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Expecting the unexpected? Expectations for future success among adolescent first-time offenders

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ABSTRACT OF THE THESIS

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Although future expectations are consistently linked to juvenile delinquency, whether or not these expectations change contingent on behavior remains unclear. In addition, few studies have considered the role an official arrest plays in changing the expectations an adolescent holds for his future. The current study (1) examines the reciprocal relations between self-reported delinquency and adolescent future expectations to graduate from college, to have a successful job or career, and to stay out of trouble with the law, and (2) evaluates the reciprocal relations between re-arrest and future expectations. To address these questions, a sample of 1,166 male juvenile offenders were recruited after their first arrest and followed for 12 months. We find partial support for our prediction that educational, occupational and behavioral expectations will influence behavior, but also that behavior will influence future expectations. In addition, our results suggest that re-arrest predicts changes in expectations for staying out of trouble, but has no effect on educational and occupational expectations.

INTRODUCTION

Although many adolescents engage in delinquent behavior, not all youth are caught and subsequently arrested. An adolescent's first formal contact with the justice system is a significant life event, and is a unique predictor of continued delinquency and future arrests. Some argue that first arrests should reduce the likelihood of future arrests, as this unpleasant experience will discourage continued antisocial behavior (Smith & Gartin, 1989). Unfortunately, first arrests may instead promote continued delinquency and police contact (Liberman, Kirk & Kim, 2014), and researchers speculate this may be because a first arrest increases monitoring from police and other legal actors. Regardless of the reason, because an adolescent's first arrest may signify a period of heightened vulnerability to future criminal behavior and future arrests, it is important to consider the various traits, attitudes and external factors that reduce or enhance delinquent behavior following a first arrest.

One attitude important to consider is the expectations an adolescent holds for his future. Prior research finds that adolescents who anticipate positive future outcomes engage in behaviors that make it more likely they will achieve these goals. For example, adolescents who are confident they will meet their expectations for their futures engage in less drug use (Harris, Duncan & Boisjoly, 2002), report fewer problem behaviors (Chen and Vazsonyi, 2011) and associate less with delinquent peers (Jackman & MacPhee, 2015). Few studies, however, have evaluated these expectations among youth who have formally come into contact with the justice system. On one hand, optimistic expectations may deter continued delinquent behavior following a first arrest, and motivate adolescents to get back on track towards their goals. On the other hand, a first arrest may lead an adolescent to question the likelihood of meeting his future goals. Adolescents who continue to commit crimes or who are rearrested may lower their expectations

if meeting their goals appears unlikely. The current study evaluates the role that future expectations play in promoting or reducing delinquency the year after an adolescent's first arrest. We also consider how delinquency shapes these expectations the year following an adolescent's first arrest by modeling the reciprocal relations between these two variables. Finally, the current study assesses which aspect of delinquency, self-reported or official re-arrests, predict future expectations. This multi-method approach will help to evaluate if delinquent behavior alters future expectations, or rather, official sanctions from the justice system

CHAPTER 1: RELATIONS BETWEEN FUTURE EXPECTATIONS AND ADOLESCENT BEHAVIOR

Previous literature demonstrates that holding optimistic expectations for the future should indeed reduce delinquent behavior following an adolescent's first arrest. Markus and Nurius' (1986) conceptualization of *possible selves* emphasizes the important influence that one's goals and expectations have on developmental outcomes. Possible selves represent an individual's idea of what they might become, what they would like to become, and what they are afraid of becoming, which motivates and directs behavior (Markus & Nurius, 1986). Adolescents pursue their hoped-for representations, and avoid their feared representations. Oyserman and Markus (1990) examined the link between possible selves and delinquency by interviewing approximately 200 delinquent and non-delinquent youth between the ages of 13 and 16. Adolescents were asked to report on their future expectations by describing their hoped-for, expected, and feared selves for the following year. The most common possible self for non-delinquent youth was "getting along in school" but was only the fourth most frequent response for the most delinquent sample. Whereas non-delinquent youth generated "having friends" as the third most frequent expected self, negative expected possible selves were the third most frequent response for the most delinquent youth (e.g., junkie, depressed, alone). Thus, delinquent youth reported more negative expected selves compared to non-delinquent youth. These findings highlight a clear association between involvement in delinquent activities and the expectations an adolescent holds for his or her future.

Additional work since Oyserman and Markus (1990) has replicated the link between expected selves and delinquency. For example, Newberry and Duncan (2001) examined the link between future expectations and delinquency among a sample of primarily White high school

students between the ages of 14 and 18. Participants were provided with a list of negative and positive self-descriptors (e.g., college graduate) and indicated how probable it is that the description would apply to them in the future. Indeed, negative possible selves predicted more delinquent behavior (e.g. lying, substance use, fighting, etc.) and positive possible selves predicted less delinquent behavior, similarly suggesting that a negative view of the future is related to delinquent behavior.

Expectations are not inherently positive, and unfortunately some adolescents report pessimistic future expectations. One recent study evaluated the relation between feared-possible selves (i.e., who adolescents fear becoming), negative peer behaviors, and violent delinquency (Pierce, Schmidt & Stoddard, 2015). Analyses included 176 seventh grade public school students, and found evidence for a direct relation between feared delinquency and self-reported violent behavior. Specifically, youth who reported delinquent feared selves (e.g., "expelled" or "violent") reported higher levels of violent delinquency. In addition, feared delinquency moderated the relation between negative peer behaviors and violent delinquency, such that negative peer behaviors only predicted violent delinquency among youth who reported high and average levels of feared delinquency (Pierce et al., 2015).

