

# Probation Intensity, Self-Reported Offending, and Psychopathy in Juveniles on Probation for Serious Offenses

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This study examines the relationship between level of supervision by the juvenile probation officers (JPO) and an adolescent's offending, considering the characteristics of juvenile offenders (specifically, level of psychopathy). Data are taken from the Pathways to Desistance Study on a subset of 859 juvenile offenders. We found that the level of probation officer supervision was not consistently related to the juvenile's risk of recidivism, and level of supervision did not affect self-reported offending. However, risk level is consistently related to offending behavior, more so than the level of supervision and other characteristics of these youths. Level of psychopathy does not moderate the relationship of self-reported offending and level of supervision. These results highlight the need for more integration of risk assessment tools into juvenile probation practices and the possibility of devising methods to focus this practice to make it more effective.

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Juvenile probation is central to the operation of the juvenile justice system. It is the most common service provided in juvenile justice, and most adolescents either enter or exit the system under supervised probation. Given that over 1.5 million delinquency cases were processed in juvenile court in 2009,<sup>1</sup> what happens to adolescents on probation is not a trivial matter. Whether this ubiquitous practice helps or hinders adolescent development is a key factor in assessing the impact of involvement with the juvenile justice system.

Although juvenile probation officers (JPOs) often have much power to influence outcomes for youths at every stage of juvenile justice processing,<sup>2</sup> the def-

inition of good practice in juvenile probation is not clear. JPOs often function as gatekeepers for filtering youths to appropriate services, while ensuring that court orders are followed. As a result, their activities can include screening to determine processing, presenting evidence in cases, identifying suitable dispositions, advising judges on dispositions, providing aftercare services, and performing direct supervision and monitoring activities.<sup>2,3</sup> At a more global level, JPOs fulfill two roles: enforcement and case management.<sup>4,5</sup> Research suggests that most juvenile probation officers balance their activities across both areas.<sup>6</sup>

Efforts to examine empirically the impact of probation and its practices have been limited and not very encouraging. Meta-analyses of the impact found that, for high-risk offenders, routine probation produces only a small reduction in recidivism.<sup>7,8</sup> How much of this limited impact is attributable to an overloaded system is an open question. As Greenwood noted, "an overworked probation officer who sees a client only once a month has little ability either to monitor the client's behavior or to exert much of an influence over his life" (Ref. 9, p. 82). More information about customary probation practice and the effects of different approaches is clearly needed. In this article, we explore one aspect of JPO supervision: how certain offender characteristics are related

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to a JPO's monitoring practices and how the level of a JPO's involvement is related to self-reported offending in adolescents with serious offenses. In other words, do JPOs assigned to adolescent offenders with serious offenses seem to be focusing on the right offenders at the right time to have an effect on reoffending?

### Offender Characteristics and Probation Officers' Decision-Making

Best practices in juvenile justice promote individualized treatment,<sup>10</sup> with certain characteristics of the adolescent, such as psychosocial risks or protective factors, determining the case management option chosen.<sup>6</sup> This aspiration toward individualized interventions, however, often simply legitimates certain biases in referral or provision of services. Bridges and Steen,<sup>11</sup> for example, found that probation officers systematically attribute the offenses of African-American youths to internal character flaws and those of Caucasian youths to external environmental factors. These views are associated with differences in the types of interventions applied, with Caucasian youths more likely to receive rehabilitative services and African American youths the more severe sanctions. Recent research has been mixed, with some supporting the significance of unconscious racial stereotypes to juvenile probation officer attributions, showing higher expectations of recidivism for minority youth associated with stronger attitudes endorsing punishment.<sup>12</sup> Other studies have found that race did not exert a significant impact on decision-making and supervision among JPOs.<sup>6,13</sup>

The sex of the offender may also affect the application of discretion in probation practice. In a qualitative study of the attitudes of JPOs toward girls, Gaarder *et al.* found that JPOs generally believe that girls are more "troubled and troublesome" (Ref. 14, p. 558) and that this stereotype reduces options for treatment and services for girls in juvenile court. The JPOs knowledge of a juvenile's history of trauma or abuse may also be associated with treatment-oriented probation approaches.<sup>13,15</sup> In addition, the presence of substance use problems and other youth characteristics such as age, race, and sex were found to be related to the JPO's use of different methods of engagement (confrontational versus client-centered tactics) to encourage compliance with court supervision.<sup>16</sup>

