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CRIMINAL JUSTICE SYSTEM INVOLVEMENT AND YOUNG ADULTS' HEALTH: THE ROLE OF CHILD ECONOMIC DISADVANTAGE, ADOLESCENT HEALTH AND LIFESTYLE RISKS, AND STRESS

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GRAPHY

ABSTRACT

Criminal justice system involvement, including arrest and incarceration, may be associated with poorer physical and mental health, but it is important to prospectively account for earlier economic disadvantage and lifestyle factors. We examined associations between criminal justice system involvement and self-reported physical and depressive symptoms while controlling for childhood poverty and adolescent health and lifestyle risks. We tested stress as a mechanism underlying these associations. Based on longitudinal data from the Toledo Adolescent Relationships Study (TARS) (n= 990), adolescent health risks and childhood economic disadvantage explained the association between criminal justice system involvement and self-reported physical health in young adulthood. Yet, incarceration was associated significantly with depression. Analyses supported stress as a mediating influence on the association between incarceration and depression. This study provided a more nuanced understanding of incarceration and health by accounting for several key factors and testing stress as a mechanism underlying the association.

In the U.S., many individuals who have experienced incarceration suffer from chronic health problems. Although there are pre-existing conditions that may be associated with both involvement with the criminal justice system and poor health, researchers often have emphasized criminal justice system contact as the key experience leading to poorer health. Additionally, stress is theorized as a critical link, but studies have not assessed empirically the mediating impact of stress on incarceration and health.

Our study builds on prior work by assessing whether criminal justice system experience (none, arrest only, incarceration) influenced young adults' self-reported health and depressive symptoms after accounting for prospective risks to health including child economic disadvantage, and adolescent health and lifestyle risks (delinquency, drug use, BMI, earlier depression). We then assessed whether stress mediated associations between criminal justice involvement and health. We based analyses on panel data from a population-based sample, the Toledo Adolescent Relationships Study (TARS) (n =1,013). This contemporary sample included young adults, ages 22-29, who have matured during the era characterized by mass incarceration.

Schnittker² reported that prison duration predicted chronic health problems, and have suggested that the stigma of incarceration increased stress, which negatively influenced health². Although relatively comprehensive, Schnittker did not examine either health or criminal activity prior to incarceration as correlates of post-release health. Further, by only examining if respondents had ever used cocaine (yes/no), this study did not distinguish between a single experimental use and using cocaine regularly,³ and did not assess other illicit drug use. Addressing some limitations,

Massoglia⁴ found that antisocial and background variables accounted for 40% of the variation in

Studies have found that incarceration negatively influences physical and mental health¹.

BACKGROUND

post-release health; however, incarceration remained significant. In a follow-up using propensity score matching Massoglia⁵ argued that incarceration is a stressor, which deteriorates health post-release. Yet, general stress was not assessed.

Although most studies have focused on incarceration effects, some researchers have argued that even minor contacts, such as encounters with police and increased police presence, are related to negative community health outcomes⁶. Arrest labels individuals, which may lead to a downward spiral including hindering educational and employment opportunities,⁷ which influence health outcomes.

We expect, however, that the association between criminal justice system involvement and the probability of poor physical and mental health may be due to other co-occurring disadvantages and lifestyle factors. Some have linked *childhood disadvantage* to poor health in adulthood⁸. Ross found that e*conomic disadvantage* led to higher depression⁹ and Wilson, Shuey, and Elder ¹⁰ found it to be associated with earlier mortality. Thus, the effects of early economic disadvantage continue to be present throughout the entire life course influencing physical and mental health.

Antisocial lifestyles also influence health outcomes. Adolescent delinquency negatively affected health in adulthood¹¹, while *drug use* diminished cognitive capacity and predicted cardiovascular problems¹². Marijuana and cocaine use, specifically, led to adverse health outcomes¹³. Longer drug use careers and poorer health increases the probability that incarcerated drug users experienced unmet health needs¹⁴. Adolescent substance abuse is related to both increased chance of incarceration and psychiatric disorders¹⁵. Thus, the connection between antisocial lifestyles and decreased health is evident and proliferates with prolonged exposure.

