activities is significantly high in Turkey. In 2008, law enforcement agencies reported more than 130,000 criminal acts for juveniles (Turkish Statistical Institute [TURKSTAT], 2010). Furthermore, criminal activities which were not reported to any law enforcement agencies are not included in the above-mentioned statistics, leaving open the possibility of underrepresentation of the criminal conduct of adolescents.

Children under 18 years old comprise about one-third of the Turkish population (TURKSTAT, 2010). As prison statistics from the year 2008 indicate, in the course of the last 10 years, 3435 of juvenile convicts received into Turkish juvenile prisons and juvenile reformatories. Turkish juveniles are mostly involved in property crimes. While almost 40% of adolescent convicts received into juvenile prisons and reformatories in Turkey were involved in robbery, and 30% of those received into juvenile prisons were involved in thefts, and about 10% of those admitted to juvenile prisons or reformatories in Turkey were involved in homicide (TURKSTAT, 2010).

In addition to major delinquent acts, minor delinquencies such as addictive substance use are also critical for adolescents. Cigarettes and alcohol have several negative outcomes for
the health and well-being of youths. In the US, smoking is one of the major causes of premature
death and disability. Also, the estimated number of deaths related to cigarette addiction is
about 430,000 per year in the US (Valente, Hoffman, Ritt-Olson, Lichtman, & Johnson, 2003).
Empirical studies reveal that 80% of smokers begin smoking before their 18th birthday
(Williams, Cox, Kouides, & Deci, 1999). Similarly, 9.1% of Turkish juveniles between the ages of
15 and 18 use cigarettes and 22.3% of them have smoked at least once in their lifetime,
according to research conducted in 2003 by the Turkish Health Department. Alcohol use of
adolescents is another critical problem threatening the health and well-being of youths.

As the 2005 Monitoring the Future Survey indicates, three-fourths of high school
students in the US consume alcohol in spite of US laws intended to prevent them from
possessing and consuming alcohol (Johnston, O’Malley, Bachman, & Schulenberg, 2006). The
rate of alcohol use is noticeably lower among Turkish adolescents compared to the rate in the
US and European countries. However, the data indicate that alcohol use by Turkish teenagers
has increased dramatically. More specifically, reported alcohol use by Turkish teenagers has
increased by 175% over the past ten years, which is the highest rate of increase among
European countries (Rehn, Room, & Edwards, 2001).

Empirical studies reveal that early engagement in criminal acts and substance use leads
to unintentional outcomes in adulthood. Therefore, keeping adolescents out of delinquent acts
in the early stages of their lives is important to providing them a successful and healthy future.

In order to understand the causal relations between adolescence and deviant behaviors,
researchers have investigated this transitional stage marking children passage from childhood
to adulthood. The rapid psychological and physiological developments in children’s
characteristics have considerable effects on their relationships with others. For instance, as adolescents grow up, interactions with their friends and the social environment become more important, while on the other hand, these developments weaken the strong ties between parents and children (Delikara, 2002). These rapid changes in their relationships lead to changes in their behaviors as well. Several scholars have linked adolescents’ interactions with parents, peers, and community to their behaviors (Coleman, 1988; Putnam, 2000; Schaefer-McDaniel, 2004, Hagan & McCarthy, 1997).

The association between social relationships and crime has emerged as an important aspect of the literature on social capital (Coleman, 1988, 1990; Sampson, Morenoff, & Earls, 1999; Putnam, 1993). The theories of social disorganization (Shaw & McKay, 1942; Hagan and McCarthy, 1997), general strain (Agnew, 1985, 1992), social control (Hirschi, 1969), and age-graded informal social control (Sampson & Laub, 1993) highlight the important impact of social connections, solidarity, and trust on crime and delinquency. In criminological studies, social capital theory has provided a broader and more comprehensive perspective by integrating different criminological theories (McCarthy, Hagan, & Martin, 2002; Hagan & McCarthy, 1997). However, the number of empirical studies examining the relationship between social capital and crime remains limited especially in non-western societies (Wright, Cullen, & Miller, 2001; Nakhaie & Sacco, 2009).

Purpose of the Study

The purpose of this study was to examine the relationship between aspects of social capital and self-reported delinquency among Turkish juveniles by using a secondary dataset.
The data set is a part of the European Youth Survey conducted among high school students in 2007 in Bağcılar, a district of Istanbul. The dependent variable of this study, delinquency, is distinguished into two parts: minor and major. Major delinquency was scaled using five offences as stipulated by the Turkish Penal Code as acts that lead to criminal investigation by law enforcement agencies. Minor delinquency was measured by four items, which are less severe than major delinquencies and which do not require any criminal investigation. Social capital was measured by assessing adolescents’ reports of interactions with their parents and their social environment. The latter refers to friends, school, neighborhood and participation in social activities such as sport and religious activities.

Research Questions

The research questions are as follows:

1. To what extent does social capital influence the odds of major delinquency among Turkish juveniles when controlling for age, gender, and relative deprivation?
2. Which dimensions of social capital have an influence on the odds of major delinquency?
3. To what extent does social capital influence the odds of minor delinquency among Turkish juveniles when controlling for age, gender, and relative deprivation?
4. Which dimensions of social capital have an influence on the odds of minor delinquency?
Significance of the Study

Social capital theory has contributed considerably to the understanding of criminological issues, especially in Western countries; however, the number of empirical studies examining the relationship between social capital and delinquency remains inadequate (Wright et al., 2001, Nakhaie & Sacco, 2009). In addition, so far as we know, there is no literature investigating the relationship between social capital theory and delinquency among Turkish adolescents. In addition, sociological and criminological theories, especially those developed in western societies, may not be successful in understanding crime and delinquency in different social structures. For that reason, the theories used to understand the existence of crime and delinquency in Western societies should be examined in other cultures to elucidate “their explanatory power” in developing, culturally diverse societies (Eker, 2010). Turkey is located at the intersection of Western and Middle Eastern societies. Turkey has a unique cultural and geographical position when compared to other Western societies. In addition, it is a developing and democratic country with an overwhelmingly Muslim population. Due to Turkey’s dissimilarity from previously investigated, primarily Western societies, testing social capital theory is essential in order to elaborate the empirical validity and generalizability of social capital theory’s explanatory power among Turkish adolescents.

Plan of Work

Chapter II reviews the relevant literature. After a discussion of the basic arguments of social capital theory, studies of the relationship of social capital to deviant behavior are reviewed. The final section reviews literature on the relationship between social capital and
adolescent delinquency. Chapter III describes the methodology used in this study. It includes detailed information about the data source and data collection. This is followed by a description of the dependent, independent, and control variables, as well as their measurement. The final section describes the data analysis. Chapter IV presents the findings of the descriptive statistics and logistic regression. Also, the results of the hypothesis testing are given in this chapter. Finally, Chapter V provides an overall assessment of the findings. In addition, policy implications of the findings, limitations, and suggestions for future studies are presented.
CHAPTER II

LITERATURE REVIEW

This chapter outlines the theoretical framework of this study. Initially, the theoretical origin and a development of social capital theory as proposed by its major theorists Pierre Bourdieu (1984), James Coleman (1988), and Robert Putnam (1993, 2000) are presented. Following the introduction of social capital theory, its ability to explain adolescent deviant behaviors is discussed. Finally, the individual-level social capital resources for adolescents – parents, peers and community – are linked to adolescent delinquent behaviors, and the findings of the relevant research are reviewed.

Social Capital Theory

Over the last two decades, the concept of social capital, originally formulated by Pierre Bourdieu (1984), James Coleman (1988), and Robert Putnam (1993, 2000), has been widely used in sociology and political science (Salmi & Kivivuori, 2006). According to Schaefer-McDaniel (2004), Bourdieu approaches the social capital construct as “cultural and social assets that give the actor better access to resources” (p. 158). However, Coleman (1990) emphasizes the social network rather than individuality. Wright et al. (2001) argue that Coleman emphasizes the quality, context and formation of social networks in transferring social resources to future generations. From a different perspective, Robert Putnam understands social capital as the “collective assets” and “common good” of societies, and places “reciprocity” and “trustworthiness” at the center of his argument (as cited in Schaefer-McDaniel, 2004, p. 157). Since the term social capital is a broad concept, several theoretical
and methodological uncertainties have emerged due to different explanations and practices (Portes, 1998). Portes (1998) considers “social network” a form of social capital, and introduces a practical definition of social capital as “the ability of actors to secure benefits by virtue of their membership in social networks or other social structures.” Therefore, he clarifies the concept of social capital by highlighting that “economic capital is in people’s bank accounts and human capital is inside their heads, social capital inheres in the structure of their relationships” (p. 7). The significant point in his statement is that social capital, which is a resource for individuals, refers to interpersonal relationships, rather than personal characteristics, and can be provided through interaction and networking with other individuals. He summarizes three key functions of social capital: “a) as a source of social control; (b) as a source of family support; (c) as a source of benefits through extra-familial networks” (p. 9).

**Theoretical Origin of Social Capital**

Social capital theory is based on two major sociological frameworks: “social structure and community theories,” which point out broad macro-level factors, and “interaction and exchange theories,” which emphasize interpersonal relations (Newman, 2004, p. 8-9).

First of all, social structure and community theories maintain that community-level factors have greater effects on social issues than individual level factors. In their social disorganization model, Shaw and McKay (1942) point out the influences of broad social contexts such as low socioeconomic status (SES) on juvenile crime and delinquency. Social disorganization theorists mostly focus on community norms and values in order to explain the unintended results of social disorder.
According to Jencks and Mayer (1990), individual-level approaches remain insufficient to explain youths’ personal life course and well-being. Zelditch (1991) emphasizes that it is essential to combine micro- and macro-level approaches in constructing “a single theoretical structure” to explain the influences of community factors on individuals (p. 105).

Newman (2004) argues that social disorganization theory includes two basic factors, “opportunity structures” and “normative behaviors and values of the community” (p. 12). Opportunity structure mostly refers to access to qualified education and high socio-economic status. Merton (1968) initially mentions “opportunity costs” in strain theory, in that efforts for inadequate resources have a significant effect on an adolescent’s deviant and criminal activities.

On the other hand, normative factors, as compared to opportunity structure, have more influence on human activities (Newman, 2004). Sampson and Laub (1993) assert that collective efficacy and social control have significant effects on families and communities. For instance, the network between adults in the community significantly determines the level of anti-social behaviors and the development of norms and social control over behaviors.

Generally speaking, people tend to promote the common good in society parallel with mainstream objectives. In addition, individuals consider benefits for others as benefits for themselves, as well. Therefore, communities with a high level of social cohesion and collective efficacy can promote informal social control that facilitates the creation of common goods for the community (Sampson & Laub, 1993). On the other hand, it is likely that, unless effective monitoring and collective social control are adequately efficient, the adolescents in a community will become more vulnerable.
Second, it is obvious that “social exchange and interaction theories,” which comprise networks, exchanges and reciprocity, share some common features with social capital theory. Thornberry (1987) argues that “the interactional theory of behavior” also includes the characteristics of “social learning theory,” in which behaviors are explained as an outcome of the process of socialization and support. Through social networks, people can find opportunities for “observational learning” and “role modeling,” which are primary methods for acquiring various behaviors (Bandura, 1977).

According to Newman (2004), network interaction may differ through “(a) the extent of reciprocity or giving and receiving among members, (b) the level of complexity or extent to which it serves different functions, (c) the density or how well members know each other, and (d) the level of intensity or emotional closeness” (p. 28). Therefore, limiting social relationships with “reciprocity” does not reflect reality. This type of approach disregards the strong bonds that allow giving without any expectation of benefit.

Thornberry, Lizotte, Krohn, Farnworth, & Jang (1991) emphasize the reciprocal relationship between the bonding variable and the level of juvenile delinquency. They stated:

Because of its reciprocal relationships with the bonding variables, delinquent behavior contributes, in a very real sense, to its own causation. Once exhibited, delinquent causes a deterioration in attachment and commitment, which in turn, leads to further increases in delinquency. (p. 31)

On the other hand, the interaction with other people which provides benefits to individuals motivates them to generate and continue these connections.

Interactional and exchange theories greatly impact behavior; however, these theories are inadequate to give essential attention to micro-level factors, such as family (Coleman, 1988; Newman, 2004). For instance, community variables are not able to reflect family factors which
play a significant role in the development of individual perceptions and characteristics besides school and other institutions.

Bourdieu and Social Capital

Bourdieu, as a pioneer in the field, initially introduced and defined the term “social capital”; however, his approach has been commonly disregarded by scholars (Morrow 2001; Portes 1998; Schaefer-McDaniel 2004). Bourdieu (1984) defines social capital as “the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition” (p. 249). In this perspective, his approach emphasizes the benefits of social capital for the owners of social capital and intentional structured sociability with the aim of creating resources.

Schaefer-McDaniel (2004) asserts that Bourdieu’s approach to social capital includes two dimensions: 1) social networks and connections and 2) sociability (p. 155). In addition, people need to understand how a social network functions and have the capacity to uphold and employ the relations for better functioning networks.

Dika and Singh (2002) note that Bourdieu, in his definition, highlighted “access to institutional resources” (p. 32). Access to social resources relies on the size, quality and capacity of connection among members of groups, such as family or kinship groups. Furthermore, expected reciprocity and member status play a key role in access to social resources (Edwards, Franklin, & Holland, 2003).

Bourdieu describes the concept of cultural capital as “information or knowledge about specific cultural beliefs, traditions, and standards of behavior that promote success and
accomplishment in life” (as cited in Schaefer-McDaniel, 2004, p. 155). Cultural capital can be transferred to future generations through parents’ assistance. For instance, parents encourage and financially support their children by providing books to read or tickets for museums or theaters in order to gain cultural capital (Schaefer-McDaniel, 2004). However, regarding the transfer of social capital, the quality and quantity of resources and the social class of parents play a significant role (Lareau & Horvat, 1999). Bourdieu considers social capital an instrument and suggests that children will more easily reach and use resources effectively through the assets of social capital (Portes, 1998; Schaefer-McDaniel, 2004).

**Coleman and Social Capital**

Coleman considers social capital an “aspect of the social structure that occurs within and outside the family and serves to secure human capital” (as cited in Schaefer-McDaniel, 2004, p. 158). Therefore, Coleman emphasizes the social network rather than individuality. According to Wright et al. (2001), Coleman also points out the quality, context, and formation of social networks in transferring social resources to future generations.

According to Coleman (1988), the context of social capital includes three forms: high levels of trust, information channels, and effective norms. First of all, a high level of trust is an essential factor in the exchange of obligations and reciprocity since it has a great effect on the expectations of repayment. Relations constituted by trust and reciprocal relations provide physical and emotional support for individuals to implement their tasks and goals. Secondly, information channels provide access to information sources, which in turn contribute to the advance of social capital. Lastly, norms and effective sanctions, which are supposed to control
human behaviors, most likely favor the interests of society over personal interests (Coleman, 1988).

Coleman (1988) also suggests that social norms established through public support, honor, and awards eliminate self-interest and proceed according to the interest of the community. In addition, Coleman (1988) includes an argument that these efficient norms restrain crime and allow people to act freely in their neighborhoods at night without any fear or anxiety.

According to Coleman (1988), it is not only the individuals who share social networks that obtain the benefits of social capital; the whole society can benefit through social interactions. Coleman (1988) also argues that “the benefits of actions that bring social capital into being are largely experienced by persons other than the actor” (p. 118). Furthermore, individuals may obtain unpredicted benefits through these connections besides their intended purposes (Dika & Singh, 2002; Edwards et al., 2003)

Coleman (1988) argues that “closure of society” is significant for facilitating the formation of norms and trust in a community. However, closed relations can only be achieved in a community in which “obligations and expectations” are present. Coleman (1988) explains “obligations and expectations” as “[i]f A does something for B and trusts B to reciprocate in the future, this establishes an expectation in A and an obligation on part of B” (p. 102). The number of exchanges is significant since the amount of social capital resources increases by the larger number of obligations in the group. He also points out the importance of “reputation” as a communal sanction that emerges in closure (Coleman, 1988, p. 107-108).

