


Research Note: Justice System–Imposed Financial Penalties Increase the Likelihood of Recidivism in a Sample of Adolescent Offenders

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Abstract

Although the use of financial penalties is pervasive in the justice system, there has been limited (and mostly dated) empirical research that has investigated the effect of financial costs incurred by juvenile offenders and the extent to which such costs relate to the likelihood of recidivism and reintegration into society. This study uses data from a large cohort of adolescent offenders to examine how demographics and case characteristics relate to financial penalties imposed by the justice system and the degree to which such monetary penalties are related to recidivism in a 2-year follow-up. Results suggest that financial penalties increase the likelihood of recidivism. Study limitations and directions for future research are also discussed.

Keywords

juveniles, delinquency, recidivism, restitution, costs, fines, fees

There are a wide range of criminal punishments available to judges and juries when it comes to sanctioning an offender for their transgression(s), the most common of which is probation, with other options including imprisonment and other community correction alternatives (boot camps, intensive supervision, etc.; see Morris & Tonry, 1990). One type of punishment that is also used is that of a fine, a punishment that has been around for several centuries (e.g., Beccaria, 1764/1986; Ruback & Bergstrom, 2006). One would suspect, then, that knowledge about the effect of fines on subsequent reoffending, or recidivism, would be as commonplace as are recidivism-based investigations for the more widely used punishments. Unfortunately, with a few exceptions (Albrecht & Johnson, 1980; Glaser & Gordon, 1988; MacDonald, Greene, & Worzella, 1992) that is not the case, as much of the research surrounding fines has been administrative or process based (cf. Hillsman,

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1990) and seems to be more focused on the extent to which the use of monetary penalties disproportionately impacts poor defendants because of their general inability to pay (Beckett, Harris, & Evans, 2008; Council of Economic Advisers, 2015). Still, even in the handful of studies that have examined the relationship between fines and recidivism, the results have been mixed.

There are also other types of “costs” that could be incurred by a sanctioned offender, such as legal financial obligations, to include “fees (cost assessments, surcharges, and interest), fines, and restitution orders that are imposed by courts and other criminal justice agencies on persons accused of crimes” (Beckett & Harris, 2011, p. 509). According to the Council of Economic Advisers (2015, p. 1), fines “are monetary punishments for infractions, misdemeanors, or felonies [and] are intended to deter crime, punish offenders, and compensate victims for losses.” On the other hand, fees

are itemized payments for court activities, supervision, or incarceration charged to defendants determined guilty of infractions, misdemeanors or felonies. Fee collections are intended to support operational costs in the criminal justice system and may also be used to compensate victims for losses. Fees may also have a punitive and deterrent purpose, but are not designed to cater to specific offense categories.¹

Most recently, Beckett and Harris (2011) provided a detailed history of the use of monetary sanctions in the adult criminal justice system in the United States, and they reported that monetary sanctions have (1) existed for many centuries in the United States, (2) legislatures have authorized new fees and fines in recent years, and (3) that criminal justice agencies appear to be more increasingly open to imposing them. Furthermore, they indicated that there were over 20 different fines and fees that can be imposed on an offender when convicted of a felony in the state of Washington, for example. Overall, their analysis of the imposition of financial penalties on adult offenders in Washington state led them to conclude that the magnitude of the fines and fees imposed, the low repayment rates, and the accrual of interest for lack of timely repayment all served as explanations as to why justice system debt is often, and likely will be, a long-term debt/burden with implications for recidivism and reintegration.

Caution is needed here, however, as it is critically important to understand that there are stark philosophical differences between the adult criminal justice system and the juvenile justice system, and these differences inform the variability in their applications of and expectations for financial sanctions. For instance, the adult criminal justice system is primarily retribution oriented, and as such, the imposition of financial penalties is clearly intended to serve as punishments (generally in addition to probation or incarceration). In contrast, certain financial penalties, such as restitution, for example, in the juvenile justice system is more heavily predicated on the juvenile justice system’s rehabilitation-oriented philosophy and on its inherent mission and goals of promoting accountability, increasing youth competency (e.g., education, vocational skills, life skills, etc.), repairing the harm done to the victim/s, and engaging the community in this process (Bazemore, 1992; Bazemore & Maloney, 1994; Maloney, Romig, & Armstrong, 1988; Umbreit, 1989; Van Ness, 1990; Zehr, 1990). Acknowledging these important differences between the adult criminal justice system and the juvenile justice system, for present study purposes, it is worth noting that research on the relationship between the imposition of financial penalties and recidivism in general and among juvenile offenders in particular is noticeably lacking in the literature. This state of affairs is rather unfortunate for several reasons.

