

Social Capital and Persistent Criminal Behavior An Empirical Test of The Reciprocal Relationships

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Introduction

Criminological research has identified both stability and change in criminal behavior over time. While most youth mature out of delinquency in their late teens and early adulthood, there is a small group of individuals whose criminal behavior persist into young adulthood and beyond, oftentimes increasing in both frequency and seriousness. Criminologists are confronted with the question of why some youth continue their criminal offending over time, when the majority of their peers have made the transition to conformity. This is a critical question not only because it leads to the discovery of protective factors, but also because it points to risk factors for recidivism and persistent offending.

While individual factors such as biological, psychological characteristics are important to consider, social capital such as family relationships, peer networks and opportunities for a conventional life are essential for us to evaluate in order to explain stability and change in criminal behavior over time. Although prior research has shown that prior delinquency is a stable predictor of future delinquency, the intervening mechanism of this linkage has not been adequately studied. It is not clear to what extent prior delinquency and important social capital variables, such as relationships with family and friends, are related to criminal behavior in adolescence and adulthood.

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Furthermore, most of the previous longitudinal research are based on samples of “average” or “typical” offenders and thus fails to study serious offenders who, arguably, may be more like to continue or even escalate their antisocial involvement as they enter adulthood. Consequently, previous research findings may not be generalized to the small group of persistent and serious offenders who are known to be responsible for most crime in general, and most serious crime in particular (Moffitt, 1997, Hagan, 1993).

Social Capital and Persistent Criminal Behavior

Criminological research in persistent offending has been greatly influenced by the original theorem of social capital (Coleman, 1990, 1988). Coleman defines social capital as “a variety of entities with two elements in common: They all consist of some aspects of social structures, and they facilitate certain action of actors-whether persons or corporate actors-within the structure” (Coleman, 1988: p. S98, 1990, p. 302). Coleman regards social capital as an important feature in interpersonal relations, which is productive in that it is indispensable for the achievement of certain goals. Social capital can be quite valuable in facilitating certain actions but may be totally useless or even detrimental for others. Wright, Cullen and Miller (2001) found that family social capital produces the types of social and personal capital envisioned by Coleman, which reduces delinquency over time, moderates the effects of misbehavior, and is associated with general positive effects across the life course. Meanwhile, lack of social capital is also recognized as one of the major causes for persistent antisocial behavior (Cernkovich and Giordano, 2001).

Other research based on the social capital perspective focuses on the impact of criminal behavior on relationships with conventional others and the reciprocal relationship between offending and social capital. Thornberry (1987) emphasized the reciprocal relationship between offending and factors that may influence future offending in his interactional theory. He proposed that initial weakened social bonds lead to criminal behavior, which further weakens conventional social ties. These weakened social bonds result from negativity and rejection of the child by the parents (Cole and Zahn-Waxler, 1992; Brook, Whiteman, Gordon, Brook and Cohen, 1990), cold and unsupportive maternal behavior (Shedler and Block, 1990) and lack of involvement and time together (Kumpfer and Demarsh, 1986), resulting in rejection of the parents by the child, and maladaptive parent/child relationships. In addition, research has also shown that excessive family conflict and marital discord (Katz and Gottman, 1993), family isolation, lack of supportive extended family networks (Dilworth-Anderson, 1989), family

social insularity (Dumas, 1986), and lack of community support resources are conducive to continuous involvement in criminal behavior. Such a vicious circle makes it difficult for delinquent youths to reestablish conventional social ties and to desist from criminal behavior, which to some extent explains their persistent antisocial behavior through the life course.

Hagan (1993) pointed out that the process of “social or criminal embeddedness” deprives delinquent youths of the human and social capital crucial for future conventional roles. Other research shows that teens involved in drug activities in poor social environments have less potential to accumulate social capital to mediate their interpersonal relations with conventional others, such as parents and friends, through the life course (Dembo et al., 1993; Hagan and McCarthy, 1997; Sampson and Laub, 1994).

Some research has also shown that there are race and gender differences in the availability of social capital and its function to constrain delinquent behavior. Structural differences produce imbalances in the social capital available to families and youths of different ethnic backgrounds, living in different communities (Morenoff et al., 2001; Sampson et al., 1999). On the one hand, parents living in structurally disadvantaged communities fail to provide adequate parenting and the accumulation of social capital, which is crucial for youths to stay away from antisocial behavior. On the other hand, high levels of community disadvantage attenuate conventional social networks that are indispensable for effective crime control (Coleman, 1990). Oftentimes, minorities become the majority of the population living in disadvantaged communities; hence there is variability in the social capital available to individuals of different ethnic backgrounds (McNulty and Bellair, 2003).

