

# The Protective Effects of Family Support on the Relationship Between Official Intervention and General Delinquency Across the Life Course

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## Abstract

*Purpose* Previous research on the labeling perspective has identified mediational processes and the long-term effects of official intervention in the life course. However, it is not yet clear what factors may moderate the relationship between labeling and subsequent offending. The current study integrates Cullen's (Justice Q 11:527–559, 1994) social support theory to examine how family social support conditions the criminogenic, stigmatizing effects of official intervention on delinquency and whether such protective effects vary by developmental stage.

*Methods* Using longitudinal data from the Rochester Youth Development Study, we estimated negative binomial regression models to investigate the relationships between police arrest, family social support, and criminal offending during both adolescence and young adulthood.

*Results* Police arrest is a significant predictor of self-reported delinquency in both the adolescent and adult models. Expressive family support exhibits main effects in the adolescent models; instrumental family support exhibits main effects at both developmental stages. Additionally, instrumental family support diminishes some of the predicted adverse effects of official intervention in adulthood.

*Conclusions* Perception of family support can be critical in reducing general delinquency as well as buffering against the adverse effects of official intervention on subsequent offending. Policies and programs that work with families subsequent to a criminal justice intervention should emphasize the importance of providing a supportive environment for those who are labeled.

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## Introduction

The labeling perspective introduced the notion that social reactions, particularly official intervention, could have the untoward and ironic effect of increasing subsequent criminal behavior rather than the intended reduction in such behavior. While reaching its intellectual peak in the 1960s, by the 1980s, the labeling perspective as originally presented was severely criticized due to its lack of testable propositions and empirical evidence [1, 2]. Recently, the revived interest in the labeling perspective has been fueled by efforts to explicate and examine the social processes embedded in the labeling premises that suggest that official intervention may, under certain circumstances, have an effect on life chances [3–9] and, in turn, lead to a delinquent career or “secondary deviance” [10].

While recent studies have found that the effect of official intervention may be criminogenic, the strength of the relationship is moderate at best. Barrick [11] in a meta-analysis of studies on labeling effects suggested that overall the evidence is ambiguous as other studies have found no effect and a few have found the expected deterrence effect. In part, Barrick’s findings can be attributed to including earlier studies that were not as methodologically rigorous as the more supportive recent ones. However, Barrick’s conclusion may also be due to the failure of most studies to address the possibility that the criminogenic effect is contingent on characteristics of the people being labeled and the context in which the intervention occurs. For instance, Barrick [11] reiterated Paternoster and Iovanni’s [12] earlier call for the exploration of contingent factors that may result in official intervention increasing or decreasing the probability of subsequent offending. Prior efforts directed at understanding the differential susceptibility of a labeling experience have mostly focused on examining how structural location (e.g., race, class, and gender) can exacerbate the effect of being labeled [13–19]. More recent studies have recognized the need to explore factors other than structural location as moderators of the relationship between official intervention and subsequent crime [4, 5, 8, 20].

In the current study, we examine factors that may protect or insulate the offender from the problematic consequences of official intervention. Specifically, we investigate whether social support from family members ameliorates negative consequences associated with official intervention. Cullen [21] was the first to “integrate the diverse insights on social support into a coherent criminological paradigm” (p. 529). Among his specific propositions regarding support and individual offending, Cullen contended that social support does not only have a direct crime-reduction effect but also conditions other variables which affect crime (e.g., criminogenic strains or the level of social control). Following this line of argument, social support should buffer the criminogenic, stigmatizing effects of criminal labeling [22].

To the best of our knowledge, prior empirical research has paid limited attention to the protective or moderating effects of social support on the relationship between labeling and general delinquency. To further explore the contingencies of the labeling process, we integrate Cullen’s [21] insight on the protective capacities of social support

to assess how family support will condition the criminogenic, stigmatizing effects of official intervention on offending. We also anticipate that the saliency of social support will vary by developmental stage because criminal labeling is a process and the nature and quality of family relationships differ across the adolescent and adult years. Expressive and instrumental supportive interactions within family may be particularly beneficial at different times. Hence, we examine whether the protective effects of family social support against official intervention vary according to developmental stage.

## Criminal Labeling: Pathways and Contingencies

The essential argument characterizing the labeling approach is that reactions to deviant or criminal behavior may result in an increase in subsequent criminal acts as a result of an adaptation to the stigma of being so identified or labeled [10]. The labeling perspective was later criticized for lacking a clearly articulated set of hypotheses, overstating the effect of labeling, and, most importantly, failing to establish convincing empirical evidence supporting its argument that societal reaction to deviance would increase rather than decrease subsequent deviant behavior [3, 6, 11, 12].

Paternoster and Iovanni [12] suggested that it might have been premature to dismiss the labeling perspective; research had not adequately examined the implications of the perspective because it had not paid adequate attention to potential mediating factors and had not taken into account contingent or moderating effects. Conceptual work by Braithwaite [23], Link et al. [24], Matsueda [25], Sherman [26], and Sampson and Laub [27, 28] reinvigorated interest in the labeling approach. Sampson and Laub [27, 28] suggested that official intervention may increase the probability of adult crime through *cumulative disadvantage* in key areas of the life course such as education, employment, and relationships with significant others. Those who were labeled would be more likely to be excluded from legitimate opportunities and from conventional others because they were defined as deviant. Link et al. [24] noted that another reason life chances for those labeled mentally ill diminished was because they suffer from social withdrawal following the anticipated rejection of others. A number of studies have examined the effect of official intervention on subsequent life chances [4, 5, 15, 16, 29–35], finding support for the indirect effect of official intervention on subsequent crime.

Although the above research is supportive of the basic premise that official intervention affects life chances which in turn lead to a higher probability of subsequent criminal behavior, the observed relationships are moderate at best [11]. This suggests that while official intervention has an impact on some of those who are labeled, it does not on others.<sup>1</sup> This observation raises the issue of what contingent or moderating factors contribute to whether official intervention affects subsequent behavior. The question of what factors may affect an individual's interpretation of stimuli and the consequences thereof might be the most important one in assessing the labeling approach.

<sup>1</sup> The inconsistency in results regarding labeling theory may also be due to different methodologies. Studies using samples from general populations find more support for the labeling perspective, whereas studies on offenders differentiating the degree of intervention report mixed findings [12, 15].

