

SOCIAL CAPITAL, SAFETY CONCERNS, PARENTING, AND EARLY ADOLESCENTS' ANTISOCIAL BEHAVIOR

Alessio Vieno
University of Padova

Maury Naton and Douglas D. Perkins
Center for Community Studies, Vanderbilt University

Massimiliano Pastore and Massimo Santinello
University of Padova

This study explores the relations between neighborhood social capital (neighbor support and social climate), safety concerns (fear of crime and concern for one's child), parenting (solicitation and support), and adolescent antisocial behavior in a sample of 952 parents (742 mothers) and 588 boys and 559 girls from five middle schools (sixth through eighth grades) in a midsize Italian city. In structural equation models, social capital is strongly and inversely related to safety concerns and positively related to parental support and solicitation. In turn, safety concerns are also positively related to parental support and solicitation. Social capital and safety concerns have indirect effects on children's antisocial behavior through their effects on parenting. Implications are discussed for parenting and community-based interventions to prevent or reduce youth antisocial behaviors. © 2010 Wiley Periodicals, Inc.

Growing empirical evidence demonstrates the influence of neighborhood context on children's and adolescents' psychosocial adjustment (Beyers, Bates, Pettit, & Dodge, 2003; Fauth, Leventhal, & Brooks-Gunn, 2007; Kohen, Leventhal, Dahinten, & McIntosh, 2008; Leventhal & Brooks-Gunn, 2000; Prezza & Pacilli, 2007; Simons,

Correspondence to: Alessio Vieno, Department of Developmental and Social Psychology, University of Padova, via Belzoni, 80-35131-Padova, Italy. E-mail: alessio.vieno@unipd.it

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Johnson, Beaman, Conger, & Whitbeck, 1996; Wandersman & Nation, 1998). According to these studies, neighborhoods characterized by disadvantaged economic conditions, low levels of opportunity, high residential instability, and high crime rates have a negative effect on a wide range of outcomes, such as school achievement and emotional and behavioral problems. It has also become clear that social processes within the neighborhood may mediate or moderate the effects of neighborhood structural characteristics (e.g., Dorsey & Forehand, 2003; Sampson, Raudenbush, & Earls, 1997). The extensive literature on the effects of neighborhood social conditions on adjustment of adolescents has been concentrated mainly in North America (Kohen et al., 2008), has considered groups of serious adolescent offenders (Chung & Steinberg, 2006), and has generally identified poor and minority neighborhoods as the riskiest context for children. However, less is known about the interaction between neighborhood characteristics and social processes in areas outside the United States, areas not affected by the concentration of poverty, and in neighborhoods with significant social capital (Putnam, Leonardi, & Nanetti, 1993).

In the present study, we propose and test a model of the mechanisms through which the effects of neighborhood social conditions as perceived by parents have an impact on the behavioral outcomes for early-adolescents residing in a mid-sized city in Italy. In this model, we consider both neighborhood social capital (i.e., support and social climate) and perceived neighborhood social threats, or dangers, as factors that may directly and indirectly influence parenting behaviors, and subsequent early adolescents' behavior.

Both Bronfenbrenner's ecological systems theory (Bronfenbrenner, 1979) and family system theories (e.g., Simons et al., 1996) conceptualize how familial and social/environmental contexts interact in facilitating (or hindering) developmental outcomes. Bronfenbrenner's model posits the child at the center of multiple, interrelated levels of social systems. The conceptual framework used to guide the present research rests on several key assumptions or hypotheses (see Fig. 1). These include the ideas that (a) the exosystem including neighborhood social capital and safety concerns may play a direct role on children's development and behavior; and (b) one of the ways in which exosystems exercise their influence on children is through microsystems such as the parent-child relationship.

NEIGHBORHOOD AND EARLY ADOLESCENTS' PSYCHOSOCIAL ADJUSTMENT

Beginning in early adolescence, there is an increase of unsupervised exposure to neighborhood settings and conditions, and direct contacts with neighborhood members (Allison et al., 1999). The neighborhood is therefore an important environment for adolescent development providing opportunities to forge supportive networks with people and organizations (Pretty, 2002). The range of child and adolescent outcomes correlated with forms of neighborhood concentrated disadvantage includes infant mortality, low birth-weight, teenage childbearing, school dropout, child maltreatment, and adolescent antisocial behavior (see e.g., Leventhal & Brooks-Gunn, 2000).

Jencks and Mayer (1990) identified mechanisms through which neighborhoods may affect child development. They suggested that collective socialization, in which social and behavioral norms are communicated formally and informally by role models living in the neighborhood, is an important contributor to neighborhood effects.