First, not only may the imposition of financial penalties be applied disproportionately to persons who lack the financial means by which to pay them, which may increase their likelihood of reoffending, but these monetary sanctions may also be disproportionately applied to minority (offending) youth who are already at increased risk for differential juvenile and adult justice system involvement (Piquero, 2008). Second, the imposition of financial penalties to young persons, who

typically do not have the requisite financial resources to pay such costs because of the lack of (gainful) employment, may also serve as a barrier to their eventual and effective reintegration back into mainstream society. This circumstance may, in turn, increase the likelihood of further penetration into the juvenile (and potentially adult) justice system that is likely to lead to additional disruptions and adverse consequences in other life domains such as education and eventual employment. Third, serious juvenile offenders who encounter experience with the juvenile justice system are at a key period in the life course, when turning points and life events may influence their subsequent offending trajectory (Laub & Sampson, 2001; Piquero, Farrington, & Blumstein, 2003; Piquero, Hawkins, & Kazemian, 2012). It is well known that the majority of criminal careers end by the end of adolescence (Moffitt, 1993), yet individuals who experience snares, such as an excessive financial penalty, may be redirected away from potential desistance and back toward offending in order to obtain resources to pay such penalties. As a result of these juvenile-specific issues, studying the consequences of excessive financial penalties among adolescent offenders represents a critically important opportunity among the policy-relevant group, given the potential impact that their continued offending and its consequences may have on the youth, their families, and society more generally (see Cohen & Piquero, 2009; Mulvey et al., 2004).

At the same time, there are a handful of older studies that do provide some evidence to inform expectations for our analysis of the relationship between financial penalties and recidivism among juveniles. For example, recidivism rates derived from the 1980s and 1990s among youth court ordered to pay for restitution range from 10% to 80% (Beck-Zierdt, 1980; Crotty & Meier, 1980; Roy, 1995; Schneider & Schneider, 1984). Furthermore, Schneider (1986) reviewed the results from randomized experiments that were simultaneously conducted in four jurisdictions: Boise, ID; Washington, DC; Clayton County, GA; and Oklahoma County, OK. In general, the results suggested that the imposition of restitution was significantly related to recidivism, although additional evidence demonstrated that in two of the four jurisdictions, the juveniles who were randomly assigned to restitution as a sanction had fewer contacts with the court in the 2- to 3-year follow-up period. Alternatively, Butts and Snyder (1992) analyzed 7,233 juvenile cases that were handled informally by the probation department and 6,336 cases that were adjudicated delinquent and where the youth were placed on formal probation. Their results indicated that youth who paid their restitution, either voluntarily or ordered to pay, had significantly lower recidivism rates than those who did not. Therefore, while most of the research previously conducted suggests that financial penalties increase the likelihood of recidivism among juveniles, some scholars have noted a positive benefit of restitution specifically in reducing recidivism risk (e.g., see Butts & Snyder, 1992).

The Current Study

Given the limited (and largely dated) prior research (and hence literature) on the effect of financial penalties on recidivism among juvenile offenders, the current study is offered as a more current and comprehensive exploration into this issue. Accordingly, the current study undertakes empirical analyses on the imposition of financial penalties imposed and owed and their effect on a 2-year recidivism follow-up among a large cohort of adolescent offenders from Allegheny County, PA. In so doing, not only does our work permit us the ability to examine how such costs vary by demographics (race, sex, and prior disposition) and case characteristics (supervision status and type of offense), but also how financial penalties relate to recidivism after controlling for relevant demographics and case characteristics. Results from this investigation will be one of the most recent and comprehensive empirical studies to examine the relationship between the effects of financial penalties on recidivism among adolescent offenders and as a result has the potential to help inform policy and practice in the juvenile justice system.

Method

Data

The data for this study are based on the entire cohort of 1,167 youth from Allegheny County, PA, who had a supervision status of adjudicated delinquent or consent decree before experiencing a case closing (e.g., an end date after active supervision) during the calendar year of 2013. In other words, all of these youth were under active (true) supervision and experienced a case closing during the calendar year of 2013 in order to be eligible for entry into the cohort. For the small percentage of youth (<4%) who had multiple cases/case closings during the calendar year of 2013, the case closing of their first episode/end date in the calendar year of 2013 was used for analysis in order to not have duplicate youth in the data.

Variables

Demographics. Three demographic variables were included, and these data were obtained from the state of Pennsylvania's Juvenile Court Judges' Commission Juvenile Case Management System (JCMS). Age represents a continuous measure based on the age of the youth at the time of the most recent disposition. The gender of the youth is coded as *male* = 1 and *female* = 0, and the race of the youth is also dichotomous (*non-White* = 1 and *White* = 0).²

Case Characteristics

Two categorical variables were also included that measured specific case characteristics. These variables were (1) the youth's supervision status prior to their case closing/end date (e.g., adjudicated delinquent or consent decree³; obtained from the Allegheny County juvenile probation supervisor database) and (2) the most serious offense type disposed (e.g., violent, drug, property, or other) for the most recent offense that resulted in their supervision status (obtained from the JCMS). In the multivariate analysis that follows, "consent decree" and "other offense" were omitted as the reference categories, respectively. In addition, whether or not the youth had a prior disposition, obtained from the JCMS, was also included as a dichotomous measure. Controlling for prior criminal activity—or in this case, prior disposition—is important because of the strong relationship between prior and future offending (Piquero et al., 2003).