Much of the limited research on factors that may moderate the effects of official intervention on subsequent crime has focused on structural location variables such as race and social class [3, 6, 11]. One of the difficulties in exploring race and social class is there are opposite hypotheses on how these indicators of disadvantage may affect the impact of intervention on subsequent behavior [3]. One argument is people with little to lose or who are more likely to either have had experience with law enforcement or to be around others who have had such experience will be less affected by official intervention into their own lives. Thus, the impact of the label for minorities and the disadvantaged classes will be less than it would be for whites and those who are economically better off. Some of the research supported this argument [13, 16, 17].

Alternatively, the argument has been made that the disadvantaged (minorities and lower class individuals) have less resources at their disposal to fend off the negative impact of labeling. Under this premise, official intervention should be more problematic for the disadvantaged classes. Support for this hypothesis has also been found [15, 36, 37].

Recently, the examination of moderating factors of the relationship between official intervention and delinquency has been expanded to include factors other than structural location. Morris and Piquero [8] found that for youth who are at greater risk for delinquency as measured by their delinquency trajectories, police arrest is criminogenic whereas it is not among lower risk youth. A few studies [4, 5, 20] have more direct relevance for the examination of social support as a moderating factor and are, therefore, reviewed in the next section.

In effect, the research on such moderating factors has just scratched the surface of potential explanations for why intervention impacts some people and not others. Theoretically, the case has been made in two extensions or modifications of labeling theory. Braithwaite's [23] reintegrative shaming perspective explicitly recognizes the importance of moderating factors on the outcomes subsequent to official intervention. Disintegrative shaming that excludes the offender from the community is likely to result in more crime, while reintegrative shaming, where the community actively tries to forgive and accept the offender back in the community, is likely to reduce future offending. Sherman's [26] defiance theory also asks the question of under what conditions sanctioning will have an escalating or deescalating impact on crime. While his focus is primarily on how perceptions of unfairness in the sanctioning process generate defiance and increase the probability of more crime, he also recognizes that "perceptions of integration into group membership" may insulate offenders from future crime ([38], p. 19).

At the conclusion of a recent review of work on labeling theory, Krohn and Lopes [6] noted that the type of social support people acquire through their interactions with family or friends may insulate or protect individuals from the stigma and decreasing conventional opportunities that often accompany official intervention. Some of the research on race and economic disadvantage also hinted that the availability of resources that individuals can bring to the situation can lessen the criminogenic effects of having been labeled. Those resources often come from networks of social support that individuals can call upon. In the next section, we discuss the importance of social support against criminal behavior and its potential impact on the effect of official intervention. In doing so, we suggest that both instrumental and expressive social support have potential moderating effects on the relationship between official intervention and subsequent crime.

## Social Support and Crime

Social support propositions imply that organized networks of human relations assist people in meeting an array of needs and wants throughout the life course, which prevents criminal behavior. Although explicitly or implicitly referenced in numerous criminological perspectives (e.g., [39–41]), including both Braithwaite's [23] reintegrative shaming perspective and Sherman's [26] defiance theory, only recently has this concept been presented in a coherent criminological paradigm and applied to direct theoretical and empirical investigation [21].

Lin [42] defined social support as “the perceived or actual instrumental and/or expressive provisions supplied by the community, social networks, and confiding partners” (p. 18). Implied in this definition are three key dimensions of support. First, social support can be perceived or actual. Previous research has shown that the effects of perceived support are stronger and consistently beneficial [43, 44].

Second, social support can be instrumental or expressive. The instrumental dimension of support involves “the use of the relationship as a means to a goal, such as seeking a job, getting a loan, or finding someone to babysit” ([42], p. 20). Supportive relationships help to provide time or material resources to individuals who are in need of assistance. On the other hand, expressive support involves “the use of the relationship as an end as well as a means” ([42], p. 20). Expressive support meets individuals' need for “love and affection, esteem and identity, and belonging and companionship” ([45], p. 21).

Third, social support exists at different levels of society and comes from distinct sources.<sup>2</sup> Social support from conformist sources (e.g., parents) is most likely to combat criminogenic factors [46], whereas illegitimate support networks (e.g., deviant friends) assist individuals with a sense of belonging, role models, skills, and resources that, unfortunately, contribute to an accumulation of “criminal capital” [47].

Beyond a general comprehension of social support as a theoretical construct, it is necessary to explicate the mechanisms through which networks of social support lessen the effects of exposure to criminogenic risk factors (e.g., official intervention) and reduce criminal acts. Cullen [21, 48] clearly indicated that social support may exhibit both main effects of crime reduction and moderating effects of criminogenic risk buffering. Social support can prevent strain from arising following a stressful life event or can lessen negative consequences if strain should emerge [43].

Specifically, Cullen's [21] propositions on social support and individual offending can be rephrased into three main mechanisms: (1) networks of social support create a nurturing environment that provides acceptance, a sense of belonging, and self-worth. Cobb [49] suggested that social acceptance generates a belief that “one belongs to a network of communication and mutual obligation” (p. 300). Within a supportive network, people will signal empathy for individuals in adverse situations, listen to his or her reactions and worries, accompany the individual as the stressful event unfolds, and help work out potential solutions [50, 51]. Perception of support also reassures the individual's sense of truly “mattering” to other people and sustains his or her sense of

<sup>2</sup> Examples of microlevel social support include positive relationships with parents, a partner, teachers, or friends. At the macrolevel, individuals may receive assistance from a variety of neighborhood organizations, and state and national welfare programs or charities.

self-worth [52]. The reciprocal nature of supportive networks also induces voluntary or involuntary role obligations on the assistance recipient, providing behavioral guidance from role expectations [53].

(2) Networks of social support supply physical and human capital needed to refrain from offending and enhance prosocial modeling. Sullivan [54], for instance, illustrated that, in contrast to minority youths whose access to support was structurally limited, white juveniles from working-class neighborhoods were able to enter the legitimate workforce through family ties and accumulated working experience and skills. When in trouble, they mobilized social networks to obtain the resources they needed to escape being captured in a criminal role (e.g., seek professional advice and aid from relatives on the police force or in the courts). In addition, the provision of social support creates opportunities for prosocial modeling. In particular, receiving support from conformist sources who have coped with similar stressors prevents anxiety, bitterness, and anger and generates hope. The distressed individual can envision himself or herself in the future, and the possession of a future orientation has been well established as a sign of maturation, and functions as a “catalyst” for desistance from crime [55, 56].<sup>3</sup>

(3) Social support creates the context in which informal and formal social control can be effectively realized. Cullen [21] suggested that criminologists often overlook social support and potentially confound the effects of control with those of support. Colvin et al. [46] argued that social support and control are not rival concepts; “normative control can involve the delivery of expressive social support and remunerative control can involve the delivery of instrumental social support” (p. 26). There is ample evidence that control is most effective when it is exerted as part of a supportive as opposed to a detached or punitive relationship [23, 26, 57].