Early health indicators also need to be considered as correlates of young adults' health. Adolescent health, including elevated BMI predicts lifelong struggles with obesity and increased odds of mortality¹⁶. Additionally, adolescent depression is one of the strongest predictors of later life depression¹⁷. Thus, numerous high risk adolescent lifestyle factors and health indicators are linked to decreased health through adulthood¹⁸.

Summarizing, although prior literature has informed our understanding of incarceration, there are limitations, which we attempted to address in the current study. First, we measured stress as opposed to simply conceptualizing stress as an underlying mechanism. Second, we included correlates of young adults' health outcomes including childhood economic disadvantage, and adolescent lifestyle and health risks (delinquency, problematic drug use, and prior health indicators). Third, criminal justice contact is assessed as depth of involvement (none, arrest only, incarceration) in order to assess whether minor forms of criminal justice contact, in addition to incarceration, detrimentally influence health outcomes. Fourth, we measured both self-reported physical and mental health. Lastly, many datasets are limited to individuals born prior to the era of mass incarceration¹⁹; this research is based on a contemporary cohort.

We assessed whether criminal justice system experience (none, arrest only, incarceration) influenced young adults' self-reported health and depression after accounting for demographic controls (race, gender, age, and union status) and prospective risk factors. We then examined whether stress mediated the association between criminal justice involvement and health outcomes.

The Present Study

DATA AND METHODS

The TARS is based on a stratified random sample of seventh, ninth and eleventh graders in the year 2000 in Lucas County, Ohio. The baseline sample (1999) consisted of 1,321 individuals ages 12 - 18. At the fifth interview in 2010 respondents were ages 22 - 29. We retained 1,021 individuals for the fifth interview. Respondents participated primarily in their homes using a computer assisted interview procedure (first interview) and on-line surveys (fifth interview). Primary caregivers, usually mothers, were surveyed at the first interview separately from adolescents. The TARS drew from school rosters, but respondents did not have to be in school or regularly attend school to be included. Census data showed that Lucas County is similar to national statistics regarding income, race, and education²⁰. The TARS oversampled Black and Hispanic respondents. We excluded respondents missing on self-reported health (n=6) or depression scale items at the fifth interview (n = 2). We also excluded respondents who reported their race as "other" (n = 23) because the sample size was too small for multivariate analyses. This resulted in a sample of 990. We estimated missing values using single imputation of the data for descriptive statistics, and multiple imputation for multivariate analyses.

Measures

Dependent variables

Poor Health. We measured self-reported poor health with the item: "Overall, how would you rate your health?" We dichotomized responses so that 1 = poor or fair health (11.5%), and 0 = not in poor health (88.5%). Dichotomizing self-reported health has precedence in the literature²¹, and yields similar results to more sophisticated categorical measure of health²², and correlates highly with more specific self-reported and objectively measured conditions¹⁰.

Depressive Symptoms. We measured depressive symptoms with an eight-item version of the Center for Epidemiological Studies Depressive Symptoms (CESD) scale²³. We asked how

often in the last week had respondents felt that each statements was true: (1) "felt depressed"; (2) "everything was an effort"; (3) "felt sad"; (4) "couldn't get going"; (5) "felt lonely"; (6) "couldn't shake off the blues"; (7) "trouble sleeping or staying asleep"; and (8) "couldn't keep focused." The mean scale ranged from 1 (never) to 8 (every day) (α = .90). Due to skewness, we log transformed depression in multivariate analyses.

Independent variables

Criminal Justice Involvement. In accordance with recent calls to more comprehensively measure criminal justice system involvement²⁴, we measured incarceration history with a trio of assessments. First, respondents indicated each arrest and whether that resulted in jail time.