Despite a number of studies supporting the link between a pessimistic future outlook and delinquent behavior, several use cross-sectional data (Oysterman & Markus, 1990; Newberry & Duncan, 2001; Pierce et al., 2015), limiting inferences of directionality. Without longitudinal data, it is unclear if an adolescent's pessimistic expectations are driving his behavior, or rather, if youth who engage in delinquency subsequently hold lower expectations. Several longitudinal studies have sought to address this issue. For example, two studies using data from the National Longitudinal Study of Adolescent Health (Add Health) evaluated the association between future

expectations and delinquency. Harris and colleagues (2002) argue that adolescents who hold low expectations for the future engage in riskier behaviors because they have "nothing to lose". As described by the theory of reasoned action (Fishbein & Ajzen, 1975), people consider the potential outcomes of a particular action before engaging in that behavior. Therefore, adolescents who hold low expectations for their future health and education will be more likely to engage in delinquent and risky behavior because they have less to lose compared to adolescents with high expectations for their future (Harris et al., 2002). Harris and colleagues evaluated future expectations using data from the first and second waves of Add Health. Specifically, the authors used data from approximately 10,000 adolescents between the ages of 13-18 at the wave 1 interview and these same adolescents were re-interviewed one-year later. The authors ensured that "nothing-to-lose" attitudes would precede the behavioral outcomes by evaluating the onset of risk behaviors such as sexual activity, selling drugs, and weapon use, rather than continued delinquent behavior. Adolescents reported on their perceived chances of living to age 35 and graduating from college as an indicator of future expectations. After accounting for several regression controls (e.g, mental health, cognitive ability, race, physical development), only the relation between a "nothing to lose" attitude and selling drugs remained. That is, youth were more likely to sell drugs if they felt they had "nothing to lose".

Chen and Vazsonyi (2011) also used the Add Health study to examine the relation between future-oriented cognitions and both minor (e.g., dishonesty to parents about whereabouts) and more serious problem behaviors (e.g., selling drugs) over an eight-year period. This study evaluated adolescents' perceived likelihood of going to college and desire to go to college, as well as adolescents' perceptions of future health and life expectancy. Adolescents reporting a more positive orientation towards their future engaged in fewer problem behaviors

(Chen & Vazsonyi, 2011). The Add Health dataset has also been used to assess longitudinal relations between future expectations and other categories of risk-taking, such as health behaviors. For example, 7th-12th graders who held more positive expectations for their futures report higher levels of physical activity and report smoking fewer cigarettes during young adulthood (McDade et al., 2011).

Although Add Health offers a large, nationally representative sample of adolescents, it is important to replicate these findings among other diverse samples. A recent analysis of over 800 ethnically diverse community adolescents between the ages of 12 and 14 indicated that adolescents' future expectations were related to perceptions of risk six months later (Jackman & MacPhee, 2015). Adolescents who reported more optimistic views of their futures (e.g., they would graduate from college, they would have a good job, etc.) were more likely to perceive risky behaviors as risky. Holding optimistic views about the future was also associated with lower reports of peer delinquency six-months later (Jackman & MacPhee, 2015), suggesting that they spent less time with delinquent peers. Not only do positive expectations for the future deter harmful behaviors, but they also encourage prosocial behaviors. For example, 8th grade students who viewed their futures more positively (i.e., indicated optimistic beliefs regarding their chances for graduating from college, having a well-paying job, remaining healthy) reported higher levels of competence, positive self-worth and self-efficacy among other indicators of positive youth development during ninth grade (Schmid, Phelps & Lerner, 2011).

Despite a clear and consistent link between future expectations and delinquent behavior, one limitation in this research is that few studies use samples of adolescents who were actually arrested *because* of their delinquent behavior. One notable exception is Iselin and colleague's (2012) evaluation of future expectations among a sample of serious adolescent offenders, the

majority of whom had been arrested for a felony offense. Their analyses revealed that youths' expectations for success predicted how often they engaged in behaviors that corresponded with those goals (Iselin, Mulvey, Loughran, Chung & Schubert, 2012). For example, having high expectations for success in work at one time-point predicted obtaining a legal job at the following time-point. In addition, ratings of expectations were quite high. When asked what their expectations were for staying out of trouble with the law, the median response for most age groups was "very good". These data suggest that many delinquent youths not only expect to meet a number of goals, but also that these expectations uniquely predict behavior over time among this high risk sample. This study did not, however, consider how an adolescent's behavior may alter expectations over time.

Longitudinal research has predominantly treated an adolescent's future expectations as a cause of behavior, rather than the effect of one's behavior. This is surprising, considering reciprocal relations between attitudes and behavior have historically received much attention within psychological science. Rosenberg and colleagues (1989) demonstrated the problems associated with assuming attitudes precede behaviors when evaluating the relation between self-esteem and school grades. Although legislative bodies had already established task forces to promote self-esteem in an effort to improve school performance, Rosenberg and colleagues found soon after that it was actually school performance that was boosting self-esteem and that the task force's efforts were misguided. Although current research suggests that raising expectations should reduce delinquent behavior, few studies have considered the reverse to be true: reducing delinquent behavior raises an adolescent's expectations. Attempting to motivate and encourage future expectations may not effectively reduce delinquency if one's behavior is primarily driving one's future expectations.