One of the potentially most useful youth characteristics that could affect JPO behavior and decision-

making is the level of risk that an adolescent poses for reoffending. Risk factors associated with continued delinquency span multiple domains,<sup>17</sup> including individual (e.g., impulsivity, aggression, prior antisocial behavior), family (e.g., parent criminality), school (e.g., academic failure), peers (e.g., peer delinquency), and community context (e.g., neighborhood disadvantage). These risk characteristics are related across domains,<sup>18</sup> and they are dynamic, changing with age and context.<sup>19</sup> A careful consideration of risk for future offending could accomplish two important goals for JPOs: to identify juveniles who need the most attention and resource investment and to identify areas for targeted interventions.<sup>20</sup> Risk assessment provides the potential for matching the most intensive services to the highest risk offenders.<sup>21</sup>

Whether JPOs actually use the results of risk assessment to influence their case management decisions is an important question that has been the focus of recent study. Luong and Wormith<sup>22</sup> found that JPOs, when provided risk assessments, apply more intense supervision to high-risk offenders and align identified needs and intervention plans. Vincent and colleagues<sup>23</sup> also recently reported that JPOs are more likely to make referrals that matched youths' identified needs and adjusted levels of supervision after the implementation of a structured risk assessment tool. Much more of this type of work is needed before it is clear how risk assessment tools influence practice in juvenile justice more broadly.<sup>24</sup> It is not clear currently how well JPOs integrate risk level for reoffending or other case characteristics into their practice, outside of demonstration programs that introduce risk instruments into selected locales.

A final potentially powerful case characteristic that may influence a JPO's actions and decision-making is the perception of an adolescent as particularly resistant to change or not amenable to intervention. Like all human beings, JPOs may be influenced by labels<sup>25</sup> or offender prototypes,<sup>13</sup> and preconceived notions of what an offender might bring to the JPO-offender relationship can affect the dynamic of that relationship. Whether an adolescent is viewed as a psychopath based on a current or previous assessment (indicated in the case record) or on perceived notions derived from prototypical characteristics observed by the JPO, may be particularly powerful in this regard. Indeed, in a study of JPO perceptions about the prevalence of psychopathy among juve-

niles on their caseloads, the JPOs indicated that a relatively small percentage (11.5%) of the juveniles in their cases are psychopathic, but those who are perceived to be psychopathic are viewed as unchangeable by 54 percent of JPOs and unlikely to benefit from treatment (asserted by 40% of JPOs).<sup>26</sup> Although JPOs do not often officially evaluate for psychopathy, many of the traits associated with psychopathy would probably be evident from other aspects of a JPO's evaluation. Psychopathy is marked by traits of emotional detachment, including callousness, egocentricity, manipulation, impulsivity, and inability to maintain close relationships. The individuals possessing a large number of these traits are likely to be identified as particularly problematic<sup>13</sup> or difficult to treat.<sup>27</sup> Furthermore, scores on psychopathy assessment tools for juveniles have been shown to be moderately predictive of future violent behavior.<sup>28-30</sup>

Psychopathy could be a moderator of JPO decisions regarding supervision, setting the stage for a different calculus about offender characteristics, such as risk level, sex, and race. Whether JPOs might manage individuals identified as psychopathic differently was tested by Vidal and Skeem,<sup>13</sup> who used case vignettes to manipulate three factors: psychopathy, race, and history of abuse. This study indicated that JPOs' recommendations regarding intensive supervision and secure residential placements are weakly affected by the presence of psychopathy, as are their expectations that they will experience supervision difficulties with the offender. The presence of psychopathy was also weakly associated with the adoption of a stricter supervisory approach. Once again, more work on this topic is needed to see how this case characteristic might actually affect a JPO's actions.

In summary, juvenile probation practice may vary according to a range of juvenile characteristics. Understanding which and how youth characteristics affect JPO practices could shed light on useful areas for JPO training and contribute to methods that will improve practice. Improved practice and training are key to strengthening the overall effectiveness of probation in reducing recidivism.