Prior research has also shown variability in the social capital available to girls and boys, which account for the variations of the delinquency outcomes. Hagan’s (1993) power control theory points out that parents provide different kinds of parenting and support to girls and boys based on conventional gender-roles, which results in differential involvement in delinquency by girls and boys. Minorities and women with a criminal record are less likely to have a stable employment and less likely to get married (Pager, 2003; Giordano, Cernkovich, and Rudolph, 2002). Limited access to conventional social ties throughout the life course diminishes the chance of desistance from criminal behavior and partially explains the development of persistent criminal behavior.

Few prior studies on persistent antisocial behavior, however, have adequately addressed the variability in social capital available to serious offenders. As Moffitt (1997) has posited, life-course-persistent offenders suffer from both cumulative and concurrent deficits regarding their desistance from criminal behavior in early adulthood. For those who were serious delinquents during adolescence, their behavior could be consequential in their later lives, in terms of life opportunities, relationships with family and friends, and so forth, which can partly explain the continuity and persistence of their criminal behavior. Although some researchers have supported Moffitt's hypothesis with findings of deficits of adulthood employment opportunities and economic attainment (Hagan, 1993; Pager, 2003), few studies have examined the impact of adult criminality on relationships within the family and among friends over time, and few have examined the reciprocal effects between adult criminal involvement and aspects of social capital in adulthood. Meanwhile, we have limited knowledge about gender differences in social capital for serious offenders and its impact on the pathway from juvenile delinquency to adult criminal behavior.

The concept of social capital examined in this study, however, is slightly different from the original notion of social capital proposed by Coleman (1990) which emphasizes the effects of community variables and the availability of social capital related to group, organizations and communities. In this study, our empirical examination of social capital is focused on social capital related to family and friends and conventional life opportunities in early adulthood.

The present study will test the following research hypotheses:

(a). There are consistent relationships between social capital variables in adolescence and in early adulthood insofar as prior delinquency will affect social capital during both adolescence and adulthood. As Moffitt (1997) suggested, the impact of prior delinquency on social capital will be carried on from adolescence to adulthood. This stability of social capital is essential for understanding the stability of criminal behavior from adolescence to early adulthood.

(b). While prior delinquency explains a great portion of the variations of adult criminal behavior, social capital variables significantly affect pathways to adult criminal behavior. It is hypothesized that even for this sample of serious offenders, who began their involvement in serious offenses in their early years, social capital variables still significantly affect their adult

criminal behavior. This means that controlling for whatever criminal propensities they might possess, various social capital factors also impact their persistent antisocial behavior.

(c). Social capital variables have stronger effects in explaining the adult criminal behavior of females than of males. It is hypothesized that females are more affected by the impact of their prior delinquency on the critical social domains because delinquency is not consistent with their expected gender role. Thus females with prior delinquency are more likely to suffer the consequences of their delinquency, which greatly impact their social capital.

Data and Methodology

Sample

The data for this study were derived from two waves of the Ohio Lifecourse Study. The sample is composed of 254 institutionalized respondents who were interviewed initially in 1982 when they were adolescents and then in 1995 as young adults (Cernkovich and Giordano, 2001). In 1982, respondents were drawn from the populations of three male juvenile institutions in the state of Ohio, and the entire population of the only female juvenile institution in the state. Fifty percent of the sample were female. Sixty-five percent of the institutionalized respondents were white; the remaining nonwhites were predominantly black (32% of the sample). The respondents ranged in age from 12 to 21, with a mean of 16.3 years. In 1995, 210 of the previously institutionalized respondents were relocated and reinterviewed. This represents an 83% reinterview rate (85% when the sample is adjusted for deceased respondents). The second wave of data was collected via face-to-face interviews as well as through a mailed version of the interview schedule. Forty-eight percent of the reinterviewed respondents were male, and 63% were white. African-Americans represent 84% of the nonwhite respondents. The respondents ranged in age from 25 to 34 at the time of reinterview, with a mean of 29.30 years.