To date, social support propositions have not been tested extensively in criminological research. Yet, the available evidence indicates a substantial degree of empirical support for the perspective and provides a clear rationale for further investigations of how social support is implicated in individual offending [22].<sup>4</sup> The direct or mediational effects of social support have been observed in mitigating a variety of antisocial outcomes including general delinquency [57–59], aggression [60], externalizing and internalizing behaviors [61, 62], and rule infractions in prison [63].

Evidence also suggests that social support can function as a protective factor against antisocial influences. Parental support has utility for moderating the link between low self-control and deviance [64]. Perception of support, in particular parental support, also moderates the relationship between associating with deviant friends and delinquency and drug use [65–68]. Although Meadows [59] reported that peer support was positively related to offending, Scarpa and Haden [60] did find that perceived friend support moderates the impact of violent victimization on aggression.

Ciaravolo [4] examined four potential moderators of the relationship between official intervention and subsequent offending. She found that for those youth who experienced more conflict in the family, less school commitment, and more negative attitudes toward the police and were more willing to take risks, the impact of official

<sup>3</sup> People may also learn to deliver support to others, which can “transform selves, inculcate idealism, foster moral purpose, and create longstanding interconnections—all of which would seem anti-criminogenic” ([21], p. 543).

<sup>4</sup> It is worth mentioning that empirical evidence for social support theory at the macrolevel is less consistent.

intervention was greater than for youth who did not have those attitudes or experiences. The results regarding family conflict and school commitment may be indirectly relevant to the importance of social support as a moderator since one might expect families that are in conflict would supply less social support and those who are less committed to school to have had less parental support.

Jackson and Hay [20] reported findings that are most relevant to the current investigation. They examined the moderating impact of family attachment on the relationship between self-reported arrest and delinquent behavior among a sample of adolescents at high risk for serious delinquency. They found that family attachment did deflect the potential negative impact of labeling on subsequent crime. Although they did not explicitly focus on social support, their study certainly suggests that family social support may play a protective role. In a related study, Hay et al. [5] demonstrated that treatment programs such as Children at Risk (CAR), whose primary goal was to reduce serious offending among high-risk youth, can also reduce the impact of arrest on subsequent crime by providing social support service.

Stewart et al. [69] also suggested that what parents do can offset labeling, although they used a mediating model and focused on measures of parental supervision and discipline rather than social support. Overall, the findings from the existing body of literature indicate that social support can play both a *direct* and *buffering* protective role in discouraging individual offending [70].

## The Current Study

Using data from the Rochester Youth Developmental Study (RYDS), the current study investigates how perception of family support moderates the relationship between criminal labeling and subsequent offending across the life course. Family members, particularly primary caregivers, have been well established as one of the most important conventional sources of support [71].<sup>5</sup> Accordingly, it is expected that family support will weaken or diminish the effect of official intervention on subsequent crime.

The nature and quality of family relationships vary across the life course. We, therefore, explore whether the protective effects of family support will vary according to developmental stages of individuals. Cullen [21] briefly mentioned that social support theory is not limited to explaining adolescent delinquency but relevant to life-course criminology. The life-course perspective recognizes that one of the most volatile stages of human development occurs as individuals move from adolescence to early adulthood [72]. Youth are expected to establish “age-appropriate autonomy” [73] and make more of their own decisions in a range of institutional arenas (e.g., education, employment, and romantic relationship). Official intervention is likely to further complicate these “demographically dense” years [74]. Confrontation with the *stigmatizing* and *segregating* effects of formal social control may lead to “role engulfment,”

<sup>5</sup> Conventional peers could also be an important source of support in preventing “secondary deviance” following official intervention across the life course. However, the RYDS data cannot differentiate between conventional peer support from delinquent peer support. Given the high-risk nature of the sample, we decided to focus on the protective effects of family support. We also recognize that faith-based organizations and other community groups may provide social support that moderates the criminogenic, stigmatizing effects of official intervention on offending. Unfortunately, we do not have detailed information on these organizations.



viewing oneself as others do (as a deviant) or perceiving the self in a less favorable light, as less worthy [75, 76]. Normative transitions in critical arenas of one's life are also likely to be disrupted (e.g., early school dropout). Parental expressive support, thus, appears particularly important during this developmental stage of life. Through perception of expressive support, adolescents experiencing the criminal labeling process may obtain confidence as well as necessary guidance when making important life decisions and talk out trouble/problems that could adversely affect subsequent life chances.

With the aging of individuals, adversities associated with a criminal label may manifest in multiple life domains in the transition to adulthood [32, 34, 77, 78]. In particular, young adults need to make their way financially in society. To alleviate such practical difficulties, instrumental support from parents should be more important during the adult years than in adolescence. Thus, we expect that instrumental family support is a particularly important element against labeling effects during adulthood.

We hypothesize that both expressive and instrumental social support will have a weakening/diminishing impact on the effect of official intervention on subsequent delinquency and crime for both adolescents and adults. However, given the varying importance of expressive and instrumental family support at different stages of the life course, we also hypothesize that expressive social support will have a greater weakening effect on the relationship between official intervention and delinquency or crime during adolescence than it will have during adulthood. On the other hand, instrumental social support is expected to have the greater weakening effect on that relationship during adulthood than it will have during adolescence.

## Methods

### Data and Sample

The data for the current study come from the RYDS, an ongoing longitudinal study aimed at understanding the causes and consequences of serious and chronic delinquency and drug use. The RYDS began in 1988 with an original sample of 1000 seventh- and eighth-grade students in the public schools of Rochester, New York. Since the base rates for serious offending are relatively low, the original sample was stratified on two dimensions to provide high-risk respondents. First, males were oversampled (75% vs. 25%) because they are more likely than females to commit crime. Second, students residing in high crime neighborhoods were oversampled based on the assumption that living in such areas of the city represented enhanced risk for offending. The sample was predominantly comprised of minorities (68% African American, 17% Hispanic, and 15% White) and males (73%).