In the current study, we examined the relations among offender characteristics, intensity of probation services, and self-reported offending in a sample of adolescents with serious offenses. We addressed three basic questions about how probation practices operate in two metropolitan areas: first, whether an

increase in the intensity of probation supervision is associated with a reduction in reported criminal offending; second, whether an increase in offending appears to be related to increased probation intensity; and third, whether having a higher number of psychopathic characteristics (either perceived or formally assessed), appears to moderate these relationships. In other words, are the relations between probation intensity and self-reported offending different for individuals who are considered psychopathic than for those who are not?

## Methods

### *The Pathways to Desistance Study*

In this study, we used data from the Pathways to Desistance study (hereafter, Pathways), a large, longitudinal study of adolescents with serious offenses from Maricopa County, Arizona, and Philadelphia County, Pennsylvania. The purpose of Pathways is to examine the mechanisms related to the reduction of antisocial activity within a group of adolescent serious offenders who are making the transition from adolescence into early adulthood.<sup>31</sup> One of the aims of Pathways is to understand more about how system-imposed sanctions and interventions may influence desistance or continued offending. This investigation of probation practices (the most common form of juvenile justice intervention) contributes to our understanding of the patterns and effects of service provision to adolescents with serious offenses.

Across both sites, 1,354 youth were enrolled in Pathways from November 2000 through January 2003. Enrollment criteria required potential participants to have been less than 18 years of age at the time of the study index offense and to have been found guilty of a serious offense (overwhelmingly, felony offenses, with a few exceptions for less serious property offenses, misdemeanor sexual assault, or misdemeanor weapons offenses). Enrollment of boys was limited to 15 percent drug offenders, to maintain a heterogeneous sample of those with serious offenses. However, all girls and all youths whose cases were being considered for trial in the adult system were approached if they met the age and adjudicated crime requirements. Additional details regarding the recruitment procedures and sample characteristics can be found elsewhere.<sup>32</sup>

Baseline interviews were conducted shortly after the participant's adjudication hearing in juvenile

court or the preliminary hearing in the adult system. Follow-up interviews were conducted every six months after the baseline interview for the first three years and annually thereafter through seven years.

Sample retention for Pathways was high at each follow-up, ranging from 84 to 93 percent (mean, 90%) of the full sample. Data for the current analyses included only the first three years (baseline and the first six biannual follow-up interviews), during which most of the juveniles were under the jurisdiction of the juvenile court.

Pathways procedures were reviewed and approved by Institutional Review Boards at the University of Pittsburgh, Arizona State University, and Temple University.

### Sample

The analyses reported here include a subset of 859 participants in Pathways. We excluded cases that were processed in the adult court for the study index petition ( $n = 244$ ), cases in which the juveniles stated that their race or ethnicity was something other than Caucasian, African-American, or Hispanic ( $n = 47$ ; excluded because the group was too small to detect effects), cases missing four or more of six possible interviews conducted in the first three years of follow-up ( $n = 40$ ), and cases missing specific variables of focus in this study (e.g., Psychopathy Checklist–Youth Version score;  $n = 164$ ).

### Measures

Three constructs are central features of the current analyses: level of probation services, reports of antisocial behavior, and individual juvenile characteristics (demographic, risk level, and psychopathy variables). The measures used for each of these are described below.

#### Probation Contact

Information regarding the prevalence and frequency of the subjects' interactions with their probation or parole officers are based on the adolescents' self-reports, including whether they were on probation in each recall period, the type of contact they had with their probation officers (i.e., face-to-face or by phone contact) and the frequency of each type of contact. The number of sessions was summed across semiannual time points to create an annual number of probation sessions (level of supervision) for each of the three years of observation.

#### Antisocial Behavior

Involvement in antisocial activities was measured with a modified version of the Self-Report of Offending Scale.<sup>33</sup> Participants reported if they had been involved in any of 22 aggressive or income-generating antisocial acts (e.g., whether they had "taken something from another person by force, using a weapon," "carried a weapon," "stolen a car or motorcycle to keep or sell," or "used checks or credit cards illegally"). Variety scores, a count of the number of different types of antisocial acts that an individual endorsed, were calculated for each recall period. Variety scores are widely used in criminology because they correlate highly with measures of seriousness of antisocial behavior, yet are less subject to recall bias than are self-reports of the frequency of antisocial behavior, which yield unreliable estimates for higher frequency behavior, such as drug selling.<sup>34,35</sup> Responses were reconciled and summed across semiannual time points to create annual variety scores for self-reported offending.