Measures

Dependent Variables

Adult Criminal Involvement (Cronbach's $\alpha=0.92$) was measured as the dependent variable in 1995. This scale was created as a modified version of Elliott and Ageton's (1980) self-report delinquency scale. This scale was

constructed by asking respondents the following questions: In the past 12 months how often did you: Damage or destroy property? Steal (or try to steal a motor vehicle, such as a car or motorcycle? Steal (or try to steal) something worth more than \$50? Carry a hidden weapon other than a plain pocket knife? Steal (or try to steal) things worth \$5 or less? Attack someone with the idea of seriously hurting him/her? Get involved in a gang fight? Sell marijuana or hashish ("pot", "grass", or "hash")? Hit (or threaten to hit) somebody? Sell hard drugs such as heroin, cocaine, or LSD? Have (or try to have) sexual relations with someone against their will? Get drunk in a public place? Break into a building or vehicle (or try to break into) to steal something or just to look around? Use drugs to get high (not because you were sick)? Cheat on your income tax? Take little things from work? Take things from work worth more than \$50? Drive more than 20 miles over the speed limit? Used or tried to use credit cards without owner's permission or passed a bad check (intentionally overdrafting)? Embezzle; that is used money or funds entrusted in your care for purposes other than intended? Frequency and severity of crime are considered to reflect the overall criminal involvement. Responses were coded from 1 (Never) to 9 (More than once a day). Each offense item was assigned a ratio-score seriousness weight derived from the National Survey of Crime Severity (Wolfgang et al, 1985: 46-50; also see Cernkovich and Giordano, 1992), ranging from 1.42 for drug use to 25.85 for rape.

Latent Independent Variables

In order to measure the theoretical concepts of critical social domains, several latent independent variables were constructed with LISREL 8.54. Exploratory factor analyses were performed to determine the best combinations of indicators for these latent variables.

Two pairs of latent variables were constructed to measure social capital related to family and peer networks. *Parents' Support* during adolescence and adulthood were measured by using indicator questions from the 1982 data and 1995 data, respectively. *Friends' Support* during adolescence and adulthood were also measured by using indicator questions from the 1982 and 1995 data. Responses to indicator questions of both latent variables in 1982 were coded from 1 (strongly disagree) to 5 (strongly agree). Responses to indicator questions of both latent variables in 1995 were coded from 1 (strongly agree) to 5 (strongly disagree). Responses were recoded so that high scores indicate high levels of support from parents and friends. Indicators and results of the measurement model of parents' support and friends' support are shown Table 1. The fit statistics indicates that the

measurement model does a good job in measuring these four latent variables (1RMSEA=0.05, χ^2 ratio = 1.66. All loadings are significant at $\alpha=0.05$ level).

Table 1.

1982	Loadings		1995	Loadings	
Indicators	Parent's Support	Friends' Support	Indicators	Parent's Support	Friends' Support
I feel comfortable talking to my parents when I	0.763	----	My parents sometimes put me down in front of other	0.584	----
My parents give me the right amount of affection	0.732	----	My parents give me the right amount of affection	0.691	----
One of the worst things that could happen to me	0.523	----	Sometimes my parents won't listen to me or my	0.608	----
My parents are usually proud of me when I've	0.554	----	My parents are usually proud of me when I've	0.626	----
My parents trust me	0.688	----	My parents trust me (reverse coded)	0.627	----
I'm closer to my parents than a lot of kids my age	0.832	----	I'm closer to my parents than a lot of kids my age	0.601	----
I feel comfortable calling my friends when I have a	----	0.582	My parents seem to wish I were a different type of	0.534	----
I can trust them - I can tell them private things and	----	0.648	Sometimes my family can't be counted on when I need	0.545	----
They're easy to talk to	----	0.655	Members of my family are not always the best ones to	0.531	----
They care about me and what happens to me	----	0.837	If I really needed something my family	0.586	----
I can't really be myself if I want to stay friends with	----	0.399	I feel comfortable calling my friends when I have a		0.638
			Sometimes my friends just won't listen to me or my		0.352
			I like most of my friends more than they like me		0.136
			I can trust them - I can tell them private things and		0.675
			They're easy to talk to (reverse coded)		0.603
			They care about me and what happens to me		0.605
RMSEA=0.05, χ^2 Ratio = 1.66, df =318. All loadings are significant at $\alpha=0.05$ level.					

¹ Root Mean Square Error Approximation. RMSEA less than 0.05 indicates a good fit of the model. RMSEA larger than 0.05 and less than 0.08 indicates acceptable fit of the model. χ^2 less than 3 indicates a good fit of the model