Coleman (1988) criticizes the inadequate social capital for children and adolescents in
the contemporary living styles of Western societies. According to Coleman (1988), not only the lack of parents’ companionship, but also the lack of parents’ interaction with their children regarding economic, academic, and individual issues, has weakened the family social capital for adolescents. In addition, the decline of neighborhood relations and collective efficacy and adolescents’ limited participation in adult-supervised activities have diminished the level of community social capital for the youth.

Coleman and Bourdieu mainly differ in their arguments on access to resources and use of social capital. While Bourdieu states that individuals can acquire social capital through the structure of society, Coleman argues that resources are attached to social relationships (Shortt, 2004). Second, Bourdieu considers social capital an instrument of reproduction, which helps to transmit values and norms from one generation to another, but Coleman takes it as an affirmative social control.

*Putnam and Social Capital*

Taking a different perspective, Robert Putnam (2000) understands social capital as “collective assets” and the “common good” of societies. Putnam (2000) assesses social capital as a public good. He suggests that a higher level of social capital produces positive values for the society, such as an increase in political participation and decrease in crime. Putnam (2000) places “reciprocity” and “trustworthiness” at the center of his arguments and maintains that social networks raise “trust” and “reciprocity,” which subsequently generate “civic virtue” and value in the society. However, in order to foster trustworthy relations in a society, social contact is inadequate in itself; the involvement of each member is necessary (Schaefer-
According to Putnam (2000), other than association with each member of the community, active involvement of community members in each other’s lives is necessary to implement mutual trust among residents. In this respect, there should be common obligations within individuals in order to build up social capital in society. Similar to Coleman, Putnam (2000) asserts that social capital is further developed in close and cooperative neighborhoods. Hence, it tends to decline among isolated individuals even if they possess many virtues. Morrow (2004) describes Putnam’s view, as “a community-level attribute, [which] consists of the existence of social and community networks; civic engagement; local identity and a sense of belonging and solidarity with other community members; norms of trust and reciprocal help and support” (p. 211).

In his study, Putnam (2000) divides social capital into two categories: bonding and bridging. “Bonding social capital” refers to trust and the network that emerges between specific community members such as parents, peers and neighbors. As “bonding social capital” occurs among individuals with similar backgrounds and identities, it is classified as horizontal. The second type of social capital, “bridging social capital,” is vertical. It is vertical and weak since it is based on context-specific organizations, such as formal social and business associations (Warr, 2006). This type of social capital includes relations between individuals with common purposes, but who are from different origins. Voluntary associations and organizations essentially reveal the level of bridging that is significant for social cohesion (Cheong, Edwards, Goulbourne & Solomos, 2007). The main difference between Coleman and Putnam is that while “bonding” is the main concern of Coleman, Putnam generally concentrates on “bridging” (Edwards et al.,
Overall, Putnam (2000) argues that social networks and reciprocal norms are mostly beneficial for individuals. However, he adds that the external consequences of social capital may not be positive at all times. For instance, Putnam refers to the role of social capital that enabled the bomber, Timothy McVeigh, to blow up the Federal Building in Oklahoma. According to Putnam (2000), the peer association and reciprocal relations facilitated McVeigh’s commission of this crime.

Generally speaking, through norms and values, social capital builds up closed relations, cohesion and solidarity among individuals (Bourdieu, 1993; Coleman, 1988; Putnam, 2000). In this respect, while Bourdieu (1993) emphasizes the size, quality and capacity of connection among members of groups, Coleman (1988) points out the function of family and school, and Putnam (2000) focuses on political participation and civic engagement in addition to recognizing the function of family.

One of the most controversial arguments concerning social capital theory, i.e. whether social capital is a personal or collective resource, is still under debate. According to Brehm and Rahn (1997), social capital is a personal resource; however, similar to several political scientists, Putnam views social capital as a collective resource. He considers that communities are “blessed” with social capital (Putnam, 1993). Furthermore, Lochner, Kawachi, and Kennedy (1999) state that social capital refers to a “collective dimension of society which is external to the individual” that belongs to social structure rather than actors. In addition, McCarthy et al. (2002) maintain that social capital is an outcome of collective relations rather than personal assets. However, the majority of scholars agree that not only the community, but also
community members themselves, profit from the social interaction and assets of social capital. Thus, social capital is mostly considered both a personal and collective asset (Salmi & Kivivuori, 2007).

However, it is noteworthy that the possession of social capital does not always result in a desirable outcome. While “mutual support, cooperation, trust and institutional effectiveness” are positive results, “sectarianism, corruption, and ethnocentrism” are negative results of social capital (Putnam, 2000, p. 22). It is always possible to channel social capital towards malicious and harmful intentions. For instance, certain groups possessing a high level of social capital may exclude outsiders and act against their well-being (Portes, 1998; Paxton, 1999). Therefore, it is essential to find ways to maximize the constructive outcomes and minimize the destructive outcomes of social capital.

Social Capital, Youth and Delinquency

Social capital theory, which is successful in integrating different criminological theories, has contributed considerably to the understanding of criminological issues (Hagan and McCarthy, 1997; McCarthy et al., 2002). The studies employing social capital theory to understand delinquency and crime provide a broader and more comprehensive perspective compared to those studies focusing on the effects of family and peers (McCarthy et al., 2002). According to Hagan and McCarthy (1997), first of all, social capital theory has integrated several competing criminological theories. Secondly, it has focused on “institutional sources including work, family, school, neighborhood, and community” in order to explain criminal activities and delinquency (p. 235). Thirdly, this theory goes beyond the static explanations of crime by
"encouraging attention to the ways in which social capital accumulates" (p. 236).

Using different levels of social capital provides a better understanding of juvenile delinquency and exploration of the association between two social constructs, namely, social capital and delinquency. Relations among individuals are unstable and subject to change over time. However, as adolescents grow up, they spend less time with their parents and more time with their peers (Morrow, 2001). Therefore, family social capital plays a more significant role in childhood. As individuals grow up, the impact of family social capital on their behaviors decreases, while the impact of peer relations and neighborhood social capital increases.

Some scholars have linked social capital theory with social disorganization theory (Sampson & Laub, 1993; Sampson & Groves, 1989). Shaw and McKay (1942) postulated that high levels of crime and deviant activities are correlated with the level of disorganization. According to Rosenfeld, Messner and Baumer (2001), civic engagement and trust are the basic aspects of socially well-organized communities. Moreover, Coleman (1988) suggests that disorganized communities indicate poor social capital levels. A large number of cross-sectional studies have revealed that social cohesion or informal social control dynamics have considerable ability to control the prevalence of victimization and delinquent activities (Sampson & Lauritsen, 1994). The level of informal social control and collective efficacy are essential to the explanation of crime level differences in various neighborhoods (Kubrin and Weitzer, 2003). Furthermore, various scholars (Sampson, Raudenbush, & Earls, 1997; Hagan and McCarthy, 1997) have argued that there is an association between the decline of social capital in metropolitan areas and high crime rates.

The theory of social bonding (Hirschi, 1969) and social control theory (Sampson and
Laub, 1993) both share similar major concepts with social capital theory. According to Hirschi (1969), “delinquent acts result when an individual’s bond to society is weak or broken” (p. 16). In other words, individuals will be more likely to respect and obey the rules and norms if they have strong bonds to other members of society. The reverse causation is also possible. For instance, delinquency and criminal activities may lead to less interaction with parents and less participation in social activities. In addition to Hirschi’s concept, Sampson and Laub (1993) suggest that the influence of bonds changes along with major “turning points” in the life course. For instance, being married or having a stable job affects humanity’s perception of criminal activities and delinquency in that these changes strengthen individuals’ ties and bonds to society (Salmi & Kivivuori, 2007).

The social environment children live in, including family, friends and neighborhood, plays a key role in the development of behaviors (Yücel, 2003). That is, children may acquire positive behaviors and keep away from delinquent acts or acquire negative behaviors and be involved in delinquent behaviors depending upon the influences of their social environment. In his study, Thornberry (1987) emphasizes the role of social interaction in the development of deviant behavior. Thornberry (1987) states that “[h]uman behavior occurs in social interaction and can therefore be explained by models that focus on interactive processes” (p. 864), and that “adolescents interact with other people and institutions;” therefore, their “behavioral outcomes are formed by that interactive process” (p. 864).

In the theory of anomie and general strain, Merton (1957) hypothesized that failure in pursuing life goals causes strain. Hence, individuals turn to crime and delinquency in order to achieve their ambitions or to adapt to traumatic situations. Briefly, “the removal of positive
stimuli” and “the confrontation with negative stimuli” can cause strain and stress and are somehow associated with the level of individuals’ social interaction and trust (Salmi & Kivivuori, 2007).

Although most scholars agree that social capital provides benefits for societies, social capital can also bring about negative outcomes. For instance, participating in gang and mafia groups that are rich in social capital leads to more criminal activities. Even though these groups include a high level of interaction among group members, they fail to provide other basic aspects of social capital, including mutual trust and reciprocity (Schaefer-McDaniel, 2004).

Overall, social capital theory has the capacity to pinpoint the impact of various aspects of human life. It enables researchers to reveal the impact of interactions on adolescents at an interpersonal level. However, as the theory of social capital is at an early stage of development, most of the studies have concentrated on adults. Thus far, few studies have studied the influence of social capital on adolescents (Schaefer-McDaniel, 2004).

A number of scholars have expressed that a high level of connections raises the level of social capital. Some scholars consider that “bonding,” or intense relationships, has a greater influence on youth (Coleman, 1988), while others believe that “bridging,” or weaker but wider networks, have more significant effects on adolescents (Putnam, 2000). Having taken into consideration both types of social capital, bonding and bridging, this study next reviews the literature by grouping social capital into three general categories: family social capital, peer relations and community social capital.

*Family Social Capital and Delinquency*

Interaction with parents provides an outstanding source of social capital for

Previous research examining the social capital factors in the family illustrates that the level of parental investment in their children is one of the strongest predictors of delinquency level (Wright et al., 2001). Parents’ investments in children lead to effective social bonding, which in turn generates informal social control that raises morality and prevents exposure to delinquent friends (Wright et al., 2001). The cumulative effects of family social capital can keep children away from engagement with deviant behaviors by eliminating their risks of involvement in criminal activities.

The structure of family transfers social norms, which include individual obligations and duties, to future generations. Children and adolescents can adapt social norms through open dialogues between parents and children (Schaefer-McDaniel, 2004). Coleman (1988) states that “the norms, the social networks, and the relationships between adults and children. . .are of value for the child’s growing up” (p. 36). Effective interaction in the family has an important influence on children in terms of designating their life course and development of social capital (Wright et al., 2001).

In addition to quality of interaction within the family, the social capital level of parents is an important determinant of the social capital level for adolescents. Parents mainly obtain social capital through connections with individuals outside their family. Social interactions and networks provided through participation in several social activities, including informal
interpersonal interactions and conversation with community members, encourage social integration and facilitate exchange of information between individuals, which in turn increases the social capital level of parents.

Other than the social capital levels of parents, Coleman (1988) points out the significance of intergenerational closed networks, assuming that these networks increase the efficiency of social norms. According to Coleman (1988), the concept of “intergenerational closure” helps the development of a structured environment and informal social control, which in turn gives rise to efficient norms in the society.

The literature on youth social capital has addressed significant relationships between family social capital and delinquency. Wright et al. (2001), in their study employing the National Youth Survey, suggest that adolescents with a higher level of family social capital, which is measured by children’s time spent with their parents and parental efforts for their children’s educational success and well-being, have lower levels of delinquency. In addition, Wright and Fitzpatrick (2006) found that teenagers having stronger parent-child relationships and school affiliations are less likely to commit violent activities. Furthermore, Salmi and Kivivuori (2006) found a strong negative relationship between parental support and juvenile delinquency, controlling for the variables of self-control, cognitive ability, and school commitment.

Peer Relations and Delinquency

Another factor which may influence delinquency is adolescents’ affiliation with delinquent peers. Meaningful social connections, which facilitate access to resources, may promote social norms and provide social support for adolescents. However, according to
Morrow (1999), social relations with peers may result in negative consequences for adolescents. Moreover, close connections affiliated with negative norms may affect behaviors in a negative way, which Portes and Landolt (1996) call “downward leveling” (p. 20). A number of criminological theories, such as differential association and social bonding theories, hypothesize that the level of affiliation with delinquent peers is one of the major predictors of adolescents’ involvement in criminal activities (Farrington, 1995; Fergusson & Horwood, 1996; Woodward, Fergusson, & Horwood, 2002) and substance use (Ary, Duncan, Biglan, Metzler, Noell, & Smolkowski, 1999; Duncan, Duncan, Biglan, & Ary, 1998; Erickson, Crosnoe, & Dornbusch, 2000).

Sutherland’s differential association theory emphasizes the influence of delinquent peer relations and peer groups on delinquency. According to differential association theory, criminal behavior is learned through interaction within individuals, especially within intimate groups. Differential association varies across intensity, priority, frequency, and duration of relations (Sutherland & Cressey, 2006).

The importance of peer relations in the explanation of criminal and delinquent activities has been highlighted by various researchers (Shoemaker, 2009). Warr (2002) states that “[n]o characteristic of individuals known to criminologists is a better predictor of criminal behavior than the number of delinquent friends an individual has” (p. 40). As children grow up, parents’ impact on adolescents’ behaviors becomes less significant, while peer impact become more significant (Gatti & Tremblay, 2007; Lundborg, 2006; Garnier & Stein, 2002). Thus, most delinquent activities are conducted in the social contexts of delinquent peers and gangs (Warr, 2002; Shoemaker, 2005).
Although affiliation with delinquent peers is strongly related to delinquent behaviors and substance use (Warr, 2002; Shoemaker, 2005), the basis of this interaction with peers is not so clear (Shoemaker, 2009). The association between delinquent peers and delinquent acts may occur in two ways. The first possible way is social homophily, which refers to the delinquent adolescents’ tendencies to seek out other peers and peer groups with similar characteristics. Second, delinquent associates may encourage and teach one another to commit delinquent acts, which is referred to as friendship assimilation (Borsari & Carey, 2001; Shoemaker, 2009).

In order to understand the correlation between delinquent peers and adolescents’ delinquent activities, delinquent peer relations need to be examined from the perspectives of homophily and friendship assimilation (Pearson, Steglich, & Snijders, 2006; Valente, Unger, & Johnson, 2005).

As noted above, social homophily refers to “the similarity of friends in terms of a number of attributes, including both personal characteristics, such as race, attributed and behaviors, such as drug use” (Thornberry, 2003, p. 15). Peer groups emerge based on a non-random selection of friends who have similar behavior patterns. Cattell (2001) argues that inter-personal relations among friends who share similar attitudes may provide more mutual understanding and solidarity among individuals as compared to relations among friends who have dissimilar attitudes. Therefore, adolescents mostly desire to engage with those with similar social characteristics (Cattell, 2001). However, selection-based associations with delinquent peers lead to a spurious relationship between peer affiliation and deviant activities. For instance, affiliation with delinquent peers does not influence adolescents’ drug use, but drug-addicted adolescents tend to establish their friendship networks with those addicted to
similar substances (Pearson et al., 2006). Also, adolescents who have weak bonds to parents and school are more likely to participate in delinquent peer groups (Urberg, Degirmencioglu, Pilgrim, 1997).

Although students find themselves in a structured social setting, they are aware of the opportunities present in different friendship networks. Therefore, they tend to join friendship groups that meet their expectations. Individuals’ sensation-seeking level plays a key role in the formation of peer relations; however, the sensation-seeking level is not significantly related to the frequency of substance use (Donohew, Hoyle, Clayton, Skinner, Colon, & Rice, 1999). Pearson and Michell (2000) report that the transition of adolescents from non-delinquent peer groups to delinquent peer groups is more common than the reverse transition.