Several theoretical perspectives suggest that an adolescent's behavior should in fact influence his future expectations. For example, Expectancy Value Theory proposes a range of factors that influence expectations for success, among which are an adolescent's prior experiences and one's self-concept of abilities (Eccles et al., 1983, Wigfield & Eccles, 2002). Indeed, most developmental theories treat the individual as an active agent in their own development, which applies to selecting, pursuing and re-evaluating goals (Heckhausen, Wrosch, & Schulz, 2010). The Motivational Theory of Life-Span Development (Heckhausen et al., 2010) stresses the importance of choosing goals that are adaptive and tangible as well as deciding when it is appropriate to strive for certain goals. Whether or not a goal is adaptive partially depends on whether the goal can be realistically attained in the present environment, and if that goal does not have negative consequences for other goals (Heckhausen et al., 2010). Although motivational theories are rarely applied within delinquent samples, these theories may serve as a useful framework for understanding adolescent future expectations. Although an adolescent may expect to achieve a particular goal (e.g., graduate from college) he may re-evaluate this expectation based on prior experiences (e.g., he drops out of high school). Similarly, an adolescent who has high expectations for the future but continues to engage in delinquency may in turn adjust his or her future goals.

Some empirical evidence suggests a reciprocal relation may exist. Among inner city youth, adolescents who reported problem behaviors experienced a decrease in positive future expectations nine-months later, suggesting that an adolescent's behavior may influence his or her expectations (Dubow et al., 2001). Beal and Crockett (2010) examined how future-orientated cognitions predicted goal-orientated activities and educational attainment among a primarily White, middle-low income community sample of adolescents in 7^{th}, 8^{th} and 9^{th} grade. The

authors also tested the reciprocal effects, and found evidence for a bidirectional relation between expectations and engagement in relevant activities, such that adolescents who participated in extracurricular activities experienced increases in occupational expectations one-year later. These findings similarly suggest that an adolescent's expectations are sensitive to feedback based on their own behavior and decisions.

Whether or not an adolescent's delinquent behavior predicts expectations for the future requires further empirical research. One possibility is that adolescent behavior does not drive future expectations, but rather, the experience of an arrest prompts an adolescent to reconsider his future plans. Because few studies have evaluated expectations for the future among adolescents who've actually been arrested, this distinction remains unclear. Adolescents who continue to receive the formal "label" as a juvenile delinquent may experience differential treatment from parents, teachers and peers which could affect one's expectations, in comparison to youth who remain under the justice system's radar.

Present Study

The current study builds on prior research by assessing the longitudinal relations between expectations for the future, self-reported delinquency and re-arrest. We examined associations between expectations for the future and self-reported delinquency every six-months for one year, among a sample of first-time juvenile offenders. We restricted our analyses to three specific expectations: to graduate from college, to have a successful job or career, and to stay out of trouble with the law. This decision was made in light of prior research which also used domain-specific (e.g., college, law) future expectations (Chen & Vazsonyi, 2011; Iselin et al., 2012). Although other studies have conceptualized future expectations more broadly by using reports of future life expectancy, we were interested in evaluating specific goals that represent the primary

tasks during the transition from adolescence to adulthood. In addition, by using these three indicators we could assess if different patterns emerge depending on whether the goal is short-term (e.g., staying out of trouble) or long-term (e.g., graduating from college, having a successful career).

We expect bi-directional, longitudinal associations between all domains of expectations and re-offending at both the six-month and twelve-month interviews, controlling for prior levels of both variables. Overall, we predict that adolescents who hold a more pessimistic view of the future at the initial interview will be more likely to re-offend six months later. In addition, adolescents who self-report higher levels of delinquency will report lower expectations for their future six-months later. Finally, we evaluate the role re-arrest plays in predicting future expectations. Using official re-arrest data, we expect that low expectations will be associated with re-arrest, but also, individuals who are re-arrested will report lower expectations.

CHAPTER 2: METHODOLOGY

Participants

Data were drawn from the Crossroads Study, a longitudinal study of 1,216 male first-time low level (misdemeanor) offenders who are involved in the juvenile justice system. Participants were between 13 -17 years old at baseline (*M* age = 15.29) and were interviewed at 6 and 12 months after their first official arrest for a variety of offenses including vandalism (17.5%), theft (16.7%) and possession of marijuana for personal use (14.8%). Data were collected from youth at three sites: Philadelphia, Pennsylvania, Jefferson Parish, Louisiana, and Orange County, California. This sample is reflective of the overrepresentation of minority youth in the system and consists of Latino (46.8%), African American (36.9%), Caucasian (14.8%) and Other (2.5%) youth.

Procedures

The Institutional Review Board (IRB) at the three sites approved all study procedures. Participants provided assent and their parents signed consent forms before the interviews were conducted. Upon obtaining consent, youth completed an interview a maximum of six weeks after the disposition hearing for their first arrest, and follow-up interviews approximately six and twelve months after their initial processing. Face-to-face interviews with the youth ranged from 2–3 hours and were recorded using a secure computer-based program. Interviews were conducted at participants' homes or other locations convenient for the participants, such as local coffee shops and restaurants or in a facility if the participant was incarcerated. Participants had the option to respond to questions using a keypad so their responses could remain private. All interview responses are protected by a Certificate of Confidentiality issued by the Department of Justice which protects participants' privacy by exempting their responses and identity from

subpoenas, court orders, or other types of involuntary disclosures. Interviewers explained in detail the purpose of the Certificate of Confidentiality before beginning the interview, and reminded participants again before asking sensitive questions, such as those about reoffending. Although participants answered a comprehensive set of questionnaires, only the measures detailed below were used in the subsequent analyses.