Relying on youths to self-report offending behavior is a common and valued method in criminology. A rich body of literature describes the strengths and weaknesses of both self-report and official measures of offending.<sup>36</sup> The conclusion reached by most researchers is that neither record-based nor self-reported involvement is without shortcomings, and both are necessary for accurate assessment of offending behavior. In the current study, we used only self-reported offenses, as they are a more accurate reflection of ongoing engagement in behaviors that have not yet been detected by the police.

#### Demographic Characteristics

Our models included several background characteristics measured at the baseline interview. These included demographic variables, including age (in years), race or ethnicity, and sex. These characteristics were included as covariates in the current analyses, given the previously noted research indicating their influence on JPO practices.

#### Level of Risk for Reoffending

A total risk score for reoffending was calculated for each participant from information reported at the baseline interview. This score was based on seven risk/need domains representing variables that are widely acknowledged to be linked to future offending: particularly, serious and violent delinquency, as well as some malleable factors that may be changed

by interventions. The domains include prior criminal behavior (e.g., early onset of offending, number of prior offenses), antisocial attitudes and beliefs (e.g., favorable attitudes toward violence and breaking the law), parental deviance (e.g., parental criminality and substance use), association with antisocial peers (e.g., delinquent peer behavior), school difficulties (e.g., suspensions or expulsions), mood and anxiety problems (e.g., depression), and substance use problems (e.g., drug or alcohol abuse). A detailed description of the Pathways measures that contributed to each risk/need indicator and the methods used to construct these indicators can be found in Mulvey *et al.*<sup>37</sup> For the current analyses, each of the seven risk/need indicators was converted to a binary score based on a median split (1, above median; 0, below median). A total risk score was calculated by summing the median split values across indicators, with values thus ranging from zero (lowest risk) to seven (highest risk). Although the JPOs did not have access to the risk score generated from the Pathways interview information, these scores are generated based on information that is routinely assessed by JPOs (e.g., family history, problems in school) as part of standard practice (see, for example, the Youth Level of Service/Case Management Inventory; Hoge and Andrews<sup>38</sup>). Thus, it is reasonable to assume that information reflected in the Pathways risk score may have influenced the JPO's management of the juvenile on probation.

### Psychopathy

Psychopathic characteristics were measured by the Psychopathy Checklist: Youth Version.<sup>39</sup> The PCL:YV is a 20-item rating scale for use in adolescents 13 years of age or older. Scores on each of the 20 items are based on two sources: an interview with the youth and charts and collateral information. The interview items assessed the youth's interpersonal style, past and current functioning, and the credibility of the information provided. Following the interview and a review of records or collateral information, the interviewer used a three-point ordinal scale to indicate how well each of the 20 items applied to the youth. Higher scores are indicative of a greater number and severity of psychopathic characteristics.

For the current analyses, participants were divided into two groups (high and low) based on the PCL:YV total score. Consistent with the work of others,<sup>40,41</sup> a cutoff score of  $\geq 25$  was used to define high psychop-

athy, and all others were placed in the low psychopathy group. With this cutoff, 13.5 percent of the sample included in the analyses fell into the high psychopathy group.

## Results

### Analysis Plan

The analyses addressed three questions using different regression approaches. First, we examined whether the level of self-reported offending was significantly associated with the level of probation services received within each of the three years. This analysis included controls for age, race, sex, and total risk score. Second, we examined whether the level of probation service received was significantly associated with the level of self-reported offending in each year, again controlling for the demographic characteristics and risk score. Our third question examined whether psychopathy moderated the statistical relationships tested in the first two sets of analyses. The question was whether the observed effects between probation sessions and self-reported antisocial activities operated differently in high- versus low-scoring psychopathy cases.

