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Assessing Factors in Adolescent Adjustment as Precursors to Recidivism in Court-Referred Youth

Richard S. Balkin¹, Janeen Miller¹, Richard J. Ricard¹, Roberto Garcia¹, and Chloe Lancaster²

Abstract
Court-referred youth participated in an intervention program and completed the Reynolds Adolescent Adjustment Screening Inventory. Reoffending rates were tracked for 2 years. Antisocial behavior, anger control, and emotional distress were influencing characteristics for recidivism. The Reynolds Adolescent Adjustment Screening Inventory may serve as a tool to identify the likelihood of reoffending for adolescents.

Keywords
adolescents, recidivism, adjustment, conduct, antisocial

Adolescence encompasses a time of transition, which includes biological, psychological, and social changes (Alestalo, Munnukka, & Pukuri, 2002). Mason, Hitch, and Spoth (2009) hypothesized that negative affect, substance use, and peer deviance were factors contributing to ongoing emotional, behavioral, and social problems in later adolescence. Tolerance of peer deviance among adolescents and low levels of empathy toward parents were noted predictors of ongoing deviant behaviors (Weisner & Silbereisen, 2003). Van Domburgh, Loeber, Bezemmer, Stallings, and Stouthamer-Loeber (2009), in their exploration of predictors of desistance and persistence in early onset offenders engaging in antisocial behaviors, discussed the possibility of the influence of genetics on adolescent antisocial behaviors. The researchers mention that genetics may be more connected to the development of serious persistent offenders versus those adolescents who persistently engaged in moderately serious offenses.

Additional social factors also tend to play a role in adolescents engaging in antisocial behaviors. Patchin, Huebner, McCluskey, Varano, and Bynum (2006) found that adolescents who observed violence within their communities were more inclined to engage in antisocial behaviors themselves. Mahoney and Stattin (2000) were interested in the use of structured versus unstructured social activities with the adolescent population. The researchers placed adolescents in groups where they were involved in either highly structured leisure activities or low-structured leisure activities. They found

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that participation in highly structured leisure activities was linked to a low level of antisocial behavior and participation in low-structured leisure activities was linked to higher levels of antisocial behaviors. The link between lack of structure and antisocial behaviors was found to affect the adolescent boys more than the adolescent girls in this study.

A community organization is one place an adolescent may find structured activities. Gardner and Brooks-Gunn (2009) found that although youth organizations may not significantly decrease exposure to community violence, significant decreases in the frequency of community violence were found in communities with a larger variety of organized activities available to adolescents. This results in fewer incidents available for adolescents to observe antisocial behavior, in turn affecting the social behaviors of the adolescent (Patchin et al., 2006). Gardner and Brooks-Gunn (2009) also found that communities with a larger variety in types of organized activities resulted in increased youth participation. Therefore, the continued development and implementation of highly structured programs within community organizations may aid in the quest to decrease adolescent antisocial behavior. Structured programs may be a life-changing component for adolescents who are on a path toward engaging in antisocial behaviors into adulthood.

Research conducted on adolescents who display antisocial attributes often include some discussion on the development of empathy to the adolescent tendency to engage in antisocial behaviors. Frick (2009) addressed the importance of callous–unemotional traits in identifying youth who were more likely to display severe and persistent antisocial behavior. Adolescents identified with callous–unemotional traits appeared uncaring toward others, limited in expressing emotions openly, and inconsiderate of logical–natural consequences of behavior. Thompson and Gullone (2008) studied the effects of parent attachment on the development of empathy in adolescents. The researchers studied parental attachment and used the humane versus inhumane treatment of animals as an indicator of the level of empathy. They found that positive parental attachment was associated with higher levels of empathy experienced, and attachment alone was a significant predictor of empathy. In addition to empathy, the role and development of moral disengagement as explored by Hyde, Shaw, and Moilanen (2010) was also discussed as a precursor experience to adolescent displays of antisocial behavior. Hyde et al. found that moral disengagement mediated the association between neighborhood impoverishment and antisocial behavior as well as the association between empathy and antisocial behavior. Therefore, either a low socioeconomic status or displaying a low level of empathy for others can result in an adolescent engaging in antisocial behaviors.

