

INTERACTION BETWEEN THE CAUSES OF DELINQUENCY AND THE SOURCES OF SOCIAL CAPITAL



Ali ÜNLÜ

Dr., İstanbul Emniyet Müdürlüğü, aliunlu@gmail.com

Serdar YILDIZ

Dr., Mardin Emniyet Müdürlüğü, serdaryildiz99@yahoo.com

İsmail ŞAHİN

Public Affairs Department of College of Health and Public Affairs,
University of Central Florida, Doktora Öğrencisi

ABSTRACT

The aim of this study is to analyze the literature about the impact of social capital on youth behavior. Research in substance use and social capital field was analyzed and related materials were integrated in an analytic approach. According to the literature, three dimensions of social capital have been well studied by many scholars in adolescent deviation field. The type of activities adolescents participate into, the types of intra-familial interactions between parents and adolescents, and the type of peer groups adolescents interact with were employed as indicators of social capital.

Keywords: Social capital, substance use, family attachment, peer influence, youth activity

SUÇ İŞLEMENİN NEDENLERİYLE SOSYAL SERMAYENİN KAYNAĞI ARASINDAKİ ETKILEŞİM

ÖZET

Bu çalışmanın amacı sosyal sermayenin gençlerin davranış sapması üzerindeki etkisini literatürde araştırmaktır. Madde kullanımı ve sosyal sermaye alanındaki araştırmalar incelenmiş ve ilgili olan materyaller analitik bir yaklaşımla entegre edilmiştir. Literature gore; sosyal sermayenin üç boyutunun gençlerde davranış sapması alanında çokça çalışıldığı görülmüştür. Gençlerin katılmış olduğu aktivitelerin çeşitleri, aile içi ilişki ve bağılarının çeşitleri ve gençlerin etkileşimde bulundukları arkadaş gruplarının türleri sosyal sermayenin göstergeleri olarak kullanılmıştır.

Anahtar Kelimeler: Sosyal sermaye, madde kullanımı, aile bağları, akran baskısı, gençlik aktiviteleri

1. INTRODUCTION

Changing behavior with social variables has been studied for many years. While some of scholars investigated the impact of social variables on youths' positive attitudes such as improvements in grades at schools and acquiring social norms, many others studied delinquent behaviors such as substance use and gang activity. However, this topic has been investigated from different perspectives. Criminologists generally consider deviant behavior as a criminal act and several criminology theories, including social control theory, social disorganization theory, and social differentiation theory, have been utilized to explain youth deviation (Valente , 2004). Youth behavior has also been studied in a physiological context because behaviors are emerged from different psychological reasons such as stress and depression.

The complexity of the causes and consequences of youth behavior is a challenge in both theoretical and methodological pursuits for identifying and proposing solutions. Nevertheless, the aim of this study is to employ individual attributes and predictors to explain youth behavior from a social capital perspective. Social capital, in this research, is considered as a predictor variable influencing individual and collective wellbeing by utilizing societal resources. Social capital plays an important role in facilitating positive behavioral outcomes for children, youth, and families (Ferguson 2006). It enables researchers to measure the impacts of personal attributes, social structure, and institutional arrangements, thereby gaining a better understanding of the social pathogenesis of behavior (Edwards 2004).

Social capital is a theoretical concept that has been defined in various ways in sociology, economy, political science, and health and public affairs. It is "integrally related to other forms of capital such as human (skills and qualifications), economic (wealth), cultural (modes of thinking) and symbolic (prestige and personal qualities)" (Edwards 2004). Broadly, it

refers to sociability, social networks, social support, trust, reciprocity, community, and civic engagement (Morrow 1999a).

2. CONCEPTUALIZING SOCIAL CAPITAL

The social capital concept has been used in different contexts by various scholars. The theory originated in the work of Pierre Bourdieu (1984), James Coleman (1987; 1991; 1994), and Robert Putnam (1993; 2000).

Bourdieu conceptualized social capital on the basis of social reproduction and symbolic power. According to Bourdieu (1992), social capital is “the sum of the resources, actual or virtual, that accrue to an individual or group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition” (p. 119). Bourdieu (1984) defines two dimensions of social capital as *social networks and connections/relationships*, which enables a person to access collectively owned capital in terms of institutional or group resources; and *sociability*, which enables a group or institution to transmit social obligations to members (Morrow, 2001). A social relationship may exist as a material or as symbolic exchanges. The combination of connections and social obligations creates social capital, which is also convertible into economic capital in certain conditions (Dika and Singh 2002). According to this formulation, social capital is a more appropriate benefit for individuals than communities.

Since social capital relies upon membership in a group such as a family or kinship group, the availability of social resources depends on the size, quality, and capacity of their networks. In addition, member status within the group and expectations of reciprocity play an important role in access to resources (Edwards et al. 2003).

Three sources of social capital defined as economic, cultural, and social by Bourdeiu. (Dika and Singh 2002). Bourdieu (1977) focused on the interaction of these sources. He described cultural capital, which refers to “information or knowledge about specific cultural beliefs, traditions and standards of behavior that promote success and accomplishment in life” (Schaefer-McDaniel 2004).

Cultural capital passes through the family from parents to children via different social interactions such as providing books to read, offering tickets to events, or spending time at the theater, museums, and other cultural artifacts (Schaefer-McDaniel 2004). The basic idea of transmittal is to use the dominant social culture to inspire children. Bourdieu perceives social capital as the investment of the dominant class in maintaining and reproducing group solidarity and preserving the group's dominant position (Dika and Singh 2002).

James Coleman, on the other hand, utilizes the role of social capital in construction of the human capital. Coleman (1994) claims that social capital is intangible and has three forms: (A) *high levels of trust*—revealed through obligations and expectations. Trust provides a structure for interactions. Thus individuals in social structures with high levels of obligations have more social capital at any given time on which they can draw (Coleman 1994). (B) *Information channels* that provide social capital through the acquisition of information from others (Dika and Singh 2002; Edwards, Franklin et al. 2003). (C) *Norms and effective sanctions*, which are believed to promote the common good over self-interest through the approval or disapproval of behaviors (Dika and Singh 2002). Therefore, social capital appears in the structure of relationships between and among actors.

Coleman conceives the family system as the basis of social capital. This system consists of financial capital, human capital, and social capital (Coleman 1990; Coleman 1994). Since family is responsible for the transition of social capital, parental communication with children is also important. Family structure provides basic rules and norms to children. Communication thus fosters personal obligations and responsibilities among family members (Schaefer-McDaniel 2004).

Social capital does not only exist in the family; it is also created outside the family and in the community (Coleman 1987). Social structure around children facilitates the emergence of effective norms (Dika and Singh 2002). In particular, school settings are extremely important (Coleman

1990b; Schaefer-McDaniel 2004). In addition, Coleman (1990) claims that the more social capital in schools, the higher the level of academic achievement that will be produced. To get this achievement, parental involvement in the school is essential for personal awareness and enhancing relationships with teachers, students, and fellow parents (Schaefer-McDaniel 2004).

The main differences between Coleman's and Bourdieu's conceptualization of social capital are "the obtaining of resources and the use of social capital for different functions". Bourdieu claims that resources can be obtained from social structure, but according to Coleman, social capital is embedded in social relations between people (Shortt 2004). Secondly, Bourdieu uses social capital as a tool of reproduction for the dominant class, but Coleman sees social capital as a positive social control.