Interactions with similar persons stabilize peers’ attitudes and behaviors; however, if group interaction extends to dissimilar persons, group members exert pressure to assimilate newcomers’ behaviors (Rice, Donohew, & Clayton, 2003). This group pressure may provide both negative and positive outcomes for juveniles. As an example, if adolescents engage with highly motivated and successful peers, then they are more likely to develop stronger attachments with their school and teachers (Hanish, Barcelo, Martin, Fabes, Holmwall, & Palermo, 2007). Conversely, when adolescents become members of gang groups, they are more likely to get involved in delinquent and gang activities (Aseltine, 1995).

Secondly, the concept of assimilation, which refers to a causal relation between delinquent peers and involvement in delinquent activities, suggests that individuals shape their behaviors according to their peers’ behaviors and approval (Pearson et al., 2006; Poelen, Engels, Van Der Vorst, Scholte, & Vermulst, 2007). Kiesner, Poulin, and Nicotra (2003) compare
the formations of different peer groups and conclude that adolescents can more freely select their peer groups in their post-school life than in their school-life, since adolescents find themselves in a structured social setting during their attendance in school. These settings play an important role in the formation of their friendship ties.

Delinquent peer groups aim to keep their group homogeneity and try to eliminate unusual behaviors (Steglich, Snijders, & Pearson, 2010; Hoffman, Sussman, Unger, & Valente, 2006). The time spent with delinquent friends significantly influences the assimilation level of adolescents. As the amount of time spent with delinquent peers increases, non-delinquent adolescents feel more pressure from delinquent peers. Similarly, a greater tendency to seek approval of peers leads to a higher level of peer influence and assimilation (Poelen et al., 2007).

As adolescents socialize with more delinquent friends, they engage in more deviant behaviors. Ennett, Bailey, and Federman (1999) found that having friendship relations with drug-addicted individuals increases the probability of drug use among adolescents. Gordon et al. (2004) report that adolescents are involved in more deviant acts when they are associated with gangs; however, when they leave their gangs, delinquency falls back to its previous level.

Simons-Morton and Chen (2006) report the significant influence of drug addicted peers on the onset of drug use. The intensity of the social network with delinquent peers is also related to the amount of substances used by students attending 6th and 9th grades. Simons-Morton and Chen (2006) also found that drug-addicted adolescents more commonly establish friendship ties with drug users. Fergusson, Swain-Campbell, and Horwood (2002), in their study using data from a 21 year longitudinal study of a birth cohort of New Zealand children, report that adolescents’ affiliations with deviant peers have significant correlations with adolescents’
involvement in violent crimes, property crimes, and marijuana, alcohol and nicotine use. They also include that the strength of delinquent peer affiliation’s influence on commitment of delinquent acts decreases as children grow up.

Steglich et al. (2010) made a comparison between the concepts of homophily and peer effect, and found a quite strong influence of peer effect on alcohol use and smoking. On the other hand, they did not find any significant effect of substance use on the peer selection process, but they did report a significant influence of individuals’ social environment and demographic characteristics on their peer selection choice. In addition, Mercken, Candel, Willems, & De Vries (2007) emphasize the concepts of homophily and peer effect as both of them have the capacity to explain the friends’ similarity of smoking status. They argue that both the concepts of homophily and delinquent peer influence explain the degree of similarity of smoking behavior when there is a reciprocal relationship. Overall, the research results illustrate a significant association between delinquent peer relationships and deviant activities, and the concepts of homophily and peer influence have the capacity to explain this correlation.
Community Social Capital and Delinquency

Coleman (1988) emphasizes family structure in the process of development of youth social capital; on the other hand, he also mentions extra-familial relationships, including interaction with neighbors, teachers and peers. According to Coleman (1988) adolescents can foster their social capital through their own interactions with others in their social environment.

Community-level structures are key factors in the development of extra-familial social capital for adolescents. For instance, churches, schools, and recreation centers not only support community members’ human capital, but also encourage social networks among individuals and promote social capital. Coleman and Hoffer introduce four key aspects of community social capital: “(1) social support networks; (2) civic engagement in local institutions; (3) trust and safety; and (4) degree of religiosity” (as cited in Ferguson, 2006, p. 5). These aspects mainly pertain to social capital for adults. In terms of youth social capital, special attention should also be paid to the characteristics of neighborhoods, schools and organized activities since these structures primarily shape adolescents’ social interactions in the community (Ferguson, 2006).

Neighborhood

Substantive and meaningful interactions and social ties with neighborhood members let residents benefit from resources embedded in social connections (Sampson & Graif, 2009; Burt, 2000; Portes & Sensebrenner, 1993). Previous research has illustrated that the level of social interaction or non-interaction in a neighborhood is significant in providing an effective informal social control for juveniles.

According to Sampson and Wilson (1995), the aspects of social disorganization in
communities – residential mobility, family disruption and low level of socio-economic status – have an important influence on community-level social capital. For instance, a high level of residential mobility is related to weak friendship ties; the prevalence of disrupted families is the major predictor of lack of supervision of youth groups; and the socio-economic status of residents is positively correlated with individuals’ participation in local organized activities (Sampson & Wilson, 1995). Coleman (1990) also maintains that residential mobility and migration negatively affect the social network and cohesion in the community. Sampson and Graif (2009) criticize community-level social relations in recent decades and assert that “in many urban communities, however, strong ties among neighbors are no longer the norm because friends and social support networks are decreasingly organized in a parochial, local fashion” (p. 1581).

Sampson and Wilson (1995) particularly argue that social isolation, which refers to inadequate interaction with people and institutions representing mainstream society, creates individuals who are alienated from resources and conventional role models. On the other hand, a high level of social cohesion in the community provides trust and reciprocity through which norms become more effective in social groups. Therefore, efficient norms in society encourage individuals to behave in the interest of their community rather than themselves. In addition, a high level of social cohesion between neighborhood members through networks and formal organizations leads to the development of collective efficacy (Sampson & Laub, 1993). According to Bursik (1999), interpersonal interactions are not sufficient themselves to generate informal social control for deviant activities; however, these interactions generate available conditions through which collective efficacy can emerge.
Collective efficacy is defined as "a sense of collective competence shared among individuals when allocating, coordinating and integrating their resources in a successful concerted response to specific situational demands" (Zaccaro, Blair, Peterson, & Zazanis, 1995, p. 309). Collective efficacy emphasizes integration and eagerness to contribute to the common good in a community. A number of scholars have reported considerable association between collective efficacy and violence in neighborhoods; thus, collective efficacy has emerged as a major construct of neighborhood social capital in criminological studies (Sampson et al., 1997; Sampson & Groves, 1989). Having the capacity to act collectively among community members facilitates the implementation of informal social control, which eliminates criminal acts or maintains the existing social order in their neighborhood, whereas law enforcement agencies do this in a formal and institutional way (Sampson et al., 1997). Supervision of adolescents provides considerable outcomes for community members (Bellair, 1997). For instance, monitoring the juveniles’ delinquent activities – vandalism, truancy, and substance use—is an effective neighborhood informal social control for the sake of a safe and crime-free neighborhood.

The literature, in which the scholars conceptualize social capital as a dimension of community, reports considerable associations between social capital and deviant behaviors. Informal social control variables are significantly and negatively related to crime rates in the neighborhood. Sampson and Groves (1989) suggest that residential mobility and instability, which lead to the collapse of friendship networks in the neighborhood, are associated with a high level of violence. In addition, unsupervised teenage groups in a neighborhood and the lack of residents’ participation in local organizations are predictors of high levels of robbery and
violence conducted by strangers. According to Sampson and Morenoff (1997), strong social connections, acquaintanceship, social participation in the neighborhood and supervision of adolescents are negatively associated with delinquency and violence. Rosenfeld et al. (2001) hold the concepts of generalized trust and civic integration in communities as important factors in explaining levels of homicide. Gatti, Tremblay and Larocque (2003), in their study of social capital in Italian regions, conclude that lower levels of cohesion, trust and socio-political commitment were correlated with higher levels of delinquency. Furthermore, Kubrin and Weitzer (2003) found that communities with informal social ties have lower levels of crime. Overall, as the above findings suggest, the dimensions of social capital, such as friendship networks, collective efficacy and participation in activities, are negatively correlated with crime and delinquency rates.

School

School, in which students spend a considerable amount of their time, forms a social environment for children. Coleman (1988) has received considerable attention through his empirical study of youth, which initially investigated the relationship between social capital in schools and student well-being. In his ground-breaking study, Coleman points out the importance of schools and other social organizations as they are appropriate spaces where informal relations and networks can grow. Coleman argues that relations among individuals in the school setting can take place in six different ways: “among students, among teachers, among parents, between teachers and students, between teachers and parents, and between students and parents” (as cited in Schaefer-McDaniel, 2004, p. 156). Coleman (1990) includes
the argument that strong relationships between students, parents, and teachers that create high level of social capital in schools positively affect students’ achievement. At this point, parental involvement in school, which produces individual awareness and establishes good relations among students, teachers and parents of peers, is essential. Schaefer-McDaniel (2004) argues that since these relations are bi-directional, in order to recognize and measure social capital entirely, each part of the relations and interactions among students, parents, and teachers needs to be analyzed.

Therefore strong connections between parents and school and students and school have positive outcomes on educational goals and student well-being. Coleman (1988) argues that the success of Catholic schools stems from strong social ties based on familiar beliefs among students and parents and parents’ encouragement of norms at school. In addition, parents of students in Catholic schools are more likely to be connected with other parents, especially through attending religious activities, compared to public schools. Thus, the high level of intergenerational closed relations in Catholic schools leads to a high level of social capital.

Social closure acts as a kind of parental monitoring that allows parents to be aware of their children’s positions and friends. According to Coleman (1988), due to the higher amount of social closure in private schools, effectiveness of common norms with reference to students’ behaviors is greater in private schools than in public schools. In addition to social closure, organizations in school are also essential in providing resources to keep students from antisocial behaviors (Parcel & Dufur, 2001). The quantity of students’ participation in these organizations may promote students’ attachment to school and their teachers, which in turn
discourages them from engaging in anti-social behaviors (Payne, Gottfredson, & Gottfredson, 2003). For instance, a higher level of participation in school-based organizations is associated with a lower level of discipline problems and involvement in gang activities (Bryk & Rollow, 1993). Buysse (1997) found that social capital associated with parents and schools is negatively related to deviant behaviors. In addition, the number of smoking students decreases as the attachment to school increases (Donohew et al., 1999). Moreover, Nakhaie and Sacco (2009) illustrate that strong relations with non-delinquent peers and teachers are associated with lower levels of property crimes.

Participation in Organized Activities

In the literature, there is far less research examining the impact of organized youth activities compared to other contexts, such as parents and peers (Kleiber, 1999). According to Barber, Stone, & Eccles (2005), participating in organized activities promotes the healthy development of adolescents in several ways. First of all, these organizations provide a developmental environment in which adolescents can engage in challenging tasks and have the chance to express their skills, enthusiasm, and creativeness. Second, participation in such activities provides a meaningful social network, which facilitates their social development. Third, these organized activities help adolescents to have a positive identity, constructive friendships and social boundaries. In addition, Cattell (2001) argues that participation in social activities and organizations provides “enhanced self esteem, a sense of achievement and perceptions of control . . . hope and optimism” for kids (p. 1513).

Furthermore, adolescents’ participation in discretionary extracurricular activities
provides a forum for adolescents to be more expressive and exchange their ideas and experiences with others. These activities instill common values in adolescents and support educational objectives of schools (Marsh & Kleitman, 2003; Barber et al., 2005). Participation in activities also shapes adolescents’ friendship groups. For instance, adolescents who participate in extracurricular activities are more likely to have more intellectual friends and fewer truant and drug-addicted friends compared to those who do not participate in such activities (Eccles & Barber, 1999). So, being involved with more academic friends and fewer delinquent friends provides positive outcomes for juveniles. On the contrary, being a member of a delinquent peer group, among which there is active encouragement for anti-social behaviors, is linked to increased involvement in deviant activities.

Adolescents’ participation in activities may help them to be engaged in peer groups with both positive and negative values (Dishion, Poulin, & Burrstaston, 2001). Adolescents’ attendance in such activities under adults’ supervision can construct a “bridge” between adolescents and adults spanning the child-adult divide (Jarrett, Sullivan, Watkins, & 2005). Through interactions with adults adolescents can be socialized into mainstream norms, especially in their transition from childhood to adulthood (Benson, 1997; Putnam, 2000; Jarrett et al., 2005). Moreover, activities under the supervision of adults provide an informal social control against deviant activities, such as smoking and drinking alcohol (Gaughan, 2003).

Similar to participation in organized activities, attending religious organizations reinforces the promotion of social interaction among individuals. Faith–based organizations provide suitable platforms for individuals from diverse social backgrounds to meet and interact with each other. These organizations also provide a kind of extracurricular education, which
primarily inculcates moral values. Strong moral values keep juveniles away from delinquent activities (Putnam, 2000; Parcel & Dufur, 2004)

On the other hand, lack of social interaction between adults and adolescents in the community may cause adults to have negative perceptions and attitudes toward juveniles (Camino, 2001). In turn, the presence of such negative attitudes may lead to the deterioration of juveniles’ perceptions toward adults (Gilliam & Bales, 2001). As a result of this kind of social isolation, juveniles may miss out on a substantial opportunity to reach formal and informal social resources. Lack of these social resources for juveniles hinders the development of new socialized generations (Jarrett, 2003).

Lundborg (2005) found a negative association between social participation and probability of smoking and illicit drug use. He included the argument that a higher level of social capital, which is built up through participation in organized activities, provides effective informal social control for adolescents. In addition, students’ participation in extracurricular activities has a positive influence on family social capital and reduction of delinquency (Horvat, Weininger, & Lareau, 2003). Unlu (2009) reports that family attachment and youth activities decrease the amount of substance use among US adolescents.

Conclusion

This literature review has illustrated that social capital theory has considerably contributed to the understanding of adolescents’ deviant behaviors. First of all, the concept of social capital, whose interdisciplinary structure brings various disciplines closer together, has provided a promising approach for theoretical improvement in criminological studies.
(Kilpatrick, Field, & Falk, 2003; Salmi & Kivivuori, 2007; Hagan & McCarthy, 1997). Second, social capital theory emphasizes the social structures in which adolescents grow up. Lastly, this theory goes beyond the limitations of traditional static explanations of adolescent deviant behaviors and focuses on the sources and accumulation of social capital. Overall, the research indicates that adolescents with higher social capital level are less likely to engage in delinquent activities.
CHAPTER III
DATA AND METHODOLOGY

This chapter first presents detailed information about the dataset. Following that, the measurements of the study variables and the process of preliminary preparation of the data for the quantitative analyses are discussed.

Data Source

The association between social capital and the probabilities of major and minor delinquency among Turkish adolescents was examined by using secondary data. The organization of European Cities against Drugs (ECAD), which is the society for prevention of drug use in Europe, conducted the collection of this data as a part of The Youth in Europe project. The Youth in Europe drug prevention program was developed based on the results of the Drug-free Iceland 1997-2002 project. This program is implemented through the consensus of several city municipalities and states in Europe and started in 2005 as a five-year program (ECAD, 2009).

The data were gathered through self-report questionnaires at the individual level that were distributed to Turkish adolescents who were attending tenth grade in a district of Istanbul (Turkey), Bağcılar. The organization collected the data at one point in time, in 2007. Bağcılar, from which the sample was drawn, is the most populated district in Istanbul and one of the most populated districts in Turkey with a population of about 700,000 (Engin, 2008; TURKSTAT, 2010). The average household income level of Bağcılar is less than the average household income level of Turkey (Engin, 2008).

In the context of the program, the comparative studies were projected to be carried out
in three stages. The first stage was conducted in 2006-2007, the second and the third stages were conducted in 2008 and 2010, respectively. The survey samples were collected from students ages 15-16. In addition, the researchers projected that they would need a sample size of 2,800 in order to adequately represent the age group of 15-16 years old. Professional institutions and universities coordinated the research, and the implementers of the survey were able to tailor the questionnaire according to the specific characteristics of each country in which the surveys were undertaken.