The RYDS has followed the subjects from their early teenage years (about age of 14) through age 31, and 14 waves of interviews have been completed across three phases. The data used in this study span all three phases of data collection. Specifically, phase 1 covered the adolescent years of the subjects from about 14 to 18 years of age. In phase 1, the respondents and their primary caretakers (most often biological mothers) were



interviewed nine and eight times respectively at 6-month intervals (waves 1–9). Phase 2 began after a 2.5-year gap in data collection. The respondents with their primary caretakers were interviewed at three annual intervals at ages 21 to 23 (waves 10–12). Phase 3 consisted of respondent interviews at 29 and 31 years of age (waves 13 and 14). In addition to self-report surveys, the RYDS also collected official data (e.g., school-performance data, child maltreatment information, and official arrest records) from schools, social services, and the police. The attrition rate in the RYDS data has been acceptable. During phase 3, approximately 76% of the original sample had been retained.

To examine the potential moderating effects of social support on the relationship between official intervention and subsequent crime in both the adolescent and early adult years, we measure whether respondents have been arrested at any time prior to the wave at which we assess social support. We then measure the offending outcome at the wave subsequent to when we measure social support. For adolescents, we access police arrest at waves 1–6, social support at wave 7, and delinquency at wave 8. In the adult outcome models, we measure whether respondents have been arrested any time from waves 7 to 12,<sup>6</sup> while social support is measured at wave 13 and crime is measured at wave 14. In this way, we are able to account for the cumulative effect of labeling over time and maintain time order.

## Measures

Table 1 reports descriptive statistics for the key variables used in the current study. The sixth and 11th columns in the table specify the waves from which the measures were taken.

### *General Delinquency*

We create a variety scale of general delinquency to capture individuals' tendency to offend in adolescence (wave 8) and early adulthood (wave 14). Sweeten [79] suggested that variety scales are more "attractive" than dichotomous and frequency scales because "they are less sensitive to high frequency items, much less skewed than frequency scales, and have the highest concurrent validity and equal predictive validity to other scales" (p. 553). The subjects responded to a delinquency index covering a range of delinquent acts from relatively minor offenses such as vandalism and petty theft, to more serious offenses like robbery and aggravated assault. They were asked if they had committed each offense since the date of the last interview. To accommodate age-appropriate items, the general delinquency index includes 24 and 26 offenses in adolescence and adulthood, respectively.

<sup>6</sup> Individuals who were arrested between waves 1 and 6 were excluded from the adult models. By controlling for prior delinquency and other theoretically informed covariates at wave 6, we reduced the risk of spuriousness. Yet, it is worth mentioning that the same substantive findings were observed when we included those subjects and estimated the effects of arrests in waves 1–12.

**Table 1** Descriptive statistics

Variables	Adolescent models ( <i>N</i> = 877)					Adult models ( <i>N</i> = 675)				
	Mean or proportion	SD	Min	Max	Wave	Mean or proportion	SD	Min	Max	Wave
General delinquency	0.844	1.620	0.000	15.000	8	0.607	1.108	0.000	9.000	14
Police arrest	0.122	0.327	0.000	1.000	1–6	0.381	0.486	0.000	1.000	7–12
Express family support	3.049	0.685	1.000	4.000	7	3.278	0.745	1.000	4.000	13
Instrumental family support	2.725	0.675	1.000	4.000	7	3.392	0.544	1.000	4.000	13
Male	0.725	0.447	0.000	1.000	1	0.685	0.465	0.000	1.000	1
African American	0.685	0.465	0.000	1.000	1	0.671	0.470	0.000	1.000	1
Hispanic	0.163	0.370	0.000	1.000	1	0.169	0.375	0.000	1.000	1
Parental education	11.372	2.185	6.000	18.000	1	11.482	2.165	6.000	18.000	1
Family poverty	0.316	0.465	0.000	1.000	2	0.299	0.458	0.000	1.000	2
Aggression	0.457	0.356	0.000	1.833	3	0.456	0.348	0.000	1.833	3
Academic aptitude	58.024	25.565	1.000	99.000	a	59.867	25.370	1.000	99.000	a
Neighborhood disadvantage	−0.003	0.963	−2.362	1.511	b	−0.039	0.978	−2.262	1.511	b
Self-esteem	3.075	0.410	1.778	4.000	2	3.207	0.411	2.222	4.000	6
Depression	2.142	0.462	1.000	3.786	2	2.026	0.469	1.000	3.571	6
Parental supervision	3.628	0.398	1.250	4.000	2	3.580	0.433	1.500	4.000	6
Risky time with friends	1.989	0.615	1.000	4.222	2	2.036	0.677	1.000	4.667	6
Prior delinquency	1.659	2.631	0.000	19.000	2	0.991	1.784	0.000	15.000	6

*Note:* a: measured by the math percentile score received on the California Achievement Test in 1987 (prior to wave 1 of the RYDS); b: measured by 1990 U.S. Census

### *Police Arrest*

Police arrest is a measure of official intervention. Using official records collected from the Rochester Police Department, we examine whether an individual experienced police arrest during adolescence and through emerging adulthood. Specifically, we are interested in whether any arrest has taken place over the time period examined because we assume that the effects of an arrest are not necessarily apparent immediately but rather result in cumulative disadvantage over time. For adolescents, this covers waves 1–6 when they were approximately 14–16 years old. For adults, we examine if they have been arrested anytime during waves 7–12; the subjects were approximately 23 years old at wave 12. The variable is a dichotomy indicating “1” for any arrest and

“0” for no arrest. This cumulative binary indicator has been widely used in labeling research and has predicted problematic outcomes in previous studies [15, 31, 32, 80].<sup>7</sup>

### *Family Support*

We measure family support at the waves subsequent to our measures of police arrest and the waves prior to our measures of offending. For adolescents, this is wave 7, and for adults, this is wave 13. Informed by theoretical considerations and explanatory factor analysis, we create two measures of social support provided by primary caregivers. The first construct, *expressive support*, is measured by a four-item scale. The respondents were asked how likely primary caregivers talk to you about trouble you are having at school or work, talk to you about trouble you are having with family members or friends, talk to you about other things that are bothering you, and help you with important decisions. Responses were scored “very unlikely” (1), “unlikely” (2), “likely” (3), and “very likely” (4). Items are averaged to provide the mean score, and higher scores on the scale reflect greater perceived expressive support. The Cronbach’s coefficient alpha equals 0.82 in the adolescent models and 0.91 in the adult models.