While Bourdieu and Coleman constructed social capital in family and schools settings and considered it in its individual aspect, Robert Putnam applies the definition to societies and communities in general (Schaefer-McDaniel 2004). Social capital, according to Putnam (2000), refers to the "collective assets" and "common good" of neighborhoods and communities. Since Coleman introduced reciprocity and trustworthiness, Putnam used these two concepts as a central component of his argument (Schaefer-McDaniel 2004). Social network relationships build trust and reciprocity, which also generate "civic virtue" (Putnam 2000). Trusting communities not only require acquaintances but also require active involvement in each other's lives to maintain trustful relations. Therefore, obligations considered to strengthen social capital must be mutual among people (Schaefer-McDaniel 2004).

Social capital is considered to be a community attribute derived from a social network. Like Coleman, Putnam argued that close or collective communities have greater social capital (Schaefer-McDaniel 2004). Social capital is present because of the existence of social and community networks, civic engagement, local identity, a sense of belonging, solidarity with other community members, and norms of trust and reciprocal help and support (Putnam 1993; Morrow 2004). The basic

premise is that “levels of social capital in a community have an important effect on people’s well-being” (Morrow 2004).

One of the main differences in Putnam’s definition of social capital is in his assessment as to whether social capital is a public good. Coleman (1994) claimed that while interactions occur between individuals and individuals use its benefits, the overall consequence of these relationships contributes to the overall social well-being. Therefore, social capital not only supports individuals, but also enhances social well-being.

Nevertheless, Putnam considers social capital as solely a public good (Putnam 2000). He assumes that higher social capital produces beneficial outcomes for the community, such as a reduction in crime or an increase in political participation. For instance, Zolotor and Runyan (2006) found that a one-point increase in the index of social capital is associated with a 30% decrease in child maltreatment.

Putnam uses three levels of social capital in community research: bonding, bridging, and linking. *Bonding social capital* refers to internal but exclusive form of social capital within communities. It acts like a “glue” to connect people (Edwards 2004). It commonly compromises the network of family and friends. It is characterized as strong and horizontal because the people that are connected in bonding networks share similar identities and experiences (Warr 2006). It enables people to “get by” with exclusive ties of solidarity between people “like us” (Edwards, Franklin et al. 2003).

On the other hand, bridging social capital is characterized as vertical or weak networks, because they are established through context-specific engagements such as community-based organizations, work, and other activities (Warr 2006). Bridging social capital includes interactions between people from different origins who work for common causes. The most common indicators are the numbers of voluntary associations and voluntary participations. It is also considered more valuable for social cohesion (Cheong, Edwards et al. 2007). While Coleman mainly emphasizes

bonding social capital, Putnam's work focuses on the benefits of bridging capital (Edwards, Franklin et al. 2003).

Linking social capital is formed mostly through community development work in order to empower vulnerable communities and groups such as immigrants and communities in poverty (Warr 2006). In other words, linking social capital enables people to access the "power structure" and "influential others" (Morrow 2004). Vertical relationships with formal institutions foster social and economic development. This form of social capital is utilized for government intervention to implement policy (Cheong, Edwards et al. 2007).

In sum, Bourdieu defines social capital as a cultural and social construct that enables actors to have better access to resources. Coleman sees it as an "aspect of the social structure that occurs within and outside the family and serves to secure human capital" (Schaefer-McDaniel 2004). Putnam sees it as community assets that assist in the attainment of a democratic society (Schaefer-McDaniel 2004).

3. IMPACT OF SOCIAL CAPITAL ON YOUTH BEHAVIOR

The social capital theory proposes the utilization of social relationships as a prevention method to achieve policy outcomes. A social network may provide not only emotional, instrumental, and informational support in times of stress, but also exercise regulation and control over delinquent behaviors (Bolin, Lindgren et al. 2003). It has been increasingly implemented in several fields, including education, political science, and economics.

Several routine activities, such as forming close family relationships, joint activities with peers, going to church (or other religious celebrations), and belonging to clubs are sources of social capital (Croll 2004).

Individuals are embedded in a web of social relations and this social structure guides their decisions (Granovetter, 1973, 1983; Maertz & Griffeth, 2004). Within the social structure, individuals invest in social capital by spending time

and energy, interacting, and forming networks with other people (Lundborg 2005). Parents, peer groups, and community are the main social structures in which youth spend most of their time. However, the characteristics of these groups have different impacts on youth behavior. The stronger the bond with any group, the stronger the influence of that group will be on behavior (Coleman 1961; Coleman 1994; Morrow 1999; Putnam 2000). For instance, a strong relationship with a delinquent peer group will result in the development of structurally delinquent behavior (Buysse 1997).

The characteristics of the relationships with these structures changes during adolescence. From middle childhood to adolescence, support from peers increases, support from teachers decreases, and support from parents or family remains somewhat more stable (Buysse 1997). Even though the perceived parental support remains great, peers emerge as significant sources of support by the end of adolescence (Buysse 1997).

Social capital has been utilized in different ways to measure its impact on youth development (Morrow, 2004). As a pioneering scholar, Coleman focused on educational achievement and found that a relationship existed between social capital and youth educational achievement. His research inspired many other scholars to investigate the impact of social capital on educational achievements. On the other hand, the relationship between social capital and youth behavior has been studied in different contexts. A similar relationship is also observed between social capital and substance use. Several studies found that social capital has an impact on smoking, binge drinking, and illicit drug use (Pearson and Michell 2000; Morrow 2004; Valente, Gallaher et al. 2004; Lundborg 2005; Lundborg 2006). Social capital is negatively correlated with the probability of youth cigarette smoking, alcohol consumption, and illicit drug use (Lundborg, 2005). To better understand the relationship between social capital and delinquent behavior, three dimensions of the social capital are discussed below.

3.1. Family Social Capital

The impact of parents on youth substance use has been well studied and documented in several empirical studies. Although family type is the main indicator of influence, a negative correlation has been revealed between parent-child closeness, parental control, and delinquent behavior. For instance, if a parent smokes, the impact of closeness and parental control is weaker compared to parents who do not smoke (Wen, Heather Van Duker et al. 2008). Coleman's operationalization of family social capital is based on five main components with separate sets of measures (Ferguson 2006). The components investigated in social capital studies include family structure, the quality of parent-child relations, adults' interest in the child, parental monitoring of the child activities, and extended family exchange and support (Ferguson 2006).

Family structure: Family structure is studied as a predictor of social capital outcomes because they have an important role as strategists or mentors in a child's development (Croll 2004). In many studies, measurement indicators show uniformity, and include a single-parent versus a two-parent household, the absence versus the presence of a paternal figure (either a biological father or a stepfather), whether both parents or one parent works outside the home, and household income (Ferguson 2006).

Coleman (1994) conceptualizes the single family in the structural context of social capital. He concludes that both the physical existence of a family and its active involvement to the child's development create positive outcomes for children at risk (Ferguson 2006). On the other hand, the mother is accepted as the most important family member for children, regardless of family structure and gender differences (Morrow 1999; Morrow 2004). Single parents and working mothers are the two main causes of declining social capital, because insufficient time and a large family structure result in less attention to child development (Morrow 1999). Put differently, two-parent households have much more opportunity than one-parent households for monitoring children or attending activities together (Croll 2004).

Quality of parent-child relations: Measuring the strength of the relationships between parents and children provides the quality of intra-familial relationship (Ferguson 2006). The common indicators used for measurements consist of the number of shared activities in which the parent and child participate together per week, the number of times per week the parent verbally encourages the child for doing a good job, the number of times per week the parent helps the children with homework, and the number of times per week the parents controls homework (Halpern 2005; Ferguson 2006). A positive correlation has been identified between a higher level of social interaction among family members and positive outcomes for children's behavioral development such as lower levels of school dropout rates for children and lower levels of fear about future (Coleman 1961; Coleman 1987; Halpern 2005; Ferguson 2006)

Adults' interest in the child: "Adults' interest" refers to parental efforts to transmit expectations and obligations to children through social interactions. During the interactions, the child learns the meanings of social norms and application of those norms to the real life; moreover, it is expected that children will internalize social norms (Ferguson 2006).