Measures

Expectations for the future. At the baseline and follow-up interviews, participants completed the 14-item Perceptions of Chances for Success measure (adapted from Menard & Elliot, 1996). This measure assesses how important a particular goal is (aspirations, e.g., "How important is it to you to stay out of trouble with the law?"), as well as perceived chances of achieving that goal (expectations, e.g., "How likely is it that you will stay out of trouble with the law?") using a five-point Likert scale ranging from "Not at all important/Poor" to "Very important/excellent" with higher scores indicative of more optimistic aspirations and expectations for the future. Analyses were limited to the three of the seven items from the expectations subscale: (1) graduating from college (2) having a good job or career and (3) staying out of trouble with the law.

Delinquency. Youth also completed the Self-Report of Offending scale (SRO; Huizinga, Esbensen, & Weihar, 1991) at all time points. The 24-item questionnaire measures whether the participant engaged in 24 different types of criminal activity over the past six months (e.g., "In the past six months, have you entered or broken into a building to steal something?"). This analyses uses the variety of offending score, which is the total count of the different types of delinquent behaviors the youth endorsed, indicated by a yes or no response. This variable was subsequently coded as a proportion (variety score) by dividing the number of endorsed items by

the number of total response options. These variety scores are highly correlated with measures of seriousness of antisocial behavior, yet are less subject to recall bias than are self-reports of frequency of antisocial behavior, as such, they are frequently used within criminological research (see Osgood, McMorris, & Potenza, 2002; Hindelang, Hirschi, & Weis, 1981). Higher scores on this scale indicate engaging in more types of criminal activity.

Official Arrest Records. Official court records were collected to evaluate filed petitions at the 6-month and 12-month follow-up interviews. A dichotomous variable to indicate whether or not the youth was re-arrested in the 6-months preceding the follow-up interview was used in the analyses. Approximately 18% of youth were re-arrested at the six-month interview, and 16% of youth were re-arrested at the twelve-month interview.

Covariates. Youth self-reported on demographic information at the baseline interview. Age, race (dummy coded variable comparing White to Latino, White to Black, and White to 'Other' youth) and parent education were included as covariates as prior research demonstrates that expectations for the future are influenced by these demographic variables (Massey et al., 2008). Participants reported on the highest level of education obtained by either of his parents which was used as a proxy for socioeconomic status. A dummy variable was created to compare youth with parents who did not graduate from high school (30%) to youth whose parents earned a high school diploma (32%), and to youth whose parents had obtained more than a high school diploma (38%). In addition, the literature consistently demonstrates that self-reported offending varies by age (Blumstein, Cohen, Harrington, 1988).

Plan of analyses

Longitudinal associations between expectations, self-reported delinquency and re-arrest were assessed with cross-lagged panel models using Mplus 7.31 (Muthén & Muthén, 2015).

Because a large percentage (36%-51.9%) of youth did not report engaging in illegal behaviors on the SRO variety score at each follow-up interview, the baseline, six-month and twelve-month follow-up SRO were left censored at zero. As a result, the current analyses uses the WLSMV estimator (weighted least squares with mean and variance adjustment) which can be used with both censored and dichotomous (i.e., re-arrest) outcome variables. In line with prior research, model fit was evaluated using the following indicators: χ^2, the comparative fit index (CFI), and the root-mean-square error of approximation (RMSEA). CFI values above .90 and RMSEA values less than .08 represent acceptable fit (Hu & Bentler, 1999). Due to some cases missing data on demographic variables, the final sample size was 1,166.

The conceptual model used to evaluate the reciprocal relations between expectations and SRO can be found in Figure 1. First, reciprocal relations between each future expectation (college, job and law) and self-report of offending were evaluated, creating a total of three cross-lagged models. Each cross-lagged panel model contained six-month stability paths within construct (e.g., self-report of offending at baseline predicting self-report of offending at six-months) as well as one-year relative stability paths (e.g., college expectations at baseline predicting college expectations at one-year). These paths reduce the six-month stability coefficients and improve model fit, a method used in prior analyses (see Cui, Donnelan & Conger, 2007; Klimstra, Akse, Hale, Raaijmakers & Meeus, 2010). In addition, we account for concurrent correlations between constructs observed at the same time point (e.g., expectations at baseline correlated with self-report of offending at baseline). Finally, cross-paths between the variables assess the effect of expectations on re-offending as well as re-offending on expectations. All demographic covariates (age, race and parent education) were controlled for at baseline reports of re-offending and future expectations.

Next, we evaluated the reciprocal relations between future expectations and re-arrest at six and twelve months (Figure 2). Because our sample was limited to first-time offenders, we could not include a "baseline" measure of arrest, as all youth had been arrested once within the past six-months of their baseline interview. We therefore evaluated the cross-lag paths between the six-month and twelve-month follow-up interviews, and treated the baseline expectation variables as a covariate in addition to age, race, and parent education.