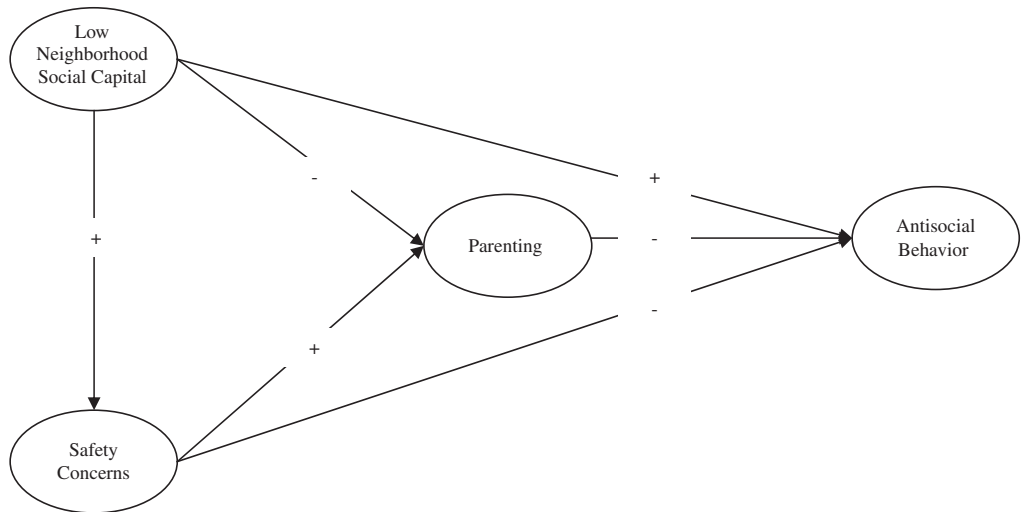


Figure 1. Conceptual model predicting adolescents' antisocial behavior from neighborhood conditions and parenting.

Others have proposed constructs such as neighborhood social organization (Wilson, 1987), and collective efficacy (Sampson et al., 1997) as a way of accounting for how social processes including social support and cohesion among neighbors, sense of community, supervision and control of children and adolescents by other adults in the community (Dorsey & Forehand, 2003; Sampson, 2001) might affect children's psychosocial adjustment.

Neighborhood social capital is perhaps the broadest and currently the most popular way of conceptualizing such community-level social resources. Social capital is promoted by neighborhood residents through the formation of trust, sharing, and informal support. Specifically, forms of social capital include both informal and formally organized, community-focused behaviors (e.g., neighboring behavior or instrumental support and citizen participation) and opportunities for trust-building (sense of community and collective efficacy or empowerment; Perkins, Hughey, & Speer, 2002). It is likely that social capital would have effects on the types and quality of the relationships children might experience within their neighborhoods. In addition to the direct effect, low social capital may indirectly affect the lives of children by increasing neighborhood safety/reducing dangerousness (Dorsey & Forehand, 2003; Leventhal & Brooks-Gunn, 2000). Neighborhood safety concerns may result from a decreasing informal social control and neighborhood cohesion (Brown, Perkins, & Brown, 2004). Research on social capital has suggested that it is an important mechanism in explaining psychosocial adjustment during adolescence as indicated by its negative effect on both antisocial behavior (Dorsey & Forehand, 2003; Furstenberg & Hughes, 1995) and neighborhood dangerousness that, in turn, is associated with child antisocial behavior (Dorsey & Forehand, 2003; Leventhal & Brooks-Gunn, 2000).

There is a large amount of evidence that parenting behaviors affect the occurrence of antisocial behavior among adolescents. In their extensive review, Barber, Stolz, and Olsen (2005), for example, found that parental support and parental behavioral control (as measured in parental solicitation) is predictive of several adolescent behaviors including antisocial behavior. In fact, the social learning theory of delinquency (Dishion & McMahon, 1998) is predicated upon the assumption that

parent monitoring and knowledge of adolescent behavior is an important predictor of adolescent antisocial behavior.

Ecological theories have suggested that parenting is a critical microsystemic mediator of neighborhood effects (Leventhal & Brooks-Gunn, 2000; Sampson & Groves, 1989). According to the family stress model (Kohen et al., 2008; Simons et al., 1996), living in dangerous neighborhoods impacts parenting closeness and monitoring. According to this perspective the effects of neighborhood stressors (e.g., low social capital and dangerousness) on children operate by influencing the types of behaviors parents might engage in with their children. For example, Leventhal and Brooks-Gunn's (2000) review of neighborhood effects research suggested that neighborhood disadvantage might affect factors ranging from mothers' display of warmth toward their children to parental monitoring of their children's behavior. In turn, decrements in these parenting behaviors have been associated with child behavior problems (Dishion & McMahon, 1998; Fletcher, Steinberg, & Williams-Wheeler, 2004; Patterson & Stouthamer-Loeber, 1984; Maccoby & Martin, 1983; Soenens, Vansteenkiste, Luyckx, & Goossens, 2006; Vieno, Nation, Pastore, & Santinello, 2009).

The relatively few studies that have examined these relations have supported parenting as a mediator of neighborhood effects. Conger, Ge, Elder, and Lorenz (1994) found that low neighborhood social capital is connected to emotional distress that often disrupts parenting, resulting in increased use of harsh and punitive parenting behaviors. Also, Dorsey and Forehand found that low social capital in the neighborhood resulted in decreased parental support and monitoring (Dorsey & Forehand, 2003). Collectively, these studies suggest that analysis of neighborhood effects on adolescents' antisocial behavior would be incomplete without considering neighborhood effects on parenting.

THE PRESENT STUDY

Most of the research analyzing the effects of neighborhood social capital on parenting and adolescent adjustment has been conducted in North America (Kohen et al., 2008), and in neighborhoods where there is a considerable concentration of poverty, racial segregation, and disadvantage (Dorsey & Forehand, 2003; Jargowsky, 1996). These neighborhoods are not representative of most residential areas and their forms of social capital skew toward less formal ties with few links to power or other resources. Less is known about neighborhoods where social inequalities are less diffused and where both formal and informal social capital tends to be higher, as in Italy (Dallago et al., 2009; Zafirovski, 2000). Thus, the principal aim of the present study is to understand the mechanisms through which neighborhood effects influence early-adolescents' antisocial behavior. We do this by testing a theoretical model where parents' perceptions of both neighborhood social capital (i.e., support and social climate) and neighborhood dangerousness predict child antisocial behavior. Moreover, we hypothesize that parenting behaviors (solicitation and support) may serve as mediators (Vieno, Santinello, Pastore, & Perkins, 2007) through which neighborhood conditions affect early adolescent antisocial behavior (see Fig. 1).