Common indicators used for measurement include the mother's academic aspirations for the child, the parent's level of empathy for the child's needs, the parent's involvement in and discussion of the child's school-related activities, enabling children to have breakfast before going to school, and homework-related activities such as helping with homework, checking homework, limiting time spent watching TV, and planning school programs (McNeal 1999; Halpern 2005; Ferguson 2006).

Parental support and parental challenge facilitate the transferral of obligations, expectations, and trustworthiness to children. While parental support shows the emotional climate of the home and the strength of personal relationships within it, parental challenge illustrates setting high standards, having high expectations, and encouraging self-reliance and independence (Croll 2004).

Higher levels of family social interactions increases the expectations of both parent and child (Halpern 2005). Higher levels of parental empathy (talking about personal matters and parental ambitions) towards children's needs is also positively correlated with children's future outcomes (Croll 2004; Ferguson 2006). Similarly, a parent-child discussion about school-related issues is associated with higher student achievement (Carbonaro 1998; Croll 2004). Although direct parental mentoring is associated with favorable educational outcomes, the main outcome finds its roots in more general parent-child communication (Croll 2004). It is, however, noticed that parental involvement is more likely to decline as children move to higher grades (Van Voorhis 2003). On the other hand, Urberg et al. (2003) found that children who did not value school achievement or spending time with parents were most likely to select friends who smoke cigarettes.

Parents' monitoring of the child: The fourth component of family social capital is parents' monitoring of their children's activities (Ferguson 2006). Parental involvement is defined as "parents' investment of resources in their children" (Sheldon 2002).

Common indicators used for measurement include knowing with whom the child is when not at home, knowing what the child is doing when not at home, the number of school meetings that the parents attend, the number of the child's friends that the parents know by sight or by name, and the number of the child's friends' parents that the parents know by sight or by name (Ferguson 2006). It is assumed that social relationships enable parents to monitor children by exchanging information, shaping beliefs, and enforcing norms of behavior (Sheldon 2002; Horvat, Weininger et al. 2003). Therefore, it is suggested that high levels of parental monitoring are associated with positive outcomes in the educational attainment of children and negative outcomes for substance use (Ferguson 2006; Abar and Turrisi 2008). Although it is known that the parents' role decreases in child development when adolescents get older, some studies found that if parental monitoring continues at college and if parents know what teens are doing in their spare time, adolescent drinking may be prevented (Abar and Turrisi 2008). Moreover, active parental monitoring and parental

modeling is also associated with lower levels of peer influence on child substance use (Abar and Turrisi 2008).

Active parental monitoring has commonly been discussed as ‘inter-generational closure’ in the social capital perspective. Closure occurs both within family relationships and in wider relationships as an extension of the family. It provides parents with firsthand information about the child’s environment and enables families to observe and interact with individuals who have contact with their children (Sheldon 2002). Although there are some inconsistent findings (McNeal 1999), several studies suggest that the more connected parents are to other parents and teachers, the better the children’s development will be (Özbay 2008). On the other hand, Zolotor and Runyan (2006) found that isolated parents are more likely to neglect their children, act harsh when parenting, and participate in domestic violence. Furthermore, these isolated families have a smaller network and spend less time with neighborhood networks, even if they live in a neighborhood with strong social capital (Zolotor and Runyan 2006). A supportive finding claims that a one-point increase in a four-point social capital index is associated with a 30% decrease in maltreatment rates in that community (Zolotor and Runyan 2006).

Extended family exchange and support: The degree of extended family social exchange and support has also been studied. Extended family members provide transportation, childcare, emotional support, and financial support (Horvat, Weininger et al. 2003). The common indicators are the number of extended family members living in the home, the number of interactions the child has with extended family members, and the number of times the child visits extended family members living outside of the home (Ferguson 2006). High levels of social support from extended family members are negatively associated with school dropout rates (Ferguson 2006). Extended family support, particularly living with relatives, not only plays a significant role in children’s lives but also helps mothers to manage duties and pressure and increases their well-being (Mowbray, Bybee et al. 2005).

In sum, for the creation of family social capital, parents have always had a central role. Besides a positive effect on neighborhoods, strong families are associated with lower levels of youth deviance. Put differently, Putnam claims that "good families have a ripple effect by increasing the pool of good peers" (Putnam 2000). It is argued that family relationships are more important than peer relationships (Schneider and Stevenson 1999). For instance, according to a British Household Panel Survey, over 90% of the youth were positive when asked how happy they were with their family and almost 60% described themselves as "completely happy" (Croll 2004). In addition, the existence of parents surrounds adolescents' life widely. Therefore, family members do not need to be present all the times around children. Parents provide relational context and grounding for the lives of their children "in the sense of being there in the background" (Morrow 2001; Morrow 2004). Accordingly,

Hypothesis 1: Family attachment is negatively correlated with substance use.

3.2. Peer-based Social Network

Peer groups have traditionally been accepted as the center of attention for adolescent deviance. For instance in substance use, they provide drugs, maintain patterns of use, talk with each other about drugs, model drug-using behavior for each other, and shape attitudes about drugs and drug-using behavior (Cotterell 1996). Moreover, friendship acquisition is not a random process; therefore, an association between peers and adolescents' behaviors is clear (Urberg, Luo et al. 2003). Even given the genetic similarity between twins, different behaviors will be encouraged by different sets of peers when it comes to a behavior such as drinking alcohol, because friendship alters the characteristics of impact on behaviors even though twins are biologically the same person (Guo, Elder et al. 2008). Furthermore, some research found that the lack of peer influence is associated with less delinquency, less drug use, and a more conventional lifestyle (Pearson and West 2003).

However, a differentiation between peer influence and social influence should be made clear in order to make a valid measurement. According to Cotterell (1996), having smoking

friends does not constitute peer pressure; instead, those friends are more likely to supply cigarettes and to model smoking. Nevertheless, peer influence, also called peer pressure, requires “attitudes in the form of direct pressure such as urging and teasing, or overt disapproval” (Cotterell 1996). In other words, direct forms of persuasion take place via the approval or disapproval of substance use (Cotterell 1996). Thus, social influence and peer influence are considered two types of influence. Social influence, also referred as indirect or normative influence, is “established through interpersonal ties, which create commonality of interests and values” (Cotterell 1996). On the other hand, direct influence exists “where parents and friends set an example and reinforce certain behavior” (Cotterell 1996).

Although some studies suggest that parents' substance use is the main reason for adolescent substance use (de Vries, Engels et al. 2003), research over the past 30 years show a tendency toward similarity in the substance use of adolescents: peer influence (Kirke 2004). Moreover, this pattern is not unique to the U.S., but is confirmed in other countries such as United Kingdom, Finland, Portugal, Spain, Australia, Canada, German, Italy, New Zealand, and many others (Hoffman, Sussman et al. 2006). For instance, the majority of young people were with friends when they smoked their first cigarettes (Hall and Valente 2007). The effect of peer influence on adolescents becomes more important than adults as they grow up, while the impact of family declines (Lundborg 2006; Gatti and Tremblay 2007). This is because adolescents spend more time with their peers than they do with their parents, particularly when they get older (Morrow 2001).

It is theoretically assumed that individuals are socialized into deviant conduct by involvement with delinquent peers (Aseltine 1995). Adolescents who have substance-using friends are more likely to use substances than those who have non-using friends (Valente, Ritt-Olson et al. 2007). This behavioral change has been investigated through many theoretical perspectives such as social bonding, differential association, reasoned action, and social learning, (Valente, Gallaher et al. 2004; Hoffman, Sussman et al. 2006).

