

Author



Hailley Hukill took a class with Professor Cauffman, which increased her interests in adolescents in general and more specifically delinquent adolescents. She joined Professor Cauffman's lab and had the opportunity to work on this project, one of only a few to examine the link between depression and re-offending in serious juvenile offenders. Hailley particularly enjoyed being able to present her research at a number of conferences, allowing her to share her findings with other interested researchers. Hailley is currently enrolled in the Masters of Social Work program at the University of Southern California..

Key Terms

- ♦ Adolescent Depression
- ♦ Depression
- ♦ Juvenile Delinquency
- ♦ Reoffending

Examining Depression and Recidivism in a Sample of Serious Adolescent Offenders: The Mediating Mechanism of Future Perception

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Psychology & Social Behavior

Abstract

Depression has been shown to influence adolescent offenders' tendency to engage in illegal activity. Prior research also suggests that having negative beliefs about one's future is associated with reoffending. The present study seeks to examine whether adolescent offenders' perceptions of future success explain the association between depression and reoffending behavior. The present sample includes serious juvenile offenders from 14–17 years of age. Participants' depression symptoms following their arrest (baseline), as assessed on the Brief Symptom Inventory, were examined as predictors of self-reported reoffending behavior across seven years following the initial arrest. Youths' perceptions of future success beliefs at baseline were tested as a potential mechanism of this association. The results suggest that perceptions of future success partially mediate the relation between depression and reoffending behavior. Specifically, the results suggest youth with more depressive symptoms tend to have lowered expectations for future success and these lowered expectations appear to ultimately lead to reoffending behavior. These findings suggest that intervention efforts aimed at improving the mental health of adolescent offenders may not only improve psychological well-being, but may also reduce recidivism among serious offenders who are most at risk for reoffending.

Faculty Mentor



This groundbreaking research is the first to recognize the role of one's expectations for future success in helping to stop the depression-delinquency cycle. Hailley's findings suggest that depressed offenders tend to feel they have poor chances of success in the future and are, therefore, more likely than non-depressed offenders to continue to engage in criminal behavior.

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Introduction

Adolescence is an important life stage during which young people form ideas about the world and search for their place within it. Importantly, previous research suggests that adolescence is a time of increased risk for depression, with greater levels of depressive symptoms during this time than during childhood or adulthood (Wight, Sepulveda, and Anashensel, 2004). In fact, according to the 2012 National Survey on Drug Use and Health (NSDUH), 9.1% of youth aged 12–17 experienced a major depressive episode in the past year in the United States, compared to only 6.9% of adults. Adolescents face many new and stressful transitions, such as attending high school, dating for the first time, navigating their newfound independence and responsibilities, and dealing with numerous hormonal and biological changes. These experiences can be overwhelming and can make adolescents vulnerable to experiencing symptoms of depression, such as sadness, hopelessness, and lethargy.

One subgroup of adolescents who may be particularly vulnerable to depression are those who have engaged in illegal activities, termed “adolescent offenders.” Research on incarcerated juveniles in Cook County, Illinois, reveals that adolescent inmates suffer from higher rates of depression (17.2% of males, 26.3% of females ages 10–18 years) (Teplin, Abram, McClelland, Dulcan, and Mericle, 2002) than the general population of adolescents (9.1% of youth aged 12–17) (NSDUH, 2012). Furthermore, a study by Wiesner, Kim, and Capaldi (2005) found that high-level adolescent offenders have more depressive symptoms than low-level offenders. In other words, the risk for depression among offenders seems to increase based on the severity of the crime committed. Thus, serious adolescent offenders represent an especially vulnerable subgroup.

Although the depression and delinquency link has been well documented, one area that seems to be missing from the literature is an examination of *how* depression is associated with delinquency and reoffending behavior. Only a few studies have explored potential mechanisms of this association. It has been well documented that depressed individuals tend to have a negative view of their future (Allen, 2003); however, prior research has also shown that adolescents who feel negatively about their future are more likely to engage in problem behaviors and minor delinquency (Skorikov and Vondracek, 2007). Therefore, adolescents’ beliefs about their futures may help to explain the depression-offending link.