The 2006 Youth in Europe Survey questionnaire was prepared based on the following sociological and criminological theories: anomie theory (Durkheim, 1951; 1965), control theory (Hirschi, 1969), theory of differential association (Sutherland, 1978), general strain theory (Agnew, 1992a; 1992b), social capital theory (Coleman, 1988), social learning theory (Bandura, 1969; Akers, 1977), symbolic interactionist theory (Mead, 1934; Blumer, 1969) (Kristjansson, 2008, p. 4). In addition, the Icelandic Centre for Social Research and Analysis (ICSRA) contributed to the questionnaire based on their previous research experience (Kristjansson, 2008).

Sample

The sample was obtained from the population of adolescents through a simple random technique. Eighty-five classes out of 162 classes were selected among tenth graders. Researchers selected 2,898 tenth graders, only 2,740 of these students responded to the questionnaire. However, in the end, only 2,627 of these responses were identified as valid. The total number of tenth graders at the high schools in Bağcılar was 5,543, so the sample
represents about 50% of the population (Engin, 2008; Altuner, Engin, Gurer, Akyay, & Akgul, 2009).

Measurements of the Variables

The dependent, independent and control variables, derived from the hypotheses, were identified and measured by using either single or composite measures based on the theories and previous research. In total, three single and eleven composite measures, also known as indexes, were employed to analyze the research hypotheses. The variables in the study were coded in the same direction, and one nominal variable (gender) was dichotomized. The composite measures were calculated by averaging the response items. Since the range of averaged composite measures is equal to the range of original single measures, the descriptive interpretation of the averaged ones is easier than that of the summed ones.

Prior to constructing the indexes, Cronbach’s (1951) alpha reliability test, which is the most common method to assess internal consistency, was employed to compute the reliability of each of the indexes independently. Cronbach’s alpha values of .70 or higher were generally considered “acceptable” in the literature; however, lower reliability coefficient values were also considered acceptable if the indexes were created based on a specific theory or previous research (Pett, Lackey, & Sullivan, 2003).

Dependent Variables: Major and Minor Delinquency

The dependent variable, juvenile delinquency, is divided into two groups: major and minor delinquency. Therefore, there are two dependent variables in this study. First, major
delinquency is scaled by five items: larceny less than three movie tickets (Q74a); larceny more than three movie tickets (Q74b); using violence for theft and robbery (Q74c); breaking and entering a car or building for robbery (Q74d); and property damage or vandalism in the last 12 months (Q74e). These five offenses, which the Turkish Penal Code have stipulated as criminal conducts, are considered major offenses since involvement in any of these activities leads to criminal investigation of Turkish law enforcement agencies. Second, minor delinquency is measured by four variables: smoking cigarettes, chewing tobacco, snuffing, and using alcohol in the last 30 days (Q63, Q65a, Q65b, and Q68b respectively). These four offenses are considered minor since adolescents’ involvement in these activities is less severe than involvement in major delinquent acts and does not require any criminal investigation by Turkish law enforcement agencies.

The first dependent variable, major delinquency, has a reliability coefficient value of .956, which indicates that the five individual items of this composite measure are highly reliable. The second dependent variable, minor delinquency, is another composite variable with an acceptable reliability value of .744.

The dependent variables, major and minor delinquency, are measured at the interval-ratio level. However, since the distributions of both dependent variables are highly positively skewed and the log transformation technique did not solve the non-normality problem, as recommended by Meyers, Gamst, and Guarino (2006), both dependent variables are dichotomized as the probability of committing any kind of major delinquent activity and the probability of committing any kind of minor delinquent activity (0 = never, 1 = one or more times). Detailed information about the dependent variables is depicted in Table 1.
Table 1

*Dependent Variables: Major and Minor Delinquency*

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>RESPONSE CATEGORIES</th>
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<tbody>
<tr>
<td><strong>Major Delinquency</strong></td>
<td></td>
</tr>
<tr>
<td>How often do you think you have done the following during the last 12 months?</td>
<td></td>
</tr>
<tr>
<td>a) Larceny less than 3 movie tickets (Q74A)</td>
<td>•1= Not at all</td>
</tr>
<tr>
<td>b) Larceny more than 3 movie tickets (Q74B)</td>
<td>•2= 1 times</td>
</tr>
<tr>
<td>c) Using violence for theft and robbery (Q74C)</td>
<td>•3= 2-5 times</td>
</tr>
<tr>
<td>d) Breaking and entering car or building for robbery (Q74D)</td>
<td>•4= 6-9 times</td>
</tr>
<tr>
<td>e) Property damage or vandalism (Q74E)</td>
<td>•5= 10-13 times</td>
</tr>
<tr>
<td>•6= 14-17 times</td>
<td></td>
</tr>
<tr>
<td>•7= 18 or more</td>
<td></td>
</tr>
<tr>
<td><strong>Minor Delinquency</strong></td>
<td></td>
</tr>
<tr>
<td>How often do you think you have used the following in the last 30 days?</td>
<td></td>
</tr>
<tr>
<td>a) Smoking cigarette (Q63)</td>
<td>•1= Not at all</td>
</tr>
<tr>
<td>b) Chewing tobacco (Q65A)</td>
<td>•2= &lt; 1 in a week</td>
</tr>
<tr>
<td>c) Snuffing (Q65B)</td>
<td>•3= &lt; 1 in a day</td>
</tr>
<tr>
<td>d) Drinking alcohol(Q68B)</td>
<td>•4= 1-5 t. in a day</td>
</tr>
<tr>
<td>•5= 6-10 times in a day</td>
<td></td>
</tr>
<tr>
<td>•6= 11-20 times in a day</td>
<td></td>
</tr>
<tr>
<td>•7= &gt; 20 in a day</td>
<td></td>
</tr>
</tbody>
</table>

Major delinquency occurring in the last 12 months is considered an indicator of current involvement in these activities, based on other important research (e.g. National Youth Survey)
and Youth in Europe Survey). In this study, involvement in minor delinquency mainly refers to the use of minor substances. Thus, as Hutchison and Blakely (2010) recommend, adolescents’ minor substance use, such as drinking alcohol and smoking, occurring in the last 30 days indicates the adolescents’ current involvement in these activities.

**Independent Variables: Social Capital Variables**

In order to measure youth social capital, the concepts of social capital based on family, peer and community relations are operationalized based on the relevant theories and previous studies. In addition, the dataset codebook has also provided a sound source for the measurement of the elements of youth social capital. Specifically, three kinds of social capital, family-based, peer-based, and community-based social capital, were used. The information about the variables and response categories are given below.

**Family Social Capital**

According to Coleman (1988, 1990), family social capital refers to the bonds between parents and children. The time and effort that parents invest in their interactions with their children are considered major predictors of family social capital. In addition, parents’ monitoring of their children’s activities is an appropriate measure indicating the level of family social capital (Parcel & Dufur, 2004; Ferguson, 2004)

Adolescents tend to acquire more social norms and moral values as the amount of time spent with their parents increases. This research assumes that parents are good role models and that children take their parents as role models. Moreover, parents supervise their children
when they spend time together. The supervision of parents provides informal social control, which in turn enables adolescents to refrain from engaging in deviant activities and associating with delinquent friends (Wright et al., 2001). According to Kristjánsson (2008), since both parents work in most European households, the level of time spent with parents is more significant in understanding adolescents’ delinquent acts compared to the level of parental support, monitoring and control.

In this study, the composite measure of “time spent with parents” is scaled by two (2) items: spending time with parents outside school hours on working days (Q24a) and spending time with parents during the weekends (Q24b), as proposed by the codebook of the dataset (Kristjánsson, 2008).

Parents’ interactions with their children facilitate adolescents’ access to social norms and resources and provide them clear principles that govern their social behaviors (Coleman, 1990b; Wright et al., 2001). Parental attachment is scaled in this study by four items: how easily adolescents receive caring and warmth from parents (Q22a), how easily they discuss their personal affairs with parents (Q22c), how easily they receive advice on other subjects or projects from parents (Q22d), and lastly, how easily they receive assistance from their parents (Q22e) (Coleman, 1990; Wright, et al., 2001).

Parental monitoring, which is used as the last dimension of family social capital, generates positive social outcomes for adolescents. Parents’ monitoring of their children is considered important since it enables them to keep their children from delinquent friends and activities (Wright et al., 2001). In this study, parental monitoring is measured by a two-item index: parents’ knowledge about whom the adolescents spent time with in the evenings (Q28e)
and where the adolescents spend time in the evenings (Q28f) (Roche, 1998).

All three of the family social capital indexes have an acceptable level of internal consistency. The composite measures of time spent with parents and parental attachment have reliability coefficient values of .740 and .745, respectively. Parental supervision has a reliability coefficient value of .860, which indicates that the two items measuring this index are highly reliable. In Table 2, the questionnaire and the response categories for the variables related to the elements of family social capital are presented.

Table 2

*Independent Variables: Family Social Capital*

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>RESPONSE CATEGORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time spent with Parents</strong></td>
<td></td>
</tr>
<tr>
<td>How well does the following apply to you?</td>
<td></td>
</tr>
<tr>
<td>a) I spend time with my parents outside school hours on working days (Q24A)</td>
<td>•1= Almost never</td>
</tr>
<tr>
<td>b) I spend time with my parents during the weekends (Q24B)</td>
<td>•2= Seldom</td>
</tr>
<tr>
<td></td>
<td>•3= Sometimes</td>
</tr>
<tr>
<td></td>
<td>•4= Often</td>
</tr>
<tr>
<td></td>
<td>•5= Almost always</td>
</tr>
<tr>
<td><strong>Parental attachment</strong></td>
<td></td>
</tr>
<tr>
<td>How easy or hard would it be for you to receive the following from your parents? (reverse coded)</td>
<td></td>
</tr>
<tr>
<td>a) Caring and warmth (Q22A)</td>
<td>•1= Very difficult</td>
</tr>
<tr>
<td>b) Advice about the studies (Q22C)</td>
<td>•2= Rather difficult</td>
</tr>
<tr>
<td>c) Advice about other issues (projects) of yours (Q22D)</td>
<td>•3= Rather easy</td>
</tr>
<tr>
<td>d) Assistance with things (Q22E)</td>
<td>•4= Very easy</td>
</tr>
<tr>
<td><strong>Parental monitoring</strong></td>
<td></td>
</tr>
<tr>
<td>How well do the following statements apply to you? (reverse coded)</td>
<td>•1= Very poorly</td>
</tr>
<tr>
<td>a) Parents know with whom I spent time in the evenings (Q28E)</td>
<td>•2= Rather poorly</td>
</tr>
<tr>
<td>b) Parents know where I spent time in the evenings (Q28F)</td>
<td>•3= Rather well</td>
</tr>
<tr>
<td></td>
<td>•4= Very well</td>
</tr>
</tbody>
</table>
Peer Effects

It is hypothesized that if adolescents are engaged with more delinquent friends, they are more likely to be involved in similar delinquent acts (Schaefer-McDaniel, 2004). In this study, affiliation with delinquent peers is measured with two variables based on the severity level of the delinquent activities that the peers are associated with. The first one is affiliation with delinquent peers who are associated with major delinquent activities, which is scaled by three items (Q80a, Q80b, and Q80c), presented in Table 3. This index has a high reliability coefficient value of .892. The second variable is affiliation with delinquent peers who are associated with minor delinquent behaviors, which is measured by two items (Q81a, Q81b), also depicted in Table 3. This composite scale has a high level of internal consistency as revealed by a Cronbach’s alpha value of .837.

In order accurately to examine the relationship between adolescents’ deviant behaviors and delinquent peer influence, each dependent variable (major and minor delinquency) is examined separately with the level of adolescents’ affiliation with delinquent friends who are associated with similar deviant behaviors. For instance, the probability of major delinquency is predicted by the level of affiliation with delinquent peers who are engaged in major delinquent acts. Similarly, the likelihood of minor delinquency is predicted by the level of affiliation with delinquent peers who are engaged in minor delinquent acts.
Table 3

**Peers influence: Delinquent Peers (Major and Minor Delinquency)**

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>RESPONSE CATEGORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Delinquent Peers (Major Delinquency)</strong></td>
<td></td>
</tr>
<tr>
<td>How many of your friends do you think have done the following during the</td>
<td></td>
</tr>
<tr>
<td>last 12 months?</td>
<td></td>
</tr>
<tr>
<td>a) Stolen something worth more than 3 movie tickets (Q80A)</td>
<td>• 1 = None</td>
</tr>
<tr>
<td>b) Broken into a building or a car in order to steal (Q80B)</td>
<td>• 2 = Few of them</td>
</tr>
<tr>
<td>c) Property damage or vandalism (Q80C)</td>
<td>• 3 = Some of them</td>
</tr>
<tr>
<td></td>
<td>• 4 = Most of them</td>
</tr>
<tr>
<td></td>
<td>• 5 = Almost all of them</td>
</tr>
<tr>
<td><strong>Delinquent Peers (Minor Delinquency)</strong></td>
<td></td>
</tr>
<tr>
<td>How many of your friends do you think do the following?</td>
<td></td>
</tr>
<tr>
<td>a) Smoking (Q81A)</td>
<td>• 1 = None</td>
</tr>
<tr>
<td>b) Drinking Alcohol (Q81B)</td>
<td>• 2 = Few of them</td>
</tr>
<tr>
<td></td>
<td>• 3 = Some of them</td>
</tr>
<tr>
<td></td>
<td>• 4 = Most of them</td>
</tr>
<tr>
<td></td>
<td>• 5 = Almost all of them</td>
</tr>
</tbody>
</table>

Community Social Capital

Community level interactions provide easy access to resources and informal social control for adolescents, which in turn negatively influence engagement with deviant behaviors.

Community social capital measures are grouped in three parts: relationships with neighbors, relationships with school, and adolescents’ participation in organized activities.

**Neighborhood**

Collective efficacy has emerged as a major construct of neighborhood social capital in criminological studies (Sampson et al., 1997; Sampson & Groves, 1989). Collective action among
community members facilitates the implementation of informal social control, which is effective in eliminating criminal acts or maintaining the existing social order in their neighborhood (Sampson et al., 1997). The level of neighborhood informal social control is scaled by four items, which represent the neighbors’ collective reactions to youths’ delinquent activities – making graffiti on houses (Q30b), disrespect to elders (Q30c), fighting (Q30d), and breaking and entering a house or a car (Q30e) (Sampson et al., 1997; ICSRA) – as presented in Table 4. The reliability coefficient of this composite measure (.796) is highly acceptable.

School

Adolescent students’ affiliation with their teachers and school provides an important resource for their access to mainstream social norms and the development of social capital (Coleman, 1988). The index of students’ attachment with their school is measured by four items (Q18g, Q18h, Q18i, and Q18g), which represent students’ bond to their school and teachers (Akers, 2000; Hirschi, 1969; Hwang & Akers, 2003; Kempf, 1993), as presented in Table 4. The index of school attachment has an acceptable level of internal consistency as revealed by a Cronbach’s alpha value of .700.