Since social capital emerges from many of the above theories, network-theory-oriented studies have been selected for the literature review. The literature suggests that peer influence occurs in three main ways: a) active offer of substances, b) modeling of others, and c) perceived norms (Borsari and Carey 2001). Particularly from a network theory perspective, youth experience with peers has been commonly investigated under the following assumptions: a) having a best friend who uses substances, b) having substance using friends, c) network position, and d) group membership (Valente 2003). The association between those indicators and substance use has been well documented in the literature. More specifically, in this study, adolescent deviance is categorized in three sections: homophily (selection), assimilation (influence) and social position (Valente, Unger et al. 2005; Pearson, Steglich et al. 2006).

The homophily perspective proposes that individuals interact with similar rather than dissimilar others, which is also known as indirect influence (Cotterell 1996). Peer networks therefore emerge from friends who are selected because of their similarity. It is assumed that relationships with similar persons promote understanding and solidarity, while dissimilar persons provide wider access to diverse resources (Cattell 2001). Similarity among peers strengthens stability in attitudes and behavior, which later creates pressure for a new member of the group to change behavior (Rice, Donohew et al. 2003). Nevertheless, homophily produces both positive and negative outcomes for adolescents. For instance, children who have successful peer relationships are more likely to engage in the school context and in academic tasks and participate in classroom activities (Hanish, Barcelo et al. 2007).

The second principal, assimilation, is also known as the principal of influence, direct influence, contagion, or social control. It suggests that individuals adjust their behavior to match that of their friends because they receive approval (Pearson, Steglich et al. 2006; Poelen, Engels et al. 2007). Peer groups feel responsible for creating behavioral homogeneity in a group. In other words, assimilated adolescents tend to influence peers' behavior (Steglich, Snijders et al. 2007). According to this perspective, a friendship network is

considered static, while individuals' behavior is changing (Steglich, Snijders et al. 2007). The third approach, social position, refers to an adolescent's place within the friends' network (Pearson and West 2003).

The literature suggests that the impact of friends varies with their position in the network. In addition to this, adolescents adopt the groups' norms based on their position in the network. This two-way interaction has been investigated in many empirical studies.

Group members are more likely to interact with each other and share similar attitudes and behaviors. For instance, being a student in a network where the smoking rate is over 50% increases the likelihood of starting smoking by twofold compared to being in a non-smokers network (Alexander, Piazza et al. 2001). However, an association between the smoking status of popular adolescents and friends' smoking status in the network suggests that popular students who are at the center of network have a stronger influence (Hoffman, Sussman et al. 2006). The popularity is measured with centrality, which is derived from the number of nominations received from friends. Therefore, the most central the person is, the more popular in the network person is (Valente, Gallaher et al. 2004).

Urberg et al. (2003) found that high levels of conformity are related to peers' desire to be popular. Peer acceptance and positive friendships are associated with peer influence, which may result in a greater risk of popular students' smoking (Urberg, Luo et al. 2003). Therefore, being popular brings a risk in schools where smoking is prevalent (Buysse 1997; Alexander, Piazza et al. 2001; Valente, Gallaher et al. 2004).

Liaisons interact with peers, but "not as a member of groups." They bridge groups with their weak personal ties. They have an important role in peer networks because they transmit group norms via their connections. According to Granovetter (1973), weak ties make liaisons strong because they can access more information and resources than group members. Particularly in relation to substance use, they may bring a risk

for being connected with different groups that have different attitudes toward substance use. Put differently, they may be exposed to using substances and then transfer new norms to other groups (Valente, Gallaher et al. 2004). Ennett et al. (2006) found that people who are less embedded in networks with a greater social status are more likely to use substances compared with their counterparts.

On the other hand, isolates represent people who have no or limited connection with others in a specific network (Pearson and Michell 2000). Nevertheless, isolates should be considered seriously in social contexts because a person may be a member of different networks, which indicates that a person is not actually isolated (Valente, Gallaher et al. 2004). Hence, being isolated is situational and produces positive or negative outcomes. For example, it may be beneficial if a person is in high-risk settings where substance use is prevalent. In contrast, in low-risk settings where innovation and information are available, isolates may not benefit from information flow and may not adapt themselves to those positive outcomes (Valente, Gallaher et al. 2004). With some exceptions, the literature suggests that isolated people are more likely to use substances, which indicates that "substance use is less a group phenomenon than a risk of being relatively isolated from peers" (Ennett, Bauman et al. 2006).

Beside adolescents' position, the quality of the friendships and duration of the connectedness determines the impact of peer influence (Degirmencioglu, Urberg et al. 1998). The quality of the friendships has been commonly linked with the mutuality of the relationships. Since many aspects of peer influence have been investigated and several contradictory findings have been reported, the main conclusion should be that all of them are interrelated concepts. It is difficult to underestimate the impact of those assumptions; however, a balanced approach may work better in identifying which of them should be prioritized in order to design a better intervention policy. The literature review shows that the social context, situation, content of the relationship, and physical environment are important to understanding peer influence because the impact varies by those circumstances.

Therefore, utilizing different levels of social capital is unavoidable for a better understanding of the problem. Gatti and Tremblay (2007) suggest that “social capital at the micro level plays a stronger role during childhood, while the macro level acts especially during adolescents and adult life”. It is safe to say the impact of the peer network on substance use is visible. For instance, a positive correlation exists between monthly bursts of drug use and contacts with drug-using friends (Poelen, Engels et al. 2007). According to Dishion and Medici Skaggs (2000), youth drug consumption increased in months in which their affiliation increased with drug-using friends. Therefore,

Hypothesis 2: Peer influence has a positive correlation with substance use.

3.3. Youth Activities, Social Capital and Substance Use

Adolescents are under the influence of three different domains: a) personal attributes such as stress and depression, b) a social environment that includes friends and negative activities, and finally c) environmental factors such as poverty, unemployment, and crime rates, as well as institutions that support well-being of the adolescents (Mason, Cheung et al. 2004). Since social factors have been discussed above, this section mainly focuses on environmental factors in order to understand the impact of the physical environment on youth substance use.

This ecological-level approach suggests that institutions provide formal and informal support to their communities (Mason, Cheung et al. 2004). While individuals may get direct support by utilization of services, institutions also facilitate activities with their infrastructural capacity. Therefore, schools, churches, clinics, and recreation centers may foster the positive development of youth if they are functioning well (Mason, Cheung et al. 2004). This approach has been developed in different perspectives such as the social ecology of human development, social psychology, and social capital as well (Mason, Cheung et al. 2004).

According to Coleman (1987), “Social capital outside the family was of greatest value for children without extensive social capital in the home” (Coleman and Hoffer 1987).

Particularly for the wellbeing of youth, community social capital gains special attention because a child's attachment to adults rather than parents is positively associated with a child's resilience to adversity (Catalano, Haggerty et al. 2004). However, creation of social capital outside the family requires institutional-level infrastructures because they provide both a physical and a social environment that facilitates interactions among people.

Coleman and Hoffer (1987) introduce four components of community social capital: social support networks, civic engagement in local institutions, trust and safety, and degree of religiosity (Ferguson 2006). Since these components are essential for adult-based community-level social capital, adolescents need a special focus on the quality of schools and quality of the neighborhood because their interactions are mainly shaped within these environments (Ferguson 2006). Bourdieu (1993) defines social capital as "contacts and group memberships which, through the accumulation of exchanges, obligations and shared identities, provide actual or potential support and access to valued resources" (p. 143). Therefore, physical environment and social interactions are interrelated and social capital emerges from their capacity.