Overall, adolescence is a time of increased risk for depression, which may lead to increased engagement in problem behaviors, including illegal activities. In fact, research has shown that a considerable number of youth who are in the juvenile justice system suffer from depression. The present study seeks to replicate the depression and reoffending link that has been documented in prior literature among a sample of serious juvenile offenders. This is a particularly important sample to study, as these adolescent offenders have committed serious, largely felony-level offenses, placing them at greater risk for depressive symptoms than lower level offenders. The study examines whether serious adolescent offenders’ attitudes towards the future serve as a potential mechanism to explain the association between their depression symptoms and reoffending behavior.

This study seeks to test the following hypotheses:

1. Youth who exhibit higher rates of depressive symptoms at baseline (within six weeks of initial arrest) will be more likely to re-offend within seven years (see Model 1 in Figure 1).

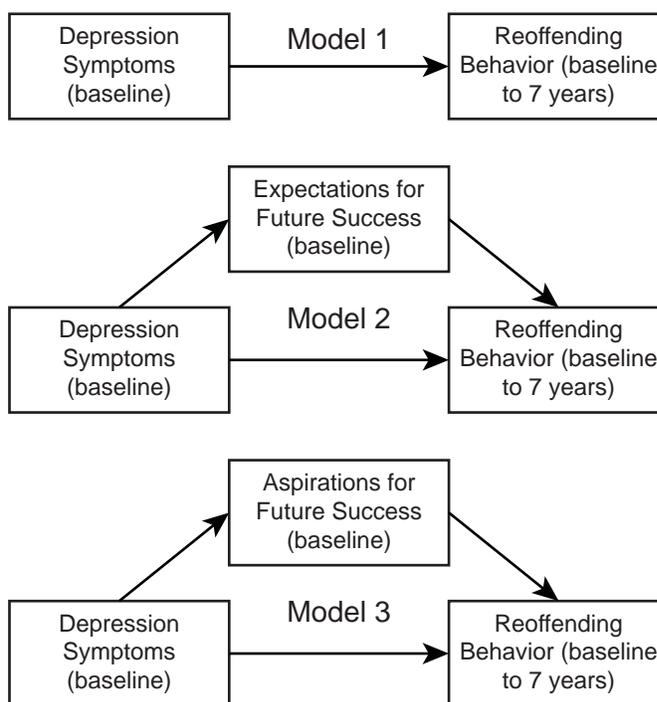


Figure 1

Models tested in this study. Model 1: Reoffending Behavior Regressed on Depression Symptoms. Model 2: Mediation of Reoffending Behavior on Depression Symptoms through Expectations for Future Success. Model 3: Mediation of Reoffending Behavior on Depression Symptoms through Aspirations for Future Success. Note: All models are conducted controlling for age, race, gender, and interview site.

2. Youths' expectations for the future at baseline will mediate the relation between depressive symptoms at baseline and reoffending behavior within seven years (see Model 2 in Figure 1). Specifically, higher levels of depressive symptoms will be associated with lower expectations of future success that will, in turn, be associated with greater reoffending behavior within seven years post-arrest.
3. Youths' aspirations for the future at baseline will mediate the relation between depressive symptoms at baseline and reoffending behavior seven years later (see Model 3 in Figure 1). Higher levels of depressive symptoms will be associated with lower aspirations of future success that will in turn be associated with greater variety of reoffending behavior within seven years post-arrest.

Depression and Delinquency

Depression is associated with increased engagement in illegal activity among adolescents (Wiesner, Kim, and Capaldi, 2005). One longitudinal study examined the trajectories of offending behavior and depression symptoms of 204 early adolescent males from the age of 9 to 24 years. Importantly, this study found that consistent involvement in high levels of offending behavior was associated with high levels of both drug use and depressive symptoms in early adulthood. Chronic high-level offenders (those who consistently committed serious offenses) had the highest levels of depressive symptoms of all the groups, even when controlling for childhood and adolescent depressive symptoms. Furthermore, those youth whose offending trajectories included only rare instances of offending or low-level offending that decreased over time had the lowest levels of depressive symptoms (Wiesner, Kim, and Capaldi, 2005). These findings suggest that greater frequency and level of offending is associated with increased depressive symptoms. Furthermore, depression may also be associated with the type of crime committed. A recent study examining depression among juvenile offenders found that property offenders had the highest rate of depression, compared to violent offenders and versatile offenders (those who engaged in both violent and property offenses; Colins, Vermeiren, Schuyten, and Broekaert, 2009). Interestingly, the study found that property offenders engaged in more substance use than did the versatile offenders, which may explain the greater prevalence of depression among the property offenders.