We construct another measure to capture *instrumental support* perceived from primary caregivers. Instrumental support is measured by five items in the adolescent models. The respondents were asked how likely primary caregivers give or loan you money that you can spend, help you with your homework, check to make sure that you did your homework, play sports or games with you, and go with you to the movies or some special events. The response categories again range from “very unlikely” (1) to “very likely” (4). Items are averaged to provide the mean score, and higher scores on the scale reflect greater instrumental support. The Cronbach’s coefficient alpha equals 0.76 in the adolescent models. Four similar questions were asked in the adult models: how likely primary caregivers give or loan you money, go places or do things with you, help you in an emergency, and take care of you no matter what is happening in your life. Again a mean score is calculated, and the Cronbach’s coefficient alpha equals 0.72 in the adult models.

### *Control Variables*

We include several baseline variables in the analysis in order to control for prior behaviors and characteristics that may be related to both police arrest and later

<sup>7</sup> As robustness checks, we also created (1) a continuous variable measuring the frequency of arrests, (2) an ordinal variable collapsing the frequency of arrests into categories, and (3) an ordinal variable accounting for the period of time between last arrest and later delinquency/crime. The results showed that the continuous variable was not a significant predictor of later offending in either the adolescent or adult models; we suspect that the continuous variable underestimated the labeling effects because it failed to capture the substantial differences between individuals with no record of arrest at all and individuals with any record of arrest. On the other hand, the conclusions drawn from using the binary indicator and the two ordinal measures were very similar (the Spearman’s rho was above 0.95 between each pair of comparison conditions). Specifically, both ordinal variables were significant predictors of later offending and instrumental family support lessened some of the predicted adverse effects of official intervention during adulthood. However, due to the statistical power provided by the ordinal variables, the high-risk categories often had relatively large incidence rate ratios (IRR), but with marginal or no statistical significance. Given that the same substantive findings were observed and for the clarity of argument, we present the final results from using the binary indicator of police arrest.

offending. We create a dummy indicator for *male* and indicators for *African American* and *Hispanic* race/ethnicity (reference group is white). *Neighborhood concentrated disadvantage* is measured by a four-item latent measure constructed from the 1990 U.S. Census assessing the level of economic hardship within the neighborhood where the subjects lived. Standard census items included percentage in poverty, percentage female-headed households, percentage unemployed, and percentage receiving public assistance. *Parental education* refers to the highest grade completed by the principal family wage earner. *Family poverty* is an indicator of whether a household had an income below the federally defined poverty line for a given family size when the respondents were on average 14.5 years of age (wave 2). *Parental supervision* is measured by a four-item scale regarding how often the primary caregiver knows where the respondent is and with whom, and how important that is to the primary caregiver ( $\alpha=0.61$  at wave 2;  $\alpha=0.69$  at wave 6). To control for unstructured activities with peers, *risky time with friends* is measured by three questions regarding how often the respondent and his friends get together where no adults are present, drive around with no special place to go, and get together where someone is using or selling drugs or alcohol. Responses were indicated on a five-point scale from “never,” “one time per week,” “two times per week,” “three or four times per week,” to “everyday.” Items are averaged to provide the mean score, and higher scores indicate greater involvement with deviant friends ( $\alpha=0.77$  at wave 2;  $\alpha=0.80$  at wave 6).

We control for four measures of individual characteristics that might confound the relationship between police arrest, family support, and offending. *Academic aptitude* is measured by the math percentile score received on the California Achievement Test in 1987 (when the respondents were approximately 12 years old). Higher scores on this variable indicate greater academic aptitude. *Self-esteem* is measured by a nine-item scale derived from Rosenberg’s [81] self-esteem scale. The subjects were asked to what extent they agree or disagree with a series of statements about oneself. Items are averaged to provide the mean score and higher scores indicate higher self-esteem ( $\alpha=0.79$  at wave 2;  $\alpha=0.84$  at wave 6). *Depression* is measured by a 14-item scale tapping the frequency of depressive symptoms [82]. Responses were indicated on a four-point scale from “never,” “seldom,” “sometimes” to “often.” Items are averaged to provide the mean score, and higher scores indicate greater depressive symptoms ( $\alpha=0.77$  at wave 2;  $\alpha=0.81$  at wave 6). *Aggression* is measured by a trimmed version of the aggression subscale of the Child Behavior Checklist, which was first administered to the primary caregivers during wave 3. Primary caregivers were asked 12 questions about how often (“often,” “sometimes,” or “never”) the adolescent exhibited behaviors such as being restless and getting into fights. A mean score is calculated, and higher scores indicate a greater level of aggression ( $\alpha=0.85$ ). Finally, we control for variety scores of *prior delinquency* at waves 2 and 6 as a general measure of antisocial proclivity.

## Analytic Plan

To answer the research questions, we performed negative binomial regression analyses in consideration of the overdispersed distributions of the count outcome variables using Stata (Version 14.1; StataCorp 1996–2015). First, an initial baseline model was estimated to examine the total (unconditional) effect of police arrest on later offending.

Second, additive or “main effects” models were estimated to establish the relationship between police arrest, family expressive and instrumental support, and general delinquency. Separate models were estimated for expressive and instrumental support because the two constructs are relatively highly correlated,<sup>8</sup> and it is important to uncover which type of support is essential at what developmental stage. Third, interaction or “moderating effects” models were estimated to investigate the protective effects of expressive and instrumental support in the face of the adversities associated with official intervention. The same analytic steps were repeated when the respondents were in their adolescent and adult years. The data were screened for patterns of missingness, and we found little evidence that the assumption of “missing at random” was violated. We thus employed the technique of multiple imputation (mi impute chained; number of imputations=20) to deal with missing data in the present study [83]. To reduce nonessential multicollinearity and facilitate interpretation, we mean-centered family support measures before estimating moderating effects [84].

## Results

### G2 Adolescent Models

We present the results first for when the respondents were in their adolescent years. Model 1 in Table 2 shows the results from negative binomial regression in which adolescent delinquency is regressed on police arrest and control variables. As expected, police arrest is a significant predictor of subsequent delinquency ( $p=0.044$ ). While holding control variables in the model constant, being arrested any time between waves 1 and 6 leads to an increase in the subject’s incidence rate for general delinquency by 42.4%. As shown in models 2 and 3 of Table 2, police arrest reaches ( $p=0.037$ ) and approaches ( $p=0.070$ ) statistical significance in the models that respectively include expressive and instrumental family support. Main or direct protective effects for expressive ( $p=0.049$ ) and instrumental family support ( $p=0.005$ ) are observed. While holding all other variables in the models constant, a one-unit increase in expressive and instrumental family support leads to a decrease in the subject’s incidence rate for general delinquency by 16.3% and 24.3%, respectively.

