The Life Course Effects of Informal Social Reactions:Testing the Interaction Effects

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Abstract

Based on the theoretical perspectives of symbolic interactions and labeling theory, this study explores the contemporaneous and longitudinal effects of informal reactions from parents and peers on delinquency. Multivariate testing of interaction effects indicates that different forms of informal reactions have differential effects on initial delinquency and delinquency in early adulthood. Results also suggest that the life course effects of informal reactions on delinquency depend on the extent to which one is associated with delinquent peers.

Keywords: delinquency, informal reactions, life course outcome

1. Introduction

Criminological research has identified both stability and change in criminal behavior over time (McCord and Ensminger, 1997, Farrington, 1998). While most youth mature out of delinquency, there is a small group of delinquents, whose criminal behavior persists into young adulthood and beyond, oftentimes increasing in both frequency and seriousness (Cernkovich and Giordano, 2001). Criminologists are confronted with the question of why some youths continue their criminal offending over time, when the majority of their peers have made the transition to conformity. This study examines the relationship between informal social reactions and criminal behaviors in adolescence and early adulthood with a particular focus on informal social control. In this paper, we will examine what forms of informal social reactions affect delinquency and crime, and through what channels those reactions work, as well as whether those effects work differently over time.

2. Literature Review

Previous criminological research has found that there is a consistent positive relationship between past and future offending. (Ou and Reynolds, 2010; Bacon et al., 2009; McCord and Ensminger, 1997, Farrington, 1998; Gottfredson and Hirshi, 1990). There is a small group of people who are different from other people in terms of criminal propensity which remains stable across their life course regardless of opportunities for change.A competing perspective explains the consistency of antisocial behaviors over time by referring to weakened social bonds, including family and employment, throughout various life situations (Nagin and Paternoster, 2000). Some contend that initial antisocial behavior negatively impacts life opportunities and weakens conventional social bonds. For instance, labeling theorists maintain that initial offending in early childhood can significantly reduce early offenders' life opportunities (Lopes, et al.; Bernburg at al., 2006; Lemert 1972; Becker, 1963). Cernkovich and Giordano (2001) find support for both latent traits and changeability of criminal behavior. These findings suggest that if we only focus on the criminal predispositions of chronic offenders, we may not know to what extent those social factors, other than the intrinsic criminal propensities, contribute to their continuous involvement in criminal behavior. In addition, knowing the types of social conditions interacting with individuals' criminal propensity can help curb the continuity of criminal behavior across the life course.

Although there is not abundant research on the consequences of formal sanctions of criminal behavior, some longitudinal studies have shown that contact with criminal justice system can substantially reduce economic opportunities (Nagin and Waldfogel, 1994, Western and Beckett, 1999), and there is discrimination toward ex-offenders in the labor market (Lam and Harcourt, 2003, Pager, 2003). Meanwhile, researchers have highlighted the importance of informal social reactions on delinquency and the mechanism through which informal social reactions impact attitudes toward delinquency and actual delinquent outcomes (Jayatilleke et al., 2014). Heimer and Matsueda (1997) provide a theoretical account of continuity in criminal behaviors over the life course that centers on the role-taking process. They suggest that delinquent individuals select out of conventional social relationships and into delinquent relationships, through self-selection by delinquent individuals and other-selection by friends and family members.

Noticeably, informal social reactions not only impact attitudes and actual delinquency, but also affect the stability of delinquency over time (Ferrier and Ludwig, 2011). Heilbrun and associates (2000) found that juveniles released to communities were at high risk of reoffending. Problems with family and school problems are identified as maladjustment symptoms and strong predictors of reoffending (Wilson and Chermak, 2011). It is arguable that harsh social reactions from agents of control can increase the chance of further offending. Cottle and associates (2001) conducted a meta-analysis of predictions for juvenile criminal recidivism. The results suggest that family problems are among significant predictors of juvenile recidivism.

All these findings point to possible pathways that informal social reactions influence the variations of criminal behavior over time.

3. Hypotheses

The present study is focused on the mechanisms of informal social reactions on individuals' criminal behaviors. Specifically we will test the following research hypotheses:

H1: Informal social reactions measured at Time 1 (T1) and Time 2 (T2) aresignificantly correlated with delinquency measured at T1 and T2.

H2: Informal social reactions at T1 are significantly predictive of delinquency ofat T2.