This complex relation between depression and offending makes it difficult to understand the nature of the association, whether depression is causing offending behavior or vice versa. A longitudinal study by Margit Wiesner (2003) attempted to examine whether the relation between depression and delinquency is unidirectional or reciprocal in nature. Wiesner's sample included 1,218 male and female adolescents from middle to late adolescence. She found a minimal unidirectional effect for boys where high levels of delinquent behavior were associated with higher levels of depressive symptoms. However, for girls, the relation between depression and delinquency was bidirectional such that higher levels of depression were positively associated with higher levels of delinquency and high levels of delinquency were positively related to higher subsequent levels of depressive symptoms. This finding reveals that, among female juvenile offenders, not only is delinquency predictive of later depression, but depression appears to also be predictive of later offending as well. This finding is important to the present study because it suggests that depression might affect future offending behavior.

In sum, several studies have established that there is a robust association between depression and offending behavior during adolescence. Yet, despite the growing recognition of the link between depression and delinquency, it remains unclear how depression influences offending behavior among adolescents. Some research is beginning to examine potential factors, such as substance use, that may explain this link. It is clear that additional research is needed to fully understand the complex relation between depression and offending. Therefore, the present study seeks to examine whether a third factor might explain this relation. We propose that adolescents' optimism for the future may serve as a potential mechanism for the depression-offending association.

Optimism for the Future and Delinquency

Optimism for the future refers to one's cognitive representation of one's future—whether or not an individual believes he or she possesses the skills to accomplish important life goals. Research suggests depressed adolescents may have little optimism for their future, as a common symptom of depression is a feeling of hopelessness (Diagnostic and Statistical Manual of Mental Disorders 4th ed., 2000). Aaron Beck theorizes that depressed individuals think negative thoughts about the world, themselves, and their future (Allen, 2003). Thinking negatively about the future may be especially harmful to adolescents because they are

young and their thoughts about the future may influence their actions towards planning for the future. We propose that depressed adolescents may turn to delinquency if they believe their future will be bleak.

On the other hand, research by Skorikov and Vondracek (2007) indicates that having a positive career orientation, believing one is capable of achieving successful occupational goals, and finding self-fulfillment in work decreases the development of problem behavior, such as delinquency. This research examined a sample of high school students, a portion of whom had committed illegal acts, such as drug use. This study found that both delinquent and non-delinquent adolescents' perceptions of their ability to succeed in the future were important for decreasing problem behavior (Skorikov and Vondracek, 2007). The authors reasoned that adolescents need to believe that they can succeed in the future, as they may have little reason to stop offending if they perceive that their future will be unsuccessful. This finding underscores the importance of adolescents' beliefs in their potential for future success, as optimism toward the future may help them avoid problem behaviors and even minor delinquent acts, such as vandalism, stealing, substance use, and school misconduct.

Optimism toward the future may be particularly low among delinquent adolescents. Prior research finds delinquent youth tend to have more negative views of their future compared to non-delinquent youth (Newberry and Duncan, 2001). In an innovative study design, Newberry and Duncan (2001) looked at 418 male and female high school students from 14–18 years old. The study looked at the correlation between participants' engagement in illegal behavior and the number of negative and positive possible selves the youth held. Possible selves refer to a person's idea of the possibilities of who he/she can be in the future; this includes what a person fears they may become, hopes to become, and expects to become (Oyserman and Markus, 1990). An example of an expected possible self is "I will get a good job"; in contrast an example of a feared possible self is "I will never get a good job and be homeless." The results of the study revealed that the greater number of delinquent acts an adolescent had engaged in, the higher the number of negative possible selves the youth held and the lower the number of positive possible selves the youth held (Newberry and Duncan, 2011). Thus, adolescents who engage in delinquent behavior tend to view their future more negatively than adolescents who abstain from delinquent behavior.

Not only do delinquent youth tend to see their futures as more bleak than non-delinquent youth, they also tend to have different life goals. In a study investigating goal setting and reputation among at-risk, not at-risk, and delinquent adolescents, delinquent youth were found to differ significantly in their values and goals for the future (Carroll, Hattie, Durkin, and Houghton, 2001). Specifically, delinquent youth tended to value maintenance of their social status over their educational status. Delinquent youth ranked educational goals as the lowest in value; youth classified as not at-risk valued educational goals more strongly than at-risk and delinquent youth. Delinquent youth tended to view themselves and their futures negatively. Carroll and colleagues (2001) theorize that these negative views, coupled with the desire to create a reputation, encourage youth to commit illegal acts.