As mentioned, adolescents who engage in antisocial behaviors tend to display thoughts, behaviors, and characteristics that are indicative of low levels of empathy. In understanding Dodge’s social information processing (SIP) theory, an adolescent’s cognitions on the interpretation of social cues, their response to and evaluation of those social cues, directly affect social behaviors, specifically the intensity of aggression (Hyde et al., 2010). Environments that lack the social cues that display positive empathy within interpersonal interactions are therefore at risk in fostering the development of antisocial behaviors and characteristics.

Liau, Barriga, and Gibbs (1998) further analyzed the cognitive attributes of adolescents who engaged in antisocial behaviors. In a study analyzing the connection between self-serving cognitive distortions with overt and covert antisocial behaviors, self-serving cognitive distortions were described as being associated with antisocial behaviors. Adolescents who engage in antisocial behaviors were described as experiencing one or more of the four categories of self-serving cognitive distortions: (a) self-centered, (b) blaming others, (c) minimizing/mislabeling, and (d) assuming the worst. Overt antisocial behaviors were described using examples such as high levels of aggression where covert antisocial behaviors were described as stealing (Liau et al., 1998). Liau et al. (1998) explained that children who display characteristics of overt antisocial behaviors are less likely
to comply with parental requests and tend to engage in more aversive and coercive behaviors, but they are more likely to respond to treatments when compared with children who display more covert antisocial behaviors. Liau et al. found that overt cognitive distortions evidenced a significant path to adolescents displaying overt antisocial behaviors and covert cognitive distortions evidenced a significant path to adolescents displaying covert antisocial behaviors.

Researchers have also found an interest in whether adolescent antisocial characteristics change after experience in the court systems. Mulvey et al. (2010) studied whether adolescents who went through the court system for a serious offense would stop, decrease, increase, or maintain the same frequency of antisocial behaviors as previously engaged in prior to their court experience. They found that although they are limited in the ability to predict which of the adolescents will continue the antisocial behaviors, majority of the individuals in the study showed a considerable decrease or complete stop in antisocial behaviors. This provides evidence that maintaining the rehabilitative nature (Binder, 1988) of the juvenile justice system may be beneficial.

The purpose of this study was to examine adolescent characteristics as they related to recidivism in court-referred youth. Studying the nature of recidivism among youth is challenging, given the nature of the population and the procedures in place to protect participants, particularly minors, in human subjects research. Extant research with this population is limited because of the numerous procedures necessary to obtain data, which include the following: (a) institutional review board approval from both the university and any cooperating facilities, (b) informed consent from a parent/guardian, and (c) assent from the participating youth.

Additionally, research with this population may present with methodological challenges. Recidivism is not a normally distributed variable. Most youth are not repeat offenders, and those that do repeatedly reoffend may do so numerous times. Thus, conventional parametric statistical procedures used to address naturally occurring continuous variables (e.g., regression) may not be appropriate. Another challenge is related to assessing timing of the offense, reoffense, and intervention. Interventions for court-referred youth do not necessarily come after the first offense because of the fact that some youth who are scheduled to attend court after their first offense may reoffend before their initial court appearance. Such occurrences are common and may present a confounding effect in evaluating early intervention strategies.

Method
Participants

Participants in this study consisted of 178 adolescent youth who were court-referred to a community-based intervention program to participate in a group-based counseling program consisting of conflict resolution skills, group processing, anger management, and academic and career counseling. In total, 52% (n = 93) of the participants were male, compared with 47% (n = 84) female, with one missing. The average age for participants was 14.78 years (SD = 1.71); the participants were primarily of Latino/a ethnicity (86%, n = 153), followed by White (7.9%, n = 14), multiethnic (4.5%, n = 8), African American (1.1%, n = 2), and Asian (0.6%, n = 1).

Measures

The Reynolds Adolescent Adjustment Screening Inventory (RAASI) is a self-report inventory for adolescents from ages 12 to 19 years. The RAASI consists of four subscales evaluating antisocial behavior, anger control, emotional distress, and positive self. Thirty-two items reflecting thoughts, feelings, or actions are rated by the participant on a scale of 0 (never or almost never) to 2 (nearly all the time). Internal consistency reliability coefficients of the subscales range from .71 to .88 for Cronbach’s alpha. Test–retest reliability coefficients range from .83 to .89 (PAR, 2010). Evidence of relationships to other variables was addressed through strong correlations to the Adolescent
Psychopathology Scale and evidence of internal structure was evident through factor analysis (Jones, 2003).