Putnam sees social capital as a characteristic of communities rather than of individuals (Putnam 2000). Community characteristics influence the creation and the pattern of social capital. Both an individual's experience and a community's characteristics determine social exclusion and the dimension of the social capital (Cattell 2001). The concept of the embeddedness of the norms in the structure, emphasized by Coleman, suggests that when the structure changes, the norms change (Cattell 2001).

Social capital is therefore considered to be characteristic of the local community or neighborhood because shared identity, a sense of morality, solidarity, income inequalities and voluntarism refer to the relationships between people and place, which became more important at the end of the 20th century (Forrest and Kearns 2001). This ecological perspective suggests that "individuals cannot be studied without

a consideration of the multiple ecological systems in which they operate" (Wen, Heather Van Duker et al. 2008). The practice of everyday life is shaped around the physical environment of people, which includes shopping, leisure activities, school attendance, and the like. Therefore, the "neighborhood becomes an extension of the home for social purposes and hence extremely important in identity terms: 'location matters' and the neighborhood becomes part of our statement about who we are" (Forrest and Kearns 2001).

Putnam (2000) defines "political participation (voting, interest in current affairs, etc.), organizational membership, religious participation, informal social visiting, and involvement in voluntary and philanthropic activities" as indicators of social capital. Therefore, the number of activities and number of organizations in the neighborhood are necessary for enabling participation. Moreover, social participation should be practiced with voluntarism—particularly essential for children's participation, because children may be coerced (Schaefer-McDaniel 2004).

Since participation is the common way of connecting with groups or community, individuals link themselves with those groups by horizontal and vertical social capital. While horizontal social capital enables people to engage with society and groups, vertical social capital links them with institutions and macro-level politics (Lindström 2008). Several studies propose that families embedded in rich social support networks have more opportunities accessing information, material resources, and friends for supporting their children's development (Johnson, Jang et al. 2000). Social capital may increase with civic engagements if they are supported and facilitated by local institutions. In this perspective, involvement in religious activities was found to be positively associated with child development (Johnson, Jang et al. 2000). Social participation therefore is regarded as one of the most central to the concepts of social capital (Lundborg 2005). Nevertheless, the quality and the perception of the quality of schools and neighborhoods are associated with the creation of community social capital (Ferguson 2006).

Home, the neighborhood, and school are important factors for shaping adolescents' behavior because adolescents spend most of their time in these environments. It is assumed that three groups—parents, communities, and schools—should develop their own leadership and change while overthrowing dysfunctional past practices. However, such change may rest largely in the hands of parents, because they are mainly responsible for the provision of environmental settings for their children (Gaviria and Raphael 2001). Because children do not select their school and neighborhood, parental discretion shapes their children's structural context.

During adolescence, young people spend most of their time with their friends in unsupervised contexts (Kiesner, Poulin et al. 2003). Youth activities, whether school-based, faith-based, community-based or otherwise, should be examined as to whether they are effective at preventing children from using substances. Activities have two functions; they serve to bridge social capital, which facilitates communication with individuals and groups of people, and bonding social capital, which strengthens the existing relationship. Nevertheless, they should be in equilibrium in order to sustain social well-being (Lindström 2004). Participation in activities and organizations provides children with enhanced self-esteem, a sense of achievement, the perception of control, hope, and optimism (Cattell 2001). Besides fostering social bonds, activities under adult supervision limit opportunities to use substances (Gaughan 2003). For instance, Lundborg (2005) found that social participation is negatively correlated with the probability of smoking cigarettes.

From a social capital perspective, an individual may be more monitored and controlled within a large social network as compared to an individual who has no or only a small social network. The network may therefore serve as a social control over deviant behavior, such as smoking and drinking (Lundborg 2005). The social network also facilitates the diffusion of information and adopts norms regarding positive consequences of behavior (Lundborg 2005). Moreover, youth activities also shape parental networks. Horvat et al. (2003) found that parents generate and sustain networks through children's out of school

activities. Living in a community with a higher or lower rate of delinquency also affects youth behavior. It is assumed that social interaction among neighbors is important for establishing community controls because both strong and weak social ties with neighbors may result in guardianship and supervision of youth within a neighborhood (Bellair 1997). In addition, voluntary participation in social activities encourages children to develop group skills that may result in an increase in democratic participation and a heightened ability to get along with others, respect their ideas and opinions, and respect each other in the long run (Schaefer-McDaniel 2004).

Population density and high-level residential mobility are one of the reasons for change in the structure of the society. Social disorganization, defined as the “inability of a community structure to realize the common values of its residents and maintain effective social control” (Sampson and Groves 1989), therefore erodes social control and social integration in the community (Winstanley, Steinwachs et al. 2008). It is likely that higher rates of crime, alcohol, and cigarette use will occur in places where social disorganization is high. According to Winstanley et al. (2008), alcohol use and dependence are associated with neighborhood disorganization even after controlling for individual and neighborhood characteristics. On the other hand, institutional infrastructures support people's well-being and weaken the detrimental impact of social disorganization. For instance, Johnson et al. (2000) found that attending church is negatively associated with crime rates among African Americans.

On the other hand, two types of barriers, interior and exterior, may inhibit adolescents from participating in activities (Lindström, Hanson et al. 2001). Interior barriers include lack of motivation and lack of time, and are particularly observed in high-level socioeconomic groups. External barriers consist of lack of money, lack of transportation, and illness (Lindström, Hanson et al. 2001). Therefore, adolescents' involvement in social activities relies upon family class. Horvat et al. (2003) found that among three family classes (middle, working, and poor), a higher level of participation in social activities was observed in middle-class families. A similar finding has been

claimed by Lindström et al. (Lindström, Hanson et al. 2001) namely, that individuals in lower-level socioeconomic circumstances are less likely to participate in leisure-time physical activities. As expected, children in poor families have the lowest participation in activities (Horvat, Weininger et al. 2003). Commitment to school and belief in conventional norms are negatively associated with adolescent smoking (Donohew, Hoyle et al. 1999). The school environment is one of the predictors for child behavioral development. Schools that are more communally organized provide more activities; therefore their students are more bonded to school, which in turn leads to less delinquency (Payne, Gottfredson et al. 2003). Moreover, involvement in school-based programs results in fewer discipline problems, more respect for adult authority, and less susceptibility to gang activities (Bryk and Rollow 1993).

Therefore, social capital can be utilized in a wide range of areas as a part of prevention programs. Hence,

Hypothesis 3: Youth activities are negatively correlated with substance use.

Hypothesis 3a: Among three dimensions of social capital, peer influence produces a higher correlation with substance use.

Hypothesis 4: Three dimensions (family, peers, and youth activities) of social capital predict youth substance use at different levels. However, the effect may vary for age, ethnicity, socio-economic status, gender, and mobility.

4. DISCUSSION

While an increase in the use of social capital in the literature is evident in youth, several limitations appear in the studies. The measurement of the actual component factors of social capital is contradictory in terms of examining relationships and benefits. Most of the studies defined social capital as the relationships or interactions between children and their families or between individuals and their communities. The remaining studies conceptualize social capital in terms of benefits or assets that support individuals, families, or communities (Ferguson 2006). Therefore, social capital has been conceptualized as both an end (that is, as consisting of tangible benefits) and a means of arriving at that end (that is, as

the social relationships that unlock those benefits). This dual understanding makes it complicated to compare findings because a common term is utilized to measure two different concepts (Ferguson 2006), which is criticized by attaching new labels to familiar variables (Portes 1998).

Coleman's studies particularly emphasize family structure as the main predictor of social capital of the young people. This notion takes a top-down view of the effect of parents on children, seeing children as passive agents of transition (Morrow 1999). The more investment parents make, according to this model, the more children will achieve for their well-being and future (Morrow 1999). Nevertheless, several studies show that children themselves actively generate their own social capital and make links for their parents, providing support for their families (Morrow 1999).