The cumulation of this research suggests that delinquent youth tend to have more negative views of their future (Newberry and Duncan, 2011) than non-delinquent youth. These youth tend to feel they will be unsuccessful in their life endeavors, such as their careers (Skorikov and Vondracek, 2007). Thus, if delinquent youth feel that they cannot be successful at reaching typical life goals, such as graduating from high school, they may view a life of crime as their only option (Carroll et al., 2001). The present study seeks to build upon these findings by examining the role of optimism toward the future as a means to explain the link between depression and offending behavior among adolescents. Specifically, we seek to explore whether adolescent offenders suffering from symptoms of depression have a greater tendency to think negatively about their future and whether these pessimistic thoughts may increase their risk of engagement in subsequent illegal behavior.

Method

Participants

Participants were youth ($N=1354$) enrolled in the Pathways to Desistance Study, a multi-site longitudinal study that systematically assessed serious adolescent offenders as they transitioned from adolescence into adulthood. The study enrolled male and female juvenile offenders in Phoenix ($n=565$) and Philadelphia ($n=605$) who had been found guilty of a serious offense (the majority of which were felony offenses such as sexual assault, robbery, and weapon possession). Because drug offenses constitute a large proportion of offenses committed by adolescents, the proportion of juvenile males recruited with a drug offense was capped at 15% of the sample at each of the sites (only 15% of the sample at each site could be enrolled on the

Table 1
Summary of descriptive data.

	N	Frequency	Range	Mean	SD	Min.	Max.
Gender							
Male	1170	86.4					
Female	184	13.6					
Race							
White	274	20.2					
Black	561	41.4					
Hispanic	454	33.5					
Other	65	4.8					
Site							
Philadelphia	700	51.7					
Phoenix	654	48.3					
Age							
14	162	12.0					
15	255	18.8					
16	412	30.4					
17	413	30.5					
18	111	8.2					
19	1	.1					
Depression (baseline)	1262		4.00	.5962	.745	.00	4.00
Self-reported offending variety (baseline-ever)	1351		0.95	.3280	.210	.00	.95
Self-reported offending (past seven years)	758		3.40	.5952	.572	.00	3.40
Expectations for Future Success	1344		4.00	3.423	.815	1.00	5.00

basis of a drug offense). The youths' ages were 14–17 at the time of recruitment ($M=16.04$, $SD=1.143$). The sample was predominately male (86.4%; $n=1170$) and ethnically diverse (20.2% White, 41.4% Black, 33.5% Hispanic, and 4.8% other). All females who met adjudication and age requirements were eligible to participate. Table 1 displays the characteristics of the sample. More information on the rationale for the original Pathways to Desistance study can be found in Mulvey et al. (2004); for complete details of study methodology, including the study design, recruitment, and a description of the full sample, consult Schubert et al. (2004).

Procedures

Names of eligible adolescents (based on age and adjudicated offense) were provided by juvenile courts in each locale. Adolescents were contacted by research assistants following their initial arrest and were informed about the study; if youth showed interest in participating, youth assent and parental consent were obtained. Baseline interviews were

administered within six weeks of the initial arrest. Follow-up interviews were conducted annually or bi-annually (every six months for the first three years of the study and every twelve months thereafter) for a period of seven years. Participants were interviewed in their homes, in public places in the community, or within facilities (for those youth who were confined to a facility). Data were collected via interviews loaded on laptop computers in which all measures and skip patterns were programmed. Trained interviewers read all items aloud and respondents could either answer verbally or non-verbally with a keypad if they chose. Honest reporting was strongly encouraged and confidentiality assured through an agreement with the Department of Justice. The study participation rate (the number of participants enrolled divided by the number attempted for enrollment) was fair (67%). The retention rate of the study was very good at 91% through the follow-up period. For greater detail on enrollment and retention refer to Schubert et al. (2004).

Measures

Demographic Variables

The study controlled for age, race/ethnicity, gender, and interview site at the time of recruitment. These variables were selected, because they tend to be associated with depression and offending behavior. Older adolescents tend to offend less than younger adolescents (Hirschi and Gottfredson, 1983). Females also tend to offend less than males (Dodge, Coie, and Lynam, 2006), and females tend to experience higher rates of depression than males (Hankin et al., 1998). Furthermore, a higher proportion of ethnic minority youth are incarcerated than white youth (Desai, Falzer, Chapman, and Borum, 2012). Age was used as a continuous variable calculated based on birth date and interview date. Participants' races were recoded to create the following dichotomous categories—Black v. White, Hispanic v. White, and Other (multi-racial) v. White. For the interview site, Philadelphia was used as the reference group.

