



Article

Family Social Capital and Delinquent Behavior in the United Kingdom

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Abstract: Research suggests that juvenile delinquency has a number of deleterious effects on adolescents' lives. A promising way to discourage delinquent behavior is by increasing social capital, which involves social connections adolescents have to other actors and pro-social norms that flow through these networks. The primary source of social capital is one's family members, but no studies to date have focused directly on the effects of family social capital on delinquent behavior in the United Kingdom (U.K.). We use data from the U.K. Millennium Cohort Study (MCS, 2015–2016; $n = 11,352$) to assess different sources of family social capital among youth. The results of negative binomial regression models indicate that certain types of family social capital, including parental supervision, not fighting with parents, and talking to parents when youth are worried, are associated with less delinquent behavior, even after adjusting for covariates such as family structure, household income, and peer behaviors. The results add to the empirical foundation that supports family social capital's attenuating effects on youth misbehaviors and increases confidence in the utility of social capital to serve as a generally applicable theory of youth development and behaviors.

Keywords: family social capital; juvenile delinquency; adolescents; United Kingdom

1. Introduction

Research suggests that juvenile delinquency has a number of deleterious effects on adolescents' lives. In addition to the direct effects of putting youth in conflict with parents, teachers, and other authority figures, delinquency is associated with low academic achievement, dropping out of high school, unplanned pregnancies, employment problems, and mental health challenges in adolescence and adulthood (Barrett et al. 2015; Becker et al. 2012; Hoffmann et al. 2013; Krohn et al. 1997; Sweeten 2006).

One potential strategy to discourage delinquent behavior by young people is by increasing social capital. Social capital—the social connections adolescents have to other actors and the resources that can flow across those connections—can help transmit pro-social norms that discourage delinquent and other untoward behaviors. Social capital which youth can draw upon from their families, their schools, their neighborhoods, and other sources help protect these youth from delinquent activities (Dufur et al. 2015; Dufur et al. 2019; Hoffmann and Dufur 2008; Hoffmann and Dufur 2018; Wright et al. 2001; Wright and Fitzpatrick 2006).

Most of what we know about the effects of social capital on adolescents, however, has been derived from U.S. samples. If social capital acts similarly in other contexts, this both strengthens evidence for the efficacy of social capital theory and suggests that policies, activities, and interventions designed to increase social capital would be salient in helping youth avoid delinquent behaviors. If social capital behaves differently in other contexts, scholars should explore why this is the case in order to understand how and why aspects of social capital affect youth in particular environments but not in

others. In general, before social capital can be designated as an effective theory of juvenile behaviors, research should determine its generalizability across multiple contexts.

In this paper, we explore whether and in what manner indicators of family social capital are associated with delinquent behavior in the United Kingdom, a country that shares important linguistic and political roots with the U.S. but also differs from the U.S. in important ways related to family formation and state support of families (Parcel et al. 2012). We use data from the U.K. Millennium Cohort Study's sweep 6 (2015–2016), when youth were 13–15 years old, and negative binomial regression models to identify potential associations between the social capital which U.K. adolescents derive from their family contexts and their delinquent behavior.

2. Background

2.1. Social Capital and Delinquency

Social capital refers to resources actors can receive and exchange through interactions with other actors; some theorists also refer to the connections themselves as social capital. Definitions of social capital can include macro-level stores of capital created through societal investments in common social goods (Paxton 1999; Putnam 2000) or micro-level interactions between individuals (Coleman 1988; Crosnoe 2004; Parcel et al. 2010). In this paper, we use the micro-level approach to social capital, focusing on social capital which adolescents create through their interactions with other actors in their lives. In doing so, we lean on Coleman (1988) theorizing, connecting resources created by and inherent in relationships with a range of social outcomes.