Participation in Organized Extracurricular Activities

Adolescents’ participation in organized activities provides a developmental environment, a meaningful social network, and social boundaries for juveniles (Barber et al., 2005). Organized activities develop suitable platforms for adolescents and adults to meet and interact with each other, through which contact adolescents can adapt social norms and moral
values. In addition, these social activities and interactions provide an effective source of informal social control over adolescents (Benson, 1997; Putnam, 2000; Jarret et al., 2005; Gaughan, 2003). In this study, the concept of participation in organized extracurricular activities is represented by two measures: sport clubs activities and religious activities. Adolescents’ participation in sport clubs activities is measured by one item (Q85b). Participation in faith-based activities is scaled by two items, which represent the frequency of attending religious services (Q60e) and religious activities other than religious services (Q60f). Participation in religious activities has a reliability coefficient of .681, which is considered an acceptable level of internal consistency. Detailed information about the measures of the participation in organized activities is presented in Table 4.
### Table 4

**Independent Variables: Community Social Capital**

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>RESPONSE CATEGORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Neighborhood Supervision</strong></td>
<td></td>
</tr>
<tr>
<td>How likely or unlikely is it that your neighbors would do something about it if... (reverse coded)</td>
<td></td>
</tr>
<tr>
<td>b) The youths were making graffiti on houses in the area (Q30B)</td>
<td>1= Very unlikely</td>
</tr>
<tr>
<td>c) The youths disrespect to the elders (Q30C)</td>
<td>2= Rather unlikely</td>
</tr>
<tr>
<td>d) There is a fight in front of your house (Q30D)</td>
<td>3= None of them</td>
</tr>
<tr>
<td>e) Somebody break and enter a house or a car (Q30E)</td>
<td>4= Rather likely</td>
</tr>
<tr>
<td></td>
<td>5= Very likely</td>
</tr>
<tr>
<td><strong>School Attachment</strong></td>
<td></td>
</tr>
<tr>
<td>How well do the following statements apply to you?</td>
<td></td>
</tr>
<tr>
<td>a) I feel bad at school (Q18G)</td>
<td>1= Almost always</td>
</tr>
<tr>
<td>b) I want to quit school (Q18H)</td>
<td>2= Often</td>
</tr>
<tr>
<td>c) I want to change schools (Q18I)</td>
<td>3= Sometimes</td>
</tr>
<tr>
<td>d) I get on badly with the teachers (Q18J)</td>
<td>4= Seldom</td>
</tr>
<tr>
<td></td>
<td>5= Almost never</td>
</tr>
<tr>
<td><strong>Sport Clubs and Teams Participation</strong></td>
<td></td>
</tr>
<tr>
<td>How often do you engage in sports in a sport club or team? (Q85B)</td>
<td>1= Almost never</td>
</tr>
<tr>
<td></td>
<td>2= Once a week</td>
</tr>
<tr>
<td></td>
<td>3= Twice a week</td>
</tr>
<tr>
<td></td>
<td>4= 3 times a week</td>
</tr>
<tr>
<td></td>
<td>5= 4-6 times a week</td>
</tr>
<tr>
<td></td>
<td>6= Almost every day</td>
</tr>
<tr>
<td><strong>Participation in Religious Activities</strong></td>
<td></td>
</tr>
<tr>
<td>How well do the following statements apply to you?</td>
<td>1= Very poorly</td>
</tr>
<tr>
<td>a) I regularly attend religious services (Q60E)</td>
<td>2= Rather poorly</td>
</tr>
<tr>
<td>b) I regularly attend religious activities other than services (Q60F)</td>
<td>3= Rather well</td>
</tr>
<tr>
<td></td>
<td>4= Very well</td>
</tr>
</tbody>
</table>
Control Variables

Relative deprivation and demographic characteristics – gender and age – are included as control variables in order to control for their potential moderating effects on the probabilities of major and minor delinquent activities. Besides gender and age, relative deprivation is related to the development of anti-social behaviors. A number of studies have reported an association between relative deprivation and property crimes (Chester, 1976; Eberts & Sehwirian, 1968) and violent crimes (Blau & Blau, 1982; Krahn, Hartnagel, & Gartrell, 1986). In this study, students’ relative deprivation level is measured by four items (Q32a, Q32b, Q32c, and Q32d), as proposed by ICSRA (2009). Detailed information about the control variables is depicted in Table 5.

Table 5

Control Variables

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>RESPONSE CATEGORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Are you a boy or girl?</td>
<td>•1 = Boy</td>
</tr>
<tr>
<td></td>
<td>•2 = Girl</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
</tr>
<tr>
<td>How old are you?</td>
<td>•1 = 13</td>
</tr>
<tr>
<td></td>
<td>•2 = 14</td>
</tr>
<tr>
<td></td>
<td>•3 = 15</td>
</tr>
<tr>
<td></td>
<td>•4 = 16</td>
</tr>
<tr>
<td></td>
<td>•4 = 17</td>
</tr>
<tr>
<td></td>
<td>•5 = 18</td>
</tr>
<tr>
<td><strong>Relative Deprivation</strong></td>
<td></td>
</tr>
<tr>
<td>To what extent the following applies to your situation? My parents...</td>
<td>•1 = Almost never</td>
</tr>
<tr>
<td>a) are poorly-off financially (Q32A).</td>
<td>•2 = Seldom</td>
</tr>
<tr>
<td>b) can’t afford to have a car (Q32B).</td>
<td>•3 = Sometimes</td>
</tr>
<tr>
<td>c) barely have money to supply the basic needing (Q32C).</td>
<td>•4 = Often</td>
</tr>
<tr>
<td>d) do not have enough money to pay for the activities (Q32D).</td>
<td>•5 = Almost always</td>
</tr>
</tbody>
</table>
Analytic Strategy

The quantitative analyses were conducted in two stages, the first incorporating descriptive statistics and the second multivariate analyses. First, descriptive statistics were performed for the full sample of juveniles; thus, the findings represent estimates of the population from which the sample was drawn. The descriptive statistics include the means, variances and ranges of variables employed in the analyses.

Secondly, a set of binary logistic regression models were calculated to predict the two different dependent variables, major and minor delinquency, with a series of independent and control variables. To test the research hypotheses, binary logistic regression was used because the dependent variables were dichotomous. Logistic regression primarily differs from two other common statistical techniques, discriminant analysis and multiple regression analysis, based on the characteristics of the dependent variables used in the analysis. Binary logistic regression is a versatile technique which allows analyzing the effects of one or more predictors on a dichotomous outcome (Foster, Barkus, & Yavorsky, 2006; Hosmer & Lemeshow, 2000; Meyers, Gamst & Guarino, 2006; Tabachnick & Fidel, 2007). In addition, logistic regression makes no assumptions (such as linearity, normality, and homoscedasticity) about the distributions of the predictor variables (Tabachnick & Fidel, 2007). In addition, logistic regression allows for the use of all types of variables, i.e. interval/ratio, ordinal and dummy variables, as predictor variables (Mertler & Vannatta, 2010; Tabachnick & Fidel, 2007).

The simultaneous method, in which all of the predictor variables were included at once in the regression (Meyers, Gamst & Guarino, 2006), was adopted in the logistic regression analyses. In order to predict the two dependent variables, five models were used for each of
the two dependent variables to analyze the effects of social capital on the probabilities of major and minor delinquency. In the first three models, the effects of the social capital elements—family social capital, peer effect, and community social capital—on the predicted variables were assessed independently. In the fourth model, all of the social capital components were regressed on the dependent variables. The fifth model is the full model, which includes all independent variables and control variables. PASW 17.0 for Windows was used for the statistical analyses.

Data Screening

Prior to the logistic regression analyses, the data were inspected for problems of missing cases, outliers, and multicollinearity. Initially, listwise deletion was used for each of the dependent variables separately to handle missing entries in the dataset. While the original sample comprised 2740 cases, the listwise deletion reduced the sample size to 1939 for the first dependent variable (major delinquency) and to 1876 for the second dependent variable (minor delinquency). The sample sizes that remained after listwise deletion were deemed adequate for the logistic regression analysis (Peduzzi, Concato, Kemper, Holford, & Feinstein, 1996).

Secondly, since binary logistic regression is sensitive to extreme values of predictors, standardized residuals were examined to detect the outliers. The sample cases with standardized residuals greater than |3| were flagged as outliers (Mertler & Vanatta, 2010), and eliminated from the samples. After deletion of outliers, the sample size for the first dependent variable, major delinquency, was lowered from 1939 to 1879, and the sample size for the second dependent variable, minor delinquency, was reduced from 1876 to 1837, both of which
were still considered adequate for the logistic regression analysis (Hosmer & Lemeshow, 2000).

Finally, as logistic regression is also sensitive to high correlations among predictor variables, the predictor variables were examined for multicollinearity problems. According to Menard (2010) and Mertler and Vanatta (2010), tolerance values for the predictors lower than .1 indicate high multicollinearity. In order to calculate tolerance values for the predictor variables in the study, linear regressions were run for each of dependent variables individually. The obtained tolerance values for the predictor variables indicated no multicollinearity problem as all the tolerance values were substantially greater than the cut off value of .1.

Hypotheses

In order to predict the impact of social capital and control variables on minor and major juvenile delinquencies, the following hypotheses were proposed based on the theoretical framework. The hypotheses concerning the first dependent variable, major delinquency, were as follows.

H1a: The level of time spent with parents is negatively related to the probability of involvement in major delinquency.

H2a: Parental attachment level is negatively related to the probability of involvement in major delinquency.

H3a: Parental supervision level is negatively related to the probability of involvement in major delinquency.

H4a: The level of affiliation with peers who are associated with major delinquent activities is positively related to the probability of involvement in major delinquency.
H5a: Neighborhood supervision level is negatively related to the probability of involvement in major delinquency.

H6a: School attachment level is negatively related to the probability of involvement in major delinquency.

H7a: The level of participation in sport clubs and teams is negatively related to the probability of involvement in major delinquency.

H8a: The level of participation in religious activities is negatively related to the probability of involvement in major delinquency.

H9a: Male juveniles are more likely to be involved in major delinquent activities than female juveniles.

H10a: Age is positively related to involvement in major delinquency.

H11a: The level of relative deprivation is positively related to the probability of involvement in major delinquency.

The following research hypotheses concerning the second dependent variable, minor delinquency were:

H1b: The level of time spent with parents is negatively related to the probability of involvement in minor delinquency.

H2b: Parental attachment level is negatively related to the probability of involvement in minor delinquency.

H3b: Parental supervision level is negatively related to the probability of involvement in minor delinquency.

H4b: The level of affiliation with peers who are associated with minor delinquent
activities is positively related to the probability of involvement in minor delinquency.

H5b: Neighborhood supervision level is negatively related to the probability of involvement in minor delinquency.

H6b: School attachment level is negatively related to the probability of involvement in minor delinquency.

H7b: The level of participation in sport clubs and teams is negatively related to the probability of involvement in minor delinquency.

H8b: The level of participation in religious activities is negatively related to the probability of involvement in minor delinquency.

H9b: Male juveniles are more likely to be involved in minor delinquent activities than female juveniles.

H10b: Age is positively related to involvement in minor delinquency.

H11b: The level of relative deprivation is positively related to the probability of involvement in minor delinquency.
CHAPTER IV

FINDINGS

This chapter describes the findings of the quantitative analyses. First, this chapter introduces the descriptive statistics of the study variables and, secondly, the findings of the binary logistic regression analyses estimating the association between the measures of social capital and Turkish juveniles’ involvement in major and minor delinquent behaviors. The hypotheses are addressed.

Descriptive Statistics

Table 6 depicts the mean, standard deviation, minimum and maximum value, and sample size of each variable. As the predicted variables are dichotomous, their mean scores indicate the proportion of cases coded 1. Thus, the mean of the probability of involvement in major delinquent activities (.089) reveals that only 8.9% of Turkish adolescents reported that they had been involved in any type of major delinquent activities in the past 12 months. However, the proportion of adolescents who were involved in any type of minor delinquent activities in the past 30 days was 21.3%, which is relatively more than that of major delinquent activities.

As the mean scores of family social capital indexes indicate, the sample of Turkish adolescents had, on average, a high level of social capital in the family. Firstly, Turkish adolescents scored an average of 3.7, or “often,” on the index of “time spent with parents.” It appeared that Turkish juveniles “often” spent time with their parents during the weekends and outside their school hours. Secondly, the average score on the index of parental attachment
was 3.1, as the range ran from 1 to 4. That is, the adolescents, on average, “easily” received warmth, advice, and assistance from their parents. Lastly, Turkish juveniles reported that their parents tended to monitor “where they were” and “with whom they were in the evenings.” The average score is 3.6, as this level ranged from 1 to 4.

Table 6

*Descriptive Statistics for Study Variables (Full Sample)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major Delinquency</td>
<td>0.089</td>
<td>0.285</td>
<td>0</td>
<td>1</td>
<td>2317</td>
</tr>
<tr>
<td>Minor Delinquency</td>
<td>0.213</td>
<td>0.409</td>
<td>0</td>
<td>1</td>
<td>2319</td>
</tr>
<tr>
<td><strong>Independent Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Spent with Parents</td>
<td>3.719</td>
<td>1.134</td>
<td>1</td>
<td>5</td>
<td>2591</td>
</tr>
<tr>
<td>Parental Support</td>
<td>3.141</td>
<td>0.668</td>
<td>1</td>
<td>4</td>
<td>2557</td>
</tr>
<tr>
<td>Parental Monitoring</td>
<td>3.563</td>
<td>0.719</td>
<td>1</td>
<td>4</td>
<td>2576</td>
</tr>
<tr>
<td>Delinquent Peers (Major Del.)</td>
<td>1.138</td>
<td>0.506</td>
<td>1</td>
<td>5</td>
<td>2278</td>
</tr>
<tr>
<td>Delinquent Peers (Minor Del.)</td>
<td>1.845</td>
<td>1.016</td>
<td>1</td>
<td>5</td>
<td>2287</td>
</tr>
<tr>
<td>Neighborhood Supervision</td>
<td>3.982</td>
<td>0.984</td>
<td>1</td>
<td>5</td>
<td>2558</td>
</tr>
<tr>
<td>School Attachment</td>
<td>4.151</td>
<td>0.929</td>
<td>1</td>
<td>5</td>
<td>2492</td>
</tr>
<tr>
<td>Participation in Sport Clubs</td>
<td>1.719</td>
<td>1.233</td>
<td>1</td>
<td>6</td>
<td>2363</td>
</tr>
<tr>
<td>Participation in Religious Activities</td>
<td>2.527</td>
<td>0.992</td>
<td>1</td>
<td>4</td>
<td>2478</td>
</tr>
<tr>
<td><strong>Control Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0.473</td>
<td>0.499</td>
<td>0</td>
<td>1</td>
<td>2590</td>
</tr>
<tr>
<td>Age</td>
<td>15.395</td>
<td>0.729</td>
<td>13</td>
<td>18</td>
<td>2608</td>
</tr>
<tr>
<td>Relative Deprivation</td>
<td>2.136</td>
<td>0.954</td>
<td>1</td>
<td>5</td>
<td>2571</td>
</tr>
</tbody>
</table>

The mean scores of affiliations with delinquent peers (minor and major delinquency) suggested an overall low level of association. Turkish adolescents scored an average of 1.14, or
“none,” on the index of affiliation with delinquent peers engaged in major delinquent activities, as the level ranged from 1 to 5. However, on average, the level of affiliation with peers engaged in minor delinquent acts is slightly higher than that with peers involved in major delinquent activities, as the mean (1.845) indicated. The students responded that “few of their friends” were engaged in minor delinquent activities, including smoking and drinking alcohol.

Turkish adolescents, on average, reported a high level of social capital at the community level. The adolescents scored an average of 3.98 on a 5-point scale, or “rather likely,” for the index of neighborhood supervision, which measured the likelihood of neighbors’ reaction against youths’ deviant behaviors, including making graffiti, disrespect to elders, fighting, and breaking-and-entering a house or a car. The students reported an average of 4.13 on a 5-point scale, or “applies seldom to me,” on the school attachment index. The students “seldom” tend to have negative feelings toward their schools and teachers, which indicates a great sense of school attachment. Participation in sport clubs activities had a relatively lower average score compared to other community social capital measures. An average score of 1.7 on a 6-point scale on engagement in sport clubs or teams indicates that, on average, the adolescents tended to participate in these activities almost “once a week.” However, Turkish adolescents reported their participation in religious activities with a mid-level mean score of 2.53 on a 4-point scale.

Table 6 shows that the majority of the sample (53%) was female. Their ages ranged from 14 to 18, the average age being about 15.395. Furthermore, Turkish juveniles seldom felt relative deprivation, as an average score of 2.14 on a 5-point scale suggests.
Multivariate Analyses

In this study, a binary logistic regression model was used as a multivariate quantitative analysis technique to predict the probabilities of both major and minor delinquencies independently using a series of social capital and control variables.

For each dependent variable, five logistic regression models were constructed. In the first three models, the effects of the social capital elements – family social capital, peer effect, and community social capital—were assessed separately. In the fourth model, all of the social capital items were regressed on the predicted variable. The last model is the full model, which includes all independent and control variables.