CHAPTER 3: RESULTS

Descriptive statistics of all study variables can be found in Table 1. In line with Iselin et al. (2012), on average, adolescents were confident that they would meet their future expectations. For example, the average expectation for graduating from college at the baseline interview was a 3.46, falling between the two response choices of "good" and "very good," and this pattern was consistent across the other two expectation variables. When evaluating the relation between the covariates and baseline reports of expectations and self-report of offending, we find several differences. Participants with one parent who earned a degree beyond high school reported higher expectations for graduating from college (ß=.13, *p*=.002) and higher expectations for having a good job or career (ß =.09, *p*=.02) compared to youth with parents who did not earn a high school diploma. These participants also reported higher levels of offending (ß=.09, *p*=.025), yet lower reports of re-arrest (ß=-.16 *p*=.004) In addition, younger adolescents reported higher expectations for graduating from college (ß=-.08, *p*=.008) and higher expectations for staying out of trouble with the law (ß=-.08, *p*=.009). Black youth reported higher expectations for graduating from college (ß=.26, *p*<.001), for having a successful job or career (ß=.16, *p*=.001), and for staying out of trouble with the law (ß=.25, *p*<.001) compared to white youth. Black youth also reported lower levels of self-reported delinquency compared to white youth (ß=-.12, *p*=.014).

Longitudinal Associations between Expectations for the Future and Self-Reported Offending. Each of the three cross-lag models fit the data well (Law Expectations: $\chi^2(26)$ = 35.317, *p*=.11; CFI=.992, RMSEA=.018 (90% confidence interval [.00, .03]); College Expectations: $\chi^2(26)$ = 38.88, *p*=.05; CFI=.990, RMSEA=.021 (90% confidence interval [.00, .03]); Job Expectations: $\chi^2(26)$ =57.17, *p*<.001; CFI =.976, RMSEA=.032 (90% confidence interval [.02, .04]).

Parameter estimates for all pathways for each model are provided in Table 2. To summarize our findings, we found a fully reciprocal relation between expectations for staying out of trouble with the law and self-reported offending. Between the baseline and six-month interview, adolescents who had higher expectations for staying out of trouble with the law reported lower self-reported offending six-months later. However, adolescents who reported lower levels of offending also reported higher expectations six-months later. This same pattern was found between the six-month and twelve-month interview.

A slightly different pattern emerged for college and job expectations. Although there was a negative relation between baseline college expectations and six-month self-report of offending, such that individuals with higher expectations reported lower re-offending, self-reported offending did not predict college expectations. Interestingly, between the six-month and twelve-month interview, although lower levels of self-reported offending predicted higher expectations for graduating from college, six-month college expectations did not predict twelve-month self-reported offending. We found this same pattern emerge when evaluating an adolescent's expectations for having a successful job or career and self-reported offending (see Table 2).

Longitudinal Associations between Expectations for the Future and Re-Arrest. Next, we ran cross-lag models using the six-month and twelve-month interview data (Figure 2). Again, all three models fit the data well (Law Expectations: $\chi^2(17) = 38.073$ p=.002; CFI=.958, RMSEA=.033 (90% confidence interval [.019, .047); College Expectations: $\chi^2(17) = 21.02$, p =.23; CFI =.995, RMSEA =.014 (90% confidence interval [.00, .03]); Job Expectations: $\chi^2(17)$ =39.19, p =.002; CFI =.963, RMSEA =.034 (90% confidence interval [.02, .05]). Table 3 provides the parameter estimates for each of the three models. Overall, low expectations in the three domains all predicted re-arrest. However, re-arrest predicted lower expectations for staying

out of trouble with the law but did not predict lower expectations for graduating from college or for having a successful job or career.

CHAPTER 4: DISCUSSION AND CONCLUSIONS

Adolescence is a developmental period of immense cognitive growth which prompts individuals to think about the possibilities for their futures. Youth who are confident in their ability to meet their expectations are likely to engage in behaviors that bring them closer to their goals. Although a large body of literature supports the link between future expectations and delinquency, few studies have evaluated future expectations among samples of adolescents who've actually been arrested. Fortunately, our data confirms Iselin et al.'s (2012) finding that not all delinquent youth doubt their ability to meet their future expectations. In fact, the majority of first-time offenders in this study reported that their chances of achieving their academic (57.2%), career (67%), and behavioral (49.5%) goals were "good" or "very good" at their initial interview. We also found some evidence that expectations in these domains predicted future delinquency, supporting the finding that among delinquent youth these expectations are nevertheless meaningful. Reminding influential adults such as parents and teachers that juvenile arrests and optimistic expectations are not mutually exclusive may be an important way to keep them invested in the adolescent's future.

In addition to replicating the established link between future expectations and delinquency, the current study also considered how an adolescent's own behavior may in turn influence his future expectations. We confirmed that expectations for staying out of trouble indeed influence self-reported offending the year following a first arrest. That is, youth who *expect* to stay out of trouble do indeed commit fewer types of offenses. Prior research, however, frequently treats adolescents' expectations as a predictor of future behavior, rather than an outcome of prior behavior. In light of cognitive development during adolescence that promotes advanced, multi-dimensional and hypothetical modes of thinking, we proposed that expectations

are likely to change contingent on their behavior. In support of this hypothesis, we found that adolescents who engaged in more crime reported *lower* expectations for staying out of trouble at a later time. This suggests that adolescents learn from their behavior, and delinquent youth who continue to engage in crime may indeed experience declines in future expectations, creating a cycle of re-offending and pessimistic expectations. Some youth may need to see their behavior improve and recognize that they are capable of staying out of trouble before they will raise their expectations.