Costs (Fines and Fees)

Costs include both fines and fees charged to the youth for their current supervision offense at disposition. Fines include those that can be ordered by the magistrate for failing to comply with certain conditions imposed, and these fines are categorized as the district justice fund stipend in Pennsylvania. Comparatively, there are a host of fees that can be levied on the youth, and these fees include the Victim Compensation Fund, the Victim Curriculum Fund, the state's computer/technology fund, fees associated with drug offenses (including driving under the influence), the costs of drug testing when the offense is a drug offense, the cost of DNA testing, the cost of ballistics testing when the offense is a gun offense, the cost of destroying the electronic monitoring device (e.g., the youth cut off the ankle bracelet), or the costs for missing/not attending a mental health evaluation appointment.⁴ Costs are represented in actual U.S. dollar amounts, and these data were obtained from the state of Pennsylvania's Juvenile Court Judges' Commission's Juvenile Court Restitution System (JCRS).

Restitution

Restitution broadly encompasses any and all restitution that the youth were ordered to pay at disposition, and these data were gathered from the JCRS. Specifically, the restitution ordered may take on several forms including (1) victim restitution payments, (2) restitution payments ordered to pay back the state who “fronted/paid” the restitution to the victim/s on behalf of the defendant, and/or (3) restitution payments that were fronted/paid to the victim by a codefendant on the defendant’s behalf (so now the youth owe their codefendant not the victim/s). Restitution is represented in actual U.S. dollar amounts.

Recidivism

Recidivism in this study was measured dichotomously (no/yes) using the state of Pennsylvania’s definition. Specifically, a youth was identified as a recidivist if they were subsequently adjudicated for a new delinquent offense and/or convicted in adult criminal court for a felony or misdemeanor offense (guilty plea or *nolo contendere*) in the 2 years since the end date of their current supervision offense (e.g., not the date of the occurrence of their current supervision offense).⁵ Juvenile delinquency data were obtained from the JCMS, and the adult criminal conviction data were provided by the Administrative Office of the Pennsylvania Courts.

Analytic Strategy

The analysis proceeded in a series of stages. In the first stage, descriptive statistics were presented for youth demographics, case characteristics, costs (fines and fees), restitution imposed at disposition and/or owed upon case closing, and recidivism. The second stage of the analyses presented a series of bivariate associations between the youth demographics and case characteristics with (1) the amount of costs and/or restitution imposed at disposition, (2) the amount of costs and/or restitution still owed upon case closing, and (3) whether or not the youth owed any costs and/or restitution upon case closing in general. These analyses were conducted using χ^2 tests, *t*-tests, one-way analyses of variance (ANOVAs) tests, and Pearson’s correlations (*r*) where relevant contingent on the distribution of the variable(s). The third stage relied on similar bivariate analytical techniques employed in the second stage (e.g., χ^2 tests, *t*-tests, ANOVAs, and *r*) but utilized these statistical tests to evaluate the associations between the youth demographics, case characteristics, the amount of costs and/or restitution imposed at disposition, the amount of costs and/or restitution still owed upon case closing, and whether or not the youth owed any costs and/or restitution upon case closing in general and recidivism. In the fourth stage of the analysis, a series of ordinary least squares (OLS) regression and logistic regression equations were estimated for continuous and dichotomous dependent variables, respectively, where relevant, in order to investigate the relationships between youth demographics and case characteristics with the costs and/or restitution imposed and/or owed in a multivariate framework that controls for relevant variables. Finally, the fifth stage of our analyses involved estimating a series of logistic regression models to determine the relationship between the youth demographics, case characteristics, and the costs and/or restitution imposed at disposition and/or owed upon case closing with recidivism in a multivariate framework.

Results

Descriptive statistics are provided in Table 1. On average, the youth in the cohort were 17.89 years of age ($SD = 2.14$) and were predominantly male (75.3%). Nearly two thirds of the youth were non-White (65.9%), and 50.8% had a prior disposition. Approximately 62.0% of the youths’ supervision status was adjudicated delinquent, and 38.0% were under consent decree. The majority of the youth

Table 1. Descriptive Statistics.