While the observed main effects of family support measures are meaningful, we are particularly interested in the interactions between police arrest and family support measures because, if significant, they will indicate that family support protects individuals from continued criminal involvement following labeling experiences. Table 3 shows the results from negative binomial regression models that include relevant interaction terms. We did not observe significant interactions between official intervention and either expressive or instrumental support during adolescence, which is not consistent with our hypothesis that perceived family support would protect against criminal labeling effects.

<sup>8</sup> The correlation equals 0.65 in adolescence and 0.69 in early adulthood.

**Table 2** Negative binomial regression of general delinquency on police arrest and family social support for adolescents

Variables	Model 1		Model 2		Model 3	
	IRR (SE)	<i>p</i> value	IRR (SE)	<i>p</i> value	IRR (SE)	<i>p</i> value
Police arrest	1.424 (0.249)	0.044**	1.440 (0.252)	0.037**	1.374 (0.241)	0.070*
Expressive family support	–	–	0.837 (0.075)	0.049**	–	–
Instrumental family support	–	–	–	–	0.757 (0.075)	0.005**
Male	1.607 (0.241)	0.002**	1.623 (0.244)	0.001**	1.677 (0.253)	0.001**
African American	1.034 (0.188)	0.855	1.063 (0.194)	0.738	1.101 (0.201)	0.597
Hispanic	0.953 (0.222)	0.836	0.970 (0.226)	0.896	0.962 (0.223)	0.868
Parental education	0.983 (0.032)	0.599	0.985 (0.032)	0.633	0.982 (0.032)	0.574
Family poverty	1.151 (0.162)	0.321	1.151 (0.163)	0.319	1.147 (0.162)	0.334
Aggression	1.621 (0.273)	0.004**	1.602 (0.270)	0.005**	1.647 (0.278)	0.003**
Academic aptitude	1.000 (0.002)	0.887	1.000 (0.003)	0.995	1.000 (0.003)	0.963
Neighborhood disadvantage	0.961 (0.063)	0.549	0.954 (0.063)	0.472	0.946 (0.062)	0.403
Self-esteem	1.011 (0.170)	0.949	1.034 (0.174)	0.840	1.071 (0.180)	0.685
Depression	1.173 (0.182)	0.303	1.192 (0.184)	0.256	1.215 (0.188)	0.208
Parental supervision	0.840 (0.131)	0.265	0.862 (0.134)	0.342	0.852 (0.132)	0.300
Risky time with friends	1.113 (0.115)	0.301	1.130 (0.117)	0.239	1.153 (0.119)	0.166
Prior delinquency	1.114 (0.027)	<0.001**	1.110 (0.027)	<0.001**	1.103 (0.027)	<0.001**

IRR incidence rate ratio, SE standard error

\* $p < 0.10$ , \*\* $p < 0.05$ ;  $N = 877$

## G2 Adult Models

In this section, we repeat the analyses in the previous section but do so for the time when the respondents were in their adult years. Model 1 in Table 4 shows that police arrest remains a statistically significant predictor of self-reported offending in adulthood ( $p = 0.020$ ). However, unlike in the adolescent models, models 2 and 3 in Table 4 show that only instrumental family support ( $p = 0.013$ ) exhibits statistically significant main or direct protective effects in the adult models. While holding all other variables in the model constant, a one-unit increase in instrumental family support leads to a decrease in the subject's incidence rate for crime by a factor of 0.729 (or a decrease of 27.1%) during adulthood.

The results from negative binomial regression models incorporating the interaction terms in adulthood are reported in Table 5. Importantly, there is a statistically significant interaction ( $p = 0.037$ ) between police arrest and instrumental family support in the theoretically expected direction. That is, perceived instrumental support protects individuals from criminal acts in the face of the adversities associated with prior labeling experiences. It is worth noting that the magnitude of such protective effects is substantial. For instance, the effect of being arrested for an individual with instrumental family support that is one unit lower than average equals 2.367, indicating that police arrest in such a nonsupportive family environment leads to an incidence rate for crime 2.367

**Table 3** Negative binomial regression of general delinquency on police arrest, family social support, and their interactions for adolescents

Variables	Model 1		Model 2	
	IRR (SE)	<i>p</i> value	IRR (SE)	<i>p</i> value
Police arrest	1.435 (0.251)	0.039**	1.318 (0.244)	0.136
Expressive family support	0.823 (0.085)	0.060*	–	–
Instrumental family support	–	–	0.781 (0.080)	0.016**
Interaction: police × expressive	1.141 (0.328)	0.646	–	–
Interaction: police × instrumental	–	–	0.761 (0.237)	0.382
Male	1.630 (0.245)	0.001**	1.665 (0.252)	0.001**
African American	1.069 (0.195)	0.713	1.100 (0.201)	0.601
Hispanic	0.975 (0.227)	0.912	0.952 (0.221)	0.833
Parental education	0.985 (0.032)	0.649	0.979 (0.032)	0.519
Family poverty	1.156 (0.163)	0.307	1.142 (0.162)	0.352
Aggression	1.605 (0.271)	0.005**	1.652 (0.280)	0.003**
Academic aptitude	1.000 (0.003)	0.991	1.000 (0.003)	0.926
Neighborhood disadvantage	0.953 (0.063)	0.467	0.943 (0.062)	0.377
Self-esteem	1.031 (0.173)	0.858	1.077 (0.182)	0.661
Depression	1.190 (0.184)	0.261	1.222 (0.189)	0.194
Parental supervision	0.857 (0.135)	0.326	0.853 (0.132)	0.305
Risky time with friends	1.125 (0.117)	0.259	1.161 (0.120)	0.148
Prior delinquency	1.110 (0.027)	<0.001**	1.102 (0.027)	<0.001**

IRR incidence rate ratio, SE standard error

\* $p < 0.10$ , \*\* $p < 0.05$ ;  $N = 877$

times that of not labeled individuals; this number equals 1.368 for individuals with an average level of instrumental family support. Specifically, Fig. 1 provides visual representation of the protective effects of instrumental family support against official intervention on later offending. Notice the slope for individuals with instrumental support that is one standard deviation below the mean level increases at a rate far greater than those with instrumental support that is one standard deviation above the mean level. In brief, the results are consistent with our hypothesis that providing financial or material support is protective against criminal labeling effects during the adult years. Future research is called for to explore through what mechanisms instrumental family support weakens the criminogenic, stigmatizing effects of official intervention on offending in adulthood.