To our knowledge, this was the first study to consider the role that re-arrest plays in predicting future expectations over time. An arrest is an important life event that carries enormous implications and may lead an adolescent to question his ability to meet his expectations for graduating from college, having a job, and staying out of trouble. For this reason, we expected that subsequent arrests would likely affect an adolescent's expectations for his future in these domains. Partially confirming this hypothesis, subsequent arrests resulted in lowered expectations for staying out of trouble with the law. This is expected in light of research demonstrating that arrests do indeed predict continued arrests, even after accounting for criminal behavior (Liberman, Kirk & Kim, 2014). One possibility is that as adolescents continue to come into contact with police, they feel there is little they can do to improve their chances of preventing future encounters. Adults such as parents and teachers may consider encouraging adolescents to maintain expectations for staying out of trouble after an arrest to help reduce delinquent behavior, and subsequently raise expectations.

Importantly, we found no evidence that re-arrests affect future expectations for having a good job or for graduating from college. We were somewhat surprised by this finding, because a juvenile arrest may very well serve as a life event that hinders one's chances of obtaining his

future goals. In line with labeling theories, prior research demonstrates that the formal label of a "delinquent" has implications for adolescents' education and career. For example, Bernburg and Krohn (2003) found that contact with the justice system reduce the odds of attending school, and subsequently graduating from high school, even after accounting for delinquent behavior. One possibility is that an adolescent's first arrest is a more important predictor of expectations, and subsequent arrests do not have an additive effect. Although we could not evaluate this hypothesis with our data, this explanation seems less likely considering most adolescents reported confident expectations of achieving their future goals at the baseline interview, and we would expect these scores to be lower if a first arrest had such a detrimental effect. Overall, adolescent expectations for their future education and career appear resilient even in the face of an arrest.

In addition, self-reported delinquency did not predict educational or career expectations in the first six-months following a first arrest, although expectations did predict their future behavior. This stresses the importance of adults such as parents and teachers reinforcing optimistic expectations in the months following a first arrest. One criticism of this approach is that adults may be setting youth up for disappointment, for example, if adolescents raise their expectations but do not meet their goals. A recent study, however, compared the effects of having low expectations versus having ambitious expectations but not meeting them. The authors found that the benefits of having short-term optimistic educational expectations out-weighted the costs associated with not meeting these expectations. Although youth who fell short of their ambitious expectations reported some negative consequences, they still reported higher educational attainment compared to individuals with less ambitious expectations (Villarreal, Heckhausen, Lessard, Greenberger & Chen, 2015). Encouraging optimistic expectations even

after a major setback may be beneficial, regardless of whether youth excel in working towards these expectations.

Despite the strengths on the current study, several limitations should be addressed in future research. Although our findings are relevant to a diverse sample of low-level male juvenile delinquents, they may not generalize to females or to more serious juvenile offenders. We are also limited in that we could not evaluate an adolescent's future expectations *prior* to their first arrest. Evaluating future expectations prior to and after a first arrest would be the most effective way to evaluate the role a first arrest plays in altering the expectations an adolescent holds for his future. That said, using data from a sample of first time adolescent offenders restricts variability in prior arrest records, and allows us to evaluate future expectations before some youth have become entrenched in the justice system. In addition, there are some inherent limitations to the questionnaire we used to assess future expectations. Although we choose items that represent important developmental tasks (e.g., attending college and having a successful job or career), participants did not have the opportunity to self-report a future goal that is most salient from his perspective. One possibility is that other future expectations (e.g., obtaining a scholarship for college, playing a professional sport) play an even more important role predicting subsequent behavior, and vice versa. We also acknowledge the lack of specificity in the future expectations items used in the current analyses. For example, the item that assesses the likelihood of "having a good job or career" may carry a different meaning for different adolescents, and thus vary in their degree of motivational success. Finally, although we found significant cross-lag paths in our models, the strength of these associations appear to be weak. However, as noted by Klimstra and colleagues (2010), cross-lag analyses include stability paths within constructs, concurrent correlations and cross-lag paths between constructs, leaving less

variance for the cross-lag paths to explain (Cui et al., 2007). Therefore, the relatively small coefficients are not especially surprising. Despite these limitations, we nevertheless think our findings contribute to our understanding of future expectations among juvenile delinquents.

In 2014, over one million individuals under the age of 18 were arrested in the United States. Because juvenile arrests are not as uncommon as one may expect, understanding the psychosocial consequences of being arrested is worth continued research. Delinquency research is oftentimes focused on the risk factors, such as hostile family relationships or delinquent peers, that encourage continued criminal offending, and less research focuses on the factors that keep adolescents out of crime. However, promoting optimistic future expectations, as well as providing adolescents with the tools necessary to meet these goals may help to keep them out of continued trouble. By encouraging adolescents to think about their futures, we may be able to help them succeed in the present.