The dependent variables of interest in the above analyses were count variables (i.e., the number of probation sessions and the number of antisocial activities endorsed). Both a Poisson regression with the overdispersion method and a negative binomial approach were examined as potential analytic approaches. The Poisson regression approach was selected because it more closely fit the data.

Some participants spent part of each follow-up period in an institutional placement, and it is important to account for this time out of the community in making estimates of the effects of certain variables sensitive to these differences in community exposure time.<sup>42</sup> In these analyses, the amount of time out of the community arguably affects both the ability to engage in certain antisocial activities and the number of probation sessions received (since probation sessions are typically suspended during periods of institutional confinement). Thus, for all analyses, number of days in the community was specified as the offset term, to model the rate of each outcome, meaning that the analyses accounted for community exposure time (i.e., proportion of time spent in the community).

**Table 1** Descriptive Information ( $n = 859$ )

Characteristic	Mean	SD
Age	16.36	1.10
Risk score	2.58	1.75
Total sessions with JPO		
Year 1	18.61	34.13
Year 2	11.93	27.88
Year 3	6.34	19.52
	<i>n</i>	Frequency (%)
Male	719	84
Caucasian	198	23
African-American	390	45
Above PCL:YV cutoff	107	13
Risk scores		
0	118	14
1	155	18
2	157	18
3	152	18
4	140	16
5	95	11
6 or more	42	5

Table 1 shows descriptive information from the sample, including average age and risk score and frequencies of independent variables in the study.

**Is Level of Self-Reported Offending Related to Level of Probation Services Received?**

Tables 2 shows the results of the Poisson regression model with self-reported offending as the dependent measure and demographic variables, risk level, and number of probation sessions as predictor variables. These results indicate that, across the three years, self-reported offending in this study was significantly related to sex and the overall risk score. Males and higher risk adolescents were likely to report more offending. There was not, however, any independent effect from the level of probation supervision provided, as level of probation supervision did not emerge as predictive above and beyond the other characteristics tested.

**Table 2** Multivariate Poisson Regression Model: Self-Reported Offending as the Outcome

Variable in Full Model	Year 1			Year 2			Year 3		
	Estimate	95% CI	<i>p</i>	Estimate	95% CI	<i>p</i>	Estimate	95% CI	<i>p</i>
Age	-0.08	0.28-0.12	.45	-0.17	0.39-0.05	.12	-0.18	0.45-0.09	.20
Race									
Caucasian	0.17	0.69-0.36	.54	0.24	0.84-0.36	.43	0.51	1.21-0.19	.15
African American	0.35	0.86-0.15	.17	0.18	0.74-0.38	.52	0.12	0.82-0.59	.74
Male	0.91	-1.64 to -0.19	.01	1.04	-1.93 to -0.15	.02	0.97	1.97-0.03	.06
Total risk score	0.40	0.27-0.53	.00	0.35	0.22-0.49	.00	0.36	0.20-0.53	.00
Number of probation sessions	0.00	-0.00-0.00	.61	-0.00	-0.01-0.01	.65	-0.00	-0.02-0.01	.69

**Is Level of Probation Services Predicted by Level of Self-Reported Offending?**

Table 3 shows the results of the Poisson regression with number of probation sessions as the dependent measure and demographic variables, risk level, and level of antisocial behavior as predictor variables. There was less consistency in the relation between level of antisocial activity and level of probation services. In Table 3, we see that level of antisocial behavior was significantly related to level of probation services in Year 1 ( $p < .005$ ), but not in the subsequent years. Instead, age was most consistently related to level of probation services ( $p < .05$  in Year 2 and  $p < .0001$  in Year 3, and a trend in Year 1 at  $p < .06$ ). Younger adolescents received a higher level of probation services in all years. In addition, sex (being male) and race (being African American), were significantly related to higher levels of probation services in Year 3.

**Does Psychopathy Moderate the Effects Between Levels of Probation Services and Antisocial Behavior?**

The above models were run again for each year, testing both the main effect for psychopathy group (high or low) as well as an interaction with either level of antisocial activity or level of probation supervision. No statistically significant effects were found for either the interaction terms or the main effects, indicating that psychopathy did not moderate any observed relations between level of probation services and level of antisocial behavior.