The reference group for gender was male using a dichotomous gender variable (0=male, 1=female).

Depressive Symptoms

Participants' depressive symptoms were measured using a subscale of the Brief Symptom Inventory (BSI), a 53-item self-report inventory (BSI; Derogatis and Melisaratos, 1983). The BSI includes nine subscales that assess different symptom constellations: depression, obsessive-compulsive, interpersonal sensitivity, anxiety, phobic anxiety, hostility, paranoid ideation, somatization and psychoticism. The subscales of the BSI have good test-retest reliability ($r=.68-.91$) and internal consistency ($\alpha=.71-.85$) in the initial study (Derogatis and Melisaratos, 1983; Skeem, Schubert, Odgers, Mulvey, Gardner, and Lidz, 2006). The BSI is generally consistent with the theoretical pattern of the Minnesota Multiphasic Personality Inventory (Derogatis and Melisaratos, 1983) and most researchers view the BSI as a good measure of general psychological distress and psychopathology (Benishek et al., 1998; Boulet and Boss, 1991).

The present study specifically used the depression subscale, a seven-item scale that assesses feelings of depression experienced in the past week. Participants were asked to rate the extent to which they have been bothered in the past week by various symptoms (e.g., "I feel hopeless about the future") from 0=not at all to 4=extremely. The participant's responses at the baseline interview were used for depression analyses. The depression subscale had good internal consistency in the present research ($\alpha=0.81$).

Optimism for the Future

Youths' optimism for the future was measured using the Perceptions of Chances for Success measure that was developed based on the work of Menard and Elliott (1996) to determine an adolescent's perception of his or her future success as an adult. Items include questions that assess adolescents' perceived likelihood of and investment in several areas of achievement (i.e. having a good job or career). The scale specifically measures perception of chances for work, family, and law-abiding behavior. This measure includes two subscales: 1) Aspirations for Success, which assesses how important the goal is to the participant, and 2) Expectations for Success, which assesses the youth's perceptions of his or her chances to achieve the goal. Participants respond to 14 questions via a five-point Likert scale ranging from 1=Not at all important/Poor to 4=Very important/Excellent. For the purpose of our analyses we used data from the baseline interview for this measure. The reliability of each subscale

was examined independently; aspirations for future success ($\alpha=0.81$) and expectations for success ($\alpha=0.67$).

Self-Reported Offending (SRO)

A modified version of the Self-Reported Offending measure (SRO; Huizinga, Esbensen, and Weiher, 1991) was used to assess participants' accounts of their involvement in antisocial and illegal activities. The SRO includes 24 items that capture the adolescents' involvement in a variety of crimes (i.e. "Have you shot someone?" and "Have you forced someone to have sex with you?"). Furthermore, after each item, follow-up questions are triggered to collect extra information on the reported offense (i.e. "How old were you the first time you did this?" and "How many times have you done this in the past year?"). The follow-up questions identify the age of onset, whether the crime was committed in the past six months or prior, and whether the crime was committed in a group or alone.

We used the variety score, which assesses the number of different offenses that the participant engaged in. For this study, the variety score was calculated using the proportion of endorsed items divided by the number of questions asked. We then calculated the sum of the proportions at each of the time points (baseline, 6 months, 12 months, 18 months, 24 months, 30 months, 36 months, 48 months, 60 months, 72 months, and 84 months) to represent the variety of reoffending that occurred within the seven years following the youths arrest.

Results

Descriptive Statistics

Participant's average levels of depression were fairly low, with participants reporting only "a little bit" of depression symptoms in the past week. However, 7.2% ($n=97$) of youth reported a large enough amount of depression symptoms to warrant a clinical diagnosis. To examine gender differences in initial depression symptoms, an independent samples T-test was performed. Results of the T-test revealed that female participants experienced significantly higher mean levels of depression on average than male participants [$t(223)=-2.207, p=.028$]. See Table 1 for a summary of the descriptive data.

Association between Depressive Symptoms and Reoffending Behavior

The study used linear regression analyses to evaluate whether baseline levels of depression symptoms predict the variety of reoffending behavior within seven years following the initial arrest, controlling for age, race, gender, and

Table 2

Mediation Model of Depression on Reoffending through Expectations for Future Success (Model 2; N=1344).