Due to our interests in adolescent development, we focus here on a specific source of social capital that might be especially salient to adolescents: family relationships. While adolescents increasingly participate in activities that help them distinguish themselves from their families, these youth still spend much of every day in family contexts and still depend on families for both physical and emotional support (Dmitrieva et al. 2004). Family social capital is created through bonds between parents and children, which can include investments of parental time to care for or socialize children, investments in monitoring children's activities and interactions, and investment in emotional guidance and transmission of norms (Dufur et al. 2013; Hoffmann 2002; Parcel and Dufur 2001). Family social capital represents more than being physically connected to a child: Coleman (1988) argues that parents must make purposeful investments in their offspring's development and must design interactions that create the bonds which along with information, obligations, and norms can pass. These interactions begin at birth and continue through adolescence in the form of concerted cultivation (Lareau 2011), making connections with their children's schools (Dufur et al. 2013), and creating discussion spaces in which to exchange expectations and aid (Crosnoe 2004; Parcel and Dufur 2001). These investments build trust within the family, which is another aspect of social capital that helps to transmit parent-favored norms about behavior and attainment to their children. Parents help facilitate additional stores of social capital for their children when they build relationships with their children's friends and those friends' parents, allowing for joint transmission of pro-social norms (Crosnoe 2004; Dufur et al. 2015). Youth can also access social capital which their parents build with other actors, such as neighbors and work colleagues.

Several studies have established a negative association between family social capital and involvement in delinquent behavior among youth in the U.S. For example, Dufur and colleagues (Dufur et al. 2015; Dufur et al. 2019; Hoffmann and Dufur 2008; Hoffmann and Dufur 2018) demonstrated that youth with higher levels of family social capital tend to report less delinquent behavior, and net the effects of other factors such as gender, school social capital, parents' education, grades in school, or peer associations. Han and Grogan-Kaylor (2015) also found that higher family social capital was associated with a lower probability of initiating delinquency. Additional research addressing particular forms of illegal behaviors, such as violence, have also determined that various features of family social capital are

related to less aggression, fighting, and other forms of violent behavior (Harris-McKoy 2016; McNulty and Bellair 2003; Rai et al. 2003; Springer et al. 2006; Wright and Fitzpatrick 2006).

Most studies have been limited to cross-sectional examinations or have not estimated the causal impact of social capital on adolescent behaviors. Turley et al. (2017), however, conducted a quasi-experiment in which they manipulated family social capital using a parent–child training program and estimated changes in delinquent behavior among youth from families that did and did not participate in the program. Using intent-to-treat and complier average causal effects models, they determined that family social capital reduced child problem behaviors and that the reductions were not the result of unmeasured factors or other potential confounders.

2.2. Family Social Capital and Its Complementary Role with Other Theories of Delinquency

Compared to other models of delinquent behavior, family social capital has been used sparingly. Yet, as McCarthy et al. (2002) argued, social capital can provide a conceptual umbrella for other delinquency theories. For instance, as mentioned earlier, several specific concepts that address parent–child relations, such as affectionate ties and parental supervision, are common features of family social capital (Dufur et al. 2019; Wright and Fitzpatrick 2006). These concepts tend to fall under the aegis of social bonding theory, a well-studied criminological model (Hoffmann 2011), but other aspects of social capital, such as communication channels, are also similar to concepts from Akers (2011) social learning theory of crime and deviance. The transmission process at the heart of family social capital is facilitated by family bonds because youth experiencing weak bonds are less likely to accept conventional socialization practices that facilitate social capital. In particular, effective communication between parents and youth is diminished when bonds are weak and, thus, youth are not as prone to internalize parental instructions about normative behaviors and expectations. Strong family bonds, on the other hand, ease the transmission of pro-social behaviors and norms and minimize the likelihood that delinquent norms from peers or other sources are internalized (Dufur et al. 2015). This is a vital piece of the process of parental investment in youth and is an evident feature of the learning environments outlined in social learning theory (Akers 2011; Hoffmann and Dufur 2018).

Family social capital's combined emphasis on parent–child bonds and parental investments also calls to mind integrated models of delinquency (Hoffmann 2011). Elliott et al. (1985), for example, contended that poor family socialization, an indicator of low parental investment, leads to weak parent–child bonding, which then affects delinquent behaviors. The social development model developed by Catalano and Hawkins (see Cambron et al. 2019), assumes that interactions between parents and children and intentional involvement by parents in their children's lives are vital in the creation of affectionate bonds and commitment to conventional norms, which, in turn, reduces involvement in delinquent behavior. Both models include reminiscent family social capital concepts.