Most of the studies on social capital are based on the large-scale quantitative analysis of national surveys that are not designed to measure social capital. These studies focus on the quantity rather than the quality of social capital (Morrow 1999). Work- and family-oriented studies focus on change in society and point out "how and why" social capital decreases. However, the roles of the "nature of intimate relationships, [the] globalized and flexible labor market, and geographical mobility" have been underestimated (Edwards 2004). Since modern social life has became unstable and relationships are shaped by awareness, studies that overestimate traditional family types and stable community structure provide a limited perspective on social capital (Edwards 2004)

5. CONCLUSION

Social capital focuses on norms and values, whether they come from parents or society, that shape social relations, social solidarity, and social cohesion (Edwards, Franklin et al. 2003). The literature review shows that social capital is commonly measured in three dimensions: a) social network and sociability, b) trust and reciprocity, and finally c) a sense of belonging or attachment to place (Schaefer-McDaniel 2004). Social networks and sociability require a social and physical environment. For instance, participation in youth activities relies

upon the availability of institutional and organizational resources in a trusted social context. Therefore, the living environment is important in order to understand the creation of social capital.

Since communities are considered to be networks, social capital is mainly a network phenomenon and attribute of community (Schaefer-McDaniel 2004). However, actors must recognize networks to utilize them as a resource (Morrow, 2001). Social networks provide beneficial resources, it should also assure trust as providing helpful information and genuine support (Schaefer-McDaniel 2004). Trustful relationships with family members, people in their neighborhoods, peers, and teachers enable children to establish their network (Schaefer-McDaniel 2004).

A sense of belonging or place attachment refers to the “psychological sense of community”—that is, an individual’s feeling of belonging after attaching symbolic meaning to a certain environment (Schaefer-McDaniel 2004). Being connected to a community is therefore a psychological property at the individual level (Warr 2006). The concept has two dimensions: a) *membership*, which refers to the “sense of feeling a part of the group or environment” and the “sense of feeling like one belongs in the environment”; and b) *influence*, which refers to the fact that “the individual matters to the group,” together with cohesiveness, the sense that “the group is complete only with the individual” (Schaefer-McDaniel 2004).

A sense of belonging is also considered a symbolic attachment or investment to a place in terms of a feeling of “rootedness or centeredness” (Schaefer-McDaniel 2004). It influences child development, helping children to form their identity. Researches show that it is important for children to “feel at home” when they are between nine and eleven years old. A feeling of belonging at school also enables children to attain higher academic achievement. By contrast, violent behavior is more prevalent at schools where children do not have a sense of belonging. In addition, if children have more symbolic attachments to a place and have a strong sense of belonging, they are more likely to have more interactions and more friends (Schaefer-McDaniel 2004).

Besides psychological attachment to a place, the environment as a physical space is also important for child development. An environment fosters social interactions when a space serves the particular needs of its users (Schaefer-McDaniel 2004). Parks, playing grounds, churches, and particularly schools form an important kind of community for young people. Friendship at school supports a sense of belonging (Morrow, 2001). Although the concepts of a sense of belonging and place attachment appear separately in the literature, an interrelatedness can be seen, and they may overlap each other (Schaefer-McDaniel 2004).

Beside its theoretical contribution to the social capital literature, this study also provides implications for public policy makers pertaining to drug prevention policies. As mentioned before, many researchers agree with that the best way to control drug abuse is to target youth and to prevent them initiating drug use at early age before getting in contact with drug. Therefore, most drug prevention programs target young people while in the school since young people who begin to use drugs at early age are more likely to use more dangerous drugs and become persistent addicts (Flemming et al., 1982). School-based drug abuse prevention programs focus on developing resistance skills and negative attitudes towards drugs, teaching decision making skills and identifying alternatives to drug use. In the U.S., however, there is a controversy among the results of recent researches about whether the school-based drug abuse programs such as DARE (Drug Abuse Resistance Education) are effective or not (Nyre et al., 1990; Becker et al., 1992; Dukes et al., 1996). Based on the conclusion of this study, more effective drug prevention programs can be designed or the current programs can be improved by policy makers. For example, not only educational institutions but also families and community organizations can be included in the prevention programs. Policy makers may revise and restructure the current programs by providing more family involvement to increase the effectiveness of the drug prevention programs.

Acknowledgement: This article was developed from the doctorate dissertation of Ali Unlu, "The Impact of Social Capital on Youth Substance Use".

REFERENCES

- Abar, C. and R. Turrisi (2008). *"How important are parents during the college years? A longitudinal perspective of indirect influences parents yield on their college teens' alcohol use."* Addictive Behaviors 33: 1360-1368.
- Alexander, C., Piazza, M., Mekos, D., & Valente, T. (2001). *"Peers, schools, and adolescent cigarette smoking."* Adolescent Health, 29(1): 22-30
- Aseltine, R. H. (1995). *"A Reconsideration of parental and peer influences on adolescent deviance."* Journal of Health and Social Behavior 36(2): 103-121.
- Becker, H. R., Agopian, M. E., & Yeh, S. (1990). Impact evaluation of drug abuse resistance education (DARE). Journal of Drug Education 22: 283-291.
- Bellair, P. E. (1997). *"Social interaction and community crime: Examining the importance of neighbor networks."* Criminology 35(4): 677-703.
- Bolin, K., Lindgren, B., Lindström, M., & Nystedt, P. (2003). *"Investments in social capital—implications of social interactions for the production of health."* Social Science & Medicine 56(12): 2379-2390.
- Borsari, B. and K. Carey (2001). *"Peer influences on college drinking: A review of the research."* Journal of Substance Abuse 13(4): 391-424.
- Bourdieu, P., Ed. (1977). Cultural reproduction and social reproduction. Power and Ideology in Education. New York, Oxford University Press.
- Bourdieu, P. (1984). Distinction: A social critique of the judgement of taste. London, Routledge.
- Bourdieu, P. (1993). Sociology in Question. London, Sage Publications.
- Bourdieu, P. and L. Wacquant (1992). An invitation to reflexive sociology. Chicago, University of Chicago Press.
- Brown, B., Lohr, M., & McClenahan, E. (1986). *"Early adolescents' perceptions of peer pressure."* The Journal of Early Adolescence 6(2): 139.
- Bryk, A. S. and S. G. Rollow (1993). *"The Chicago experiment: The potential and reality of reform."* Equity and Choice(9 (3)): 22-32.

- Buyssse, W. H. (1997). "Behaviour problems and relationships with family and peers during adolescence." *Journal of Adolescence* 20(6): 645-659.
- Carbonaro, W. J. (1998). "A little help from my friend's parents: Intergenerational closure and educational outcomes." *Sociology of education* 71(4): 295-313.
- Catalano, R., Haggerty, K., Oesterle, S., Fleming, C., & Hawkins, J. (2004). "The importance of bonding to school for healthy development: Findings from the social development research group." *Journal of School Health* 74(7): 252-261.
- Cattell, V. (2001). "Poor people, poor places, and poor health: the mediating role of social networks and social capital." *Social Science & Medicine* 52(10): 1501-1516.
- Cheong, P., Edwards, R., Goulbourne, H., & Solomos, J. (2007). "Immigration, social cohesion and social capital: A critical review." *Critical Social Policy* 27(1): 24.
- Chuang, Y. and K. Chuang (2008). "Gender differences in relationships between social capital and individual smoking and drinking behavior in Taiwan." *Social Science & Medicine* 67: 1321-1330.
- Coleman, J. and T. Hoffer (1987). Public and private high schools: The impact of communities. New York, Basic Books.
- Coleman, J. S. (1961). The adolescent society: The social life of the teenager and its impact on education. New York, Free Press of Glencoe.
- Coleman, J. S. (1987). "Families and Schools." *Educational Researcher* 16(6): 32.
- Coleman, J. S. (1990a). Foundations of social theory. Cambridge, MA, Bellknap Press.
- Coleman, J. S. (1990b). "How worksite schools and other schools reforms can generate social capital: An interview with James Coleman." *American Federation of Teachers* 14(2): 35-45.
- Coleman, J. S. (1994). "Social capital in the creation of human capital." *American Journal of Sociology Supplement*, 94: S95-120.
- Coleman, J. S. and T. Hoffer (1987). Public and private high schools: The impact of communities. New York, Basic Books.