Variables	Mean/%	SD	Minimum	Maximum
Age	17.89	2.14	12.00	21.00
Gender				
Male	75.3%	—	—	—
Female	24.8%			
Race				
Non-White	65.9%	—	—	—
White	34.1%			
Prior disposition (yes = 1)	50.8%	—	—	—
Supervision status prior to case closing				
Adjudicated delinquent	62.0%	—	—	—
Consent decree	38.0%			
Most serious offense for supervision offense				
Violent	44.7%	—	—	—
Drug	12.4%			
Property	16.9%			
Other	26.0%			
Costs imposed at disposition (yes = 1)	94.4%	—	—	—
Restitution imposed at disposition (yes = 1)	35.8%			
Total costs and restitution imposed at disposition	US\$428.98	US\$1,159.76	US\$0.00	US\$15,704.30
Total costs and restitution owed upon case closing	US\$237.40	US\$1,086.87	US\$0.00	US\$15,545.30
Owe costs and/or restitution upon case closing	24.5%	—	—	—
Recidivist (yes = 1)	27.0%	—	—	—

Note. $N = 1,167$.

had committed a violent offense (44.7%) for their current supervision offense, followed by an other offense (26.0%), property offense (16.9%), and drug offense (12.4%).

Approximately 94.4% of the youth were ordered to pay costs (fines and fees) at disposition, and 35.8% were ordered to pay restitution at disposition. There was a wide variability among the youth with respect to the total costs and restitution imposed upon them at disposition or owed upon case closing. On average, the youth were ordered to pay US\$428.98 ($SD = US\$1,159.76$) for their current supervision offense at disposition in fines, fees, and/or restitution, and on average, the youth still owed US\$237.40 ($SD = US\$1,086.87$) in fines, fees, and/or restitution upon case closing. Overall, 24.5% of the youth still had outstanding fines, fees, and/or restitution upon case closing. Slightly more than one in four (27.0%) youth in the cohort had recidivated in the 2 years since case closing by having been adjudicated delinquent for a new offense and/or having been convicted in adult criminal court for a felony or misdemeanor. It is important to note that this rate of recidivism is somewhat lower than what is seen in federal recidivism studies, although these are mainly conducted among adults (see Durose, Cooper, & Snyder, 2014).

Prior to the main analysis on recidivism, bivariate associations for the youth demographics and case characteristics with the costs and/or restitution imposed at disposition were examined.⁶ On average, the youth who still owed fines, fees, and/or restitution upon case closing were 19.54 years of age relative to the youth who did not owe fines, fees, and/or restitution upon case closing who were 17.35 years on average ($t = -16.85, p < .001$). With respect to gender, males, on average, had significantly higher fines, fees, and restitution imposed on them at disposition (males: $M = US\$496.22$; females: $M = US\$245.32$; $t = -3.20, p < .001$); owed significantly higher fines, fees, and/or restitution upon case closing (males: $M = US\$279.99$; females: $M = US\$151.32$; $t = -1.67, p < .05$); and a greater percentage of males still owed fines, fees, and/or restitution upon case closing in general (males: 26.3%; females = 19.1%; $\chi^2 = 6.09, p < .05$).⁷

Turning to race, the results showed that a significantly greater percentages of non-Whites still owed fines, fees, and/or restitution in general upon case closing (non-Whites: 29.1%; Whites: 15.6%; $\chi^2 = 26.03, p < .001$) relative to their White youth counterparts.⁸ In addition, having a prior disposition and having a supervision status of adjudicated delinquent versus consent decree were significantly related to fines, fees, and/or restitution imposed. These costs also significantly varied by offense type, with property offenses typically having the highest dollar amount imposed.

Table 2 provides the bivariate associations between the youth demographics; case characteristics; and fines, fees, and/or restitution imposed and the 2-year recidivism follow-up. Generally speaking, youth who recidivated were older, male, and non-White. Recidivism also varied significantly by supervision status ($\chi^2 = 33.47, p < .001$), having had a prior disposition ($\chi^2 = 56.40, p < .01$), and offense type ($\chi^2 = 11.69, p < .01$). When looking at the association between fines, fees, and/or restitution imposed and recidivism, having restitution imposed at disposition ($\chi^2 = 12.96, p < .001$), having a greater amount of fines, fees, and/or restitution imposed at disposition ($t = -6.12, p < .001$), owing a greater amount of fines, fees, and/or restitution upon case closing ($t = -4.11, p < .001$), along with owing fines, fees, and/or restitution in general upon case closing ($\chi^2 = 20.87, p < .001$), were all significantly related to recidivism.⁹