According to the model, neighborhood social capital creates a context that shapes parents' perceptions and behavior. Parents' perception of low social capital is associated directly with higher levels of child behavioral problems and decreased use of certain effective parenting strategies (solicitation and support), which, in turn, results in more behavioral problems. According to this model, families exposed to disadvantaged

neighborhood conditions display less capacity to act in a supportive involved manner (e.g., Kohen et al., 2008), solicit less information about their children's whereabouts, and provide less monitoring of their children's behavior (e.g., Chung & Steinberg, 2006). The proposed model addresses limitations of previous studies. For example, Dorsey and Forehand's (2003) examination of parenting focused primarily on parental knowledge. However, subsequent studies have suggested that it is important to deconstruct parental knowledge into multiple dimensions of parental behavior. Kerr and Stattin (2000) suggest that parental knowledge may be more related to individual differences in adolescent self-disclosure, rather than the result of parental practices (also see Stattin & Kerr, 2000). For this reason, we focus on parent support and include the construct of "solicitation" to capture the primary behaviors that parents may engage in to increase their knowledge.

Another important path in this model is an association of parental perception of local social capital with perceived neighborhood safety concern (Leventhal & Brooks-Gunn, 2000). Building upon the fear of crime research (see Clemente & Kleiman, 1977) we expand the definition of neighborhood dangerousness to include crime concerns related to threats to children's wellbeing. In fact, we argue that, contrary to Dorsey and Forehand (2003) who used just a general measure of neighborhood dangerousness, the constructs of fear of crime and concern for children represent the cognitive factors parents use to make decisions regarding their use of support and solicitation. In addition to the direct link from neighborhood dangerousness to adolescent antisocial behavior, we will test whether parenting may also be influenced by safety concerns in a way that also affects children's behavior.

Our model extends previous models by exploring an early adolescent sample, a developmental period when parental solicitation becomes more salient. However, early adolescence is a critical period in the development of many risky behaviors (Moffitt, Caspi, Dickson, Silva, & Stanton, 1996). This stage is also critical because during early adolescence, children are increasingly exposed to a variety of extrafamilial individuals and settings, and are expected to become increasingly independent and self-regulating (Patrick, Snyder, Schrepferman, & Snyder, 2005). Also, the model is distinguished by including both parent and child ratings of the child's antisocial behavior. In fact, when models are run separately (for child and parents), significant predictions are likely (in our case by using just parents' information). However, the association between variables may be partially due to a methodological artifact. Researchers (e.g., Bartels et al., 2004) have suggested using structural equation modeling to address this limitation. Thus, we address this issue by combining parent and adolescent information about child behavior to create a latent construct.

More importantly, we test whether or not the relationship between neighborhood conditions and adolescent engagement in antisocial behavior is direct or indirect depending on parenting styles or practices, such as solicitation or support towards the child.

METHOD

Procedure

The present data came from a study conducted in a midsized city in the northeast of Italy. Parents of all sixth-, seventh-, and eighth-grade students (from five public middle

schools) were asked for their consent to participate and for their permission to allow their child to participate in the study. Students filled out their portion of the questionnaire during a single class period. Data were collected during a 4-week period and was proctored by research assistants. Students were given approximately 50 minutes to complete the questionnaire. Parents also received a questionnaire and decided whether the mother or father would complete the survey. Eighty-four percent of parents agreed to participate. Each child returned a sealed envelope to their teacher containing either the completed survey or their parents' decision not to participate.

Participants

Participants included 952 parents: 742 (77.3%) mothers, 210 (21.9%) fathers. Mothers' mean age was 42.07 years ($SD = 4.97$). On an 8-point rating scale their mean educational level was 4.27 ($SD = 1.47$) indicating that they had at least 11 years of education on average. Fathers' mean age was 45.49 years ($SD = 4.99$). Their mean educational level was 4.55 ($SD = 1.47$) indicating that they had 13 years of education on average.

In addition, participants included 1,147 early adolescents (588 boys and 559 girls) from five middle schools (sixth through eighth grades). The children's ages ranged from 11 to 15, with a mean of 12.58 ($SD = .97$). Four hundred twenty-two students were in the sixth grade (36.8%), 341 in the seventh grade (29.7%), and 384 (33.5%) in the eighth grade. Most of the children were born in Italy (94.8%), with most of the rest from Eastern Europe (3.5%). In relation to family structure, 89.5% of the students came from a two-parent family (with parents married and living together), 6.0% had divorced parents, 4.5% lived with one parent (mainly the mother).

The nonresponse of parents ($N = 188$), and excessive missing values from some of the children ($N = 107$) and parents ($N = 103$) reduced the number of participants in the final sample. The theoretical model was tested on a final sample of 749 pupils (50.7% boys) and parent dyads (78% mothers). Compared to the excluded sample, the analysis sample was equally distributed in terms of students' gender, $\chi^2(1) = 1.81$, *ns*; and age, $t(1142) = .69$, *ns*. Given the way mothers and fathers were recruited into the study, we also compared the percentage of boys (78.6%) and girls (76.7%) whose mother participated, $\chi^2(1) = 1.09$, *ns*. Also, we found no differences related to mothers' and fathers' education, $t(920) = 2.13$, *ns*; or to the youths' age, $t(920) = 1.43$, *ns*.