2.3. Social Capital and Delinquency Research Outside the U.S.

As suggested earlier, the bulk of the research on family social capital and delinquent behavior has been conducted in the U.S. Several studies of social bonds and delinquency have used data from outside the U.S., though, and support the notion that strong bonds between parents and children are associated with less involvement in delinquency. Research has been conducted, for example, in Germany (Boers et al. 2010), Korea (Peterson et al. 2016), Finland (Salmi and Kivivuori 2006), El Salvador (Springer et al. 2006), and Turkey (Yuksekk and Solakoglu 2016). Although others have mentioned that stores of family social capital offer a way to curtail certain forms of untoward behaviors (Gatti and Tremblay 2007; Hagan et al. 1995), there have been relatively few systematic attempts to study family social capital and delinquent behavior outside the U.S.

2.4. The Case of the U.K.

Research on juvenile delinquency has often followed parallel paths in the U.S. and the U.K. (Farrington 2010), but there is surprisingly little research on social capital and deviant behaviors in the

latter part of the world (McPherson et al. 2013; Shildrick and MacDonald 2008). Most of the research on social capital in the U.K. has studied health, employment, or educational achievement; or assessed factors that encourage the building of social capital among youth (Deuchar 2009; Miller et al. 2015; Rothon et al. 2012). Studies examining various facets of family social bonds and delinquency in the U.K., however, are suggestive that social capital may be as predictive of delinquent behaviors in this area as it is in the U.S. (Godfrey et al. 2012; Segevand and Farrall 2020).

The Cambridge Study of Delinquent Development, a long-term study of South London youth, for instance, revealed that the strongest predictors of delinquent behavior include family disruption and a high degree of conflict in families (Farrington et al. 2013), both of which are often indicators of poor family social capital. Other studies of U.K. youth have also shown salutary effects of positive parenting, parental warmth, and supervision on substance use, trouble with the law, and other misbehaviors (Aston 2015; Barnes and Cheng 2006; Calafat et al. 2014; Smith 2004).

We, therefore, anticipated that, as in the U.S., family social capital variables are negatively associated with delinquent behaviors among youth in the U.K. Some family social capital research has treated the concept as a latent variable and examined generally how it relates to delinquency. However, because there is so little research directed at social capital's specific effects on delinquency in the U.K., we examine specific features of family social capital as predictors of these behaviors. Thus, we are mainly interested in the precision of the association among social capital items and delinquency, which is sacrificed when one uses a latent construct in a regression model (Ledgerwood and Shrout 2011).

3. Materials and Methods

This study draws upon data from the Millennium Cohort Study (MCS), a longitudinal study of children in the United Kingdom born between September 2000 and January 2002. The MCS contains data on children from all four countries that comprise the United Kingdom (England, Northern Ireland, Scotland, and Wales) and uses a probability sampling design clustered at the electoral ward level, supplemented by an oversampling of disadvantaged families and ethnic minorities, to achieve a sample that is representative of the total population (Plewis 2007). Potential participants were identified using the Department of Work and Pensions, Child Benefit system records, and families were ultimately selected based on their residential location following the child's birth (Kelly et al. 2013). The first sweep of data collection occurred when cohort members were, on average, 9 months old, with subsequent sweeps conducted when cohort members were about 3, 5, 7, 11, and 14 years of age.

Our study focuses on data from sweep 6, collected in 2015–2016 when most of the youth were 14 years old. Data were collected from both parents and their children. Parents provided information via a face-to-face interview about family composition, parental health, employment and income, housing, parenting attitudes and activities, and the cohort member's physical and mental health, behavior, and schooling. Additional information about sensitive topics was collected from parents through a self-completed questionnaire. Importantly, this sweep included extensive information collected directly from the cohort member in conjunction with the information collected from parents. Cohort members responded on a self-completed questionnaire to inquiries about school, relationships, daily activities, mental and physical health, wellbeing, aspirations and the future, identity and attitudes, as well as age-appropriate questions about risky behaviors, antisocial and criminal activities and contact with the police, puberty, romantic relationships and sexual behavior.

3.1. Analytic Sample

Sweep 6 collected data from 11,872 cohort members. Our sample was restricted only by missing data. As expected in any large-scale, representative dataset, data were missing on a number of variables. Variables that were missing on fewer than three percent of cases were treated with listwise deletion; missing data that remained after this treatment were handled via multiple imputation. To confirm that multiple imputation was appropriate, we conducted Little's test for covariate dependent missingness and determined that the data may be assumed missing at random (Li 2013). Twenty completed datasets

were imputed using Multiple Imputation via Chained Equations (MICE) in Stata 16. After addressing missing data, our final analytical sample consisted of 11,352 cohort members.