Second, at each interview respondents provided their residency, and if they selected "in prison," they were coded as previously incarcerated. Finally, on the parent questionnaire, caregivers were asked how many times their child "was placed in a juvenile detention facility." If caregivers responded affirmatively, respondents were coded as previously incarcerated. We constructed three dichotomous variables: never arrested (63%), arrested (27%), and incarcerated (9%).

Sociodemographic Characteristics. We controlled for race (White, Black, Hispanic), age, and gender measured at the first interview, and union status (single, cohabiting, and married) at the fifth interview.

Childhood Economic Disadvantage. We used items from the parent's questionnaire at the first interview to measure childhood economic disadvantage²⁵. We summed four dichotomous variables: (1) mother has less than high school education; (2) family ever received public assistance; (3) mother unemployed; and (4) there were times when there was not enough food in the house. The measure ranged from 1 to 5 (α =. 63).

Adolescent Health and Antisocial Lifestyle Risks. We assessed early health by calculating body mass index (BMI) at the baseline interview, and centered this value in multivariate analyses to give the variable an interpretable zero. For models predicting depression, we measured early depressive symptoms at baseline, similar to the dependent variable, using the eight-item (CESD) scale²³ (α =. 83).

We measured *juvenile delinquency*, a lifestyle risk, at the first interview by asking how often respondents committed each of the following: (1) "steal something less than \$50"; (2) "steal something more than \$50"; (3) "damage property"; (4) "carry gun"; (5) "attack someone"; (6) "sell drugs"; (7) "break into a building;" and (8) "drunk in a public place" Responses ranged from 1 (never) to 9 (daily) (α = .75).

Drug use is a lifestyle risk predicting poor health and depression. We asked, "How often in the past 2 years have you experienced the following because of drug use: (1) "not felt good next day"; (2) "unable to do your best"; (3) "problems with partner"; (4) "hit family member"; (5) "gotten into fights"; (6) "problems with friends"; (7) and "gotten into regrettable sexual situation²⁷". The mean scale ranged from 1 (never) to 8 (daily) (α =. 87).

Stress. At the fifth interview respondents indicated how stressed they were due to the following: (1) family members' health; (2) employment; (3) living arrangements; (4) school; (5) money; (6) romantic relationship; (7) parents; (8) other family members; and (9) friends. The mean scale ranged from 1 (not at all stressed) to 5 (extremely stressed) (α =. 83). *Analytic plan*

We tested whether arrest or incarceration negatively influenced the health of individuals controlling for adolescent health adverse behavior and childhood economic disadvantage. First, we tested for differences of means/proportions of each independent variable among those with

no criminal justice contact, were arrested only, and were incarcerated (Table 1). We conducted logistic and ordinary least squares regression, respectively, to estimate the effects of arrest and incarceration on physical health (Table 2) and depression (Table 3). We included incarceration and sociodemographic characteristics (model 1), added childhood disadvantage and adolescent health risks (model 2), and then added stress (model 3).

Results

As expected, the never arrested included a smaller proportion (10.6%) of individuals who reported poor health compared with the arrested group (11.6%), and compared to the incarcerated group (17.4%) (Table 1). Both the never arrested and the arrested groups were significantly different from the incarcerated individuals in several respects. Individuals who were incarcerated previously reported more frequent depressive symptoms (\bar{X} =.97) on average than those who had been arrested only (\bar{X} =.73). On average, the never arrested group (\bar{X} =.21) reported less delinquency than the two groups with criminal justice system contact, with incarcerated individuals reporting the highest delinquency (\bar{X} =.54). Both the arrested and incarcerated groups reported significantly higher drug abuse during adolescence. Compared to the never arrested, levels of childhood economic disadvantage were higher among respondents with incarceration histories. Those who experienced incarceration exhibited higher general stress (\bar{X} =2.34) than those who experienced arrest only (\bar{X} =2.06) and those with no criminal justice system contact (\bar{X} =2.09).