The youth included in the analysis may differ systematically from those who were excluded because we required parental participation and active parental consent (Weinberger, Tublin, Ford, & Feldman, 1990). For this reason, we used *t* tests to compare participants to students who were excluded because their parents did not participate in the study. We found no differences in terms of parental control, $t(1153) = 1.10$, *ns*; mothers' closeness, $t(1076) = .12$, *ns*; fathers' closeness, $t(1067) = .04$, *ns*; self-disclosure to mother, $t(1134) = 2.72$, *ns*; self-disclosure to father, $t(1109) = .67$, *ns*; mothers' knowledge, $t(1129) = 3.80$, *ns*; fathers' knowledge, $t(1105) = 1.66$, *ns*; or adolescents' antisocial behavior, $t(1153) = .77$, *ns*.

Measures

Parents were given measures of neighborhood social capital, safety concerns, parenting behavior (support and solicitation), and their perception of child antisocial behavior. This is consistent with much of the literature on social capital, where adult informants are traditionally used (e.g., Dorsey & Forehand, 2003; Sampson et al.,

1997). To have a more valid and detailed measure of antisocial behavior, a student self-report measure was also used.

Neighbor support. Neighbor support was measured using neighbor support and positive neighborhood climate scales. The Italian neighbor support subscale (Bonaiuto, Fornara, Aiello, & Bonnes, 2002) was used by parents to rate their perceptions of neighboring behavior within their community. The scale was composed of five items (e.g., "In general, people in my neighborhood are interested in helping other people"). The participants responded on a Likert scale that ranged from 1 = *completely agree* to 7 = *completely disagree*. The Cronbach's α for the five-item scale was .78. Responses were averaged for the measure of low neighbor support.

Social neighborhood climate. The Italian neighborhood climate subscale (Bonaiuto et al., 2002) was used by parents to rate their perception of the climate in the neighborhood. The scale was composed of five items (e.g., "The atmosphere in my neighborhood is untroubled" or "Living in this neighborhood is pretty stressful"). The participants responded on a Likert scale that ranged from 1 = *completely agree* to 7 = *completely disagree*. The Cronbach's α for the five-item scale was .79. Responses were averaged for the measure of bad neighborhood climate.

Fear of crime. The Italian Fear of Crime subscale (Bonaiuto et al., 2002) was used by parents to rate their perception about the climate in the neighborhood. The scale was composed of five items (e.g., "In this neighborhood, one can walk at night without any risk of harm"). The participants responded on a Likert scale that ranged from 1 = *completely agree* to 7 = *completely disagree*. The Cronbach's α for the five-item scale was .81. Responses were averaged for the measure of fear of crime.

Concern for child. Three items were used to assess parents' concern about their child: "When my child goes out in my neighborhood without my supervision I'm concerned about: (1) criminals, (2) bad company, (3) drugs." The participants responded on a Likert scale that ranged from 1 = *not at all concerned* to 7 = *a lot concerned*. The Cronbach's alpha for the three-item scale was .87. Responses were averaged for the measure of concern for child.

Parental solicitation. Five-items from the Parental Solicitation Scale (Kerr & Stattin, 2000) was used to assess the extent to which parents try to gain knowledge about their child's unsupervised activities (e.g., "During the last month, how often did you initiate a conversation with your child about his free time?"). The participants responded on a 5-point scale: 1 = *never* to 5 = *always*. The five items were averaged to yield a single measure of parental solicitation with an alpha of .65.

Parental support. Parents rated the items with respect to their own parenting behavior using the Child Rearing Practices Report (CRPR; Rickel & Biasatti, 1982) composed of 10 items (e.g., "I encourage my child to talk about his/her troubles"). Parents responded on a scale that ranged from 1 = *not at all descriptive of me* to 5 = *highly descriptive of me*. The alpha for the 10-item scale was .86. Responses were averaged for the measure of parental support.

Adolescent antisocial behavior. This is a latent variable based on both parent and child survey scales. Parents rated 11 items from the Problem Checklist (PLST, Oregon Social Learning Center, 1997), with respect to their child's misbehavior. The parents responded on a scale that ranged from 1 = *never* to 6 = *always/almost always*. The alpha

for the scale was .84. Responses were averaged for the measure of adolescent's antisocial behavior (parent report).

In addition, adolescents completed an adapted version of the self-report measure of antisocial behavior (Kiesner, 2002). The scale was composed of 11 items (e.g., "How many times did you take money from your parents without their permission?"). Participants were asked to respond by considering the past 30 days. The answer options were based upon a 6-point ordinal scale, ranging from 1 = *Never* to 6 = *More than 20 times*. The Cronbach's alpha for this scale was .82. Responses were averaged for the measure of adolescent's antisocial behavior (child report).

Statistical Analyses

Structural equation modeling (Jöreskog & Sörbom, 1996), implemented by the program LISREL (8.50), was used to test model fit. We considered a variety of indices as indicators of the model's overall goodness of fit: Chi square was used as a test of the null hypothesis that the model fit the data. However, reliance on the χ^2 has been criticized, especially in the case of large samples (more than 200; Jöreskog & Sörbom, 1996; Saris, 1982). For that reason, we also used the comparative fit index (CFI) and non-normed fit index (NNFI)—with values ranging from 0 (a poor fit) to 1 (a perfect fit). We also used the root mean squared error of approximation (RMSEA), which is considered a measure of a good fit when lower than .06 (Hu & Bentler, 1999). Finally, we examined the squared multiple correlations for the structural equations.