- Cotterell, J. (1996). Social networks and social influences in adolescence. Newyork, Routledge.
- Croll, P. (2004). "Families, social capital and educational outcomes." British Journal of Educational Studies 52(4): 390-416.
- de Vries, H., Engels, R., Kremers, S., Wetzels, J., & Mudde, A. (2003). "Parents'and friends' smoking status as predictors of smoking onset: findings from six European countries." Health Education Research 18(5): 627-636.
- Degirmencioglu, S., K. Urberg, et al. (1998). "Adolescent friendship networks: Continuity and change over the school year." Merrill-Palmer Quarterly 44(3): 313-37.
- Dika, S. L. and K. Singh (2002). "Applications of social capital in educational literature: A critical synthesis." Review of Educational Research 72(1): 31-60.
- Dishion, T. J. and N. Medici Skaggs (2000). "An ecological analysis of monthly "bursts" in early adolescent substance use." Applied Developmental Science. 4: 89-97.
- Donohew, R., Hoyle, R., Clayton, R., Skinner, W., Colon, S., & Rice, R. (1999). "Sensation seeking and drug use by adolescents and their friends: Models for marijuana and alcohol." Journal of Studies on Alcohol 60(5): 622-631.
- Dukes, R., Stein, J., & Ullman, J. (1996). The long term effects of DARE. *Evaluation Review* 20: 49-66.
- Edwards, R. (2004). "Present and absent in troubling ways: Families and social capital debates." The Sociological Review 52(1): 1-21.
- Edwards, R. (2004). "Social capital." Organization Management Journal 1(1): 81-88.
- Edwards, R., Franklin, J., & Holland, J. (2003). Families and social capital: Exploring the issues. London, South Bank University.
- Ennett, S. T., Bailey, S. L., & Federman, E. B. (1999). "Social network characteristics associated with risky behaviors among runaway and homeless youth." Journal of Health and Social Behavior 40(1): 63-78.
- Ennett, S. T., Bauman, K., Hussong, A., Faris, R., Foshee, V., Cai, L., (2006). "The peer context of adolescent substance use: Findings from social network analysis." Journal of Research on Adolescence 16(2): 159-186.

- Ferguson, K. M. (2006). "Social capital and children's wellbeing: A critical synthesis of the international social capital literature." *International Journal of Social Welfare* 15(1): 2-18.
- Flemming, J. P., Kellam, S. G., & Brown, C. H. (1982). Early predictors of age at first use of alcohol, marijuana, and cigarettes. *Drug and Alcohol Dependence*, 9, 285-303
- Forrest, R. and A. Kearns (2001). "Social cohesion, social capital and the neighbourhood." *Urban Studies* 38(12): 2125.
- Furstenberg, F. F. and M. E. Hughes (1995). "Social capital and successful development among at-risk youth." *Journal of marriage and the family* 57(3): 580-592.
- Gatti, U. and R. Tremblay (2007). "Social capital and aggressive behavior." *European Journal on Criminal Policy and Research* 13(3): 235-249.
- Gaughan, M. (2003). "Predisposition and pressure: mutual influence and adolescent drunkenness." *Connections* 25(2): 17-31.
- Gaviria, A. and S. Raphael (2001). "School-based peer effects and juvenile behavior." *Review of Economics and Statistics* 83(2): 257-268.
- Gordon, R., Lahey, B., Kawai, E., Loeber, R., Stouthamer-Loeber, M., & Farrington, D. (2004). "Antisocial behavior and youth gang membership: Selection and socialization." *Criminology* 42(1): 55-88.
- Granovetter, M. (1973). "The strength of weak ties." *American Journal of Sociology* 78(6): 1360.
- Guo, G., Elder, G. H., Cai, T., & Hamilton, N. (2008). "Gene-environment interactions: Peers' alcohol use moderates genetic contribution to adolescent drinking behavior." *Social Science Research*.38 (1): 213-224
- Hall, J. and T. Valente (2007). "Adolescent smoking networks: The effects of influence and selection on future smoking." *Addictive Behaviors* 32(12): 3054-3059.
- Halpern, D. (2005). *Social capital*, Polity Malden, MA.
- Hanish, L., Barcelo, H., Martin, C., Fabes, R., Holmwall, J., & Palermo, F. (2007). "Using the Q-Connectivity method to study frequency of interaction with multiple peer triads: Do preschoolers' peer group interactions at school relate to academic skills?" *New Directions for Adult and Continuing Education* 2007(118): 16.

- Hoffman, B., Sussman, S., Unger, J., & Valente, T. (2006). "Peer influences on adolescent cigarette smoking: A theoretical review of the literature." *Substance Use & Misuse* 41(1): 103-155.
- Horvat, E. M. N., Weininger, E. B., & Lareau, A. (2003). "From social ties to social capital: Class differences in the relations between schools and parent networks." *American Educational Research Journal* 40(2): 319-351.
- Johnson, B., Jang, S., Li, S., & Larson, D. (2000). "The 'invisible institution' and black youth crime: The church as an agency of local social control." *Journal of Youth and Adolescence* 29(4): 479-498.
- Kawachi, I. and L. Berkman, Eds. (2000). Social cohesion, social capital, and health. *Social Epidemiology*. New York, Oxford University Pres.
- Kay, P., Fitzgerald, M., Paradee, C., & Mellencamp, A. (1994). "Making homework work at home: the parent's perspective." *Journal of Learning Disabilities* 27(9): 550-561.
- Kiesner, J., Poulin, F., & Nicotra, E. (2003). "Peer relations across contexts: Individual-network homophily and network inclusion in and after school." *Child Development* 74(5): 1328-1343.
- Kirke, D. (2004). "Chain reactions in adolescents' cigarette, alcohol and drug use: similarity through peer influence or the patterning of ties in peer networks?" *Social Networks* 26(1): 3-28.
- Lareau, A. and E. Horvat (1999). "Moments of social inclusion and exclusion: Race, class, and cultural capital in family-school relationships." *Sociology of education* 72(1): 37-53.
- Lindström, M. (2004). "Social capital, the miniaturisation of community and self-reported global and psychological health." *Social Science & Medicine* 59: 595-607.
- Lindström, M. (2008). "Social capital, political trust and experience of cannabis smoking: A population-based study in Southern Sweden." *Preventive Medicine* 46(6): 599-604.
- Lindström, M., Hanson, B., & Östergren, P. (2001). "Socioeconomic differences in leisure-time physical activity: The role of social participation and social capital in shaping health related behaviour." *Social Science & Medicine* 52(3): 441-451.