(Table 1 about here)

In Table 2, regarding bivariate associations, incarceration (OR=1.7), stress (OR=2.16), childhood disadvantage (OR=1.30), and adolescent BMI (1.08) were associated with poor health.

In model 1, net of sociodemographic controls (race, gender, age, union status), the association between incarceration and the probability of reporting poor health approached significance. None of the sociodemographic characteristics were significantly associated with self-reported poor health during young adulthood.

In model 2, for each level of disadvantage during childhood, the odds of poor health increased by about 23% (OR=1.23). However, neither adolescent drug use nor delinquency increased the probability of reporting poor health during young adulthood. In model 3, general stress was associated with higher odds of reporting poor health. Every unit increase in stress increased the probability of self-reported poor health by about 105% (OR=2.05). With the inclusion of stress, childhood disadvantage remained associated with poor health (OR=1.24).

(Table 2 about here)

In Table 3, incarceration was associated positively with depression. The significance of controls in model 1, however, differed from the poor physical health models in three ways. First, Black (b = .09), compared to White, respondents reported higher depression (b=. 09). Second, female (b = .06), compared to male, respondents reported higher depression. Third, married (b = -.25), cohabiting (b = -.15), and dating (b = -.11), compared with single, respondents reported lower depression. As expected, depression during adolescence (b = .09) was associated with young adulthood adolescence. Both experiencing incarceration (b=. 22) and childhood disadvantage (b=. 04) were significant indicating that both detrimentally influenced mental health.

Model 2 included indicators of health and antisocial lifestyle that act as risk factors during adolescence. Adolescent drug use was associated with young adult depression (b=. 18) controlling for adolescent depressive symptoms (b=. 10) and the other independent variables. We

expected the addition of adolescent risks to reduce the coefficient for incarceration. The addition, however, of this block group did not significantly alter the coefficient for incarceration (b=. 22) in model 2.

Next, in model 3, as expected, stress (b = .28) was associated with depression. The effect of incarceration decreased when accounting for stress indicating that incarceration affects mental health partially through stress. Results of a Sobel test for mediation showed that the coefficient for incarceration significantly decreased in magnitude after stress was included in the model. Additionally, the prior depression coefficient was also significantly reduced in magnitude.

(Table 3 about here)

We used targeted centering to assess the effect of arrest without incarceration. We changed the reference group in each model from never arrested to incarcerated previously (not shown). The effect of arrest was significantly lower than the effect of incarceration on self-reported poor health and depression, and did not differ from the effect of no criminal justice contact. That the arrested only coefficients were not significantly different from the never arrested coefficients demonstrated that any effect on health appears triggered by incarceration, not arrest.

DISCUSSION

We contributed to the literature on the association between incarceration and health in several ways. Previous studies have suggested that prison conditions negatively impact individuals' health even after release from prison. However, it is plausible that incarceration is not the cause of poor health, but rather reflects selection into poor health by individuals who engaged in earlier health compromising behaviors, which we referred to as adolescent health risks, and who were disadvantaged by their childhood economic standing. Furthermore, some

have argued that any contact, such as arrest, has long-term consequences for individual well-being. Additionally, other scholars hypothesized that the negative effects of incarceration and arrest on health act through the increased stress of the prison environment^{2,4,5}. Although researchers presume stress is the mechanism through which incarceration affects well-being⁵, prior studies have not tested this relationship.

To address these concerns, two research questions drove the current study. First, does criminal justice system involvement (no contact, arrest only, incarceration) affect (a) physical and (b) mental health? In brief, contact does not appear to affect physical health, but does affect mental health. We found that neither arrest only nor incarceration was associated with self-reported physical health. Instead, an adolescent health risk, BMI, and childhood economic disadvantage, were most highly correlated with self-reported poorer health in young adulthood.

Incarceration, but not arrest only, was associated positively with depression.