H3: There is a significant interaction between informal social reactions at T 1 and other social factors at T 2 in predicting delinquency.

4. Methods

4.1 Sample

To test the effects of informal social reactions on delinquency over time, this study uses two waves of data from the National Youth Survey (NYS) with the 11 years between T1 and T2. The survey employed a multistage cluster sampling procedure to obtain a national probability sample of households in the United States. After several stages of randomly sampling geographic units, the final stage sampled 7998 households and collected data from all eligible 11-to 17-year-old youths in each household. A final sample of 1725 youths was obtained, for a response rate of 73%.

4.2 Measures

Dependent Variable Delinquency Outcome was measured at T2 by 28 self-report questions. Each question consists of two parts. The first part asks for an absolute frequency of each behavior; the second part asks for an estimate of the rate of occurrence of the behavior on a 6-point scale for initial responses indicating a frequency of 10 or more. A combined rate of occurrence measure, scored 1=never through 9=2-3 times a day, was then constructed. The combined occurrence rate for each behavior was then assigned a ratio-score serious weight ranging from 1.42 for drug offense to 25.85 for sexual assault (Cernkovich and Giordano, 2001). The reliability (Cronbach's alpha) for this 28-item scale is 0.78. Items were scored so that a higher score reflects greater frequency or rate of involvement in each behavior.Independent Variable Labeling by Parents was measured by asking respondents to indicate the extent to which their parents would agree with a set of negative labels attached to the youths. Responses were coded from 1 (strongly agree) though 5 (strongly disagree), with high score indicating high level of negative parental labeling. The reliability (Cronbach's alpha) for Labeling by Parents 1 is 0.74. Labeling by Parents 2 was measured in 1987 using the same questions and the reliability is 0.87.Labeling by Friends was measured in T1 by asking respondents to indicate the extent to which their friends would agree with a set of labels attached to the youths.

The items used to create this scale are the same as those used in measuring Labeling by Parents. The reliability (Cronbach's alpha) for this scale is 0.89.Perceived Disapproval from Parents 1 was measured at T1 by asking respondents the extent to which their parents would disapprove of each of a set of behaviors if the respondent engaged in them. Responses were coded from 1 (strongly approve) though 5 (strongly disapprove) so that a higher score reflects greater perceived disapproval. The reliability (Cronbach's alpha) for this scale is 0.90.Perceived Disapproval from Friends 1 was measured at T1 by asking respondents the extent to which their friends would disapprove of each of a set of behaviors if the respondent engaged in them. The items used to create this scale are the same as those for Perceived Disapproval from Parents 1. Responses were coded from 1 (strongly approve) though 5 (strongly disapprove) so that a higher score reflects greater perceived disapproval. The reliability (Cronbach's alpha) for this scale is 0.94.

Perceived Disapproval from Parents 2 was measured at T2 by asking respondents the extent to which their parents would disapprove of each of a set of behaviors if the respondent engaged in them. Responses were coded from 1 (strongly approve) though 5 (strongly disapprove) so that a higher score reflects greater perceived disapproval. The reliability (Cronbach's alpha) for this scale is 0.86.Perceived Disapproval from Friends 2 was measured at T2 by asking respondents the extent to which their friends would disapprove of each of a set of behaviors if the respondent engaged in them. Responses were coded from 1 (strongly approve) through 5 (strongly disapprove) so that a higher score reflects greater perceived disapproval. The reliability (Cronbach's alpha) for this scale is 0.90.
Control Variable. Prior Delinquency was measured at T1 by 24 questions. The combined occurrence rate for each behavior was then assigned a ratio-score serious weight ranging from 1.42 for drug offense to 25.85 for sexual assault (Cernkovich and Giordano, 2001).The reliability (Cronbach's alpha) for this scale is 0.96.Exposure to Delinquent Peers was measured at T2 by asking respondents how many of their close friends have engaged in each of a set of deviant behaviors in the past year. Responses were coded 1 (None of them) through 5 (All of them) so that a higher score represents a higher proportion of friends committing each act. The reliability (Cronbach's alpha) for this scale is 0.86.Other control variables in the models are respondents' Age, Family Income, GPA (1=most F's, 5=most A's) and Completed Year of Education (6 through 17).