After the removal of the missing data and outliers from the samples for each group individually, the sample size available for the regression analyses decreased to 1879 for the first group of models, estimating the likelihood of major delinquency, and 1837 for the second group of models, estimating the likelihood of minor delinquency. The alpha level was set to 0.05 to determine the statistical significance of the findings. As the research hypotheses are directional, one-tail tests were used. Thus, two tailed $p$-values were divided by two to have one-tailed $p$-values.
Table 7

*Logistic Regression Estimates Predicting the Odds of Major Delinquency, Turkish Adolescents, 2007 (N = 1879)*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Odds Ratio</td>
<td>B</td>
</tr>
<tr>
<td>Time Spent with Parents</td>
<td>-0.357***</td>
<td>0.7</td>
<td>(0.093)</td>
</tr>
<tr>
<td>Parental Support</td>
<td>-0.285*</td>
<td>0.752</td>
<td>(0.155)</td>
</tr>
<tr>
<td>Parental Monitoring</td>
<td>-0.734***</td>
<td>0.480</td>
<td>(0.114)</td>
</tr>
<tr>
<td>Delinquent Peers (Major Del.)</td>
<td></td>
<td>3.376***</td>
<td>29.261</td>
</tr>
<tr>
<td>Neighborhood Supervision</td>
<td></td>
<td>-0.475***</td>
<td>0.622</td>
</tr>
<tr>
<td>School Attachment</td>
<td></td>
<td>-0.720***</td>
<td>0.487</td>
</tr>
<tr>
<td>Participation in Sport Clubs</td>
<td></td>
<td>0.248***</td>
<td>1.282</td>
</tr>
<tr>
<td>Participation in Religious Act.</td>
<td></td>
<td></td>
<td>-0.099</td>
</tr>
<tr>
<td>Constant</td>
<td>1.691***</td>
<td>5.425</td>
<td>-7.434***</td>
</tr>
<tr>
<td>(0.491)</td>
<td></td>
<td>(3.860)</td>
<td></td>
</tr>
</tbody>
</table>

-2 log likelihood              | 713.245 | 439.374 | 702.880 |
Model X²                      | 102.171 | 376.042 | 112.536 |
Degrees of freedom            | 3       | 1       | 4       |
P-Value                       | <.001   | <.001   | <.001   |
Nagelkerke Pseudo R²          | 0.150   | 0.515   | 0.165   |

(table continues)
Table 7 (continued).

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Odds Ratio</td>
</tr>
<tr>
<td>Time Spent with Parents</td>
<td>-0.266* (0.130)</td>
<td>0.767</td>
</tr>
<tr>
<td>Parental Support</td>
<td>0.010 (0.226)</td>
<td>1.010</td>
</tr>
<tr>
<td>Parental Monitoring</td>
<td>-0.634*** (0.164)</td>
<td>0.531</td>
</tr>
<tr>
<td>Delinquent Peers (Major Del.)</td>
<td>3.126*** (0.260)</td>
<td>22.782</td>
</tr>
<tr>
<td>Neighborhood Supervision</td>
<td>-0.491*** (0.134)</td>
<td>0.612</td>
</tr>
<tr>
<td>School Attachment</td>
<td>-0.474*** (0.139)</td>
<td>0.623</td>
</tr>
<tr>
<td>Participation in Sport Clubs</td>
<td>-0.161 (0.131)</td>
<td>0.852</td>
</tr>
<tr>
<td>Participation in Religious Activities</td>
<td>-0.235 (0.149)</td>
<td>0.790</td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.271 (0.189)</td>
<td>1.282</td>
</tr>
<tr>
<td>Relative Deprivation</td>
<td>0.438** (0.152)</td>
<td>1.549</td>
</tr>
<tr>
<td>Constant</td>
<td>0.355 (1.061)</td>
<td>1.424</td>
</tr>
<tr>
<td>-2 log likelihood</td>
<td>373.127</td>
<td>341.422</td>
</tr>
<tr>
<td>Model X²</td>
<td>442.289</td>
<td>473.994</td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>P-Value</td>
<td>&lt;.001</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Nagelkerke Pseudo R²</td>
<td>0.596</td>
<td>0.633</td>
</tr>
</tbody>
</table>

*p ≤ .05  **p ≤ .01  ***p ≤ .001, One-Tailed Test.

Notes: The odds ratio is the antilog of the B. and the standard errors are in parentheses.
Table 7 shows the first group of regression models, estimating the likelihood of major delinquency. In the first model, the family social capital items—time spent with parents, parental support, and parental monitoring—were used to predict the outcome variable. The goodness-of-fit statistics show the model to be a good fit to the data ($\chi^2 = 102.171, p < .001$). This model accounts for 15% of the variation in the likelihood of juveniles’ involvement in major delinquent activities (pseudo $R^2 = .195$).

According to Model 1 (Table 7), all the items of family social capital had statistically significant effects on the outcome variable. As proposed in the research hypotheses (H1a-H3a), time spent with parents, parental support and parental supervision had negative effects on the probability of major delinquent activities. More specifically, all else being equal, the probability of adolescents’ engagement in any kind of major delinquent activities decreased by 30% ($[.70 - 1] * 100 = -30\%$) with each level increase in time adolescents spend with their parents. Similarly, with each incremental increase in the degree of parental support and warmth, the probability of adolescents’ engagement in major delinquent activities decreased by 25% ($[.75 - 1] * 100 = -25\%$). Similarly, the probability of serious delinquent activities decreased by 52% ($[.48 - 1] * 100 = -52\%$) with each level increase in parental supervision.

In Model 2 (Table 7), the predictor variable, adolescents’ association with delinquent friends involved in major delinquent activities, was used to predict the likelihood of juveniles’ engagement in major delinquent activities. As the table illustrates, a test of the model with one predictor, affiliation with delinquent peers, against a constant-only model was statistically significant ($\chi^2 = 376.042, p < .001$). The pseudo $R^2$ of .515 indicates that the overall model explains about 52% of the variation in the likelihood of major delinquency,
which is a greater percentage compared to the previous model using family social capital items. As expected in Research Hypothesis H4a, the level of affiliation with delinquent peers had a significant and positive effect on the likelihood of engagement in major delinquent activities. Specifically, for each level increase in the association with delinquent peers, the likelihood of involvement in major delinquent activities rose by 2826% ([29.26 - 1] * 100 = 2826%), which indicates a highly strong correlation between the dependent and independent variables.

In Model 3 (Table 7), the effects of four community social capital items—neighborhood supervision, school attachment, participation in sport clubs, and participation in religious activities—were estimated in relation to probability of involvement in major delinquent activities. The model-fit statistics reveal that the model was statistically significant ($\chi^2 = 112.536, p < .001$), and at least one of the community social capital variables had a significant effect on the probability of major delinquency. As the Nagelkerke pseudo $R^2$ indicates, this model explains 16.5% of the total variance in the predicted variable.

According to the results shown in Model 3, only two of the four hypotheses (H5a and H6a), those related to neighborhood supervision and school attachment items, were supported. Specifically, the level of neighborhood supervision and school attachments had statistically significant and negative influences on the probability of major delinquency. All else being equal, a one-level elevation in neighborhood supervision reduced adolescents’ probability of engagement in serious delinquent acts by 38%. Similarly, the probability of major delinquency dropped by 51% ($[.49 - 1] * 100 = -51\%$) with each level increase in students’ attachment to their school.

The two hypotheses pertaining to participation in sport clubs and religious activities (H7a and H8a) were not supported. Although participation in sport clubs had a statistically
significant effect, its relation with the likelihood of major delinquency was in the opposite
direction from that proposed by the theory. Thus, the likelihood of major delinquency for
adolescents increased about 25%, instead of decreasing, with each level increase in
participation in sport clubs. However, the correlation between participation in religious
activities and the likelihood of major delinquency was statistically insignificant ($p = .174$),
although the relation was in the predicted direction ($B = -.10$).

In Model 4 (Table 7), the probability of major delinquency was regressed on all social
capital items. The overall fit of the model to the data was good (Model $\chi^2 = 442.289$, $p < .001$). The Nagelkerke pseudo $R^2$ of .596 show that this model explains about 60% of the
variance in the probability of major delinquency.

Considering the effect of all social capital items simultaneously, the direction and
significance level of some relationships changed. For instance, when all social capital items
were considered at once, only two (H1a and H3a) of the three family social capital items
were supported. However, when the family social capital effects were considered alone in
Model 1 (Table 7), all the related hypotheses (H1a, H2a, and H3a) were supported.

According to Model 4 (Table 7), all else being equal, the likelihood of adolescents’
involvement in any type of major delinquent activities decreases by 23% with each level
increase in time adolescents spend with their parents. Similarly, with each level of increase in
parental supervision, the probability of adolescents’ engagement in serious delinquent
activities is reduced by 47%. Although the effects of parental support were significant in
Model 1, having taken into consideration all social capital items in Model 4, the correlation
became statistically insignificant ($p = .483$).

The impact of affiliation with delinquent peers in Model 4 remained similar to its
effect in Model 2. For each level increase in juveniles’ association with delinquent peers, the
likelihood of major delinquency increased by 2178% ([22.78 - 1] * 100 = 2178), which still indicates a very strong association.

Among the community social capital items in Model 4, only the effect of participation in sport clubs significantly changed as compared to the predictions of Model 3. In Model 3, participation in sport clubs activities had a positively significant association with the outcome variable in the reverse direction of Hypothesis H7a. However, it now demonstrates no statistically significant effect on the outcome variable; however, the direction of relation changed from positive to negative, as predicted (B = -0.161, p = .109). The significance level and the direction of the relationship for the other three community social capital items remained similar to the previous model. The two hypotheses about neighborhood supervision and school attachment (H5a and H6a) were supported. Holding all else constant, the likelihood of adolescents’ involvement in any type of major delinquent activities decreased by 39%, with each level increase in neighborhood supervision. With each level of increase in school attachment, the likelihood of adolescents’ involvement in major delinquent activities decreased by 38%. Similar to Model 3, Hypothesis H9a, regarding participation in religious activities, was also not supported in Model 4 (p = .069).

In Model 5 (Table 7), the likelihood of juveniles’ engagement in major delinquent activities was regressed on all social capital items, and control variables. The overall fit of the model to the data was good ($\chi^2 = 473.994, p < .001$). The -2 Log Likelihood ($-2LL = 341.422$) indicated that this full model was a significantly better fit to the data as compared to the other models. The addition of control variables to the model significantly increased its explanatory power. As the Nagelkerke pseudo $R^2$ indicated, this model explains 63.3 % of the total variance in the likelihood of major delinquency.

In this model, three control variables – gender, age, and relative deprivation – were
included as controls. Holding all else equal, sex and relative deprivation level of students had a statistically significant effect on the likelihood of Turkish juveniles’ involvement in major delinquent acts. Male adolescents were more likely to be involved in major delinquent activities than females students ($B = 1.858, p = .001$). To be more specific, male students were 6.41 times likelier than female students to commit any type of major delinquent acts (Odds ratio = 6.41). In addition, the perceived relative deprivation level of students was positively associated with the predicted variable ($B = 0.438, p < .01$). For each level increase in the level of relative deprivation perceived by students, the likelihood of major delinquency increased by 55%. On the other hand, age had no significant effect on the dependent variable ($p = .076$).

As Table 7 illustrates, the addition of the control variables to the model altered the strength and significance of some of the predictor variables. In particular, once the control variables were introduced, only one (H3a) of three hypotheses pertaining to family social capital items continued to be supported. The association between time spent with parents and major delinquency lost its statistical significance ($p = .089$). As in Model 4, the effect of parental support remained statistically insignificant. Among the family social capital items in Model 5, only parental supervision had a statistically significant negative effect on the probability of major delinquency ($B = -0.428, p < .01$). More specifically, all else being equal, the likelihood of adolescents’ involvement in any type of major delinquent activities decreased by 35% with each level increase in parental supervision.

Even with the control variables added to the regression analysis, the association with delinquent peers and the predicted variables remained statistically significant and essentially similar in magnitude. For each level increase in juveniles’ association with delinquent peers, the probability of major delinquency increased by 2195% ($\left(22.95 - 1\right) * 100$)
In addition, when the controls were introduced, all four of the community social capital hypotheses (H5a-H8a) were supported. Although the previous models did not support Hypotheses H7a and H8a, regarding the impact of participation in sport clubs and religious activities, these variables demonstrated statistically significant and negative relationships with the dependent variable when the control variables were included in the equation. Specifically, controlling for all other variables in the model, with each level increase in participation in sport clubs activities, the probability of major delinquency decreased by 20%. Similarly, with each level increase in participation in religious activities, the probability major delinquent activities decreased by 33%. The effects of neighborhood supervision and school attachment remained negatively and significantly associated with the outcome variable as in the previous models. Specifically, all else being equal, for each level increase in neighborhood supervision and school attachment, the likelihood of major delinquent activities decreased by 32% and 36%, respectively.
Table 8

*Logistic Regression Estimates Predicting the Odds of Minor Delinquency, Turkish Adolescents, 2007 (N = 1837)*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Odds Ratio</td>
<td>B</td>
</tr>
<tr>
<td>Time Spent with Parents</td>
<td>-0.403***</td>
<td>0.668 (0.058)</td>
<td></td>
</tr>
<tr>
<td>Parental Support</td>
<td>-0.386***</td>
<td>0.680 (0.099)</td>
<td></td>
</tr>
<tr>
<td>Parental Monitoring</td>
<td>-0.648***</td>
<td>0.523 (0.082)</td>
<td></td>
</tr>
<tr>
<td>Delinquent Peers (Minor Del.)</td>
<td>0.969***</td>
<td>2.635 (0.061)</td>
<td></td>
</tr>
<tr>
<td>Neighborhood Supervision</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Attachment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation in Sport Clubs</td>
<td>0.189***</td>
<td>1.209 (0.047)</td>
<td></td>
</tr>
<tr>
<td>Participation in Religious Act.</td>
<td>-0.145*</td>
<td>0.865 (0.064)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>3.397***</td>
<td>29.885 (0.382)</td>
<td>-3.540***</td>
</tr>
</tbody>
</table>

-2 log likelihood: 1562.613, 1484.037, 1590.335
Model X²: 214.950, 293.527, 187.228
Degrees of freedom: 3, 1, 4
P-Value: <.001, <.001, <.001
Nagelkerke Pseudo R²: 0.178, 0.238, 0.156

*(table continues)*
Table 8 (continued).