**How Does the Total Risk Score Affect Self-Reported Offending and Level of Probation Services?**

Figures 1 and 2 illustrate the observed patterns between the risk levels and levels of probation services and self-reported offending. For the purposes of

**Table 3** Multivariate Poisson Regression Model: Probation Sessions as Outcome

Variable in Full Model	Year 1			Year 2			Year 3		
	Estimate	95% CI	<i>p</i>	Estimate	95% CI	<i>p</i>	Estimate	95% CI	<i>p</i>
Age	-0.14	0.14-0.00	.06	-0.37	-0.72 to -0.02	.04	-0.54	-0.74 to -0.35	.00
Race									
Caucasian	-0.08	0.34-0.50	.70	-0.09	0.99-1.18	.87	-0.01	0.62-0.65	.97
African American	0.28	0.64-0.09	.14	0.17	1.06-0.72	.71	0.54	-1.04 to -0.04	.03
Male	0.13	0.56-0.29	.54	0.89	2.26-0.49	.21	0.69	-1.37 to -0.02	.04
Total risk score	0.16	0.08-0.12	.76	0.08	0.16-0.32	.53	0.12	0.00-0.25	.06
Self-reported offenses	0.05	0.03-0.08	.00	-0.01	0.12-0.09	.80	-0.01	0.07-0.06	.78

these figures, the number of probation sessions attended and the variety score for each year have been divided by the number of days in the community for each year, to provide indicators of the intensity of probation supervision and the intensity of antisocial behaviors in a given year, essentially the variable that was considered in the Poisson regressions reported. Given the small number of cases at the highest level of risk (<1% of the cases at Risk Level 7), the categories for Risk Levels 6 and 7 have been combined.

As seen in Figure 1, there was a generally flat line, indicating the relation between the level of risk and the intensity of probation services for all three years. There was, however, a notable difference in levels of the intensity of probation services in the different years, with Year 1 having the highest intensity of services. As seen in the regression results, risk level was not associated with the level of probation services provided, and fewer services were provided as the sample aged.

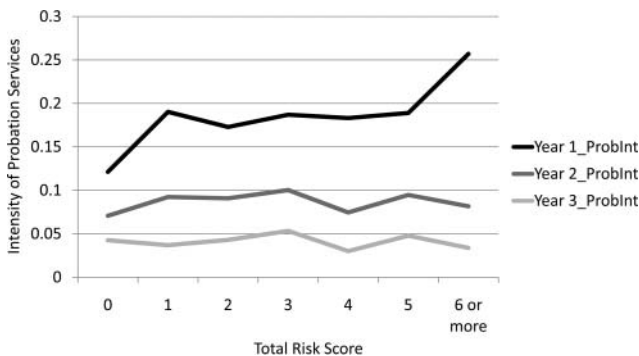
Figure 2 indicates that risk level was consistently related to the intensity of antisocial activities in all three years. Higher risk levels were associated with higher intensity of antisocial behavior. Higher levels of antisocial activity were seen in Year 1 than in the other two years.

**Discussion**

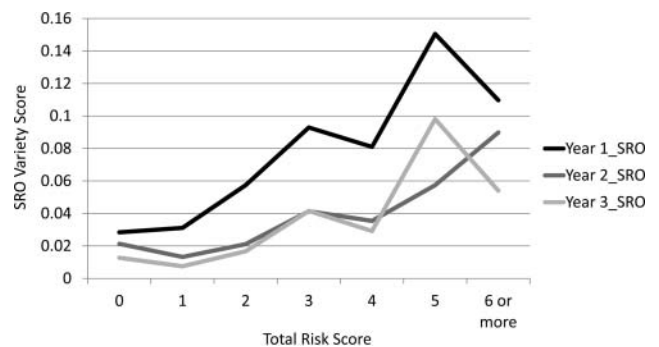
We examined the relations among offender characteristics, intensity of probation services, and self-reported offending in a sample of adolescents with serious offenses. This report is a description of the associations among these variables in a large sample of offenders. Several notable findings emerged.