4.3 Models

Four multiple regression models are used to test the three research hypotheses. Model 1 and Model 2 are used to determine whether informal social reactions are significantly correlated with delinquency at T1 and T2 respectively. In each model, social reaction variables measured at each time were entered into the model together with the control variables.Model 3 is used to test the second research hypothesis, that is, to determine whether informal social reactions at T1 are predictive of delinquency at T2. Social reaction variables measured at T1 were entered into them model together with control variables and social reaction variables measured at T2. Prior Delinquency measured at T1 was also entered into the model as a control variable.To test the third research hypothesis, we examined whether there is a significant interaction between social reaction variables and Association with delinquent peers in affecting delinquency at T2. Social reactions variables measured in both waves and Association with delinquent peers measured at T2 was entered into Model 4 together with the cross-product terms of social reaction variables and Association with delinquent peers.Before the analysis, data were screened to ensure the assumptions of multiple linearregressions were met. All independent variables were centered before they were entered into the model.

5. Results

5.1 Bivariate Results

The Pearson correlations between the social reaction variables and the dependent variables are summarized in table 1

Table 1. Pearson Correlation Coefficients

Variables	Delinquency T1	Delinquency T2
Parental Labeling 1	0.466***	0.146***
Friend Labeling 1	0.528***	0.087***
Perceived Parental Disapproval 1	0.468***	-0.038
Perceived Peer Disapproval 1	0.225***	-0.121***
Parental Labeling 2	0.093***	0.277***
Perceived Parental Disapproval 2	-0.048	-0.226***
Perceived Peer Disapproval 2	-0.103***	-0.333***
Delinquent Peers 2	0.100***	0.439***

* p<0.05, ** p<0.01, ***p<0.001

From the table we find support for the first two research hypotheses, which posit that social reaction variables in each wave are significantly correlated with delinquency; and that social reaction variables measured at T1 are predictive of delinquency at T2.

5.2 Multivariate results

Multiple regression analyses are conducted on four models to test the research hypotheses, and the results are summarized in table 2. Model 1 and Model 2 are used to test the first hypothesis, that is, whether social reaction variables measured in each wave are predictive of delinquency (DL1 and DL2) measured in each wave respectively.

Table 2. Standardized (Unstandardized) Regression Coefficients on Delinquency

	Model 1		**Model 2**		**Model 3**		**Model 4**	
Regressor	DL1		DL2		DL2		DL2	
Intercept	------	5.884	------	5.701	------	5.702***	------	5.65***
Age	-0.015	(-0.008)	-0.003	(-0.001)	-0.005	(-0.002)	-0.100	(-0.004)
Income	-0.029	(-0.013)	------	------	------	------	------	------
GPA	-0.036	(-0.045)	------	------	------	------	------	------
Parental Labeling 1	0.142	(0.251)***	------	------	0.057	0.072	0.048	0.060
Friend Labeling 1	0.185	(0.271)***	------	------	-0.025	(-0.023)	-0.015	(-0.014)
PerceivedParentDisapproval1	0.061	(0.161)*	------	------	0.021	-0.036	0.024	(0.041)
PerceivedFriendDisapproval1	-0.289	(-0.411)***	------	------	-0.027	(-0.026)	-0.034	(-0.032)
Delinquency 1	------	------	0.017	-0.005	-0.001	-0.0004	-0.012	(-0.003)
Education 2	------	------	-0.063	-0.025**	-0.057	(-0.022)*	-0.033	-0.013
Parental Labeling2	------	------	0.102	(0.158)***	0.091	(0.142)**	0.072	(0.112)*
PerceivedParentDisapproval2	------	------	-0.053	(-0.112)	-0.058	(-0.122)	-0.047	(-0.100)
PerceivedFriendDisapprova2	------	------	0.0001	0.0002	0.005	-0.008	-0.054	(-0.082)
Delinquent Peers 2	------	------	0.385	(0.690)***	0.382	(0.684)***	0.276	(0.494)***
ParentLabeling1*Delinquent Peers2							0.080	(0.216)**
PerceivedParentDisapproval1* DelinquentPeers2							0.032	(0.134)
ParentLabeling2*Delinquent Peers2							1.106	(0.257)***
PerceivedParentDisapproval2* DelinquentPeers2							-0.131	(-0.503)***
F	55.627***		54.09***		34.828***		33.392***	
R^2_{adj}	0.192		0.215		0.215		0.264	

*p<0.05, **p<0.01, ***p<0.001 (All regresses are centered).