3.2. Measures

3.2.1. Dependent Variable

The measure of delinquency is a count variable created by indexing together child responses about their participation in antisocial or criminal activities and their contact with the police. Child respondents indicated if they had participated in activities such as taking things from a shop without paying, spray painting somewhere they should not, damaging things that do not belong to them, or hacking into someone else's computer or online account within the previous twelve-month period. Additionally, children reported if they had been stopped by police, received a formal warning from a police officer, and/or been arrested within the past twelve months. Responses to these questions were summed and collapsed to an upper limit of 10, resulting in a measure ranging from 0–10 or more activities.

3.2.2. Key Independent Variables: Family Social Capital

Social capital is a multi-faceted, complex concept that encapsulates several areas of adolescent life (Dufur et al. 2019). As such, we include a number of different indicators of social capital as key predictors in our models. We focus, in this study, on family social capital. The first subset of indicators that we include in our models captures the dimension of social capital associated with the quality of the parent–child bond. These indicators include child responses to the following questions: “Overall, how close would you say you are to your mother/father?”, “How often do you argue with your mother/father?”, “What do you do if you are worried about something? Tell my parent(s)”. Parent responses to the following question were also included in this subset: “How often do you talk to the study child about things that are important to them?” Responses to all questions were coded such that higher values corresponded to more social capital.

We also include a second subset of social capital indicators measuring social capital within the home. The indicators in this subset are those that assess social control efforts of parents over their child, including responses to questions about how often their parent(s) knew where they were, who they were with, and what they were doing when outside the home. We also include a measure of how frequently the family shared dinner together during the week and a dichotomous measure of whether or not a parent attended meetings at the youth's school outside of parent-teacher conferences. In these subsets, several questions asked about mothers and fathers separately; for such questions, the measure we include in our models reflects the response about the parent present in the household for single-parent households and the average of the responses about both parents for children where both parents are in the home.

3.2.3. Control Variables

We also included several common covariates of delinquency, including peer associations and behaviors, perceived safety in one's neighborhood, and socio-demographic factors (Bonner et al. 2020; Dufur et al. 2015; Farrington et al. 2013; Hoffmann 2002; Hoffmann 2011; Hoffmann et al. 2013; Fite et al. 2010; Jacobsen and Zaatut 2020; McGloin and Thomas 2019).

Peer associations and behaviors are gauged by youth responses to questions about how many of their friends work hard at school, get in trouble at school, and how much time they spend with close friends outside of school. Youth were also asked about their perceptions of neighborhood safety. Higher values on the resultant variable indicated greater feelings of safety.

Additional control variables included family income, family structure and household size, parental education, and the age, sex, and race/ethnicity of the study child. Family income was reported by the parent and is measured in pounds per week. The family structure measure captures both the number

and biological status of the parent(s) in the home with four categories: two parents—both biological, two parents—one biological, one parent—biological, and other. Household size represents the total number of individuals residing in the household, including both parents and children. Parental education was measured using the National Vocational Qualification (NVQ) scale employed in the United Kingdom where higher values indicate more education; the measure we employ represents the highest level of education reported by either parent. Child age was measured in years and ranged from 13 to 15 years of age during the sweep of data collection we employed. Sex was measured dichotomously: 0 = female and 1 = male (other options were not available). Finally, in order to maintain sufficient subsample sizes to support multivariable regression analysis, racial/ethnic identification was collapsed to the following four categories: White, Black, Asian, and Other/Mixed.

3.3. Analytic Strategy

To assess the association between social capital and adolescent delinquency, we employ two nested regression models. The dependent variable is a count of behaviors, so we performed preliminary analyses (not shown but available upon request) to determine whether a Poisson or negative binomial (NB) regression model best captured the distribution of delinquency. Overdispersion in the outcome recommended the latter model. The first model we estimate is thus a NB regression model of delinquent behaviors on all of the social capital indicators. In the subsequent NB model, we introduce all of the control variables. The coefficients are presented as incidence rate ratios (IRRs), with values above 1 indicating an increased risk of delinquent behavior (Hoffmann 2016).