**Procedure**

Court-referred youth were referred to a community-based program geared toward early intervention for offending youth. A parent/guardian provided consent for participation in the study. Youth provided assent. At the beginning of the program, youth were administered the RAASI. The program lasted 7 weeks and included group counseling and modules related to academic and career guidance, anger management, and conflict resolution, as well as a family counseling component with additional individual and family counseling provided as determined by program staff. During and after completion of the program, youth were tracked for reoffenses using court documentation for a period of 2 years.

Although the number of reoffenses is a naturally occurring variable, it was not normally distributed. The distribution was extremely positively skewed and leptokurtic and not correctable through transformation procedures. The median response for the participants was 0 reoffenses (n = 115). Therefore, to establish how adolescent adjustment relates to the potential to reoffend, the number of reoffenses was categorized into two groups: court-referred adolescents who did not reoffend (n = 155) and court-referred adolescent who reoffended one or more times (n = 63).

A multivariate analysis of variance (MANOVA) was conducted to examine adolescent characteristics as they related to recidivism in court-referred youth. MANOVA tests differences between two or more groups across two or more dependent variables (Dimitrov, 2009). As the number of reoffenses was converted to a nominal variable, MANOVA was used to evaluate group differences—adolescents who reoffended versus adolescents who did not reoffend—across each of the RAASI subscales. Post hoc analysis consisted of discriminant analysis to examine how the compared groups differed across some linear combination of the dependent variables (Dimitrov, 2009). In this case, comparisons of the adolescents who reoffended versus adolescents who did not reoffend could be compared across linear combinations of the RAASI subscales.

**Results**

A MANOVA was conducted using an alpha level of .05 on RAASI subscales across two groups: adolescents who did not reoffend after court referral and adolescents who reoffended after court referral. Power was adequate for this study. An a priori power analysis given an alpha level of .05, a moderate effect size, and sufficient power calculated at .80 (Cohen, 1988) yielded a minimal sample size of 54 to be necessary; the sample size for this study was 178. Descriptive statistics of the subscales across reoffending status are in Table 1. RAASI subscales were normally distributed and the homogeneity of covariance assumption was met. A statistically significant difference between reoffending status was evident, Wilks’s Λ = .93, F(4, 173) = 3.18, p = .015, indicative of a moderate effect size.

Given the significance of the model, a discriminant analysis was conducted as a post hoc analysis for the MANOVA. Table 2 provides the structure coefficients and the standardized discriminant function correlation coefficients. The discriminant function was significant, Wilks’s Λ = .93, $\chi^2(4) = 12.36$, p = .015. Both antisocial behavior and anger control loaded strongly on the latent variable and indicated a moderate to high positive relationship with the discriminant function. Although positive self and emotional distress had weak loadings on the discriminant function, emotional distress did have a strong negative relationship with the discriminant function as noted by the standardized discriminant function correlation coefficients (−.61). Thus, emotional distress is likely a function of antisocial behavior and anger control and therefore provides redundant information to the model. Centroid means for the discriminant functions indicated that higher scores in antisocial behaviors and anger control and lower scores in emotional distress
were notable among adolescents who reoffended (.36) than those who did not reoffend (−.20). As a result of this finding, the discriminant function was identified as conduct-disorder proneness.

Discussion

Although not a diagnostic tool, the RAASI can be used to screen court-referred adolescents and ascertain their likelihood of reoffending, despite receiving intervention. In our study, court-referred adolescents who had higher degrees of antisocial behavior and anger mismanagement were more likely to reoffend within 2 years of receiving an intervention program. The discriminant function was labeled conduct-disorder proneness as a result of the increased scores in antisocial behavior and anger control. Thus, reoffending adolescents may be more likely to engage in antisocial behaviors and have poorer anger control, which are similar characteristics to adolescents diagnosed with conduct disorder.

Children diagnosed with a significant disruptive behavioral disorder are often thought of as having poor prognoses, and therefore costly to society via their continued involvement with mental health agencies or the criminal justice system (Webster-Stratton & Reid, 2003).