To evaluate child gender differences in the model, a multigroup approach was used (Jöreskog & Sörbom, 1996; see, for example Byrne, 1989). This approach allows estimating the fit of the model and the parameters simultaneously on different subgroups. In particular, the hypothesis of the invariance of the covariance matrix (σ) and the hypothesis of the form invariance (same dimensions, and same patterns of fixed, free, and constrained values in all matrices; k) on different groups tested the fit and parameters of the model comparing boys and girls.

RESULTS

Descriptive Statistics

Descriptive statistics for the total sample and separated by child gender, and bivariate correlations among variables for the total sample are shown in Table 1. Similar to previous studies (see for example, Kerr & Stattin, 2000), boys scored higher on antisocial behavior, independently from the informant. Parents of girls scored higher on fear for crime, concern for child, and support.

In general, all the correlations are in the expected direction. Although the correlation between the two indicators of antisocial behavior measured on the children and parents were significant, the magnitude was relatively low (.26). These results are generally consistent with previous studies (see Soenens et al., 2006; Stattin & Kerr, 2000).

Testing the Theoretical Model

Analyses began with testing the proposed theoretical model (Fig. 1) in which all paths among the variables were assessed. Three direct path coefficients from neighborhood conditions (Low social capital and safety concerns) and antisocial behavior were not significant. Figure 2 represents the tested model with estimated standardized parameters.

Table 1. Means, Standard Deviations, *t* Test for Child Gender and Correlations Among Variables

	1	2	3	4	5	6	7	8	<i>M</i> (<i>SD</i>)
1. Low neighbor support	—								3.62 (.99)
2. Bad neighborhood climate	.41**	—							2.73 (1.05)
3. Fear of crime	.30**	.49**	—						3.47 (1.16)
4. Concern for child	.26**	.39**	.46**	—					3.66 (1.55)
5. Parental solicitation	-.01	.02	.02	.01	—				4.11 (.70)
6. Parental support	-.08*	-.03	.01	.03	.10**	—			2.48 (.31)
7. Ad. Antisocial Behavior (PR)	.11**	.09*	.02	.07	-.17**	-.24**	—		2.29 (.72)
8. Ad. Antisocial Behavior (CR)	.01	.05	-.01	-.05	-.27**	-.08*	.26**	—	1.48 (.62)
Females	3.65 (1.00)	2.73 (1.04)	3.58 (1.18)	3.77 (1.56)	4.07 (.70)	2.45 (.31)	2.18 (.71)	1.34 (.48)	
Males	3.61 (.99)	2.74 (1.06)	3.36 (1.12)	3.56 (1.53)	4.16 (.70)	2.50 (.31)	2.39 (.71)	1.61 (.71)	
<i>t</i> Test <i>df</i>	.44 (925)	.01 (906)	8.58** (919)	4.35* (939)	3.95* (907)	6.06** (905)	18.73** (912)	60.15** (1126)	

Note. PR = Parent report; CR = child report. **p* < .05; ***p* < .01.

The resulting model produced these fit indices: $\chi^2_{(14)} = 29.78(p < .01)$, CFI = .98, NFI = .97, NNFI = .97, RMSEA = .04. Observing the remaining indices, it is possible to conclude that the model produces a very good fit. Moreover, the squared multiple correlations for structural equation are $R^2_{\eta_1} = .66$, $R^2_{\eta_2} = .08$, $R^2_{\eta_3} = .09$. Thus, 66% of the variance in neighborhood safety concerns, 8% of parenting, and 9% of variance in antisocial behavior is accounted for in the model.

In addition to the direct relation presented in Figure 1, there are some indirect relations (not included in Fig. 2). Neighborhood social capital has an indirect effect on parenting through neighborhood safety concerns (.36) and on adolescent antisocial behavior through its effect on parenting (.13). Safety concerns have an indirect effect on antisocial behavior (-.13) through their effect on parenting.

After evaluating the overall fit of the model in the total sample, multigroup comparisons were used to examine the extent to which this model is consistent, in terms of covariance matrices (σ) and forms (dimensions, and patterns of fixed, free, and constrained values; k), across child gender. All the fit indices presented indicate significant statistical differences in the covariance matrices, $\chi^2_{(29)} = 46.78(p < .05)$, CFI = .98, NNFI = .96, RMSEA = .04; and forms, $\chi^2_{(34)} = 156.71(p < .01)$, CFI = .98, NNFI = .96, RMSEA = .04, between males and females. It was therefore necessary to analyze and compare the structural parameters of the model for gender subgroups. Table 2 presents all the parameters included in the model and the R^2 for each of the

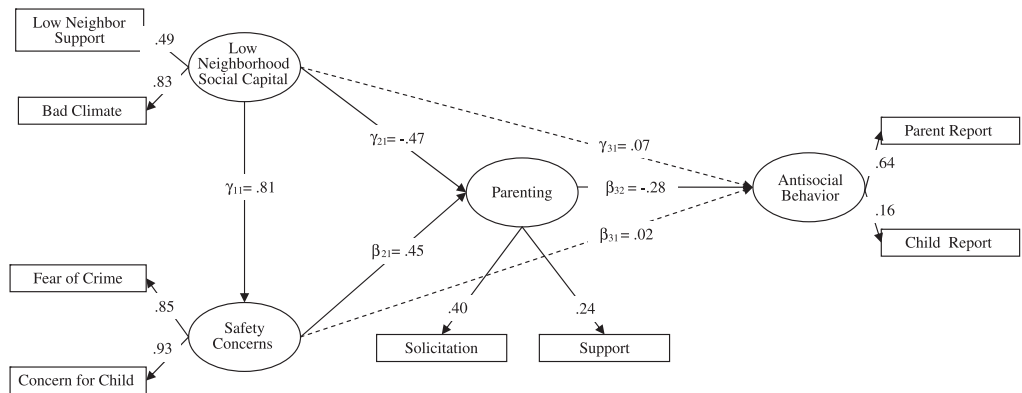


Figure 2. Path coefficients for the model proposed. Relations among variables represented by a continuous line were significant at least at $p < .05$. Relations among variables represented by a cross-hatch line were nonsignificant, $\chi^2_{(14)} = 29.78(p < .01)$, CFI = .98, NFI = .97, NNFI = .97, RMSEA = .04.