Other Independent Variables

Other independent variables in the analyses include *Race* (1=black, 0=non-black, which includes whites and others), *Gender* (1=female, 0=male), *Age in 1995* (25-34), and *Prior Delinquency*. Prior research has shown that on the aggregate level, age is inversely related to criminal involvement (Gottfredson and Hirschi, 1990; Hirschi, 1969). Research has also shown that compared with males, fewer females commit crime and there are fewer serious female offenders (Cernkovich and Giordano, 1979; McCord, 1993; Steffensmeier and Streifel, 1993; Broidy and Agnew, 1997). In order to include the effect of latent criminal traits in the analysis, prior delinquency measured in 1982 was used as a proxy measure. Prior research has shown that early onset of crime is a stable predictor of future offense (Gottfredson and Hirschi, 1990; Piquero, Paternoster, Mazerolle, Brame, and Dean 1999; Cernkovich and Giordano, 2001). *Prior Delinquency* (Cronbach's $\alpha=0.92$) was measured in 1982 by a modified version of Elliott and Ageton's (1980) self-report delinquency scale. This scale was constructed by asking the following questions: In the past 12 months, how often have you: Damaged or destroyed property on purpose? Stolen (or tried to steal) a motor vehicle, such as a car or motorcycle? Stolen (or tried to steal) something worth more than \$50? Knowingly bought, sold, or held stolen goods (or tried to do any of these things)? Thrown objects (such as rocks, snowballs, or bottles) at cars or people? Run away from home? Lied about your age to gain entrance or to buy something, for example, lying about your age to buy liquor or get into a movie? Carried a hidden weapon other than a plain pocket knife? Stolen (or tried to steal) things worth \$5 or less? Attacked someone with the idea of seriously hurting him/her? Been paid for having sex with someone? Had sexual intercourse with someone of the opposite sex (other than your wife/husband)? Been involved in gang fights? Sold marijuana or hashish ("pot", "grass", or "hash")? Cheated on school tests? Hit (or threatened to hit) somebody? Been loud, rowdy, or unruly in a public place (disorderly conduct)? Sold hard drugs such as heroin, cocaine, or LSD? Taken a car or motorcycle for a ride (driven without the owner's permission)? Had (or tried to have) sexual relations with someone against their will? Used force (strong-arm methods) to get money or other things? Been drunk in a public place? Stolen (or tried to steal) things worth between \$5 and \$50? Broken into a building or vehicle (or tried to break in) to steal something or just to look around? Skipped classes without an excuse? Used drugs to get high (not because you were sick)? Drunk alcohol? As with the measure of adult criminal involvement, frequency and severity of offending were used to construct an overall delinquency measure.

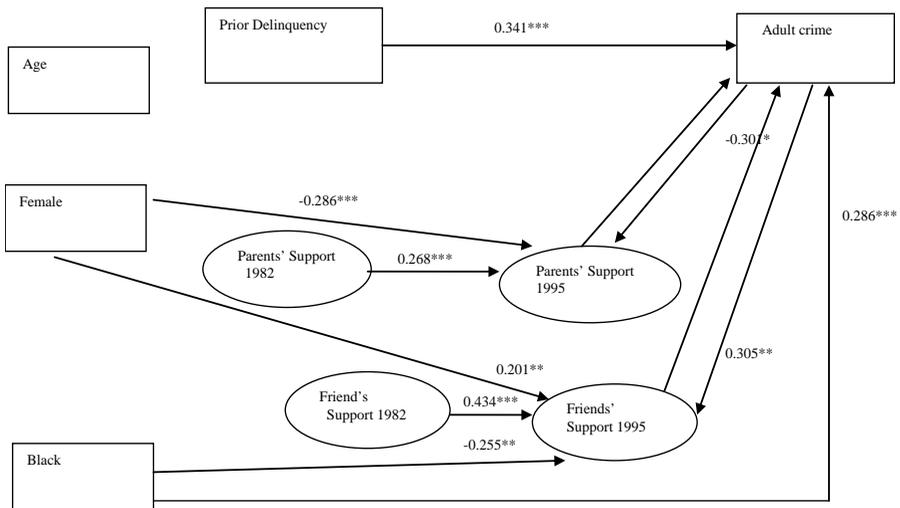
capital variables during adolescence will not have a significantly direct effect on criminal behavior in adulthood. Using instrument variables will solve the problem of lack of information in contemporaneous-effect models, and ensure the validity of the results (Kohn and Schooler, 1982).

In the second part of the analysis, I will follow similar procedure but test the gender variations based on female sample and male sample respectively.

Results

Results From The Whole Sample

Results from the first part of the analyses (Figure 2) indicate that there are significant stability effects in respondents' social capital from adolescence to early adulthood. Parents' support in 1982 significantly predict parents' support in 1995 ($\beta=0.268$, $p<0.001$). Friends' support in 1982 significantly predicts friends' support in 1995 ($\beta=0.434$, $p<0.001$). Meanwhile, prior delinquency significantly predicts adult criminal involvement ($\beta=0.341$, $p<0.001$). These results support the first hypothesis that there are strong stability effects for the social capital variables from adolescence to early adulthood.



* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. RMSEA=0.05, $df=490$, χ^2 Ratio = 1.51. All coefficients are standardized.

Figure 2. Testing Reciprocal Effects between Adult Delinquency and Latent Variables of Social Capital

Results from the reciprocal analysis indicate that parents' support in early adulthood does not affect adult criminal involvement, nor does adult criminal involvement has significant effect on parents' support in early adulthood. Nevertheless, the results show that there are significant reciprocal relationships between friends' support in early adulthood and adult criminal involvement. Friends' support in 1995 significantly reduces adult criminal involvement ($\beta = -0.301$, $p < 0.05$), while at the same time, adult criminal involvement significantly increase support from friends ($\beta = 0.305$, $p < 0.01$). This result suggests that while social capital from peer networks affects adult criminal involvement, adult criminal involvement also has contemporaneous effect on the critical social domains. The positive effect of adult crime on friends' support in adulthood suggests that adult criminal involvement can increase friends' support, which makes sense considering that serious adult offenders are more likely to have criminal friends as their support groups. In addition, support from these friends, whether delinquent or not, can significantly reduce adult criminal involvement, much as Hirschi's (1969) social control theory argues.

Age, gender and race are included as control variables in this model. The results indicate that females have less parental support ($\beta = -0.286$, $p < 0.001$) in adulthood compared with males, but have more support ($\beta = 0.201$, $p < 0.01$) from friends than males. Since delinquency is aberrant from the perspective of the conventional female gender role, females who were juvenile delinquents have less parental support in adulthood than males who were also involved in juvenile delinquency. With limited parental support in adulthood, females tend to receive more support from friends instead. Compared with non-blacks, blacks have less friends' support in adulthood ($\beta = -0.255$, $p < 0.01$), but have more criminal involvement ($\beta = 0.286$, $p < 0.001$). Age does not significantly affect support from parents and friends in adulthood, or adult criminal involvement.

In sum, analysis of the reciprocal model suggests that there are significant stability effects between support from parents and friends in adolescence and adulthood, and between prior delinquency and adult criminal involvement. Consistent with findings from prior research on adolescent relationships and peer networks (Youniss and Smollar, 1985; Warr, 2002), support from friends still affects criminal involvement in adulthood while support from parents does not significantly influence adult criminal involvement for this sample of respondents who were serious juvenile delinquents in their adolescence. For this sample, adult criminal involvement tends to increase support from friends, although at the same time, support from friends can also reduce criminal involvement. Separate analysis shows that the majority of the respondents report having friends

involved in various types of delinquency and crime in adulthood, and this partly explains why adult criminal involvement tends to increase friends' support in adulthood.² Meanwhile, support from friends, even if they are delinquent, might reduce criminal involvement. Arguably, certain types of support from delinquent friends, such as emergency financial support and emotional support, may also sometimes reduce the individual's criminal involvement.

The next step of the analysis is to examine the pathways from prior delinquency to adult criminal involvement and identify the effects of latent social capital variables on adult criminal involvement (Figure 3). The results indicate that there are significantly positive relationship between support from parents and friends over time. Prior delinquency has significant direct effect on adult criminal involvement. However, the results do not show significant effect of prior delinquency on the social capital variables in adulthood. Parents' support and friends' support do not affect adult criminal involvement either. These results suggest that these social capital variables are not affected by prior delinquency and do not significantly affect adult criminal involvement. One of the reasons for this can be that adult criminal involvement has contemporaneous effects on the latent social capital variables. As shown in the analysis of reciprocal relationships (Figure 2), adult criminal involvement significant affects friends' support in adulthood.

Age, gender and race are used as demographic controls in the model and significant paths are shown in Figure 3. The results indicate that females have lower level of parental support in adolescence ($\beta = -0.137$, $p < 0.05$) and adulthood ($\beta = -0.237$, $p < 0.001$) than males. In addition, since most female juveniles in this sample of serious offenders are more delinquent than their contemporaries, they were more likely to break from traditional gender roles and more likely to weaken their ties with parents. Meanwhile, compared with males, females report higher level of friends' support in adolescence ($\beta = 0.249$, $p < 0.001$) and adulthood ($\beta = 0.201$, $p < 0.05$). Blacks have higher level of parents' support in adolescence ($\beta = 0.165$, $p < 0.01$) but lower level of friends' support in adulthood ($\beta = -0.159$, $p < 0.05$).

² A scale of criminal friends is created using the same indicators indexing the latent variable of having criminal friends. Results show that 86% of the respondents reports having criminal friends.