Predicting Financial Penalties

The results from a series of multivariate OLS and logistic regression models examining the relationship between the youth demographics and case characteristics and fines, fees, and/or imposed and/or owed are displayed in Table 3. As shown in column 1, youth with prior disposition ($OR = 2.45, p < .01$) were significantly more likely to have costs (fines and fees) imposed at disposition whereas the coefficient estimate for youth whose supervision status was adjudicated delinquent was negatively related to the likelihood of having costs (fines and fees) imposed at disposition ($OR = 0.48, p < .05$). Comparatively, age ($OR = 1.18, p < .001$), being male ($OR = 1.65, p < .001$), having a prior disposition ($OR = 1.89, p < .001$), and youth whose current supervision offense was a property offense relative to an other offense ($OR = 4.35, p < .001$) all significantly increased the odds of having restitution imposed at disposition (see Table 3, column 2). Further, as illustrated in column 3, age ($\beta = 0.14, p < .001$), being male ($\beta = 0.12, p < .001$), having a prior disposition ($\beta = 0.24, p < .001$), and youth whose current supervision offense was a property offense relative to an other offense ($\beta = 0.23, p < .001$) were all positively and significantly related to the total amount of fines, fees, and/or restitution imposed at disposition. Similarly, having a prior disposition ($\beta = 0.09, p < .001$) and being non-White ($\beta = 0.09, p < .001$) were positively and significantly associated with the total amounts of fines, fees, and/or restitution owed upon case closing, as was also true for the youth's age at the time of the disposition ($\beta = 0.39, p < .001$) (see Table 3, column 4). Offense type was also significantly associated with the total amount of fines, fees, and/or restitution owed upon case closing (drug offense: $\beta = -0.09, p < .05$; property offense: $\beta = 0.13, p < .001$). Finally, the logistic regression results presented in column 5 reveal that the odds of still owing fines, fees, and/or restitution in general upon case closing were positively related with the age of the youth ($OR = 1.73, p < .001$), non-White youth ($OR = 1.68, p < .05$), youth who had a prior disposition ($OR = 2.89, p < .001$), and for youth whose current supervision offense was a property offense ($OR = 2.06, p < .05$).

Predicting Recidivism

Table 4 displays the results from a series of logistic regression models that estimated the effects of youth demographics; case characteristics; and the fines, fees, and/or restitution imposed and/or owed on the 2-year recidivism measure. Five models are presented in Table 4. Although all five models contain many of the same youth demographics and case characteristic variables, we parcel out the

Table 2. Bivariate Associations Between Demographics, Case Characteristics, and Fines, Fees, and Restitution Imposed and Owed and Recidivism.

Variables	Recidivism
Age	Recidivist: $M = 18.23$ Non-Recidivist: $M = 17.76$ $t = -3.37^{***}$
Gender	
Male	30.9%
Female	15.3%
	$\chi^2 = 26.73^{***}$
Race	
Non-White	31.6%
White	18.1%
	$\chi^2 = 24.29^{***}$
Prior disposition	
Yes	36.6%
No	17.1%
	$\chi^2 = 56.40^{***}$
Supervision status prior to case closing	
Adjudicated delinquent	32.9%
Consent decree	17.4%
	$\chi^2 = 33.47^{***}$
Most serious offense for supervision offense	
Violent	26.8%
Drug	33.1%
Property	32.5%
Other	20.8%
	$\chi^2 = 11.69^{**}$
Costs imposed at disposition	
Yes	27.3%
No	21.5%
	$\chi^2 = 1.04$
Restitution imposed at disposition	
Yes	33.3%
No	23.5%
	$\chi^2 = 12.96^{***}$
Total costs and restitution imposed (ln) at disposition	Recidivist: $M = 5.27$ Non-Recidivist: $M = 4.68$ $t = -6.12^{***}$
Total costs and restitution owed (ln) upon case closing	Recidivist: $M = 1.93$ Non-Recidivist: $M = 1.19$ $t = -4.11^{***}$
Owe costs and/or restitution upon case closing	
Yes	37.4%
No	23.6%
	$\chi^2 = 20.87^{***}$

Note. M = Mean; r = Pearson's Correlation Coefficient; t = t -statistic derived from an independent samples t -test; F = F -statistic derived from an analysis-of-variance test; χ^2 = Chi-square statistic derived from a chi-square analysis.
* $p < .05$. ** $p < .01$. *** $p < .001$.

individual effects for the fines, fees, and/or restitution imposed and/or owed by the youth in order to capture the individual effect of each measure on recidivism while controlling for all other variables. Several interesting results emerged from these analyses.

Table 3. Regression of Fines, Fees, and Restitution Imposed and Owed on Demographics and Case Characteristics.

Variables	Costs Imposed at Disposition, OR	Restitution Imposed at Disposition, OR	Total Costs and Restitution Imposed (ln) at Disposition, β	Total Costs and Restitution Owed (ln) Upon Case Closing, β	Owe Costs and/or Restitution, Upon Case Closing, OR
Age	1.00	1.18***	0.14***	0.39***	1.73***
Male	1.01	1.65***	0.12***	0.04	1.07
Non-White	0.85	0.93	-0.03	0.09***	1.68**
Prior disposition	2.45**	1.89***	0.24***	0.14***	2.89***
Adjudicated delinquent	0.48*	1.12	0.04	—	—
Violent offense	1.24	1.04	0.03	0.05	1.20
Drug offense	2.14	0.88	0.01	-0.09*	0.79
Property offense	0.86	4.35***	0.23***	0.13***	2.06***
Model diagnostics					
Adjusted R^2			0.21	0.27	
Nagelkerke R^2	0.03	0.21			0.37

Note. β = Standardized coefficient derived from ordinary least squares regression; OR = odds ratio derived from logistic regression; ln = natural logarithmic transformation.