However, the appropriate assessment and the selection of interventions that match the child’s needs are key to effective treatment. In such cases, children with disruptive behavioral disorders (such as oppositional defiant disorder or conduct disorder) can show positive response to treatment particularly in situations when parents are involved in the treatment planning (McMahon, Wells, & Kotler, 2006; Seligman & Reichenberg, 2007).

The 7-week intervention employed for our sample of court-ordered youth was designed to interrupt the cycle of repeat offending and the ultimate consequence of longer term adjudicated outcomes (including perhaps incarceration). The results of this study are significant in that they are consistent with previous research regarding the characteristic profile of children.

Table 1. Descriptive Statistics and Correlation Coefficients of RAASI Subscales

| Scale              | No Reoffense (n = 115) | Reoffending (n = 63) |  |  |  |
|--------------------|------------------------|----------------------| 2 | 3 | 4 |
| 1. Antisocial Behavior | 57.34 (13.51)          | 63.54 (12.74)        | 0.67* | 0.35* | 0.24* |
| 2. Anger Control    | 54 (12.21)             | 58.95 (11.51)        | .49* | .30* |
| 3. Emotional Distress | 54.28 (12.18)         | 54.05 (10.99)        | 0.45 |
| 4. Positive Self    | 50.37 (10)             | 51.31 (10.05)        |     |

Note. RAASI = Reynolds Adolescent Adjustment Screening Inventory. *p < .01.

Table 2. Correlation Coefficients and Standardized Function Coefficients for RAASI Subscales

<table>
<thead>
<tr>
<th>Scale</th>
<th>Correlation Coefficients With Discriminant Function</th>
<th>Standard Function Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Antisocial Behavior</td>
<td>0.64</td>
<td>0.83</td>
</tr>
<tr>
<td>2. Anger Control</td>
<td>0.56</td>
<td>0.73</td>
</tr>
<tr>
<td>3. Emotional Distress</td>
<td>-0.61</td>
<td>0.16</td>
</tr>
<tr>
<td>4. Positive Self</td>
<td>0.11</td>
<td>-0.04</td>
</tr>
</tbody>
</table>

Note. RAASI = Reynolds Adolescent Adjustment Screening Inventory.
exhibiting behaviors on a continuum of disruptive behavior disorders ranging from relatively mild oppositional defiant disorder, conduct disorder to antisocial personality disorder (American Psychiatric Association, 2000). Characteristically, these children show the presence of repetitive and persistent violations of basic right of others or violations of major age-appropriate societal norms and rules (Seligman & Reichenberg, 2007). Although the diversity of our adolescent sample and the lack of complete access to their adjudicated profiles limited the availability of important diagnostic distinctions for use in predicting the likelihood of reoffending (e.g., number of previous offenses), most relevant to the current study is the empirical identification of an assessment tool that has diagnostic value related to adolescent propensity to reoffend or be resistant to treatment (Seligman & Reichenberg, 2007).

In this regard, these results indicate that the RAASI as part of a multidimensional assessment strategy (Kazdin, 2002) may serve as a screener for the propensity of reoffending, as well as identifying levels of behavioral traits that might be targeted formatively during treatment planning and implementation. For example, preintervention use of the RAASI may be used to tailor interventions specifically to those with elevated scores on antisocial behavior and anger management scales. Although this point may seem tautological given that antisocial behavioral tendency is inherent in the criteria for the continuum of behavioral disorders (American Psychiatric Association, 2000), our results show that the scale scores on the RASSI are normally distributed whereas reoffending status is not. Thus, the considerable variability in diagnostic categories (e.g., severity, onset, number of previous offenses) may prove to merit the tenability and value of considering the RAASI as a tool for tailoring interventions to identified subgroups of clients. In specific, the results indicate positive interventions that focus on empathy and anger/impulse control might be increased with youth with specific elevations of these scores in pretreatment.

Future studies might address the limitations of this study by identifying a more complete profile of the offense histories of the clients; however, access to files, which may be sealed, may not allow this. The RASSI may have increased diagnostic validity in more formal and structured evaluation studies of adjudicated youth. In summary, the RASSI may be a useful preintervention screener, treatment-planning tool, and preliminary indicator of repeat offending for at-risk youth.

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