Additionally, childhood economic disadvantage and adolescent health risks (earlier depression, drug use) were associated with greater frequency of depressive symptoms during young adulthood. Although studies have begun to explore whether the effects of the criminal justice system extend to early procedures like arrest or police contact, we found no evidence of deleterious effects of arrest for depression (similarly there were no significant effects of arrest for poor physical health). Perhaps the significance of incarceration reflects a reverse process, where drug use becomes a coping strategy given higher levels of depression. However, this relationship is likely a reciprocal one because greater drug use during adolescence increases the odds of arrest and incarceration and being in prison can increase reliance on such coping strategies. A third plausible scenario is that those individuals with debilitating conditions and no ability or desire to receive mental health treatment self-medicated as youth via drug use. Not surprisingly,

adolescent depression was one of the strongest correlates of young adult depressive symptoms. Race (Black) and being female were associated positively with depression, and being married, cohabiting, or dating compared to being single were associated negatively with depression. Our second research question asked whether stress mediated the relationship between incarceration and (a) self-reported health and (b) depressive symptoms. In brief, because we did not find an incarceration effect for physical health, stress did not play a mediating role. Nevertheless, stress was associated with poorer health, net of sociodemographic characteristics, childhood disadvantage, and adolescent health risks. The effect of incarceration on depression, however, was significantly decreased net of stress, but not among individuals who had only experienced arrest. This finding of mediation supports arguments made by scholars who have posited that the stressfulness of incarceration is likely to overwhelm individuals' coping abilities and ultimately leave them more depressed than prior to incarceration². Furthermore, incarceration may impede the path to important life transitions, such as marriage, employment and home ownership. These barriers to success may further increase stress due to financial strain in formerly incarcerated individuals.

The results of the current study support the need to continue developing theory and research in the area of stress processes and cumulative disadvantage, and how these figure into health consequences of incarceration. As demonstrated by our analyses, stress explained the effects of incarceration experience on depressive symptoms. Regarding cumulative disadvantage, the effect of childhood economic disadvantage on depression is persistent throughout the models.

This study has limitations. First, the arrest and incarceration measures are retrospective.

This is potentially problematic because the dependent variables assessed health at the time of the interview. Because of this limitation, inference of causal order based on gradual health changes

being compared to the time of arrest is not possible. The measure complicated the research question as an individual's health is naturally going to decrease over time, especially those with the type of lifestyle that leads to arrest. For this reason, it will be difficult to pinpoint arrest history as the mechanism leading to decreased health in adulthood. Future research should seek to establish with more precision the time of incarceration to determine more accurately whether these events triggered increases in stress.

Studies of incarceration and health have often used more in-depth measures of health conditions than the single item self-report measure used in this study. Nevertheless, some scholars have concluded that self-reported overall health is an adequate if not superior way to measure health in survey research. A self-reported measure may be the optimal way to capture health disparities in younger adults¹⁰, as self-reported health was highly correlated with objective measures of more serious conditions. Therefore, the present study used self-reported health as a reliable measure for a sample the age of the TARS respondents. Other studies have focused primarily on older adults or adolescent health. The present study focused on adults who should be in excellent physical health. Thus, finding small effects on health may be indicative of future problems as health declines naturally with age. This accelerates the decline via the continual accumulation of disadvantage and stress. Another consideration is that our measure of stress combined various life domains into a singular measure. It is not clear how these domains directly relate to incarceration experiences. If a direct measure of stress from incarceration were available in the data, it would be useful to explore how this measure affected the other stress measures examined in this study. Furthermore, additional research is needed on the interplay of the included domains of stress. Although they are correlated well enough to combine into a single measure (α =. 83), this does not permit us to elaborate on more specific pathways. We

conceptualized this measure of stress as manifestations of proliferating stress via the stress process, however other pathways are plausible. For example, incarceration may influence stress through the straining of relationships and employment or education opportunities. Incarceration may directly strain the relationships with families, thus increasing stress in that domain as well.