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Model 4</th>
<th></th>
<th>Model 5</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Odds Ratio</td>
<td>B</td>
<td>Odds Ratio</td>
</tr>
<tr>
<td>Time Spent with Parents</td>
<td>-0.350***</td>
<td>0.704</td>
<td>-0.259***</td>
<td>0.772</td>
</tr>
<tr>
<td></td>
<td>(0.066)</td>
<td></td>
<td>(0.070)</td>
<td></td>
</tr>
<tr>
<td>Parental Support</td>
<td>-0.206*</td>
<td>0.813</td>
<td>-0.274**</td>
<td>0.760</td>
</tr>
<tr>
<td></td>
<td>(0.113)</td>
<td></td>
<td>(0.118)</td>
<td></td>
</tr>
<tr>
<td>Parental Monitoring</td>
<td>-0.564***</td>
<td>0.569</td>
<td>-0.441***</td>
<td>0.644</td>
</tr>
<tr>
<td></td>
<td>(0.093)</td>
<td></td>
<td>(0.097)</td>
<td></td>
</tr>
<tr>
<td>Delinquent Peers (Major Del.)</td>
<td>0.883***</td>
<td>2.418</td>
<td>0.884***</td>
<td>2.421</td>
</tr>
<tr>
<td></td>
<td>(0.069)</td>
<td></td>
<td>(0.070)</td>
<td></td>
</tr>
<tr>
<td>Neighborhood Supervision</td>
<td>-0.073</td>
<td>0.930</td>
<td>-0.085</td>
<td>0.919</td>
</tr>
<tr>
<td></td>
<td>(0.075)</td>
<td></td>
<td>(0.076)</td>
<td></td>
</tr>
<tr>
<td>School Attachment</td>
<td>-0.564***</td>
<td>0.569</td>
<td>-0.590***</td>
<td>0.555</td>
</tr>
<tr>
<td></td>
<td>(0.076)</td>
<td></td>
<td>(0.078)</td>
<td></td>
</tr>
<tr>
<td>Participation in Sport Clubs</td>
<td>0.078</td>
<td>1.081</td>
<td>0.006</td>
<td>1.006</td>
</tr>
<tr>
<td></td>
<td>(0.055)</td>
<td></td>
<td>(0.058)</td>
<td></td>
</tr>
<tr>
<td>Participation in Religious</td>
<td>-0.102</td>
<td>0.903</td>
<td>-0.254***</td>
<td>0.776</td>
</tr>
<tr>
<td>Activities</td>
<td>(0.074)</td>
<td></td>
<td>(0.081)</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td>0.821***</td>
<td></td>
<td>2.274</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.177)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.266**</td>
<td>1.305</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.100)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative Deprivation</td>
<td>-0.302***</td>
<td>0.739</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.083)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>3.142***</td>
<td>23.141</td>
<td>2.498***</td>
<td>12.155</td>
</tr>
<tr>
<td></td>
<td>(0.609)</td>
<td></td>
<td>(0.805)</td>
<td></td>
</tr>
<tr>
<td>-2 log likelihood</td>
<td>1265.971</td>
<td></td>
<td>1224.439</td>
<td></td>
</tr>
<tr>
<td>Model X²</td>
<td>511.592</td>
<td></td>
<td>553.124</td>
<td></td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>8</td>
<td></td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>P-Value</td>
<td>&lt;.001</td>
<td></td>
<td>&lt;.001</td>
<td></td>
</tr>
<tr>
<td>Nagelkerke Pseudo R²</td>
<td>0.392</td>
<td></td>
<td>0.419</td>
<td></td>
</tr>
</tbody>
</table>

*p ≤ .05  **p ≤ .01 ***p ≤ .001, One-Tailed Test.

Notes: The odds ratio is the antilog of the B. and the standard errors are in parentheses.
**Minor Delinquency Scale**

Table 8 presents the regression models estimating the probability of minor delinquency. Similar to the previous group, Model 1 depicts the association between family social capital items and minor delinquency. The goodness-of-fit statistics show the model to be a good fit to the data ($\chi^2 = 214.950, p < .001$). This model explains about 18% of the variation in the probability of juveniles’ involvement in any type of minor delinquent acts (pseudo $R^2 = .178$).

All the family social capital items in this model had statistically significant effects on the predicted variable. As expected in Research Hypotheses H1b, H2b, and H3b, time spent with parents, parental support and parental supervision were significantly and negatively correlated with the likelihood of minor delinquency. Controlling for other variables, the likelihood of adolescents’ engagement in any type of minor delinquent activities was reduced by 33%, with each level increase in time juveniles spend with their parents. Similarly, for each level of increase in parental support and parental supervision, the likelihood of minor delinquency decreased by 22% and 48%, respectively.

Model 2 (Table 8) illustrates the relationship between juveniles’ association with delinquent friends engaged in minor delinquent activities and the odds of minor delinquency. The overall fit of the model to the data was statistically significant ($\chi^2 = 293.527, p < .001$). The Nagelkerke $R^2$ (0.238) indicates that the model accounts for about 24% of the variance in the dependent variable. As expected in research hypothesis H4b, the level of association with delinquent peers had a significant and positive influence on the odds of engagement in minor delinquent acts ($p < .001$). More specifically, with each level increase in juveniles’ association with delinquent friends, the likelihood of their involvement in minor delinquent activities
increased by 164%.

In Model 3 (Table 8), the effects of four community social capital predictors were regressed on the odds of minor delinquent activities. The overall fit of the model was statistically significant ($\chi^2 = 187.228, p < .001$). As the pseudo $R^2$ indicated, this model explains about 16% of the total variance.

Table 8 indicates that, of the four hypotheses concerning community-based social capital, only two, school attachment and participation in religious activities (H6b and H8b), were supported. However, Hypotheses H5b and H7b, regarding neighborhood supervision and participation in sport clubs, were not confirmed. Neighborhood supervision had no statistically significant influence on the predicted variable, but the direction of relation is negative, as predicted ($B = -0.088, p = .089$). Contrary to the proposed hypothesis, participation in sport clubs activities appeared significantly to increase the probability of involvement in minor delinquent activities. The odds of minor delinquency increased by 21% with each level increase in participation in sport clubs activities.

The other items of community social capital were statistically and negatively associated with the odds of minor delinquency, as proposed by Hypotheses H6b and H8b. All else being equal, a one-level increase in students’ school attachment and participation in religious activities decreased their likelihood of engagement in minor delinquent acts by 54% and 13%, respectively.

In Model 4 (Table 8), all social capital items were regressed on the probability of minor delinquency. As this table indicates, the model was overall a good fit for the data (Model $\chi^2 = 511.592, p < .001$). Furthermore, the -2 Log Likelihood (1265.971) model and goodness-of-fit
statistics indicated that this model fits the data significantly better than the previous three models. The Nagelkerke pseudo $R^2$ of .392 suggests that the model including all the social capital items explains 39% of the variance in the probability of minor delinquency.

When the effects of all social capital items are considered simultaneously, the significance level and the direction of relationship between family social capital items and the dependent variable remained similar to those of Model 1. Hypotheses H1b, H2b, and H3b were confirmed in both Model1 and Model 4. Specifically, all else being equal, for each level increase in time spent with parents, parental support, and parental supervision, the probability of juveniles' involvement in any type of minor delinquent activities decreased by 30%, 19%, and 43%, respectively.

The association between delinquent peers and the probability of minor delinquency continued to be significant in Model 4. With each level increase in juveniles' association with delinquent peers, the probability of minor delinquency increased by 142 %.

When all social capital variables are introduced, among the community social capital measures, the effects of participation in sport clubs and religious activities significantly changed. While sport clubs activities had positive and religious activities had negative significant associations with the probability of minor delinquency in Model 3, both predictor variables now have no statistically significant effects on the predicted variable. On the other hand, the significance level and the direction of relationships between the other two items of community social capital and the dependent variable remained similar to those of the previous model (Model 3). While Hypothesis H6b, pertaining to neighborhood supervision, was not supported, the association with school attachment and the outcome variable was statistically
significant and in the predicted direction. The probability of juveniles’ involvement in any type of minor delinquent activities decreased by 40% with each level increase in school attachment.

In Model 5 (Table 8), a binary logistic regression was employed to estimate the effects of all of the social capital items on the likelihood of minor delinquency, controlling for demographic and economic variables. As Table 8 illustrates, the overall fit of the model to the data was good ($\chi^2 = 553.124, p < .001$). The -2 Log Likelihood (-2LL = 1224.439) indicated that the full model was a significantly better fit to the data than the others. As the Nagelkerke pseudo $R^2$ indicated, this model explains 41.9% of the total variance in the likelihood of minor delinquency.

In the final model, three control variables – gender, age, and relative deprivation – were included as controls. All else being equal, gender, age, and relative deprivation level of students had statistically significant effects on the odds of minor delinquency among Turkish adolescents. Boys were more likely to become embroiled in minor delinquent activities than girls ($B = .821, p = .001$). To be more specific, male students were 2.27 times likelier than female students to engage in any type of minor delinquent acts (Odds ratio = 2.27). In addition, age was positively associated with the odds of minor delinquency. For each year increase in age, the odds of minor delinquency increase by 31%. Contrary to its association with major delinquency, juveniles’ perceived deprivation level was negatively correlated with minor delinquency. For each level increase in the level of relative deprivation perceived by students, the likelihood of minor delinquency decreased by 26%.

As Table 8 presents, the addition of the control variables to the regression only changed the effect of juveniles’ participation in religious activities. The effect of participation in religious
activities on the probability of minor delinquency became statistically significant, as hypothesized. To be more specific, all else being equal, the likelihood of juveniles’ involvement in any type of minor delinquent activities decreased by 22% with each level increase in attending religious activities.

For all other social capital items, the significance level and the direction of relationships remained similar to the previous models. All of the three hypotheses related to family social capital (H1b, H2b, and H3b) were confirmed in all three models, that is, Models 3, 4, and 5. For each level increase in time spent with parents, parental support, and parental supervision, the likelihood of juveniles’ involvement in any type of minor delinquent activities decreased by 23%, 24% and 36%, respectively.

The relation between juveniles’ association with delinquent friends and the predicted variable continued to be significant in Model 5. With each level increase in juveniles’ association with delinquent peers, the probability of minor delinquency increases by 142%.

The effects of community social capital items, other than participation in religious activities, remained similar to the previous model. As in Model 4, the hypotheses regarding neighborhood supervision and juveniles’ participation in sport clubs (H5b and H7b) were not supported in Model 5. However, the hypothesis pertaining to students’ school attachment (H6b) was confirmed in both models. Holding all else constant, the probability of juveniles’ involvement in any type of minor delinquent activities decreased by 44% with each level increases in school attachment.

In sum, although the significance level and the strength of associations somewhat varied depending on each dependent variable, the findings, in general, indicate that a higher level of
positive social capital, such as family-based and community-based social capital, is negatively associated with the probability of Turkish adolescents’ being involved in major and minor delinquent activities. In contrast, adolescents’ higher level of negative social capital, such as affiliations with delinquent peers, is positively associated with the probability of both types of delinquent activities. Overall, the results are consistent with the previous literature and provide significant support for the research hypotheses.
CHAPTER V

DISCUSSION AND CONCLUSIONS

This chapter provides an in-depth discussion of findings and policy implications based on the research findings. This chapter also presents limitations of the study and recommendations for future research.

Summary and Discussion

The research hypotheses, in general, stated that the probabilities of Turkish adolescents' engagement in minor and major delinquent activities were higher for those who had less positive social capital and more negative social capital. Although the strength and direction of these relationships varied depending on the type of delinquent behavior and the quality and context of social networks, the findings, overall, present persuasive support for most of the research hypotheses.

In the first part of the analysis, Hypotheses H1a-H9a explored the issue of whether the probability of juveniles' involvement in any type of major delinquent activities (which include serious criminal offences such as larceny, using violence for theft and robbery, breaking and entering a car or building for robbery, and property damage and vandalism) was negatively associated with the level of adolescents' access to social capital resources. In the second part of the analysis, Hypotheses H1b-H9b sought to determine whether the likelihood of Turkish adolescents' involvement in minor delinquent activities, which includes less severe activities compared to major delinquency, was influenced by three dimensions of social capital. The scale of minor delinquency consists of smoking cigarettes, chewing tobacco, snuffing, and using
alcohol, which do not require any criminal investigation by Turkish law enforcement agencies.

The dimensions of social capital were categorized into three groups: family, delinquent peers and community. Adolescents’ relations with their parents and communities, which comprise neighbors, schools, and organized activities, are considered a source of positive social capital. On the other hand, adolescents’ associations with delinquent peers are taken as an indicator of negative social capital for juveniles. The results, showing the significance and the strength of association between social capital items and minor and major delinquency, are conformable to the theoretical hypotheses in general.

**Family Social Capital**

Hypotheses H1a-H3a and H1b-H3b posited that family social capital elements, the first dimension of social capital, would be negatively correlated to the probabilities of both major and minor delinquency. Generally, some support was found for these hypotheses.

Of the elements of the family social capital measured in this study, parental supervision appeared to be the strongest predictor of major delinquency. It was negatively and significantly associated with the probability of major delinquency in each of the three models. The second family social capital element, time spent with parents, had negative and significant relations with the outcome variable. However, the introduction of control variables diminished its effect on the likelihood of major delinquency. Similarly, the level of parental support and warmth appeared to have some significant association with the predicted variables, but the addition of other social capital elements and control variables into the equation reduced its effect on major delinquency. This finding is tentative to some extent, since it is not possible to truly distinguish
the effect of parental support and warmth from certain other community and delinquent peer effects. For instance, the effect of parental support might be suppressed by a strong impact of delinquent friends.

The findings are consistent with the previous literature. However, in relation to major delinquency, only parental supervision received significant support in the final model, while the other two items, time spent with parents and parental support, did not remain significantly associated with major delinquency.

In terms of the relationship between family social capital and minor delinquency, all three hypotheses (H1b-H3b) received significant and consistent support from the data. As postulated in this study, all three elements of family social capital, time spent with their parents, parental support, and parental supervision, had negative associations with the probability of minor delinquency among Turkish adolescents. Among the family social capital elements, parental supervision had the strongest effect on both minor and major delinquent activities.

The findings are consistent with the literature that suggests a negative association between family-based social capital and delinquency. Adolescents’ interactions with their parents and parental investments in children, which provide an important source of social capital, impose an inhibiting effect on delinquency (Wright et al., 2001). The cumulative effects of family social capital can keep children away from engaging in deviant behaviors by eliminating the possibility of involvement in criminal activities. According to Coleman (1990), parental supervision is an essential source of social capital that provides adolescents clear principles and enforces them through informal social control. Likewise, the findings indicated
that parental supervision had a significant effect on the development of social behaviors and preventing Turkish adolescents from minor and major delinquent activities.

Peer Relations

In this study, Hypotheses H4a and H4b investigated the question of whether affiliation with more delinquent friends increased the likelihood of Turkish juveniles to be involved in both major and minor delinquent activities. The results strongly supported these hypotheses and indicated a highly robust correlation between these variables. Although Model 2 (Table 7) consists of only one predictor variable (the level of affiliation with delinquent peers), it explains about 52% of the variation in the likelihood of major delinquency, which is a considerably high percentage. Likewise, minor delinquency was strongly related to the level of relations with delinquent peers. As Table 8 reveals, the level of affiliation with delinquent peers explains about 24% of the variation in the likelihood of minor delinquency. However, minor delinquency was not as strongly associated with delinquent peers as major delinquency was.

Overall, the findings in this section are entirely consistent with the literature and a number of criminological theories such as differential association and social bonding theories (Farrington, 1995; Fergusson & Horwood, 1996; Woodward et al., 2002). As Portes and Landolt (1996) argue, close connections with delinquent and criminal individuals might lead to “downward leveling” and increase the level of juveniles’ association with deviant activities.

In spite of the strong and significant correlation between delinquent peers and the likelihood of involvement in delinquent behaviors, due to the restrictions imposed by the use of cross-sectional data, the reasons motivating this correlation are not so clear (Shoemaker, 2009).
This correlation may have resulted from social homophily or assimilation of friends (Mercken, et al., 2007; Borsari & Carey, 2001; Shoemaker, 2009). Social homophily, which refers to the selection-based association between delinquent peers according to similar behavioral patterns, might present a spurious relationship between delinquent peer affiliation and deviant activities. On the other hand, friendship assimilation provides a causal relation between the predictor and predicted variable. Previous researchers have mostly emphasized the assimilation effect of friends in explaining the strong correlation between delinquent friends and delinquent conduct (Pearson et al., 2006; Poelen et al., 2007). Furthermore, students’ involvement in structured social settings, such as school and extra-curricular organized activities, mostly impedes non-random, selection-based matching of students to their friends (Kiesner et al., 2003). In addition, according to Steglich et al. (2010), peer influence has more capacity to explain the similarities among delinquent peers than homophily. Thus, the previous literature suggests that a spurious relation between association with delinquent friends and involvement in delinquent activities is not very likely.

Community Social Capital

Thirdly, the effect of community-based social capital was analyzed to understand adolescent’s involvement in major and minor delinquent activities. Hypotheses H5a-H8a and H5b-H8b predicted that there would be negative correlations between community social capital indicators and the probability of major and minor delinquent behaviors. In general, significant support was found for these hypotheses. However, the findings provided more significant support for Hypotheses H5a-H8a, pertaining to major delinquency, than for those concerned
with minor delinquency. Each of these hypotheses, H5a to H8a, concerning the impact of community social capital on major delinquency, were supported in the final model that included all study variables.