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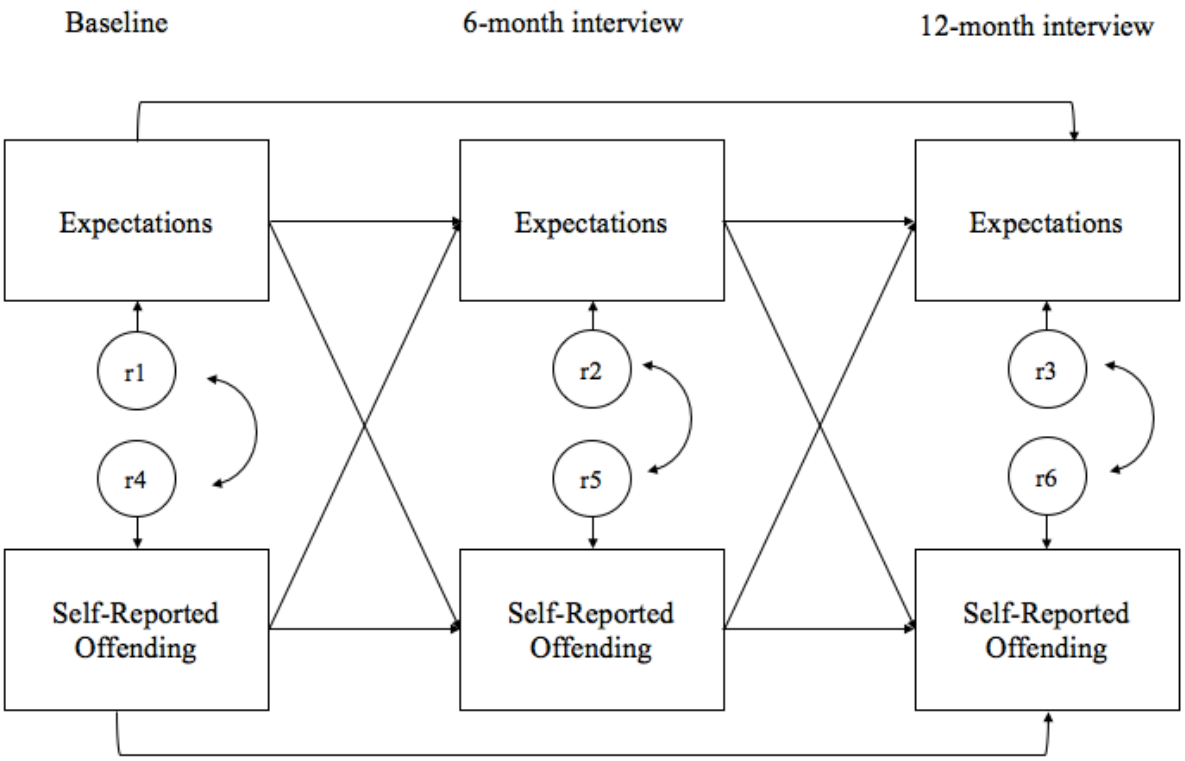

Figure 1.

Hypothesized cross-lag panel model assessing longitudinal relations between future expectations and self-reported offending (covariates excluded from figure)

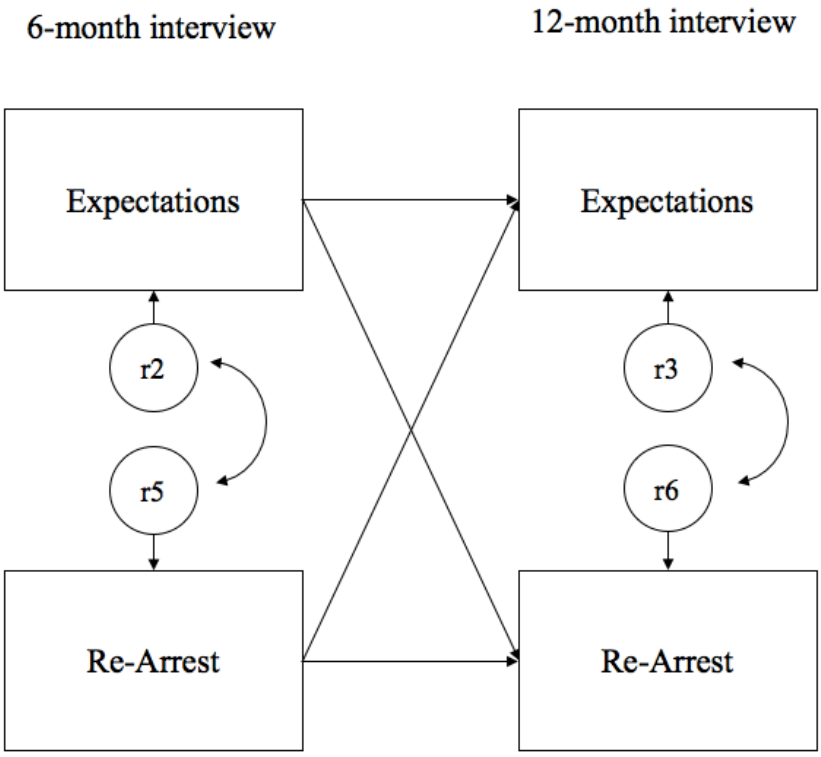

Figure 2.

Hypothesized cross-lag panel model assessing longitudinal relations between future expectations and re-arrest (covariates excluded from figure)

Table 1.

Descriptive Statistics of Study Variables

Variable	*M (SD)*	Possible Range	Observed Range
Legal Expectations			
Baseline	3.92 (1.16)	1-5	1-5
6-mo interview	3.94 (1.12)	1-5	1-5
12-mo interview	3.96 (1.12)	1-5	1-5
College Expectations			
Baseline	3.46 (1.32)	1-5	1-5
6-mo interview	3.52 (1.23)	1-5	1-5
12-mo interview	3.61 (1.27)	1-5	1-5
Job Expectations			
Baseline	3.66 (.95)	1-5	1-5
6-mo interview	3.74 (.89)	1-5	1-5
12-mo interview	3.84 (.91)	1-5	1-5
Self-Report of Offending			
Baseline	.06(.008)	0-1	0-.71
6-mo interview	.058(.009)	0-1	0-.75
12-mo interview	.05(.009)	0-1	0-.58

Table 2.