Future research may wish to shift focus from adult to child outcomes of criminal justice. Supplemental analyses of the TARS data did not reveal any significant differences between those who experienced the criminal justice system as juveniles and those who only experienced arrest or incarceration as adults. The present study combined juvenile and adult criminal justice experience into singular categories that indicated any criminal justice experience. The present study did not focus on racial disparities in the processes we examined. Researchers have repeatedly shown that racial disparities exist in the experience of economic disadvantage, exposure to incarceration, and a range of health outcomes²⁸. Thus, a next step is to determine whether the interrelationships explored above are similar or vary based on race/ethnicity. Gender differences in health (e.g., depression) and odds of system exposure also suggest the need to explore similarities and differences in the nature of these pathways. Other samples that include older respondents would add to our focus here on a relatively limited age range.

Results of the current study are important in highlighting the need to access preceding conditions that increase the probability that an individual will experience criminal justice contact. Findings on self-reported health indicated that incarceration is not significant, once these factors were included in the models. In contrast, an effect on depression remained significant net of these lifestyle and disadvantage factors. Although it is likely that health and well-being are influenced by multiple factors, and not solely from incarceration, nevertheless criminal justice agencies have a responsibility and opportunity to provide health programs in

prison and support for paroled and released prisoner health education²⁹. Given the significant effects on depression, even after introducing controls, including prior depression, focusing on emotional well-being and coping with stress should be a priority. Supporting individuals' mental and physical health post-release will increase the likelihood that this period will lead to efficacious actions, including gainful activity and reduced odds of relying on ineffective coping strategies such as substance use.

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Table 1. Descriptive Statistics and Group Comparisons for Criminal Justice Involvement

	Full	Criminal Justice Involvement								
	Sample	Name Associated Associated V								
		Never Arr	ested	Arreste	ed	Incarcerated				
		(n=643	3)	(n=277	')	(n=92)				
	Means/	Means/		Means/		Means/				
	Percentage	Percentage	SD	Percentage	SD	Percentage	SD			
Dependent Variables										
Poor health	11.50	10.60		11.61		17.44 ^{ab}				
Depressive symptoms	0.73	0.70	0.47	0.73	0.47	0.97^{ab}	0.44			
Independent Variables										
Race/Ethnicity										
(White)										
Black	21.5	17.70		26.70a`		32.60^{ab}				
Hispanic	10.9	10.00		9.00		22.80				
Age	25.38	25.44	1.86	25.17	1.18	25.36	1.55			
Gender										
(Male)										
Female	53.9	62.50		41.90	0.49	29.30^{a}				
Adolescent Depression	2.30	2.30	1.14	2.29	1.05	2.38	1.22			
Childhood disadvantage	1.18	1.00	1.15	1.35 ^a	1.23	1.92^{ab}	1.10			
Adolescent BMI	0.00	0.01	5.70	-0.24^{a}	5.31	0.35^{ab}	5.67			
Delinquency	0.29	0.21	0.42	0.40^{a}	0.57	0.54^{a}	0.70			
Drug use	1.12	1.07	0.31	1.16^{a}	0.52	1.29 ^a	0.58			
Stress	2.11	2.09	0.70	2.06	0.73	2.34^{ab}	0.80			

Source: Toledo Adolescent Relationships Study

Note: ^a Value is significantly different from the no involvement group;

^b Value is significantly different between arrested and incarcerated groups

Table 2. Zero-Order and Multivariate Logistic Regression of Poor Health on Criminal Justice Involvement, Sociodemographic Characteristics, Child Disadvantage, Adolescent Health Risks and Stress