4. Results

Table 1 provides descriptive statistics for the variables included in the analyses. Most of the sample was White (81%) and lived with both biological parents (64%). The sample was evenly split between males and females (50% each). Average household income was about £400 per week and average household size was approximately four people. The average level of parental education was close to NVQ level 3. Youth in the sample participated in few delinquent activities, with the average number falling below 1 (mean = 0.79).

Table 1. Descriptive Statistics for Analytic Sample; $n = 11,352$.

Variables	Mean/Prop.	SD	Range
Dependent variable: Delinquency index	0.79	1.42	0–10+
Key independent variables—social capital			
How close are you to your parent(s)	0.89	0.78	0–3
How often you fight with parent(s) (3 = Never)	2.16	0.85	0–3
Do you talk to parents when worried	0.51		0–1
How often parent(s) talk about things important to child	4.33	0.77	0–5
How often parent(s) know where you are	2.54	0.69	0–3
How often parent(s) know who you are with	2.44	0.73	0–3
How often parent(s) know what you are doing	2.28	0.81	0–3
How often family meals together	2.17	0.87	0–3
Parent(s) attended school meetings	0.19		0–1
Control variables			
How many of close friends work hard at school	1.92	0.65	0–3
How many of close friends don't get into trouble	2.23	0.62	0–3
How often you spend time with close friends	2.96	1.06	0–4
How safe is your neighborhood	2.23	0.59	0–3
Household Income (£/week)	415.23	176.87	0–1200
Family Structure			0–3
Two parents—Both biological	0.64		

Table 1. Cont.

Variables	Mean/Prop.	SD	Range
Two parents—One biological	0.11		
One parent—Biological	0.24		
Other	0.01		
Household Size	4.39	1.29	2–10+
Parental Education	3.17	1.45	0–5
Age	13.77	0.45	13–15
Sex (1 = Male)	0.50		0–1
Race			0–4
White	0.81		
Black	0.03		
Asian	0.10		
Other/Mixed	0.06		

Note: Prop.: proportion; SD: standard deviation.

On average, youth reported that most of their close friends worked hard at school and did not get into trouble. They also reported spending time with their close friends outside of school on most days during the week. Finally, most of the youth reported that their neighborhoods were relatively safe.

About half of the youth (51%) said they talked to a parent when they were worried about something; quarrels between parents and youth occurred infrequently. The average level of closeness to parents was relatively low. Youth reported that their parents knew where they were, who they were with, and what they were doing a majority of the time. Families shared an average of about two meals together during the week and only 19% of youth had a parent attend a meeting at the school outside of parent-teacher conferences.

Table 2 provides a correlation matrix of the explanatory and control variables used in the models. The social capital items are related in the expected directions, with, for instance, closeness to parents negatively associated with fights with parents. However, most of the social capital items have modest to low intercorrelations, which suggests that their potential impact on delinquent behavior should be examined separately to reveal the precision of the associations.

Table 2. Correlations among Explanatory and Control Variables Included in Analyses.