- Lundborg, P. (2005). "Social capital and substance use among Swedish adolescents—an explorative study." Social Science & Medicine 61(6): 1151-1158.
- Lundborg, P. (2006). "Having the wrong friends? Peer effects in adolescent substance use." Journal of Health Economics 25(2): 214-233.
- Mason, M., Cheung, I., & Walker, L. (2004). "Substance use, social networks, and the geography of urban adolescents." Substance Use & Misuse 39(10): 1751-1777.
- McNeal, R. B. (1999). "Parental involvement as social capital: differential effectiveness on science achievement, truancy, and dropping out." Social Forces 78(1): 117-144.
- Mercken, L., Candel, M., Willems, P., & Vries, H. d. (2007). "Disentangling social selection and social influence effects on adolescent smoking: the importance of reciprocity in friendships." Addiction 102(9): 1483-1492.
- Morrow, V. (1999a). "Conceptualising social capital in relation to the well-being of children and young people: a critical review." The Sociological Review 47(4): 744-765.
- Morrow, V. (1999b). Searching for social capital in children's accounts of neighborhood and networks: A preliminary analysis. LSE Gender Institute Discussion Paper
- Morrow, V. (2001). "Using qualitative methods to elicit young people's perspectives on their environments: Some ideas for community health initiatives." Health Education Research 16(3): 255-268.
- Morrow, V. (2001). "Young people's explanation and experiences of social exclusion: Retreiving Bourdieu's concept of social capital." International Journal of Sociology and Social Policy 21(4/5/6): 37-63.
- Morrow, V. (2004). "Children's social capital": implications for health and well-being." Health Education 104(4): 211-225.
- Mowbray, C., Bybee, D., Hollingsworth, L., Goodkind, S., & Oyserman, D. (2005). "Living arrangements and social support: Effects on the well-being of mothers with mental illness." Social Work Research 29(1): 41-56.
- Nyre, G. F., Rose, C., & Bolus, R.E. (1990). DARE Evaluation Report for 1985-1989. Los Angeles, CA: Evaluation and Training Institute.

- Özbay, Ö. (2008). "Does social capital deter youth from cheating, alcohol use, and violence in Turkey?: Bringing torpid in." *Journal of Criminal Justice* 36(5): 403-415.
- Payne, A. A., Gottfredson, D., & Gottfredson, G. (2003). "Schools as communities: The relationships among communal school organization, student bonding, and school disorder." *Criminology* 41(3): 749-778.
- Pearson, M. and L. Michell (2000). "Smoke rings: Social network analysis of friendship groups, smoking and drug-taking." *Drugs: Education, Prevention and Policy* 7(1): 21-37.
- Pearson, M., Steglich, C., & Snijders, T. (2006). "Homophily and assimilation among sport-active adolescent substance users." *Connections* 27(1): 51-67.
- Pearson, M. and P. West (2003). "Drifting smoke rings: social network analysis and Markov processes in a longitudinal study of friendship groups and risk taking." *Connections* 25(2): 59-76.
- Poelen, E. A. P., Engels, R., Van Der Vorst, H., Scholte, R. H. J., & Vermulst, A. A. (2007). "Best friends and alcohol consumption in adolescence: A within-family analysis." *Drug and Alcohol Dependence* 88(2-3): 163-173.
- Portes, A. (1998). "Social Capital: Its origins and applications in modern sociology." *Annual Reviews in Sociology* 24(1): 1-24.
- Putnam, R. (1993). "The prosperous community: Social capital and public life." *The American Prospect* 13(1): 35-42.
- Putnam, R. (2000). *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon and Shuster.
- Rice, R. E., Donohew, L., & Clayton, R. (2003). "Peer network, sensation seeking, and drug use among junior and senior high school students." *Connections* 25(2): 32-58.
- Sampson, R. and W. Groves (1989). "Community structure and crime: Testing social-disorganization theory." *American Journal of Sociology* 94(4): 774-802.
- Santos, M. (2005). *Reopening the debate on social capital: Parental intergenerational closure, school racial composition, and math achievement*. 100th Annual American Sociological Association Conference.
- Schaefer-McDaniel, N. J. (2004). "Conceptualizing social capital among young people: Toward a new theory." *Children, Youth and Environments* 14(1): 140-150.

- Schneider, B. and D. Stevenson (1999). *The ambitious generation: America's teenagers, motivated but directionless.* New Haven, Yale U. Press.
- Sheldon, S. B. (2002). "Parents' social networks and beliefs as predictors of parent involvement." *The Elementary School Journal* 102(4): 301-316.
- Shortt, S. E. D. (2004). "Making sense of social capital, health and policy." *Health Policy* 70(1): 11-22.
- Simons-Morton, B. and R. Chen (2006). "Over time relationships between early adolescent and peer substance use." *Addictive Behaviors* 31(7): 1211-1223.
- Steglich, C., Snijders, T., & Pearson, M. (2007) *Dynamic networks and behavior: Separating selection from influence.* Interuniversity Center For Social Science Theory And Methodology.
- Urberg, K., Degirmencioglu, S., & Pilgrim, C. (1997). "Close friend and group influence on adolescent cigarette smoking and alcohol use." *Developmental Psychology* 33(5): 834-44.
- Urberg, K., Luo, Q., Pilgrim, C., & Degirmencioglu, S. (2003). "A two-stage model of peer influence in adolescent substance use: individual and relationship-specific differences in susceptibility to influence." *Addictive Behaviors* 28(7): 1243-1256.
- Valente, T. (2003). "Social network influences on adolescent substance use: An introduction." *Connections* 25(2): 11-16.
- Valente, T., Gallaher, P., & Mouttapa, M. (2004). "Using social networks to understand and prevent substance use: A transdisciplinary perspective." *Substance Use & Misuse* 39(10): 1685-1712.
- Valente, T., Ritt-Olson, A., Stacy, A., Unger, J., Okamoto, J., & Sussman, S. (2007). "Peer acceleration: effects of a social network tailored substance abuse prevention program among high-risk adolescents." *Addiction* 102(11): 1804-1815.
- Valente, T., Unger, J., & Johnson, C. (2005). "Do popular students smoke? The association between popularity and smoking among middle school students." *Journal of Adolescent Health* 37(4): 323-329.

- Valente, T., Watkins, S., Jato, M., Van Der Straten, A., & Tsitsol, L. (1997). "Social network associations with contraceptive use among Cameroonian women in voluntary associations." *Social Science & Medicine* 45(5): 677-687.
- Valente, T. W., Hoffman, B. R., Ritt-Olson, A., Lichtman, K., & Johnson, C. A. (2003). "Effects of a social network method for group assignment strategies on peer-led tobacco prevention programs in schools." *American Journal of Public Health* 93(11): 1837-1843.
- Van Voorhis, F. L. (2003). "Interactive homework in middle school: Effects on family involvement and science achievement." *The Journal of Educational Research* 96(6): 323-338.
- Vander Ven, T. M., F. T. Cullen, et al. (2001). "Home alone: The impact of maternal employment on delinquency." *Social Problems* 48(2): 236-257.
- Warr, D. J. (2006). "Gender, class, and the art and craft of social capital." *Sociological Quarterly* 47(3): 497-520.
- Weitzman, E. R. and I. Kawachi (2000). "Giving means receiving: the protective effect of social capital on binge drinking on college campuses." *American Journal of Public Health* 90(12): 1936-1939.
- Wen, M., Heather Van Duker, B. S., & Olson, L. M. (2008). "Social contexts of regular smoking in adolescence: Towards a multidimensional ecological model." *Journal of Adolescence* 32(3):671-92
- Willmott, P. (1987). Friendship networks and social support. London, Policy Studies Institute.
- Winstanley, E. L., D. M. Steinwachs, et al. (2008). "The association of self-reported neighborhood disorganization and social capital with adolescent alcohol and drug Use, dependence, and access to treatment." *Drug and Alcohol Dependence* 92(1-3): 173-182.
- Zolotor, A. and D. Runyan (2006). "Social Capital, Family Violence, and Neglect." *Pediatrics* 117(6): 1124.