Table 2. Standardized Structural Parameters of the Relationships Among Latent Constructs and R^2 for Total Sample and By Sex

	γ_{11}	γ_{21}	γ_{31}	β_{21}	β_{31}	β_{32}	$R^2_{\eta_1}$	$R^2_{\eta_2}$	$R^2_{\eta_3}$
Total sample	.81	-.47	ns	.45	ns	-.28	.66	.08	.09
Subgroup									
Sex									
Male	.82	-.57	ns	.57	ns	-.37	.68	.12	.15
Female	.82	-.53	ns	.53	ns	-.40	.68	.09	.25

Note. ns = Not significant.

endogenous variables. All the paths are the same as the general model; parenting factors explained slightly more variance for girls' behavior than for boys.

DISCUSSION

This study explores the mechanisms through which neighborhood social capital are associated with early adolescent antisocial behavior. The proposed model postulated that both neighborhood social capital and perceived neighborhood social threats and neighborhood dangers are factors that may directly affect early adolescent antisocial behavior and indirectly influence child behavior via differential parenting behaviors. The present study partially validates the theoretical model proposed in which parents' perceptions of low social capital are associated indirectly with higher levels of child behavioral problems by decreasing the use of effective parenting (solicitation and support).

Moreover, according to our hypothesis, and contrary to Forehand and Dorsey (2003), the construct of safety concern, composed of fear of crime and concern for children, represents an important psychological factor influencing parents' decisions to be more supportive and solicitous toward their children and to know more about their child's daily activities. Again, our results suggest that parenting is influenced by safety concerns in a way that also affects children's behavior. The indirect effect of neighborhood social capital and safety concerns on early adolescent outcomes suggests that the connection between these constructs was fully mediated (Baron & Kenny, 1986) by family-level (parenting) processes (Kohen et al., 2008). This result again confirms how familial and social/environmental contexts interact in facilitating (or hindering) developmental outcomes (Bronfenbrenner, 1979).

Although there were no major gender differences found within the model, the results suggest that parenting might play an even more important role in girls' than boys' antisocial behavior.

Strengths and Limitations

The strengths of the study include the use of a relatively large sample of parents as well as their children's self-reports (for cross-validation) and the multigroup comparison that allowed us to test the stability of the model by sex. The sample was also drawn from a different kind of community than is typical in the literature. That is both a strength and a limitation, however, as the sample from a region in northeastern Italy may not be generalizable to young adolescents in other parts of the world where parenting styles and other cultural factors may be very different (see Claes, Lacourse, Bouchard, & Perucchini, 2003). In relation to solicitation, for example, parents in our sample may have more concern about neighborhood conditions because we considered a region of Italy (Veneto), where political parties have been effective in mobilizing voters around the issue of fear of crime. Also, there are regional variations in parenting practices among Italian families that may limit the ability to generalize these conclusions. Additionally, the sample of fathers was much smaller than that of mothers, resulting in further threats to external validity.

The present cross-sectional design does not allow us to determine the dynamics of the relationships between some of the study variables. For example, it is possible that parents of children who engage in antisocial behavior may begin to engage in fewer parenting behaviors because of their perceived ineffectiveness. That is, just as parents may withdraw from dangerous neighborhoods, they may withdraw from children that they perceive are

uncontrollable. Another alternative hypothesis is also possible: Those parents who are more anxious may simply see their neighborhood as more dangerous and lower in social capital. This may lead them to rate their adolescents as more difficult. Also, the cross-sectional design does not allow examination of the stability of the effects, or to study how the relations between parent and child variables change over time. Longitudinal (including experimental and other panel) studies of parenting and neighborhood perceptions are needed to determine the causal relationships with antisocial behavior.

Moreover, in considering the results we have to take into account how well student views of parenting behavior relate to those provided by their parents. Previous research has demonstrated that although the correlation between all the indicators (e.g., closeness and control) of the same constructs measured on the children and parents were significant, the magnitude was relatively low, ranging from .18 to .27 for fathers and from .24 to .34 for mothers (Vieno et al., 2009). This suggests that the behaviors that parents may engage in response to neighborhood conditions may not be perceived or received as intended by their children. This difference may be one of the reasons the impact of parenting on antisocial behavior was indirect.

Despite these limitations, the present study does hold important implications for parenting and community-based interventions to prevent or reduce youth antisocial behaviors. It suggests that although interventions are often conducted in schools or youth organizations, they should not ignore the key role of parenting styles and behaviors and that those are significantly influenced by parents' perceptions of the social capital resources and safety concerns of their community.