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1. Close to parents	1.00																			
2. Fight with parents	-0.32	1.00																		
3. Talk to parents when worried	-0.35	0.199	1.00																	
4. Talk about important things	-0.17	0.054	0.103	1.00																
5. Know where you are	-0.24	0.193	0.244	0.093	1.00															
6. Know who you are with	-0.24	0.188	0.244	0.100	0.594	1.00														
7. Know what you are doing	-0.26	0.222	0.263	0.096	0.607	0.622	1.00													
8. Meals together	-0.09	0.045	0.056	0.156	0.100	0.087	0.095	1.00												
9. Attend school meetings	0.09	-0.121	-0.044	0.028	-0.129	-0.107	-0.125	-0.033	1.00											
10. Friends work hard at school	-0.17	0.150	0.166	0.048	0.264	0.280	0.301	0.074	-0.085	1.00										
11. Friends don't get into trouble	-0.14	0.166	0.160	0.046	0.269	0.265	0.291	0.071	-0.130	0.439	1.00									
12. Spend time with close friends	-0.01	-0.076	-0.031	-0.008	-0.183	-0.159	-0.190	-0.086	0.025	-0.074	-0.115	1.00								
13. Neighborhood is safe	-0.11	0.065	0.067	0.021	0.077	0.058	0.065	0.017	-0.058	0.080	0.093	0.061	1.00							
14. Income	-0.06	0.000	0.055	0.006	0.074	0.035	0.062	-0.048	-0.085	0.087	0.163	-0.013	0.142	1.00						
15. Family structure	0.05	-0.095	-0.044	0.046	-0.101	-0.096	-0.105	-0.006	0.113	-0.083	-0.103	0.077	-0.059	-0.461	1.00					
16. Household Size	0.05	0.080	-0.008	-0.079	0.022	0.029	0.040	0.029	-0.028	0.013	-0.029	-0.076	-0.015	-0.207	-0.354	1.00				
17. Parental Education	-0.02	-0.001	0.023	0.025	0.056	0.026	0.045	-0.010	-0.053	0.069	0.147	-0.034	0.113	0.616	-0.246	-0.083	1.00			
18. Age	0.04	-0.011	-0.037	-0.009	-0.037	-0.037	-0.033	-0.036	-0.010	-0.024	-0.021	0.047	0.014	0.016	0.011	-0.017	-0.003	1.00		
19. Sex	-0.07	0.056	0.029	-0.008	-0.136	-0.166	-0.109	-0.016	0.065	-0.140	-0.151	0.018	0.034	0.006	0.001	0.010	0.006	-0.007	1.00	
20. Race	-0.00	0.046	-0.028	0.028	0.041	0.034	0.059	0.071	0.002	0.019	-0.047	-0.142	-0.060	-0.224	-0.015	0.191	-0.135	-0.023	0.011	1.00

Table 3 presents the results of the NB regression models. As mentioned earlier, the coefficients are presented as IRRs. In Model 1, we regressed delinquent activities on the indicators of family social capital only. Results from this model indicate that closeness of the parent–child relationship is not a statistically significant predictor of delinquent activities (IRR = 1.01, $p > 0.05$). Yet, each one-unit increase in the frequency of not fighting with parents is associated with a 16% decrease in the rate of delinquent activities ($p < 0.001$). Youth who talked to their parents when they are worried about something reported about 22% fewer delinquent activities ($p < 0.001$). The results also indicate, though, that as parents talked more frequently with their children about important things, the rate of delinquency was slightly higher (IRR = 1.04, $p < 0.05$). Thus, the topic of discussion, at least from the youth’s vantage point, may have different consequences for delinquent behavior.

Table 3. Negative Binomial Regression of Social Capital Indicators on Delinquency Index Score.

Variable	Model 1		Model 2	
	IRR	SE	IRR	SE
Social capital variables				
How close are you to your parent(s)	1.012	0.020	1.049 *	0.021
How often you fight with parent(s) (3 = Never)	0.804 ***	0.014	0.820 ***	0.014
Do you talk to parents when worried	0.781 ***	0.025	0.794 ***	0.024
How often parent(s) talk about things important to child	1.043 *	0.019	1.037 *	0.018
How often parent(s) know where you are	0.821 ***	0.022	0.908 ***	0.022
How often parent(s) know who you are with	0.803 ***	0.020	0.875 ***	0.020
How often parent(s) know what you are doing	0.679 ***	0.016	0.741 ***	0.016
How often family meals together	0.946 **	0.016	0.968 *	0.015
Parent(s) attended school meetings	1.444 ***	0.049	1.281 ***	0.041
Control variables				
How many of close friends work hard at school			0.820 ***	0.021
How many of close friends don’t get into trouble			0.729 ***	0.021
How often you spend time with close friends			1.177 ***	0.018
How safe is your neighborhood			0.906 ***	0.021
Household Income (L/week)			0.999 ***	0.000
Family Structure				
Two parents—One biological			1.053	0.047
One parent—Biological			1.012	0.047
Other			1.078	0.149
Household Size			0.984	0.013
Parental Education				
Age			1.067 *	0.032
Sex (1 = Male)			1.684 ***	0.050
Race				
Black			1.056	0.083
Asian			1.037	0.068
Other/Mixed			1.181 **	0.062
Constant	6.397 ***	0.674	2.544 ***	1.155

Note: IRR: incidence rate ratio; SE: standard error. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

The associations among the social control-type variables and delinquent activities were largely consistent with expectations. Youth who reported that their parents knew where they were, who they were with, and what they were doing outside of the home manifested a lower risk of delinquent activities. Moreover, as youth reported more meals shared among family members, the risk of delinquency decreased (IRR = 0.95, $p < 0.01$).