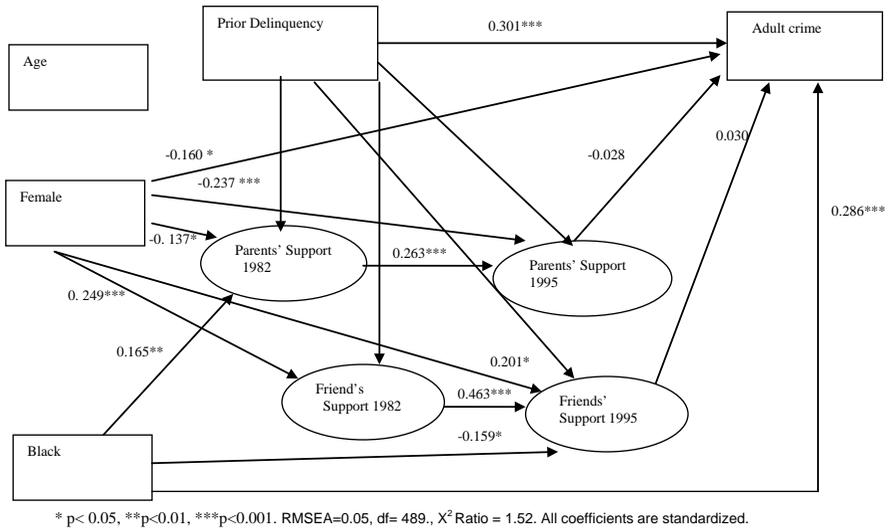
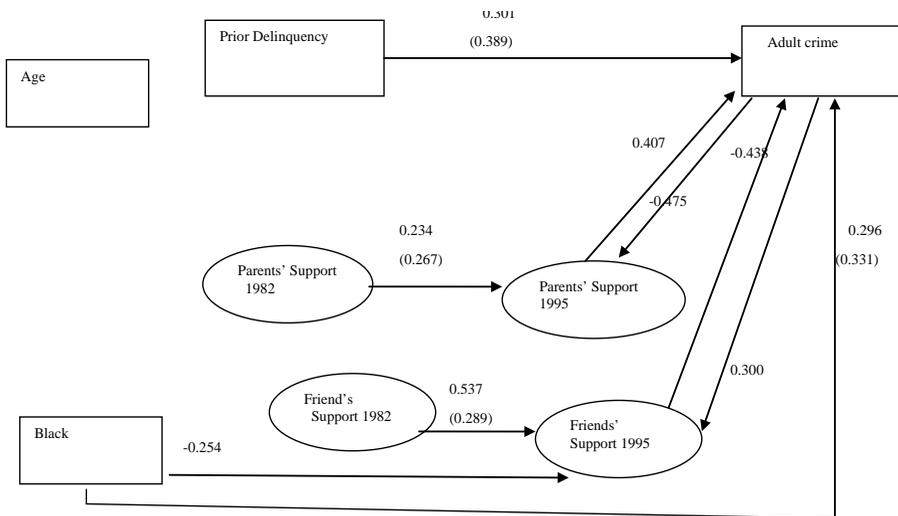


Figure 3. Testing Effects of Latent Variables of Social Capital on Adult Criminal Involvement

Overall, results from these analyses show significant reciprocal effects between adult criminality and social capital related to parents and peer networks. Specifically, supports from friends in adulthood and adult criminality have significant reciprocal relationships. In the path analysis, in which one-way paths from the latent social capital variables to adult criminality are examined, supports from parents and friends in adulthood do not influence adult criminality. This is partly related to the contemporaneous effect of adult 1982 criminality on the social capital variables in adulthood.

Gender Differences In Social Capital and Crime

In order to identify possible gender differences in the analysis, I split the complete sample into male and female subsamples, and ran the measurement models again based on these subsamples. In the first step of the analysis, I examine the reciprocal relationships between adult criminal involvement and the latent variables of social capital. Figure 4 presents the results of the stability model (coefficients for males are in parentheses; those without parentheses are for females). Standardized path coefficients are given in the path diagrams, while unstandardized path coefficients from each subsample are used wherever comparisons are made.



RMSEA=0.05, χ^2 Ratio = 1.34, df= 950. Only standardized significant ($p < 0.05$) coefficients are given. Significant coefficients from male sample are in parentheses.