* $p < .05$. ** $p < .01$. *** $p < .001$ (one-tailed).

Table 4. Regression of Recidivism on Demographics, Case Characteristics, and Fines, Fees, and Restitution Imposed and Owed.

Variables	Recidivist, OR				
Age	0.97	0.96	0.95	0.96	0.96
Male	2.36***	2.31***	2.21***	2.38***	2.39***
Non-White	1.78***	1.78***	1.81***	1.79***	1.78***
Prior disposition	2.11***	2.08***	1.95***	2.27***	2.24***
Adjudicated delinquent	1.29	1.27	1.24	—	—
Violent offense	1.16	1.17	1.16	1.19	1.19
Drug offense	1.60*	1.63*	1.62*	1.63*	1.63*
Property offense	1.43*	1.35	1.27	1.43*	1.43*
Costs imposed at disposition	1.25				
Restitution imposed at disposition		1.23			
Total costs and restitution imposed (ln) at disposition			1.15***		
Total costs and restitution owed (ln) upon case closing				1.04*	
Owe costs and/or restitution upon case closing					1.33*
Model diagnostics					
Nagelkerke R^2	0.12	0.12	0.13	0.12	0.12

Note. OR = odds ratio derived from logistic regression; ln = natural logarithmic transformation.

* $p < .05$. ** $p < .01$. *** $p < .001$ (one-tailed).

With respect to the demographic and case characteristic variables, consistent effects on recidivism are observed for many of them. In particular, males, non-Whites, youth with a prior disposition, youth who were adjudicated delinquent versus on a consent decree, and youth with a drug or property offense all exhibited an increased likelihood of recidivism. While these effects are important in general and consistent with much recidivism research in (adult) criminal justice samples more

generally (Durose et al., 2014), our main interest herein is on the relationship of the fines, fees, and/or restitution variables on recidivism—the results of which are quite consistent.

Specifically, the total amount of fines, fees, and/or restitution imposed at disposition ($OR = 1.15$, $p < .001$) and owed upon case closing ($OR = 1.04$, $p < .01$) as well as owing fines, fees, and/or restitution in general upon case closing ($OR = 1.33$, $p < .05$) all significantly increased the odds of a youth recidivating. Importantly, these results hold even after controlling for relevant youth demographics and case characteristics variables.

Discussion

The use of monetary penalties aimed at punishment for offenders for their misdeeds and for potentially deterring their subsequent offending has long been a staple of punishments in any modern criminal justice system (Beccaria, 1764/1986; Morris & Tonry, 1990). And, while some sort of financial penalty may seem like a reasonable way to punish transgressors, they may also entail adverse consequences, such as continued reoffending, to the extent that the offenders whom these costs are imposed on are unable to pay because of the lack of employment and/or other monetary pressures. With a few exceptions, there has been very little research on the effect of these financial penalties on recidivism and that which has been conducted has focused mainly on day fines and/or within adult offending populations. Almost no (recent) empirical research exists on the imposition of fines, fees, and/or restitution among juvenile offenders and the degree to which such costs are related to recidivism within this group. Focusing such analyses on juvenile offenders is especially important because they represent a very policy-relevant group due to their positioning in the life course when many criminal careers end and a few careers continue (see Farrington, Piquero, & Jennings, 2013; Jennings et al., 2016; Laub & Sampson, 2001; Mulvey et al., 2004; Piquero et al., 2012). Accordingly, this study undertook an analysis of the relationship between the imposition of fines, fees, and/or restitution on recidivism in a large cohort of youth from Allegheny (Pittsburgh) County, PA, who were under supervision (adjudicated delinquent or on consent decree) for a recent offense and had their case closed during the calendar year of 2013.

Several key findings emerged from our work. First, the analyses showed that youth who had restitution imposed them evinced a significantly higher likelihood of recidivism. As well, the sheer amount of costs and/or restitution imposed increased their likelihood of recidivism. Second, owing costs and/or restitution upon case closing and the amount of costs and/or restitution still owed upon case closing were also significantly related to recidivism. Importantly, these findings held in multivariate analysis that controlled for relevant youth demographics and case characteristics that themselves were related to recidivism but that did not eliminate the adverse effect of costs and/or restitution on recidivism. Third, and potentially troubling from a social policy perspective, our analyses also indicated that non-Whites were more likely to still owe costs and restitution upon case closing.¹⁰ When this is coupled with their higher likelihood of recidivism, minority youth in these data not only face problems in closing their financial debt to the juvenile justice system but also may exert additional costs on the system as a result of their higher likelihood of recidivism. This leads to a very important, provocative but relevant, policy question: Are these financial punishments appropriate if certain persons, minorities in the current study, are unable to pay them off?¹¹ In short, the main takeaway from our analysis is clear: Financial burden increases the likelihood of recidivism among adolescent offenders.