	Step 1	Step 2	Step 3
Phoenix ^a	.072	-.195**	.065
Age	-.020	-.032	-.021
Race			
Black ^b	-.069	-.192**	-.080
Hispanic ^b	-.085	-.139*	-.101
Other ^b	-.083	-.101	-.114
Female ^c	-.286***	.130*	-.270***
Expectations For Future Success			-.086**
Depression	.101**	-.174***	.084**

Notes: ^aReference group for recruitment site is Philadelphia. ^bReference group for race is White. ^cReference group for gender is male. Step 1 regresses Reoffending on Depression, controlling for the listed covariates. Step 1 is equivalent to Model 1. Step 2 regresses Expectations for Future Success on Depression, controlling for the covariates. Step 3 regresses Reoffending on Depression and Expectations for Future Success. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 3

Mediation Model of Depression on Reoffending through Aspirations for Future Success (N=1347).

	Model 1	Model 2	Model 3
Phoenix ^a	.072	-.116**	.061
Age	-.020	-.000	-.021
Race			
Black ^b	-.069	-.077	-.073
Hispanic ^b	-.085	-.050	-.096
Other ^b	-.083	-.057	-.119
Female ^c	-.286***	.093*	-.276***
Aspirations to have work, family, and law			-.110**
Depression	.101**	-.174***	.100**

Notes: ^aReference group for recruitment site is Philadelphia. ^bReference group for race is White. ^cReference group for gender is male. Dependent variable in Models 1 and 3 is reoffending. Dependent variable in Model 2 is Aspirations for Future Success (mediator). * $p < .05$, ** $p < .01$, *** $p < .001$.

interview site. The results revealed a significant positive association between depression symptoms at baseline and reoffending behavior seven years later ($B = .101$; $p = .001$). That is, participants who had a greater number of depressive symptoms at baseline tended to engage in a greater variety of offenses within the seven years after their arrest than those with fewer depressive symptoms. Female participants were significantly less likely to reoffend than male participants ($B = -.286$; $p < .001$). Race and interview site were not

significantly associated with reoffending. See Step 1 in Table 2 and Model 1 in Table 3 for the unstandardized coefficients from these analyses.

Optimism for the Future as a Mediator of the Depression and Reoffending Association

Having established a relation between depression and reoffending, we next sought to explain this association. We tested two aspects of optimism for the future as mediators of this association: expectations for success and aspirations for success. Mediation analyses examine how a third variable (in this case, the two subscales of optimism for the future) may explain an association between two variables (depression and reoffending). To demonstrate that mediation has occurred, one has to meet three criteria: 1) demonstrate a significant association between the independent variable (depression) and the dependent variable (reoffending behavior), 2) demonstrate a significant association between the independent variable (depression) and the mediator (optimism for the future), and 3) demonstrate a significant association between the mediator (optimism for the future) and the dependent variable (reoffending behavior) controlling for the independent variable (depression). If the inclusion of the mediator variable reduces the association between the independent variable and the dependent variable, a partial mediation has occurred.

Expectations for Success

A mediation analysis was conducted to assess whether adolescents' expectations of future success at baseline explain the association between baseline symptoms of depression and reoffending behavior that occurred within the seven years following participants' initial adjudication. Having already demonstrated a relation between depression and reoffending, we next examined how baseline levels of depression predicted baseline expectations for success. A significant negative association was found between depression at baseline and expectations of future success at baseline ($B = -.174$; $p < .001$). Thus, participants with greater depression symptomatology at baseline were more likely to have lower expectations of future success than those with fewer depression symptoms. Gender, race, ethnicity, and interview site were controlled for in this analysis. Of the control variables, only race was significantly associated with expectations to succeed. Specifically, Black ($B = -.192$; $p = .007$) and Hispanic ($B = -.139$; $p = .028$) youth tended to report lower expectations for success than white youth.

Next, to demonstrate an association between expectations of future success and reoffending (controlling for baseline levels of depression), we ran a multiple linear regression

analysis. Results from this analysis revealed that expectations of future success at baseline significantly and negatively predicted self-reported offending seven years later, controlling for initial depression symptomatology ($B=-.086$; $p=.002$). Lower levels of expectations of future success were associated with a greater variety of reoffending behavior seven years later. Participants with low expectations of future success at baseline were more likely to re-offend seven years later than those with more optimistic views of their expectations for future success. The inclusion of the “expectations of future success” variable in the full model was found to reduce the association between baseline depression and later reoffending ($B=.084$; $p=.006$), revealing a partial mediation effect. This shows that expectations for future success partially explain the relation between baseline depression symptomatology and later reoffending. The Sobel’s test was significant, ($t= 2.77$, $p=.005$), confirming the mediation. See Table 2 for the coefficients from this series of analyses.