The addition of the control variables in Model 2 did little to change the patterns of associations between the social capital variables and delinquent behavior. The one exception involved closeness to parents, which emerged as a modest predictor of delinquency, though the association was

paradoxical. Youth reporting closer feelings with parents reported slightly more delinquent activities (5%), which does not conform to a social capital perspective. Nonetheless, fighting with parents, talking to parents when worried, parental knowledge of one's whereabouts, and family meals continued to show statistically significant associations with the rate of delinquent activities at levels consistent with those in Model 1.

Among the control variables, friendship behaviors exhibited a notable association with delinquency: youth who claimed their friends work hard at school or stay out of trouble reported fewer delinquent activities (−20% and −31%) than other youth. Youth who spent more time with their friends, however, reported a higher risk of delinquent behavior, which is consistent with research on peer delinquency (McGloin and Thomas 2019). Feeling safe in one's neighborhood was associated with a lower rate of delinquency involvement (IRR = 0.91, $p < 0.001$) (Barnes and Cheng 2006).

The results concerning the other control variables suggest that lower household income and older age were associated with more involvement in delinquency. Consistent with a large body of research (De Coster et al. 2013; Liu and Miller 2020), males, on average, were involved in more delinquent activities than females (IRR = 1.68, $p < 0.001$). Finally, the only race/ethnic status showing a statistically significant effect was Other/Mixed: these youth reported an 18% higher rate of delinquency than White youth.

5. Discussion

A substantial body of research has examined the association between social capital among youth and delinquent behaviors, with studies supporting the notion that the social connections adolescents have with their parents and other family members can help transmit pro-social norms that discourage delinquent behavior (Dufur et al. 2015; Dufur et al. 2019; Han and Grogan-Kaylor 2015; Hoffmann and Dufur 2008; Hoffmann and Dufur 2018; Wright et al. 2001; Wright and Fitzpatrick 2006). Most research has been conducted in the U.S., however, with few studies in European nations or in other parts of the world, e.g., Boers et al. (2010), Springer et al. (2006), Yuksek and Solakoglu (2016). A surprising omission of locations for research on social capital and delinquency is the U.K. Whereas several research projects have addressed social capital and outcomes such as youth employment or health outcomes (Deuchar 2009; McPherson et al. 2013; Miller et al. 2015), and studies of family relations and youth misbehaviors are not uncommon (Aston 2015; Farrington et al. 2013), no study to date has addressed family social capital and illegal behaviors among youth from this nation.

We set about rectifying this oversight by using nationally representative data from all four regions of the U.K. to explore the associations among several family social capital measures and delinquent conduct. The results of the analysis were largely consistent with previous research: youth who talk to parents when worried, who rarely fight with their parents, or whose parents know where they are and what they are doing tend to be involved in fewer delinquent activities than other youth. These associations persist even with statistical adjustments for several common predictors of delinquency, including sex, family structure, race/ethnicity, and peer associations (Dufur et al. 2015; Farrington et al. 2013; Hoffmann 2011; Hoffmann and Dufur 2018; McGloin and Thomas 2019).

These results both add to the empirical evidence that favors family social capital as a way to minimize the risk of youth misbehaviors and increase confidence in the utility of social capital as a generally applicable theory of youth development and behaviors (Parcel et al. 2010). Several common models of delinquency, such as social bonding theory, address certain aspects of parent–child relations, but few provide a clear theoretical lens through which to understand how these relations translate into a lower risk of delinquent behavior (Hoffmann and Dufur 2008; Hoffmann and Dufur 2018). Social capital theory, as it addresses family relations and the transmission of norms that favor conventional behaviors, does provide such a lens that focuses distinctly on youth development from childhood through adolescence. Social capital theory's emphasis on specific and intentional investment by parents in passing on information, obligations, and norms to their children places greater attention on actors' agency and the inherently social nature of families and other networks. The similarities between the

U.K. findings we report here and previous work in the United States suggests that social capital is a worthy investment by parents who are concerned about protecting their children from participation in delinquent or other negative behaviors, at least for families in high-income, English-speaking countries.