Neighborhood

The consistent support for the association between neighborhood supervision and major delinquency reveals the significance of social interaction and non-interaction in the neighborhoods in terms of the development of informal social control against serious criminal behaviors. As proposed by Sampson and Laub (1993), informal social control in the neighborhood encourages adolescents to act in the interest of their community and for the common good. While law enforcement agencies struggle with criminal conduct in an institutional and official manner, the collective reactions of community members against serious criminal conduct decrease the prevalence of criminal activities and keeps social order in an informal way (Sampson et al., 1997). Similar to previous research in Western societies (Sampson & Groves, 1989), this study illustrated that the presence of unsupervised adolescents in a neighborhood was a predictor of a high level of major criminal conduct, including larceny, theft, robbery and vandalism, among Turkish adolescents.

Contrary to its association with major delinquency, neighborhood supervision is not significantly related to minor delinquency. Hypothesis H5b did not receive support in any of three models. This result may be due to the fact that in Turkish communities, neighbors may disregard juveniles’ minor delinquent activities. For instance, community members may see smoking, which is very common in Turkish society, as a normal activity, as opposed to other
serious offenses. Additional research is needed to explore this issue.

School

These results revealed that among Turkish adolescents, stronger relations with their school were consistently correlated with a lower level of involvement in both major and minor delinquent activities. The findings for each dependent variable provided robust support for the research hypotheses. This consistent relationship between school attachment and delinquency might be due to the fact that students spend a considerable amount of their time in school, in which formal and informal relations grow among students and teachers (Coleman, 1990).

As demonstrated by other researchers (Bryk & Rollow, 1993; Buysee, 1997; Donohew et al., 1999; Nakhaie & Sacco, 2009), close relations between students and teachers, which refer to a high level of social capital, discourage students from being engaged in anti-social behaviors. Similarly, the findings of this study indicated that the level of Turkish students’ attachment to their school was negatively associated with their engagement in major and minor delinquent activities.

Participation in Organized Activities

The effect of participation in sport clubs varied across major and minor delinquency. Hypothesis H7a, which predicted a negative association between participation in sport clubs and teams and major delinquency, received significant empirical support. Even though a positive and significant relationship between the variables was observed in the first model, which included only community-social capital items, the addition of other social capital items to
the model made this relationship insignificant. Further, after controlling for all independent and control variables, a significant negative association was observed, which is consistent with social capital theory. Therefore, the result in the final model confirmed the Research Hypothesis (H7a), which proposed a decrease in the likelihood of serious criminal activities when students participate in more sport clubs activities.

On the other hand, Hypothesis H7b, pertaining to participation in sport clubs and teams and minor delinquency, did not receive any significant support. Even in the first model, including only community social capital items, the association was significantly contrary to the predicted direction. This might be due to the fact that, as the previous literature reported, some types of activities, such as sport activities in recreation centers, except for competitive team sports, are characterized as low-structured leisure activities. Adolescents’ involvement in low-structured activities may cause increased associations with delinquent peers and decreased relations with parents, which may in turn lead to a higher level of deviant behaviors (Mahoney & Stattin, 2000; Osgood, Wilson, O’Malley, Bachman, & Johnston, 1996). Some studies reported a positive correlation between youth activities, such as adolescents’ participation in summer camps and youth centers, and deviant behaviors, such as drinking alcohol (McCord, 1992; Bergmark & Andersson, 1999).

The findings of this study partially confirmed the previously mentioned statements in the literature. However, the addition of other social capital items to the model changed the relationship between sport clubs participation and minor delinquency from positive to negative. Specifically, the positive association between sport clubs participation and minor delinquency disappeared when community social capital items and delinquent peer effect were
controlled for. Similarly, the association of minor delinquency with sport clubs participation changed to a significant and negative association form a positive one, after holding all other social capital items and control variables constant.

The findings of this study supported Hypotheses H8a and H8b, which predicted a negative correlation between the level of adolescents’ participation in religious activities and major and minor delinquent activities. For major delinquency, even though this relationship was insignificant in the first two models, once the control variables were included, the results showed a significant negative association. Thus, this result is consistent with social capital theory and the previous research, which suggest such a negative association (Putnam, 2000; Parcel & Dufur, 2004). Similar to its effect on major delinquency, participation in religious activities had a significant negative effect on minor delinquent activities. This finding supports the argument that involvement in religious activities discourages adolescents from participating in serious criminal activities as well as minor deviant behaviors. Thus, such organized activities are important resources for Turkish juveniles to refrain from deviant activities. This result emerges due to the fact that religious activities provide a kind of extracurricular education and inculcate moral values. It is obvious that participation in religious activities facilitates adolescents’ contact with others sharing similar beliefs and values. Involvement in religious activities enhances a trustful network of cooperation and mutual assistance among the participants, which encourages adolescents to engage in conformist behaviors and to refrain from delinquent activities (Putnam, 2000; Parcel & Dufur, 2004). Overall, these activities provide various positive outcomes for adolescents. The findings conform to the theoretical implications and provide support for Hypotheses H7a, H8a, and H8b concerning participation in
sport clubs activities and religious activities.

**Control Variables**

The control variables, overall, contributed to the explained variance of the likelihood of each dependent variable. Specifically, gender had a significant association with the likelihood of major and minor delinquent activities. These results are consistent with the existing research, which suggests that males tend to be involved in more delinquent activities (Canter, 1982). However, the correlations between relative deprivation and minor and major delinquency were reverse from one another. While relative deprivation was positively associated with the likelihood of major delinquency, minor delinquency was negatively associated with this control variable. This might be due to the fact that, in this study, minor delinquent activities refer to substance use, including smoking, using alcohol, snuffing, and chewing tobacco; hence, economic problems of adolescents somehow hinder their access to these substances. On the other hand, major delinquent activities mostly refer to property crimes, including theft, robbery, and larceny. Therefore, a positive correlation between major delinquent activities and relative deprivation is reasonable. Moreover, as reported by other researchers, criminal activities including property crimes (Chester, 1976; Eberts & Sehwirian, 1968) and violent crimes (Blau & Blau, 1982; Krahn et al., 1986) are associated with the individuals’ relative deprivation. Similar to relative deprivation, the effect of age on major delinquency differs from that on minor delinquency. While the findings did not present a significant correlation between age and the likelihood of major delinquency, age was positively correlated with the likelihood of minor delinquency.
In sum, it appears that lack of social capital significantly contributes to Turkish adolescents’ involvement in major and minor delinquent activities. However, there are some differences among the effects of social capital items for each outcome variable. In general, adolescents’ increasing access to positive social capital through relations with parents and interaction with the community appears to decrease the likelihood of involvement in major and minor delinquent activities. On the other hand, the increasing association with delinquent peers, which is considered negative social capital, dramatically increases the likelihood of involvement in major and minor delinquent activities. Overall, these findings suggest that Turkish adolescents’ greater access to social capital decreases the likelihood of their involvement in delinquent behaviors.

Policy Implications

The findings offer a number of important policy implications. The results illustrate that the effect of delinquent peers is the most critical factor that should be considered, along with coping strategies, as a way to help reduce the involvement of juveniles in delinquent activities. Government officials should develop programs so as to detach gang members from gangs and integrate them back into conventional society. For this purpose, officials might assign local adults to contact neighborhood gangs and provide their members opportunities to associate with conformist individuals. Additionally, these assigned persons might encourage adolescents to participate in highly-structured leisure activities, such as sport teams, which might enable them to associate with conformist teenagers and adults.

The findings suggest that strong social capital in family settings prominently affects
adolescents’ social behaviors. Parents’ support and involvement with their children, intimacy between family members, and parental supervision are among the essential elements of social capital in the family. Therefore, parents should be informed of the important role that family social capital plays in reducing the likelihood of juveniles’ involvement in delinquent activities.

Government officials, municipalities and NGOs should provide educational programs for parents to improve their parenting skills, which might include building closer emotional bonds with their children, giving emotional support, and supervising activities and relations.

As the findings indicate, community-based social capital also plays a major role in keeping Turkish adolescents away from engagement in serious delinquent activities. Thus, policies that enable the reinforcement of neighborhood-based social capital are necessary. Collaboration and connection of community members contributes to the development of neighborhood-based social capital, and more specifically, the collective efficacy and neighborhood supervision of adolescents in the community (Sampson et al., 1997).

In order to integrate community members and to encourage neighbors to be concerned about the deviant activities in their neighborhoods, city municipalities and mukhtars (who are the elected heads of a neighborhood or village within a city or town) should use information technology, such as weekly newsletters, to provide information for community members about events and training programs in the community. In addition, these formal organizations should encourage local volunteer organizations to meet with the new residents face-to-face. Thus, these new residents can easily engage in community life and integrate with their neighbors. Moreover, volunteers can organize events, such as neighbors’ days, reading days, and park concerts, to bring residents from various backgrounds together and to facilitate the
improvement of collective efficacy.

Sampson et al. (1997) emphasize the necessity of “community policing” strategies, which encourage residents to use “self-help” strategies to prevent anti-social activities in their neighborhoods. However, Sampson et al. (1997) imply that residents’ collective efforts may not be necessarily sufficient to overcome criminal and delinquent activities since the socioeconomic and ecological aspects are also important determinants of the level of anti-social activities. For this, they suggest macro-level policies and strategies to deal with inequalities and concentrated disadvantages within communities.

As a component of community policing, neighborhood crime watch programs, which are common in the US, assist law enforcement agencies in their struggle against criminal activities. Program coordinators organize meetings to inform residents about criminal activities in their communities and encourage community members to connect with each other. These programs play a significant role in deterring criminal activities by promoting social capital in the community. Similarly, the community policing units of the Turkish National Police should initially be extended to all cities and districts. Afterwards, these units should organize meetings with the mukhtars and the apartment building managers (who are selected by the residents of apartment buildings) to inform them of the positive outcomes of collective efficacy and neighborhood crime watch programs in the prevention of adolescents’ deviant activities. Then, mukhtars and apartment building managers should organize meetings with the residents in order to promote civic engagement and obtain their support in and commitment to the neighborhood watch programs.

In addition, policy makers should focus on the appropriate design of public spaces and
places, where adults and adolescents can interact with each other. Recreation centers and playgrounds would provide appropriate spaces for the interaction of residents. Also, lighting sidewalks and open parks and eliminating the safety concerns of individuals might encourage the residents to use these public places in the evenings.

Another important factor, which is negatively associated with the likelihood of Turkish juveniles’ involvement in delinquent activities, is students’ attachment to their schools. Due to the fact that teachers play an indispensable role in the development of school-based social capital, they should not view schools as disciplinary institutions. Hence, teachers should establish close relations with their students and should spend time and effort to understand students’ problems. Furthermore, students’ academic success explicitly contributes to the development of school attachment and bonding (Maddox & Prinz, 2003; Catalano et al., 2004; Simmons-Morton et al., 1999). The Turkish Department of Education and charitable organizations should take steps to expand the existing after-school programs for the purpose of helping adolescents to improve their academic success and to refrain from associating with neighborhood gang groups and delinquent teenagers.

As the present findings suggest, participation in organized activities also inhibits juveniles’ involvement in delinquent activities. Students’ participation in sport clubs, religious activities, and civic engagement programs should be supported by parents, teachers, and state and local institutions.
Limitations

This research was constrained by several limitations. As the data were cross-sectional and collected at one point in time, the findings could not identify any causal relationships or changes over time. In addition, even though a probability sampling method was used to collect the data, the sample included only the tenth graders living in Bağcılar. Therefore, the sample does not represent, and therefore cannot be generalized to, all Turkish adolescents. Another limitation of this study is that data collection in schools may have missed the population that had a high rate of delinquency, such as truants, homeless children and adolescents in custody. Hence, the most delinquent adolescents may have been underrepresented.

Since the data were collected through self-reports, there are also some potential biases. The most important of these was how accurately participants responded to the questions. The survey that was conducted in the classrooms under the supervision of researcher and teachers, regardless of assurance about confidentiality and anonymity, may have underestimated the delinquency among the students. Due to the unlawful nature of criminal activities and unattractive consequences, offenders may not have been willing to disclose their criminal activities (Thornberry & Krohn, 2000). In addition, some respondents might have overstated their delinquent acts while some might have concealed them. For instance, girls have been shown to be more likely to give accurate responses compared to boys in Western societies (Flood-Page, Campbell, Harrington, & Miller, 2000). However, due to cultural changes, the accuracy of Turkish adolescents’ responses may have differed from those in Western societies.

Finally, since only a small number of types of delinquency were included in the data, they were not representative of the entire domain of major and minor delinquency.
Forexample, there was no variable in the data set measuring certain delinquent behaviors such as cheating, truancy, or bullying.

Recommendations for Future Research

This study is the first to investigate the effects of social capital on Turkish adolescents’ involvement in delinquent activities. Overall, the findings provided important support for the theoretical assumptions and the research hypotheses. To ensure the empirical validity of studies conducted in Turkey, which is a non-western society, the research hypotheses should be retested by using different types of data.

To take this study one step further, a sample could be drawn from a population that represents age groups other than tenth graders as well as Turkish adolescents who are non-students. The addition of non-students into the sample size enables researchers to make inferences about a population that is likely to have higher rates of delinquency, such as homeless children and adolescents in custody.

Future studies could also include other types of delinquent activities, which were not available in the current data, to expand further the concepts of minor and major delinquency. For instance, some other serious offenses, such as unlicensed driving, fighting and involvement in gang activities could be included in the index of major delinquency. Similarly, other minor delinquent activities, such as cheating, truancy, and bullying could be included in the index of minor delinquency. Each delinquent behavior could be examined independently, since each delinquent activity has its own nature and characteristics. By doing so, researchers could obtain more detailed information about the influence of social capital on each type of delinquent
behavior.

The varying effects of neighborhood supervision and family social capital items according to the severity of delinquency should be analyzed to develop a more in depth analysis of their impact. The attitudes of parents and community members toward delinquent activities need to be investigated through interviews and surveys.

The study indicated that the effect of participation in sport clubs activities differed because of additional factors in the models, such as family social capital items and delinquent peer relations. In order to better understand these differences, the effects of participation in sport clubs on affiliation with delinquent peers and on family social capital items should also be taken into consideration.

This study indicated a considerably strong effect of delinquent peers on the likelihood of juveniles’ involvement in delinquent activities. However, the causal relation between these two variables needs to be clarified through longitudinal studies, and spurious relationships should be excluded. Furthermore, the mediating effect of delinquent peers between social capital items and the level of Turkish juveniles’ delinquent activities could be considered by using different types of multivariate statistical methods, such as path analysis and structural equation modeling. This may shed additional light on the capability of social capital theory to explain the delinquency among Turkish adolescents.

Conclusion

This study is significant because it is the first to apply social capital theory to understand the delinquent behaviors among Turkish juveniles. In addition, due to Turkey’s unique
characteristics vis-a-vis Western societies, testing social capital theory is necessary to elaborate its empirical validity and explanatory power among Turkish juveniles.

In this study, the concept of juvenile delinquency was divided into two groups, major and minor delinquency, based on the provisions of the Turkish Penal Code. This division provided a more in-depth analysis to understand the influence of social capital elements on Turkish adolescents’ delinquent behaviors. Social capital is measured by adolescents’ direct relations with their parents, peers and community, the last referring specifically to neighbors, school, and organized social activities.

Based on social capital theory, in general, this study demonstrated that a higher level of adolescents’ access to positive social capital resources, such as family and community, is negatively correlated with the likelihood of major and minor delinquent activities, controlling for gender, age, and relative deprivation level. On the other hand, a higher level of negative social capital resources, such as delinquent peers, is positively associated with both types of delinquent activities.

Overall, the findings conform to social capital theory and provide significant support for the research hypotheses. Although the significance level and the strength of relationships varied according to the severity of the delinquent behaviors and the context of social networks, in general, it appeared that a low level of social capital significantly contributed to Turkish juveniles’ engagement in major and minor delinquent activities.
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