Figure 4. Gender Differences in the Reciprocal Effects between Adult Delinquency and Latent Variables of Social Capital

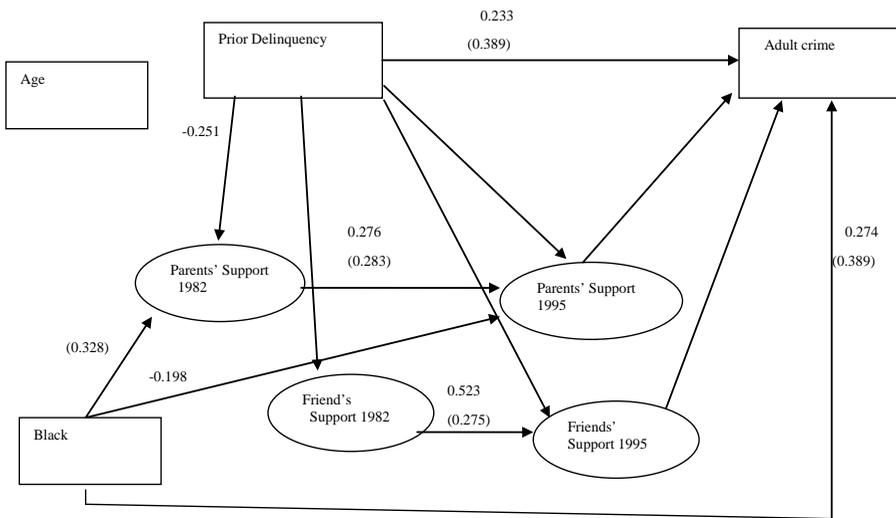
Results indicate that there are significant stability effects of support from parents and friends from adolescence to early adulthood for both males and females. Results from the female sample suggest that parents' support in 1982 significantly predicts parents' support in 1995 ($\beta = 0.234$, $p < 0.05$). For the male sample, the effect of parents' support in 1982 on parents' support in 1995 is also significant ($\beta = 0.267$, $p < 0.05$). For the female sample, friends' support in 1982 significantly leads to friends' support in 1995 ($\beta = 0.537$, $p < 0.001$). For the male sample, however, the stability effect among friends' support over time is much weaker ($\beta = 0.289$, $p < 0.05$) than that of the female sample. These results indicate that for females, support from friends has much stronger stability effects over time. For the female sample, prior delinquency significantly predicts adult criminal involvement ($\beta = 0.301$, $p < 0.001$). For the male sample, however, the stability effect among delinquency over time is stronger ($\beta = 0.389$, $p < 0.001$). This result indicates that prior delinquency has stronger direct effect on adult criminal involvement for males.

Results from the reciprocal analysis indicate that for the male sample support from parents and friends in adulthood do not significantly affect adult criminal involvement, nor does adult criminal involvement have a significant effect on support from parents and friends in early adulthood. Nevertheless, the results from the female sample show that there are significant reciprocal relationships between social capital variables in early adulthood and adult criminal involvement. For females, adult criminal involvement has strong effect in reducing parents' support in 1995 ($\beta = -0.475$, $p < 0.001$). At the same time, parents' support in 1995 significantly increase adult criminal involvement ($\beta = 0.407$, $p < 0.05$). This suggests that respondents may have deviant parents who provide support for antisocial behavior. In addition, for the female sample, friends' support in 1995 significantly reduce adult criminal involvement ($\beta = -0.438$, $p < 0.01$), while adult criminal involvement increases support from friends ($\beta = 0.300$, $p < 0.05$). These results indicate that for females, support from friends in adulthood, rather than support from parents in adulthood, significantly affects their adult criminality. These results also partially support the hypothesis that while social capital variables affect adult criminal involvement, adult criminal involvement also has contemporaneous effects on respondents' social capital, though only results from the female sample suggest these reciprocal relationships.

In sum, results from the reciprocal model suggest that for both males and females there are significant stability effects for support from parents and friends in adolescence and adulthood. The stability effects among parents' support are stronger for males, while the stability effects for friends' support are stronger for females. For females, there are significant reciprocal relationships between support from parents and friends and adult criminal involvement. The results show that female's adult criminal involvement has a significant impact in decreasing support from parents. For females, support from friends has a stronger effect in reducing adulthood criminal involvement than vice versa. These findings support the hypothesis that adult criminal involvement has significant contemporaneous effects on the social capital variables. The results from the male sample, however, do not suggest significant reciprocal relationship between social support and adult criminal involvement.