## Discussion

Exploring what factors may affect an individual's reaction to criminal justice intervention and the consequences thereof represents a critical issue in studying the labeling perspective. In this study, we extended prior research by investigating whether family



**Table 4** Negative binomial regression of general crime on police arrest and family social support for adults

Variables	Model 1		Model 2		Model 3	
	IRR (SE)	<i>p</i> value	IRR (SE)	<i>p</i> value	IRR (SE)	<i>p</i> value
Police arrest	1.444 (0.228)	0.020**	1.449 (0.229)	0.019**	1.416 (0.224)	0.028**
Expressive family support	–	–	0.908 (0.087)	0.314	–	–
Instrumental family support	–	–	–	–	0.729 (0.093)	0.013**
Male	2.442 (0.452)	<0.001**	2.433 (0.450)	<0.001**	2.387 (0.439)	<0.001**
African American	1.231 (0.248)	0.303	1.227 (0.247)	0.310	1.246 (0.249)	0.270
Hispanic	1.381 (0.358)	0.213	1.374 (0.355)	0.219	1.377 (0.353)	0.212
Parental education	1.071 (0.040)	0.066*	1.073 (0.040)	0.061*	1.069 (0.040)	0.074*
Family poverty	0.903 (0.151)	0.541	0.896 (0.150)	0.513	0.879 (0.147)	0.440
Aggression	1.813 (0.369)	0.003**	1.817 (0.370)	0.003**	1.840 (0.373)	0.003**
Academic aptitude	1.013 (0.003)	<0.001**	1.013 (0.003)	<0.001**	1.012 (0.003)	<0.001**
Neighborhood disadvantage	0.996 (0.076)	0.958	0.995 (0.076)	0.947	0.994 (0.076)	0.941
Self-esteem	0.950 (0.188)	0.796	0.973 (0.194)	0.890	0.979 (0.193)	0.916
Depression	1.322 (0.228)	0.105	1.335 (0.230)	0.094*	1.345 (0.231)	0.084*
Parental supervision	0.909 (0.151)	0.566	0.939 (0.158)	0.707	0.969 (0.161)	0.850
Risky time with friends	0.900 (0.103)	0.357	0.909 (0.104)	0.402	0.909 (0.103)	0.400
Prior delinquency	1.070 (0.042)	0.085*	1.067 (0.042)	0.096*	1.070 (0.041)	0.077*

IRR incidence rate ratio, SE standard error

\* $p < 0.10$ , \*\* $p < 0.05$ ;  $N = 675$

social support, both expressive and instrumental, moderates the impact of official intervention on subsequent offending. Cullen [21] suggested that social support can be viewed as an organizing concept in the explanation of criminal behavior; he not only predicted a main effect of social support on criminal behavior but also suggested that social support could buffer the effect of criminogenic risk. As such, social support should diminish some of the predicted adverse effects of official intervention.

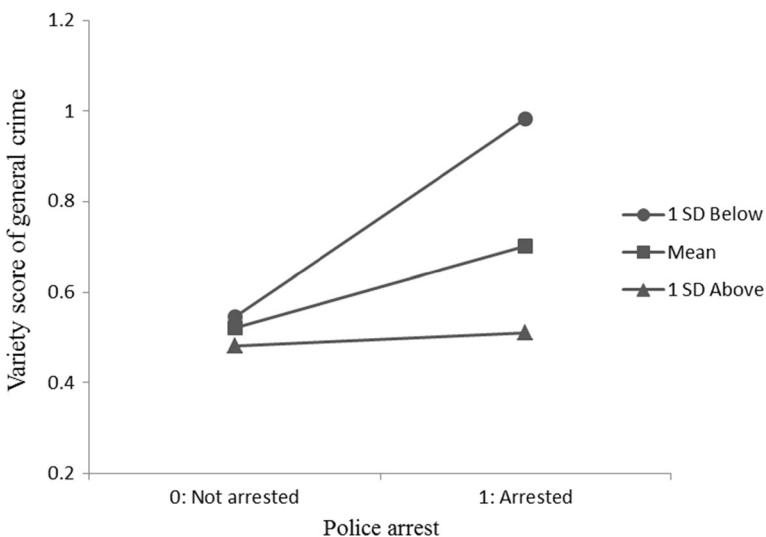
We anticipated that during adolescence, the perceived expressive social support that those labeled receive from their parents would deflect the stigma and resultant lack of acceptance by conventional others and bolster self-worth. Instrumental social support was predicted to be less important since the family is typically responsible for the sustenance of their children whether they have had contact with the criminal justice system or not. Although we found that the perceived level of both expressive and instrumental social support provided by primary caregivers decreased the probability that they engaged in subsequent delinquency during adolescence, neither type of social support moderated the effect of official intervention on subsequent offending. Prior research on youth reactions to official intervention suggests that rather than seeking acceptance or advice from parents in response to police arrest, adolescents situated in high-risk neighborhoods may view their difficulties with the law as a badge of honor or prestige, which enhances their “reputation” on the street [85, 86]; they do not yet fully understand the detrimental effects of official intervention and spurn the expression of social support offered by their parents. In a broader sense, confrontation with social

**Table 5** Negative binomial regression of general crime on police arrest, family social support, and their interactions for adults