In Model 1, Parental labeling at T1 is positively correlated with Delinquency at T1 (p<0.001). Friend labeling at T1 (p<0.001) and Perceived parental disapproval (p<0.05) are also positively correlated with Delinquency at T1. One interesting finding is that Perceived friend disapproval is negatively correlated with Delinquency at T1 (β=-0.289, p<0.001). This finding indicates that during adolescence, individuals are more likely to be influenced by their friends than their parents.

Model 2 tests the relationship between social reactions and Delinquency at T2. Education level at T2 is negatively correlated with Delinquency at T2 ($p<0.01$), while Parental labeling at T2 is positively correlated with Delinquency at T2 ($p<0.001$). In addition, Association with delinquent peers exhibits a strong positive relationship with Delinquency at T2 ($\beta=0.385$, $p<0.001$).

Model 3 tests whether social reactions measured at T1 are predictive of delinquency at T2, controlling for social reactions at T2. Education level at T2 is still negatively correlated with Delinquency at T2, but the magnitude of significance is reduced compared with that in Model 2 ($p<0.05$). Parental labeling at T2 is still positively correlated with Delinquency at T2, and the magnitude of significance is also reduced ($p<0.01$) compared with that in Model 2. Association with delinquent peers still exhibits a strong positive relationship with Delinquency at T2 ($\beta=0.382$, $p<0.001$). None of the social reaction variables measured at T1 is significantly predictive of Delinquency at T2. Part of the reasons can be that the effects of social reaction variables at T1 are mediated by the social reaction variables at T2. For instance, separate analysis shows that when we regress Delinquency at T2 only on social reaction variables measured at T1, Perceived friends disapproval at T1 significantly reduces Delinquency at T2 ($\beta=-0.152$, $p<0.001$). However, once social reaction variables at T2 are entered into the model, as we see in Model 3, this effect is not significant any more.

Model 4 tests the interactions between social reaction variables and Association with delinquent peers. Four cross-product terms are entered into the model together with other variables in Model 3. Three of the interaction terms are significant and the results suggest that the effect of Parental labeling at T2 as a function of Association with delinquent peers: The effect of Parental labeling at T2 is greatest at high levels of Association with delinquent peers. Meanwhile, higher levels of Parental labeling at T1 and T2 significantly elevate the effect of Association with delinquent peers on Delinquency at T2. In contrast, high levels of Perceived parental disapproval at T2 significantly reduce the effect of Association with delinquent peers on Delinquency at T2. The interaction results suggest that the effect of Parental labeling on Delinquency depends on the extent to which one is associated with delinquent peers. Negative informal reaction increases delinquency for those with more delinquent peers and negative informal reaction increase the effect of Association with delinquent peers on Delinquency as well. In contrast, Perceived parental disapproval of delinquency reduces the effect of Association with delinquent peers and thus reduces delinquency involvement. Overall, results from the four models support all of the research hypotheses.

6. Conclusions

This study explores the impact of informal social reactions on the delinquent outcomes over time. Our findings suggest that informal social reactions from parents and peers provide the most immediate contexts for adolescents and young adults to establish, negotiate, and reconstruct the meaning of their self-identify, which in turn will affect their attitude toward delinquency and actual delinquent outcomes. Furthermore, and consistent with the symbolic interactionism perspective, adolescents tend to behave according to the labels attached to them which indicates that if delinquents, especially those who are first-time offenders, are negatively labeled, the risk of hardening both their attitudes and antisocial behavior will increase. Findings from this research thus support the theoretical propositions of symbolic interactionism and labeling theory given we found significant positive relationships between parental labeling and delinquency based on both waves of the data.Meanwhile, we also find support for social learning theory and the mechanisms through which individuals associate with delinquent peers and form favorable attitudes toward delinquency. Feelings of isolation or rejection from parents and association with delinquent peers can significantly increase one's delinquent involvement by making adolescents more likely to associate with delinquent peers and more susceptible to the influence of delinquent peers (Warr, 2002). Given the fact that most adolescents engage in various types of delinquency during adolescence and that most of them will desist as soon as they enter the adulthood (Moffitt, 1997), cultivating a pro-social attitude and strengthen the attachment to conventional society are more important than purely relying on negative sanctions.

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