Before we highlight some specific policy and practice considerations, we must acknowledge some limitations associated with the current study. First, although our analysis is the most recent and comprehensive analysis to examine the potentially adverse effects of financial penalties on recidivism in a sample of juvenile offenders, we do not have access to a comparable group of youth who were not given any financial penalties. Ideally, a randomized experiment would take place and that

is surely a goal for future research—recognizing the difficulty with which carrying out such a study in “real-world” juvenile and criminal justice agencies is challenging. Second, while we had a 2-year window within which to measure recidivism, which is about a year longer than many recidivism studies, our recidivism measure was based on official records. Thus, some offending could have occurred but went undetected by the juvenile and/or criminal justice system. Third, it was very important that we had access to several important youth demographics and case characteristics that have been found to be related to recidivism for our study; however, as is the case in many administrative data sources, there are many other variables that could potentially be related to either or both, recidivism and the extent to which financial penalties are levied on youth—and, if so, for what amount. For example, Beckett, Harris, and Evans (2008) found that criminal justice debt also varied by certain county characteristics, which unfortunately were not present in the data we used herein, as these data were drawn from one county. Other relevant control variables would be the youth’s living situation—especially, the financial resources of their families and the youth’s own educational attainment. It would also be important for future research to include dynamic risk factors such as measures generated from standardized risks/needs assessments (such as the Youth Level of Service) in addition to the static risk factors relied on in the current study (e.g., demographics, prior disposition, offense type, etc.) in order to rule out other potentially rival causal factors. Finally, as the majority of the non-White youth in the current study were Black, a larger data collection effort would hopefully permit analyses across race and ethnicity to better assess the extent to which different minority group members have more or less financial penalties levied upon them and then, in turn, how such penalties affect subsequent offending. Research on race—and especially ethnic differences—in the juvenile justice system is sorely needed.

In short, we do not wish to leave readers with a sense that carrying out this type of research will be too difficult and time consuming to pursue. It certainly is the case that conducting empirical research on juvenile offenders is very challenging because of the data constraints and appropriate protections afforded to youth because of their age. However, as noted before, juvenile offenders are a very important group to study from a policy perspective and examining how various interventions, not just financial penalties, influence the future course of their criminal and noncriminal careers is highly important.

Let us be sure that our work is not interpreted in a manner that suggests that costs and/or restitution should be not be used. When used fairly and wisely, they certainly represent one form of punishment between prison and probation (see Morris & Tonry, 1990). However, the distinction between costs (fines and fees) and restitution is indeed an important one, as the former can be seen as a monetary sanction to offset the burden of juvenile justice system case processing (e.g., fees imposed) or applied for certain types of offenses (e.g., driving-under-the-influence fines), whereas restitution is rooted in the philosophical ideals of restorative justice and repairing harm done to the victim (Bazemore, 1992; Bazemore & Maloney, 1994; Maloney et al., 1988; Umbreit, 1989; Van Ness, 1990; Zehr, 1990). In this vein, there may likely be some elements of the restitution and victim repayment process that reduce recidivism risk and foster successful reintegration for some youth, as the youth may come to recognize the importance of accountability, develop certain competencies (e.g., work experience, active learning, community service opportunities), increase their empathy for their victim/s and victims in general, and appreciate their active role in repairing the harm done. Yet, we also believe that the juvenile justice system should take various aspects of the offender and the case into account, including the nature (especially severity) of the offense as well as the financial means that the offender has available to them in order to pay the financial penalties imposed in general (e.g., Hillsman & Greene, 1988). Imposing excessive financial penalties (including restitution) on offenders may do more harm than good, and not only serve as a potential barrier that limits their reintegration back into mainstream society, but perhaps more importantly may undermine the

role of justice and fairness within the juvenile (and adult) justice system more generally (Beckett & Harris, 2011, p. 510).

Perhaps instead, the manner and process by which financial penalties are employed should be reconsidered. For example, when policy makers and juvenile justice actors are considering options to reduce financial burden, then perhaps it would be useful to begin with a reduction or a waiver of the costs imposed (which are more readily understood as punishments by definition) versus restitution imposed, as restitution may have some positive benefits for the offender as described above and certainly contribute to one of the primary goals of the philosophy of restorative justice which is to financially repair the harm done to the victim/s (Bazemore, 1992; Bazemore & Maloney, 1994; Maloney et al., 1988; Umbreit, 1989; Van Ness, 1990; Zehr, 1990). Furthermore, perhaps the implementation of a program where financial penalties are implemented in more of a graduated fashion where offenders pay their debt in say, for example, a monthly installment, and then perhaps as their employment wages increase over time, the financial costs incurred by the offender would rise proportionately. "Day fines," which are a common feature of many European and Latin American countries, could also present a viable alternative that ties the financial penalty to what a defendant earns in a given day. Although the details of this approach and how it would be implemented need to be solidified, the results of our study suggest that the imposition of financial penalties is having an adverse effect with respect to subsequent reoffending and, in turn, likely hampering efforts at reintegrating these juvenile offenders back into mainstream society where they can become productive citizens.