Variables	Model 1		Model 2	
	IRR (SE)	<i>p</i> value	IRR (SE)	<i>p</i> value
Police arrest	1.445 (0.229)	0.020**	1.368 (0.217)	0.049**
Expressive family support	0.943 (0.117)	0.638	–	–
Instrumental family support	–	–	0.929 (0.161)	0.670
Interaction: police × expressive	0.910 (0.180)	0.632	–	–
Interaction: police × instrumental	–	–	0.578 (0.152)	0.037**
Male	2.423 (0.448)	<0.001**	2.370 (0.435)	<0.001**
African American	1.216 (0.245)	0.332	1.186 (0.237)	0.393
Hispanic	1.368 (0.354)	0.226	1.320 (0.337)	0.276
Parental education	1.073 (0.040)	0.061*	1.065 (0.039)	0.087*
Family poverty	0.894 (0.150)	0.504	0.872 (0.146)	0.412
Aggression	1.823 (0.372)	0.003**	1.855 (0.376)	0.002**
Academic aptitude	1.013 (0.003)	<0.001**	1.013 (0.003)	<0.001**
Neighborhood disadvantage	0.997 (0.076)	0.968	1.002 (0.076)	0.982
Self-esteem	0.970 (0.193)	0.878	0.969 (0.190)	0.871
Depression	1.334 (0.230)	0.095*	1.365 (0.234)	0.069*
Parental supervision	0.939 (0.159)	0.708	0.981 (0.164)	0.909
Risky time with friends	0.908 (0.104)	0.400	0.896 (0.101)	0.332
Prior delinquency	1.066 (0.042)	0.102	1.070 (0.041)	0.079*

IRR incidence rate ratio, SE standard error

\* $p < 0.10$ , \*\* $p < 0.05$ ;  $N = 675$



**Fig. 1** Protective effects of instrumental family support on criminal offending among adults

control authorities creates turmoil during a period of life (i.e., adolescence) in which rapid, almost frenetic changes are occurring. As discussed earlier, being labeled a juvenile delinquent when an adolescent is striving for “age-appropriate autonomy” [73] is likely to disrupt normative transitions from adolescence to early adulthood in various life domains—from negative self-perception, lack of school education, to opposing relationships with conventional peers and the surrounding environment [3, 12, 31]. Thus, it is possible that, despite its importance, perceived social support from primary caregivers simply cannot override those overwhelmingly deleterious forces.

Alternatively, we must recognize that the measures used for both types of social support ask the adolescents their perceptions of how likely their parents would be able to provide them with emotional support and advice (expressive support) and how likely their parents would provide them with resources (instrumental support). We cannot say with certainty what parents actually did when and if such support was needed. It is possible that adolescents are not cognizant of what parents do to support them both emotionally and financially since it may simply be expected and not appreciated. Official intervention may also influence how parents deliver social support. As Stewart et al. [69] observed, legal sanctions increase poor parenting practices which might diminish the quality of support and/or the adolescent’s perception of it.

During the adult years, perceived instrumental support had both a main effect on criminal behavior and a moderating effect on the relationship between official intervention and offending. During this developmental stage, individuals are expected to begin an independent life in terms of financial affairs and other concerns that arise in the transition to adult status. Records of police arrest can negatively affect the ability of those labeled to make ends meet [32, 35]. Thus, resources provided by parents play an important role in moderating the effect of official intervention as they enable these young adults to weather the storm created by having gotten in trouble with the law. As Thoits [43] argued, to be efficacious risk or stress buffers, the type of social support offered by social relationships must match the demands of the individual’s stressful situation.

On the other hand, young adults have largely established their identities and autonomy in society, and their need for love and affection and a sense of belonging and companionship may come from sources other than a parental figure (e.g., domestic partners) [27, 87]. Expressive parental support may not be that important in dealing with the everyday problems that accrue with having an arrest record. It is not surprising that we do not find a moderating effect of expressive family support for young adults. Also, young adults like adolescents may assume that expressive social support would be forthcoming from parents if they asked for it, and what they appreciate more is the instrumental backing that parents can provide in order to facilitate getting their lives back in order. This emphasis on financial or material resources is consistent with the broader research on resilience in adulthood against negative impact of criminal justice interventions [88, 89].

The current study is not without limitations. First, the findings of this study were derived from a high-risk, disproportionately minority sample. While social support buffered the impact of official intervention for adults among this sample, we cannot determine if social support would have the same effect on samples with other demographic characteristics. Future research may also examine whether the protective effects of social support vary across gender. Second, we looked only at police arrest and did

not explore the effects of whether parental social support would have diminished the negative impact for those who were convicted or incarcerated as well. Also, the current investigation is only able to assess the protective effects of parental support until the early 30s; it remains to be seen how the relationships under investigation could differ at later stages of the life course. Finally, we only examined one source of social support. It is possible that expressive and instrumental social support from conventional friends and partners would be important in allowing youth and young adults to cope with the impact of official intervention. Given our findings that parental instrumental support had a moderating role in adulthood, we might anticipate that social support provided by partners would also be important. Once a partner relationship is established, the significant other may preempt the supportive role that parents had played, especially in terms of expressive support. Given our focus on the impact of social support during both adolescence and early adulthood, we did not explore the role of partners since most of the adolescents in our sample had not established such relationships. However, future research with emerging adults can focus on the impact of partner social support in moderating the impact of official intervention.

## Conclusion

While there remain questions that need to be addressed in future research, there are important conclusions that are suggested by the findings reported in this study. The results confirm the importance of official intervention in increasing the probability of subsequent criminal behavior. Given that other studies using the RYDS data have established this [15, 32, 35, 80], we anticipated these findings. However, our study adds to the growing recognition that the labeling perspective is important in understanding the role that law enforcement plays in deviance escalation. These findings suggest that official intervention should be used judiciously given the untoward consequence evidenced by this research.

More importantly, the findings suggest that measures of social support not only play a role in decreasing the probability of criminal behavior for both adolescents and adults but also moderate the relationship between official intervention and subsequent offending during adulthood. It has long been suggested that examining conditioning or moderating factors may account for why crime and delinquency escalate for some after official intervention while there is no change or a decrease in such behavior for others. These findings are important not only for establishing the continuing relevance of labeling theory but also for encouraging the examination of the implications of Cullen's [21] social support theory. They also may suggest that programs that work with families subsequent to an arrest or incarceration should emphasize the importance of providing a supportive environment for those who are labeled. While such programs exist for those who have been incarcerated and are reentering society, they are largely absent for those who experience an arrest. Additionally, future work is needed to figure out why perceived social support did not have protective effects against criminal labeling effects for adolescents. For youth that live and interact in a high-risk environment, it may be necessary to first reduce the barriers that they have built and allow them to accept the support and other assistance from family members.

Our findings should encourage theoretical explorations of how hypotheses consistent with labeling theory can be enhanced by incorporating factors like social support

that we have observed to have direct effects on criminal behavior as moderators of the relationship between official intervention and criminal behavior. With more developed conceptualization along these lines, further research on the moderators of official intervention will likely ensue.

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