The results of the path analysis (Figure 5) show that for females, prior delinquency significantly reduces parents' support in adolescence ($\beta = -0.251$, $p < 0.001$). For both samples, parents support and friends' support in adolescence significantly predicts their counterparts in adulthood. Parents' and friends' support in adulthood, however, do not affect adult criminal involvement in either sample. Black males report higher levels of adult

criminal involvement ($\beta = 0.389$, $p < 0.001$) than non-black males and black females also report higher levels of adult crime than non-black females ($\beta = 0.274$, $p < 0.001$). In addition, black males report higher levels of parents' support ($\beta = 0.328$, $p < 0.001$) in adolescence than non-black males, while black females have lower levels of parents' support in adulthood ($\beta = -0.198$, $p < 0.05$) than non-black females. This result supports findings from the reciprocal model that females' criminal involvement tends to reduce parents' support in adulthood. Overall the results suggest that prior delinquency and adult criminal involvement have stronger negative impact on female's social capital in early adulthood.



RMSEA=0.05, χ^2 Ratio = 1.34., $df = 945$. Only standardized significant ($p < 0.05$) coefficients are given. Significant coefficients from male sample are in parentheses.

Figure 5. Gender Differences in the Effects of Latent Variables of Social Capital on Adult Delinquency

Discussion and Conclusion

The present study was designed to explore the relationship between social capital and the continuity of criminal behavior based on a sample of serious offenders who were serious juvenile delinquents in adolescence. The findings suggest that social capital variables in adolescence have cumulative effects on social capital in early adulthood. This supports the research hypothesis that there are significant stability effects between social capital variables from adolescence to adulthood. Meanwhile, social capital variables in this study have minimum impact on adult criminal behavior. Instead,

findings from the reciprocal model indicate that adult criminal involvement has a significant contemporaneous effect on increasing support from friends. This result is not consistent with the traditional proposition of social capital theory that criminal behavior will negatively impact significant social relationships which serve as important conventional social capital that buffers the individual from criminal involvement. Considering the particular characteristics of this sample and their experience as serious juvenile offenders, however, this result does make sense. Starting as serious juvenile delinquents, many of those respondents may suffer from isolation from conventional peer networks, which increase their opportunities to associate with delinquent peers. Within the delinquent friend network, being delinquent and committing crime confer gain status and garner support from delinquent friends. Warr (2002) elaborates the micro mechanisms in which delinquent peer pressure increases individual's criminal behavior in order to gain support from delinquent peers. This result is also consistent with findings from research on gang membership and criminal behavior (Esbensen and Deschenes, 1998), which suggest that collective criminal behavior tends to increase mutual support from gang members. This helps to explain why adult criminal behavior tends to increase friends' support for these serious offenders. The findings from the reciprocal model suggest that although social capital variables affect adult criminal involvement, the latter exerts significant contemporaneous effects on the social factors as well.

Findings based on subsamples of males and females suggest that there are significant gender differences in the ways prior delinquency affects the social capital variables and in how the social capital variables affect adult criminal involvement. Juvenile delinquency reduces parents' support for females but not for males. Since delinquency is not congruent with the traditional female gender role, once girls are found to be involved in juvenile delinquency, they suffer more than boys the consequences of their delinquency, not only because of the delinquency per se, but also because of violation of the traditional gender roles. Findings from the present study suggest that parents' support for females over time is affected by both prior delinquency and adult criminal involvement. Females' adult criminal involvement significantly reduces support from parents, even when considering the contemporaneous effect of parents' support on adult criminal involvement.

Results from the analysis also indicate that the stability effect between friends' support over time is much stronger for females than males. This result is consistent with findings about the gender differences in peer networking and its effect on delinquency (Agnew, 2001). For females, quality relationships with significant others is a major factor in

understanding their involvement in delinquency. Additional results suggest that friends' support in adulthood significantly reduces females' adult criminal involvement, even when considering the contemporaneous effect of adult crime on friends' support. For females in this sample, it seems that friends' support over time is far more important in affecting their adult criminal involvement than parents' support. For males, however, social capital variables do not significantly affect their adult criminal involvement. These results indicate that for this sample of serious offenders, social capital theory is more relevant for females than for males in understanding pathways from prior delinquency to adult criminality.

Some limitations of this study should be acknowledged. The first limitation is that the study was based on a non-probability sample. While the Ohio Life Course Study is a unique study of the life histories of juveniles followed into their adulthood, the institutional sample used in the present study is not a national probability sample. Although this sample better satisfies the research objective of the present study, generalization of the results is limited in scope.

Secondly, the present study focused parents' support and friends' support and use these variables to measure the concept of social capital. However, there may be other important social capital dimensions not included in the present study such as relationship with relatives, significant others and so forth. These dimensions may as well interact with gender and race and affect the pathways from juvenile delinquency to adult criminal involvement. Further research on social capital and serious offenders should incorporate other important dimensions of social capital.

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