Longitudinal Associations between Expectations for the Future and Self-Report of Offending

Model	Coefficient	Std. error	P-value
Legal Expectations			
Stability Paths			
EXP Stability BL-6mo	0.39	0.03	$p<.001$
EXP Stability 6mo-12mo	0.29	0.02	$p<.001$
EXP Stability BL-12mo	0.25	0.03	$p<.001$
SRO Stability BL-6mo	0.47	0.02	$p<.001$
SRO Stability 6mo-12mo	0.53	0.02	$p<.001$
SRO Stability BL-12mo	0.17	0.03	$p<.001$
Cross-Lag Associations			
BL EXP > 6mo SRO	-0.14	0.03	$p<.001$
6mo EXP > 12mo SRO	-0.08	0.03	$p=.004$
BL SRO > 6mo EXP	-0.10	0.03	$p=.001$
6mo SRO > 12mo EXP	-0.10	0.03	$p<.001$
Within-time Correlated Residuals			
BL EXP with BL SRO	-0.25	0.03	$p<.001$
6mo EXP with 6mo SRO	-0.20	0.03	$p<.001$
12mo EXP with 12mo SRO	-0.15	0.03	$p<.001$
College Expectations			
Stability Paths			
EXP Stability BL-6mo	0.54	0.02	$p<.001$
EXP Stability 6mo-12mo	0.41	0.02	$p<.001$
EXP Stability BL-12mo	0.26	0.03	$p<.001$
SRO Stability BL-6mo	0.48	0.02	$p<.001$
SRO Stability 6mo-12mo	0.54	0.02	$p<.001$
SRO Stability BL-12mo	0.17	0.03	$p<.001$
Cross-Lag Associations			
BL EXP > 6mo SRO	-0.13	0.03	$p<.001$
6mo EXP > 12mo SRO	-0.02	0.03	*ns*
BL SRO > 6mo EXP	-0.002	0.03	*ns*
6mo SRO > 12mo EXP	-0.08	0.03	$p=.002$
Within-time Correlated Residuals			
BL EXP with BL SRO	-0.20	0.03	$p<.001$
6mo EXP with 6mo SRO	-0.17	0.03	$p<.001$
12mo EXP with 12mo SRO	-0.09	0.03	$p = .008$

Job Expectations

Stability Paths			
EXP Stability BL-6mo	0.41	0.02	$p<.001$
EXP Stability 6mo-12mo	0.34	0.02	$p<.001$
EXP Stability BL-12mo	0.24	0.03	$p<.001$
SRO Stability BL-6mo	0.48	0.02	$p<.001$
SRO Stability 6mo-12mo	0.55	0.02	$p<.001$
SRO Stability BL-12mo	0.17	0.03	$p<.001$
Cross-Lag Associations			
BL EXP > 6mo SRO	-0.12	0.03	$p<.001$
6mo EXP > 12mo SRO	-0.02	0.03	*ns*
BL SRO > 6mo EXP	-0.04	0.03	*ns*
6mo SRO > 12mo EXP	-0.07	0.03	$p=.02$
Within-time Correlated Residuals			
BL EXP with BL SRO	-0.17	0.03	$p<.001$
6mo EXP with 6mo SRO	-0.16	0.03	$p<.001$
12mo EXP with 12mo SRO	-0.12	0.03	$p=.001$

Note: BL = baseline interview; 6mo = 6-month interview; 12mo = 12-month interview; EXP = expectations measure; SRO = Self-Report of Offending

Table 3.

Longitudinal Associations between Expectations for the Future and Re-Arrest

Model	Coefficient	Std. error	P-value
Legal Expectations			
Stability Paths			
EXP Stability 6mo-12mo	0.31	0.03	*p<.001*
EXP Stability BL-12mo	0.26	0.03	*p<.001*
Re-Arrest Stability 6mo-12mo	0.43	0.05	*p<.001*
Cross-Lag Associations			
6mo EXP > 12mo Re-Arrest	-0.13	0.04	*p<.001*
6mo Re-Arrest > 12mo EXP	-0.09	0.04	*p*=.02
Within-time Correlated Residuals			
6mo EXP with 6mo Re-Arrest	-0.07	0.04	*ns*
12mo EXP with 12mo Re-Arrest	-0.02	0.05	*ns*
College Expectations			
Stability Paths			
EXP Stability 6mo-12mo	0.43	0.02	*p<.001*
EXP Stability BL-12mo	0.26	0.03	*p<.001*
Re-Arrest Stability 6mo-12mo	0.44	0.05	*p<.001*
Cross-Lag Associations			
6mo EXP > 12mo Re-Arrest	-0.15	0.05	*p<.001*
6mo Re-Arrest > 12mo EXP	-0.05	0.03	*ns*
Within-time Correlated Residuals			
6mo EXP with 6mo Re-Arrest	-0.05	0.04	*ns*
12mo EXP with 12mo Re-Arrest	-0.10	0.05	*p*=.03
Job Expectations			
Stability Paths			
EXP Stability 6mo-12mo	0.34	0.02	*p<.001*
EXP Stability BL-12mo	0.23	0.03	*p<.001*
Re-Arrest Stability 6mo-12mo	0.43	0.05	*p<.001*
Cross-Lag Associations			
6mo EXP > 12mo Re-Arrest	-0.10	0.04	*p*=.03
6mo Re-Arrest > 12mo EXP	-0.06	0.04	*p*=.09
Within-time Correlated Residuals			
6mo EXP with 6mo Re-Arrest	-0.09	0.04	*p*=.04
12mo EXP with 12mo Re-Arrest	-0.06	0.05	*p*=.24

Note: BL = baseline interview; 6mo = 6-month interview; 12mo = 12-month interview; EXP = expectations measure.