Limitations

Although the empirical model's results are stable after adjustment for several important control variables, they do have some limitations. The data are cross-sectional and observational; we therefore cannot establish causal associations among the variables using experimental or quasi-experimental methods. Still, it is difficult to design a study using one of these methods that would allow delinquent behavior as an outcome, so our analyses land squarely within typical approaches to studying delinquency. We also note that our findings should be interpreted with caution in terms of temporality because of the data are cross-sectional. Since the findings align with previous work using approaches such as structural equation models (Dufur et al. 2015) or a quasi-experimental design (Turley et al. 2017), we are confident that the claims concerning family social capital's consequences for delinquent behavior are accurate. It is possible, however, that youth who participate in delinquent activities break down the social capital that may have already been established in their families. Family social capital and delinquent behavior may thus be reciprocally related among youth.

Although we capture a common age when young people initiate delinquency, the data are limited to younger adolescents. As a result, we cannot be certain of the relationships between social capital and delinquency at slightly older ages when delinquency typically peaks. This is a particularly important question concerning social capital, as the influence of peer social capital might increase across adolescence, while the influence of family social capital might fade as youth try to distinguish themselves from their families and build their own identities. Previous research addressing family effects on delinquency provide mixed evidence, with some scholars finding an attenuated effect (Thornberry et al. 2003) and others finding a persistent effect of family influences in late adolescence (Jang 1999). Both of the limitations we mention here could be addressed through research with future updates of the MCS data, as the next sweep of data to be released will provide data for subjects when they are 17 years of age. Measuring social capital at age 14, as we do here, and using it to predict delinquency at age 17 would help establish the causal order, as well allow an examination of delinquent behaviors later in adolescence.

We focused, in this study, on family social capital, but capital can be derived and developed through other sources. We included several control variables assessing relations beyond the family, but social capital that is created outside of the family has also been linked to academic and delinquent outcomes, such as social capital created in schools, with peers, in religious and community institutions, and in neighborhoods (Dufur et al. 2015; Elliott et al. 2006). Examinations comparing family and school social capital have generally found positive effects of social capital built with adults in children's schools, but also that the influence of that social capital is much weaker than that of family social capital (Dufur et al. 2015; Dufur et al. 2019). Whether these social capital effects external to families differ across cultural contexts is an outstanding question, however. For example, school leaving happens earlier in the U.K. than in the U.S., where most research on social capital has taken place, so it is possible under such circumstances that school social capital may be less influential in the U.K. context. Moreover, social capital created in religious settings might be less available or less influential in European settings than in the U.S., where more citizens report attending religious services (Brenner 2016). Finally, we largely ignore the macro-level resources that allow the building of family social capital, such as state-sponsored social welfare programs, support efforts for disadvantaged families, neighborhood organizations designed to build communities, or equitable support for schools regardless of local wealth or poverty (Farrall et al. 2020; Jack and Jordan 1999). The data we employ do not provide measures of school-, religious-, community-, or state-supported social capital measures comparable to those in previous work using U.S. data. Cross-cultural research examining how different sources of social capital do or

do not operate similarly across different contexts should, however, help adjudicate the salience and generalizability of social capital theory for explaining child and adolescent development.

Even though an important contribution of our paper is to extend examinations of how family social capital might influence delinquent behavior to youth beyond the United States, we note that the U.S. and U.K. share a number of characteristics, including economic structures, a common language, and a shared political heritage. This makes them an interesting comparison, but also provides opportunities to extend these inquiries into even more diverse settings. For example, social capital may be created differently, used differently, or have different degrees of influence in countries with more collectivist cultures (Jarvis et al.; Thorpe et al. 2020). Putnam (2000) concepts of bridging and bonding social capital may be more or less salient in Global South economies with rapid in-migration from rural to urban settings. The models we use here provide a road map for future research extending questions about youth social capital to such settings.

Our findings concerning family social capital and youth delinquency in the U.K. provide a bridge to similar findings for youth in the U.S. Family social investments in youth through building relationships, talking together, and knowing about activities and friends help adolescents avoid delinquent behavior in the U.K. in similar ways that they do in the US. Taken together, this growing literature positions social capital as a promising avenue through which to promote pro-social adolescent development.

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