A social environment rich in participatory opportunities, allowing people to meet frequently, is fertile ground for nurturing shared values and social norms of trust and reciprocity. Where such values and norms develop, the likelihood of informal social controls and other cooperative behaviors is higher. The concept of social capital invites us to look at family resources that parents and adolescents could more easily change. The ability to enhance these resources during adolescence makes them very different from other characteristics of families such as income and parental education. Second, Coleman's discussion of social capital outside the family (Coleman, 1988) invites us to examine the integration of the family into the community in which it lives as an important family resource of value to children. Integration is not completely up to the family; it also involves the attitudes and behaviors of school personnel, peers and friends of the adolescent, and other parents in the community. Nonetheless, family integration into the community is more susceptible to change than are family income and parental education. Encouraging parents to develop strong connections with their children, their children's schools, and their surrounding community could lead to better educational outcomes, as well as stronger families (Sandefur, Meier, & Campbell, 2006).

REFERENCES

- Allison, K.W., Burton, L., Marshall, S., Perez-Febles, A., Yarrington, J., Kirsh, L.B., et al. (1999). Life experiences among urban adolescents: Examining the role of context. *Child Development*, 70, 1017–1029.
- Barber, B.K., Stolz, H.E., & Olsen, J.A. (2005). Parental support, psychological control, and behavioral control: Assessing relevance across time, method, and culture. *Monographs of the Society for Research in Child Development*, 70(4).

- Baron, R.M., & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173–1182.
- Bartels, M., Boomsma, D.I., Hudziak, J.J., Rietveld, M.J.H., van Beijsterveldt, T.C.E.M., & van den Oord, E.J.C.G. (2004). Disentangling genetic, environmental, and rater effects on internalizing and externalizing problem behavior in 10-year-old twins. *Twin Research*, 7, 162–175.
- Beyers, J.M., Bates, J.E., Pettit, G.S., & Dodge, K.A. (2003). Neighborhood structure, parenting processes, and the development of youths' externalizing behaviors: A multilevel analysis. *American Journal of Community Psychology*, 31, 35–53.
- Bonaiuto, M., Fornara, F., Aiello, A., & Bonnes, M. (2002). La qualità urbana percepita [The perception of urban quality]. In M. Prezza & M. Santinello (Eds.), *Knowing the community* (pp. 133–160). Bologna, Italy: Il Mulino.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Brown, B.B., Perkins, D.D., & Brown, G. (2004). Incivilities, place attachment and crime: Block and individual effects. *Journal of Environmental Psychology*, 24, 359–371.
- Byrne, B.M. (1989). Multigroup comparison and the assumption of equivalent construct validity across groups: methodological and substantive issues. *Multivariate Behavioral Research*, 24, 503–523.
- Chung, H.L., & Steinberg, L. (2006). Relations between neighborhood factors, parenting behaviors, peer deviance, and delinquency among serious juvenile offenders. *Developmental Psychology*, 42, 319–331.
- Claes, M., Lacourse, E., Bouchard, C., & Perucchini, P. (2003). Parental practices in late adolescence, a comparison of three countries: Canada, France and Italy. *Journal of Adolescence*, 26, 387–399.
- Clemente, F., & Kleiman, M.B. (1977). Fear of crime in the United States: A multivariate analysis. *Social Forces*, 56, 519–531.
- Coleman, J.S. (1988). The creation and destruction of social capital: Implications for the law. *Journal of Law, Ethics, and Public Policy*, 3, 375–404.
- Conger, R.D., Ge, X., Elder, G.H., & Lorenz, F.O. (1994). Economic stress, coercive family process, and developmental problems of adolescents. *Child Development*, 65, 541–561.
- Dallago, L., Perkins, D.D., Santinello, M., Boyce, W., Molcho, M., & Morgan, A. (2009). Adolescent place attachment, social capital, and perceived safety: A comparison of 13 countries. *American Journal of Community Psychology*, 44, 148–160.
- Dishion, T.J., & McMahon, R.J. (1998). Parental monitoring and the prevention of child and adolescent problem behavior: A conceptual and empirical formulation. *Clinical Child and Family Psychology Review*, 1, 61–75.
- Dorsey, S., & Forehand, R. (2003). The relation of social capital to child psychosocial adjustment difficulties: The role of positive parenting and neighborhood dangerousness. *Journal of Psychopathology and Behavioral Assessment*, 25, 11–23.
- Fauth, R., Leventhal, T., & Brooks-Gunn, J. (2007). Welcome to the neighborhood? Long-term impacts on moving to low-poverty neighborhoods on poor children's and adolescents' outcomes. *Journal of Research on Adolescence*, 17, 249–284.
- Fletcher, A.C., Steinberg, L., & Williams-Wheeler, M. (2004). Parental influences on adolescent problem behavior: Revisiting Stattin and Kerr. *Child Development*, 75, 781–796.
- Furstenberg, F.F., Jr., & Hughes, M.E. (1995). Social capital and successful development among at-risk youth. *Journal of Marriage and the Family*, 57, 580–592.
- Hu, L., & Bentler, P.M. (1999). Cut-off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modelling*, 6, 1–55.