These results suggest that depression can negatively affect the way juvenile delinquents think about their likelihood of attaining future success. Adolescent offenders who experience symptoms of depression may perceive fewer opportunities in school and work settings in their future. In turn, those youth with lowered expectations for the future were more likely to engage in a greater variety of reoffending behavior.

Aspirations for Success

After determining that adolescents’ expectations of future success explain the association between symptoms of depression and reoffending behavior we wanted to run the same analyses for the adolescents’ aspirations for success. Similarly, we ran a mediation analysis to assess whether adolescents’ aspirations of future success at baseline explain the association between baseline symptoms of depression and reoffending behavior that occurred within the seven years following participants’ initial adjudication. Having already demonstrated a relation between depression and reoffending (Step 1), we next examined how baseline levels of depression predicted baseline aspirations for success (Step 2). Using linear regression, we found no significant association between depression at baseline and aspirations of future success at baseline ($B=-.003$; $p=.894$). This means that depression does not significantly influence adolescents’ aspirations of future success; therefore, aspirations of future success does not mediate the relation between depression and offending behavior. However, recruitment site and gender were significantly associated with aspirations of future success. Specifically, participants in Phoenix

had lower aspirations of future success than those in Philadelphia ($B=-.116$; $p=.005$). Interestingly, female participants tended to have greater aspirations than male participants ($B=.093$; $p=.044$).

Discussion

The present findings reveal that depressed adolescent offenders may be at greater risk for reoffending than non-depressed offenders, in part due to their lowered expectations for future success. Thus, addressing the depression symptomatology of juvenile offenders appears to be an avenue to reduce reoffending behavior. This underscores the importance of providing rehabilitative services in juvenile detention facilities, given that adolescent offenders are more likely to suffer from depressive symptoms (Teplin, Abram, McClelland, Dulcan, and Mericle, 2002) than the general population of adolescents. One possible solution is to screen all youth who enter detention facilities for depressive symptoms. In addition investments should be made in mental health resources, such as therapy to treat depression symptoms, as this may reduce recidivism rates among adolescent offenders.

Additionally, we found that although adolescent offenders’ depressive symptoms were not associated with their *aspirations* for success, they were associated with their *expectations* for success. Aspirations for success focus on whether youth find certain life goals to be important and expectations for success focus on whether they think those life goals are attainable. We conclude from this finding that depression does not seem to influence how youth value important goals; rather, depression appears to be more important in influencing whether youth believe they can *attain* the goals they find important. It would seem that depression influences adolescents’ self-efficacy, making them question their abilities to reach important milestones in life, such as earning a good living, getting married, etc. A delinquent youth may find a goal important, but not believe he/she can achieve that goal. This difference in belief seems to be the critical factor in reducing reoffending behavior. This finding reveals how important it is for adolescent offenders to believe they can accomplish the goals they find important. It appears that helping adolescent offenders believe they can accomplish their life goals may break the depression-offending cycle and help them reduce future offending behavior. However, it is important to recognize that the present sample focused on serious adolescent offenders by design; therefore, the findings cannot be generalized to all adolescents. Future research should examine the effectiveness of

interventions targeting depression and future thoughts at reducing recidivism among juvenile offenders.

In conclusion, our results suggest that adolescent offenders who experience symptoms of depression may perceive fewer opportunities to achieve important life goals and, therefore, have lower expectations for their future. Importantly, these lowered expectations appear to increase one's risk of reoffending. To better help offenders, the justice system must first acknowledge the importance of treating internalizing problems, rather than focusing exclusively on externalizing behaviors. The juvenile justice system tends to focus more on the external behaviors that adolescent offenders present rather than internal behaviors, which may be less evident. Methods that encourage youth to perceive their future more positively could help decrease criminal behavior. Programs that emphasize successful re-entry strategies and provide resources to give a smooth transition into the community post-arrest are likely to be most successful. Although it is difficult to completely remove all symptoms of depression, it is possible to encourage youth to think and feel more hopeful about their future; this appears to be an important avenue for intervention.

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