Other strategies in existence in some jurisdictions (such as in Allegheny County in particular) for youth who are under the age of 14 where legal employment is not permitted are opportunities for youth to go above and beyond the amount of community service required to earn money to help pay their restitution. Thus, in addition to employment services and vocational skills training that are available to ex-offenders, there are important mechanisms to facilitate the offender's repayment of their debt, but, more importantly, to assist them in developing requisite job skills to improve their chances of successful reintegration.

Ultimately, the suggestions we highlight above need to be considered carefully within the context of ensuring that whatever financial penalty structure is implemented that it is done so fairly to the heterogeneous population of juvenile offenders, including those youth who are given fines/fees/restitution and are able to pay them compared to those youth who may have difficulty in paying them. In this vein, the financial penalty and repayment structure also need to be informed by the recognition that there is a philosophical rationale in the juvenile justice system (and potentially positive benefits for some youth) for certain monetary sanctions, such as restitution (Bazemore, 1992; Bazemore & Maloney, 1994; Maloney et al., 1988; Umbreit, 1989; Van Ness, 1990; Zehr, 1990), and that there is a clear difference between the inability to pay (e.g., financial burden) versus the ability *but* unwillingness to pay.

In sum, if the juvenile justice system is to punish in a fair, efficient, and effective manner (see Harris, 2016), there is a need to develop a deeper understanding as to what burden(s) these costs impose on the offender and, in turn, increase the likelihood of their recidivism. This information is imperative for the juvenile justice system to operate in accordance with the rehabilitative (and restorative) goals that distinguish the juvenile justice system from the more punishment-oriented adult criminal justice system (Monahan, Steinberg, & Piquero, 2015; Nagin, Piquero, Scott, & Steinberg, 2006).

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Notes

1. Also, it is important to note that there exists a penological difference between fees and fines, where some countries may and do use fines as a form of punishment in lieu of incarceration whereas fees are generally imposed for the purpose of the defendant paying for the court management of each case (Beckett & Harris, 2011; Harris, 2016). The data used in the current study come from Allegheny County, PA, which collectively refer to fines and fees as costs.
2. The large majority of non-Whites in the sample were Black (94.8%).
3. In Allegheny County, PA, a consent decree is a supervision status that can be imposed versus "standard probation" and can be considered an alternative to adjudication, so that the youth can avoid the stigma that is attached to an adjudication of delinquency. Essentially, as long as the juvenile maintains compliance with the conditions outlined in the consent decree and no new allegations are filed against the juvenile while under the supervision/consent decree, then the juvenile avoids an adjudication of delinquency once the consent decree expires. As such, youth who are on consent decree versus standard probation are generally less serious offenders with less prior delinquent/criminal history.
4. The costs imposed that are associated with destroying electronic monitoring equipment and/or for having missed/not attended a mental health evaluation appointment are forgiven when the case is closed.
5. A word of caution is needed here when interpreting the recidivism rates, as recidivism was not able to be tracked for youth who had their cases expunged. By not having these cases in the analysis, the recidivism rate could be slightly higher compared to the overall population, as youth who have had their cases expunged usually have lower recidivism rates.
6. Table not presented but available upon request from the authors.
7. These differences are likely due to the fact that males were more likely to have a prior record (males: 53.5%; females: 42.7%; $\chi^2 = 10.16, p < .001$) and nearly 70% of the youth whose current supervision offense was a violent offense were male ($\chi^2 = 14.96, p < .001$).
8. Non-Whites were more likely to have a prior record (non-Whites: 60.6%; Whites: 31.9%; $\chi^2 = 86.36, p < .001$), and 73.6% of the youth whose current supervision offense was a violent offense were non-White ($\chi^2 = 25.06, p < .001$).
9. Due to the positive skewness that existed in the distributions for the costs and/or restitution imposed and owed, the natural logarithmic transformation was performed on these variables prior to analysis.
10. It is important to bear in mind that disproportionality does not automatically equate to system-based racial bias. Because our data do not have information as to the reason for the disproportionality, we cannot speak to the intention of any juvenile justice personnel with respect to why some youth receive greater fines, fees, and/or restitution. Such research is needed, especially given the findings from the extant literature regarding criminal justice actors' differential attributions about the causes of crime

among White and minority youth (see Bridges & Steen, 1998; although see Bechtold, Monahan, Wakefield, & Cauffman, 2015).

11. We would like to thank Alexes Harris for this specific observation.

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