- Jargowsky, P.A. (1996). *Poverty and place*. New York: Russell Sage Foundation.
- Jencks, C., & Mayer, S. (1990). The social consequences of growing up in a poor neighborhood. In L.E. Lynn & M.G.H. McGeary (Eds.), *Inner-city poverty in the United States* (pp. 111–186). Washington, DC: National Academy Press.
- Jöreskog, K.G., & Sörbom, D. (1996). *LISREL 8: User's reference guide*. Chicago: Scientific Software International.
- Kerr, M., & Stattin, H. (2000). What parents know, how they know it, and several forms of adolescent adjustment: Further support for a reinterpretation of monitoring. *Developmental Psychology*, 36, 366–380.
- Kiesner, J. (2002). Depressive symptoms in early adolescence: Their relations with classroom problem behavior and peer status. *Journal of Research on Adolescence*, 12, 463–478.
- Kohen, D.E., Leventhal, T., Dahinten, V.S., & McIntosh, C. (2008). Neighborhood disadvantage: Pathways of effects for young children. *Child Development*, 79, 156–169.
- Leventhal, T., & Brooks-Gunn, J. (2000). The neighborhoods they live in: The effects of neighborhood residence on child and adolescent outcomes. *Psychological Bulletin*, 126, 309–337.
- Maccoby, E.E., & Martin, J.A. (1983). Socialization in the context of the family: Parent–child interaction. In P.H. Mussen (Ed.), *Handbook of child psychology: Vol. 4. Socialization, personality, and social development* (pp. 1–101). New York: Wiley.
- Moffitt, T.E., Caspi, A., Dickson, N., Silva, P., & Stanton, W. (1996). Childhood-onset versus adolescent-onset antisocial conduct problems in males: Natural history from ages 3 to 18 years. *Development and Psychopathology*, 8, 399–424.
- Oregon Social Learning Center. (1997). *Problem Checklist (PLST)*. Unpublished instrument, Oregon Social Learning Center, Eugene, OR.
- Patterson, G.R., & Stouthamer-Loeber, M. (1984). The correlation of family management practices and delinquency. *Child Development*, 55, 1299–1307.
- Patrick, M.R., Snyder, J., Schrepferman, L.M., & Snyder, J. (2005). The joint contribution of early parental warmth, communication and tracking, and early child conduct problems on monitoring in late childhood. *Child Development*, 76, 999–1014.
- Perkins, D.D., Hughey, J., & Speer, P.W. (2002). Community psychology perspectives on social capital theory and community development practice. *Journal of the Community Development Society*, 33, 33–52.
- Pretty, G.M.H. (2002). Young people's development of the community-minded self: Considering community identity, community attachment and sense of community. In A.T. Fisher, C.C. Sonn, & B.J. Bishop (Eds.), *Psychological sense of community: Research, applications, and implications* (pp. 183–203). New York: Kluwer Academic/Plenum Publishers.
- Prezza, M., & Pacilli, M.G. (2007). Current fear of crime, sense of community and loneliness in Italian adolescents: The role of autonomous mobility and play during childhood. *Journal of Community Psychology*, 35, 151–170.
- Putnam, R.D., Leonardi, R., & Nanetti, R. (1993). *Making democracy work: Civic traditions in modern Italy*. Princeton: Princeton University Press.
- Rickel, A.U., & Biasatti, L.L. (1982). Modification of the Block Child Rearing Practices Report. *Journal of Clinical Psychology*, 38, 129–134.
- Sampson, R.J. (2001). Crime and public safety: Insights from community-level perspectives on social capital. In S. Saegert, J.P. Thompson, & M.R. Warren (Eds.), *Social capital and poor communities* (pp. 89–114). New York: Russell Sage Foundation.
- Sampson, R.J., & Groves, W.B. (1989). Community structure and crime: Testing social-disorganization theory. *American Journal of Sociology*, 94, 774–802.
- Sampson, R.J., Raudenbush, S.W., & Earls, F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science*, 277(5328), 918–924.

- Sandefur, G.D., Meier, A.M., & Campbell, M.E. (2006). Family resources, social capital, and college attendance. *Social Science Research, 35*, 525–553.
- Saris, W.E. (1982). Different questions, different variables. In C. Fornell (Ed.), *A second generation of multivariate analysis: Volume 2, Measurement and evaluation*. New York: Praeger.
- Simons, R.L., Johnson, C., Beaman, J., & Conger, R.D. (1996). Parents and peer group as mediators of the effect of community structure on adolescent problem behavior. *American Journal of Community Psychology, 24*, 145–171.
- Soenens, B., Vansteenkiste, M., Luyckx, K., & Goossens, L. (2006). Parenting and adolescent problem behavior: An integrated model with adolescent self-disclosure and perceived parental knowledge as intervening variables. *Developmental Psychology, 42*, 305–318.
- Stattin, H., & Kerr, M. (2000). Parental monitoring: A reinterpretation. *Child Development, 71*, 1072–1085.
- Vieno, A., Nation, M., Pastore, M., & Santinello, M. (2009). Parenting and antisocial behavior: A model of the relations between adolescent self-disclosure, parental closeness, parental control, and adolescent antisocial behavior. *Developmental Psychology, 45*, 1509–1519.
- Vieno, A., Santinello, M., Pastore, M., & Perkins, D.D. (2007). Social support, sense of community in school, and self-efficacy as resources during early adolescence: An integrative, developmentally oriented model. *American Journal of Community Psychology, 39*, 177–190.
- Wandersman, A., & Nation, M. (1998). Urban neighborhoods and mental health: Psychological contributions to understanding toxicity, resilience, and interventions. *American Psychologist, 53*, 647–656.
- Weinberger, D.A., Tublin, S.K., Ford, M.E., & Feldman, S.S. (1990). Preadolescents' social-emotional adjustment and selective attrition in family research. *Child Development, 61*, 1374–1386.
- Wilson, W.J. (1987). *The truly disadvantaged: The inner city, the underclass and public policy*. Chicago: University of Chicago Press.
- Zafirovski, M. (2000). The rational choice generalization of neoclassical economics reconsidered: Any theoretical legitimation for economic imperialism? *Sociological Theory, 18*, 448–471.