	Zero-order		Model 1		Model 2		Model 3	
	OR	(SE)	OR	(SE)	OR	(SE)	OR	(SE)
Criminal Justice System Involvement								
Arrest	1.107	(0.23)	1.141	(0.24)	0.997	(0.17)	1.024	(0.17)
Incarceration	1.673†	(0.27)	1.678†	(0.29)	1.226	(0.19)	1.087	(0.20)
Sociodemographic characteristics								
Race (ref=White)								
Black	1.438	(0.23)	1.331	(0.24)	0.896	(0.23)	0.82	(0.24)
Hispanic	1.062	(0.33)	0.968	(0.34)	0.643	(0.29)	0.592	(0.29)
Female	1.238	(0.20)	1.368	(0.21)	1.202	(0.22)	1.135	(0.22)
Union status (ref=Single)								
Married	0.809	(0.29)	0.802	(0.31)	0.871	(0.32)	1.002	(0.33)
Cohabiting	1.026	(0.26)	0.97	(0.27)	1.094	(0.28)	1.212	(0.29)
Dating	0.824	(0.27)	0.786	(0.28)	0.873	(0.29)	0.909	(0.29)
Age	1.024	(0.05)	1.03	(0.06)	1.011		1.053	(0.06)
Child Disadvantage	1.291**	(0.08)			1.195†	(0.09)	1.205†	(0.10)
Adolescent Risk Factors								
BMI	1.084	(0.01)			1.082***	(0.02)	1.074***	(0.02)
Delinquency	1.046	(0.19)			1.106	(0.23)	1.023	(0.23)
Drug use	0.923	(0.26)			0.677	(0.34)	0.675	(0.35)
Mediator								
Stress	2.16***	(0.77)					2.068 ***	(0.71)

[†]p<.10, *p<.05, **p<.01, ***p<.001

Table 3. Zero-Order and Multivariate OLS Regression of Logged Depression on Criminal Justice Involvement, Sociodemographic Characteristics, Child Disadvantage, Adolescent Health Risks and Stress

	Zero-Order		Model 1		Model 2		Model 3	
	b	(SE)	b	(SE)	b	(SE)	b	(SE)
Intercept			0.756***	(0.21)	0.588**	(0.21)	-0.175	(0.20)
Criminal Justice System Involvement								
Arrest	0.032*	(0.02)	0.027	(0.03)	0.004	(0.03)	0.007	(0.03)
Incarceration	0.226***	(0.02)	0.214***	(0.05)	0.149**	(0.05)	0.108*	(0.04)
Sociodemographic Characteristics								
Race (ref=White)								
Black	0.160***	(0.04)	0.099**	(0.04)	0.051	(0.04)	0.075*	(0.04)
Hispanic	0.068	(0.05)	0.036	(0.05)	-0.019	(0.05)	-0.013	(0.04)
Female	0.020	(0.03)	0.067*	(0.03)	0.037	(0.03)	0.024	(0.03)
Union Status (ref=single)								
Married	-0.212	(0.29)	-0.260***	(0.04)	-0.246***	(0.04)	-0.170 ***	(0.04)
Cohabiting	0.013	(0.26)	-0.151***	(0.04)	-0.150***	(0.04)	-0.118**	(0.04)
Dating	-0.198	(0.27)	-0.116**	(0.04)	-0.112**	(0.04)	-0.100 **	(0.04)
Age	0.025	(0.05)	0.001	(0.01)	-0.002	(0.01)	0.009	(0.01)
Child Disadvantage	0.065 ***	(0.01)			0.036**	(0.01)	0.038 **	(0.01)
Adolescent Risk Factors								
Depression	0.106***	(0.01)			0.093 ***	(0.01)	0.064 ***	(0.01)
BMI	0.008**	(0.00)			0.002	(0.00)	-0.001	(0.00)
Delinquency	0.061*	(0.03)			-0.012	(0.03)	-0.037	(0.03)
Drug use	0.098**	(0.04)			0.056	(0.04)	0.083*	(0.04)
Mediator								
Stress	0.305 ***	(0.02)					0.280 ***	(0.02)

[†]p<.10, *p<.05, **p<.01, ***p<.001