First, the level of probation supervision did not independently predict the level of antisocial behavior in any of the three years tested, over and above age, sex, race, and risk level. Level of antisocial behavior in this sample was consistently a function of sex and risk level, with increased probation services appearing to have no impact on the level of offending after static characteristics related to offending in general were considered. Thus, it appears that within a one-year time span, level of JPO supervision had no clear association with reduced or increased antisocial behavior of youthful offenders. This finding is consistent with extant research that has found a high correspondence between risk level and offending,<sup>43</sup> as well as limited research indicating that probation supervision does little to change reoffending among high-risk youths.<sup>8</sup>

Posing the question in the reverse provides an alternative view of these associations. In other words,



**Figure 1.** Risk level and probation intensity (ProbInt).



**Figure 2.** Risk level and self-reported offending (SRO) variety score.

do levels of supervision differ based on the characteristics of the youths? In these analyses, we find that JPOs appear to react to youths' characteristics, but that the most influential characteristics change slightly over each of the years observed. Age is the only youth characteristic that was consistently related to the level of probation services provided. Within each year, younger adolescent offenders received a higher level of probation services. This finding could indicate that, although offenders are younger at the time of their involvement with the court for a serious offense, probation officers make more of an effort to connect and monitor them for an extended period. Age, however, does not appear to serve as a proxy for overall risk or need for attention, since it consistently appears as a predictor over and above the calculated risk scores.

Level of antisocial activity, sex, race, and risk level were also related to level of supervision, but not consistently across each year examined. The level of reported antisocial activity had a significant association with the level of probation services received in Year 1. During that period, adolescents with higher levels of self-reported offending received significantly more probation supervision. It is unclear whether this pattern was the result of information the probation officer had at the time of starting supervision, such as the nature of the adolescent's prior level of offending, or a product of the JPO's experience and observations during this period. If the probation officers were simply giving more attention to juveniles who were getting into more trouble, this would be both a logical and expected outcome.

In Year 3, the most influential predictors of the level of probation services in addition to age were sex, race, and risk score. In that year, the focus of probation services seemed to have shifted to more of a concern with younger African-American males with higher risk of reoffending, but not necessarily an emphasis on those offenders who were involved in higher levels of antisocial activity. More analyses of longitudinal patterns of probation supervision are needed, to see exactly how the focus of probation supervision shifts with the patterns of adolescent offending. As Figure 1 illustrates, there was no appreciable relationship between risk level and the level of supervision within each observed year, even though there is a statistically significant finding in Year 3. The overall pattern illustrates that risk level has little association with the intensity of probation

supervision. It may be that risk level is more related to the types of programming recommended by the JPO than to the frequency of contacts; however, examining this possibility is beyond the scope of this study.

Notably, degree of psychopathy did not emerge, either independently or as a moderator to the relationships between antisocial behaviors and the level of probation supervision, indicating that, although JPOs are able to provide increased probation supervision based on level of engagement in antisocial activities, the level of psychopathy is not a substantial factor in this consideration. Once again, it is unclear whether the JPO in each case had knowledge of the youth's level of psychopathy (either from a formal assessment or if it was surmised based on characteristics of the juvenile) and did not account for this factor in supervision planning, or if the JPO was unaware of the youth's level of psychopathy (e.g., was not part of an assessment). Moreover, the lack of effect for the level of JPO supervision on reported antisocial activity was equivalent in those with high and low psychopathy.

This study has limitations. First, the sample comprised juveniles adjudicated of a serious crime, and the observed relationships within this group may not generalize to juvenile offenders as a whole or to less serious juvenile offenders. The adolescents in the sample can be expected to have a more limited range of characteristics than might be seen in samples drawn at earlier stages of juvenile justice processing. We have presented a test of how these factors operate in a sample similar to the subset of more serious offenders on a typical probation caseload. How the factors tested in this study would operate in less homogenous samples, however, is an open question.

Second, the information included in the study is based on self-report. As a result, there could be shared method variance in the reports of activities like offending and involvement with probation services. Although this method is probably the most feasible and effective way currently available to obtain data of this type,<sup>44</sup> it could certainly be subject to systematic bias. In addition, some of the variables tested (e.g., risk and PCL scores) were based on information generated for study purposes, and we have no way of knowing whether all of this information was available to or used by the JPOs in determining their practices.



Information about the JPOs and the broader types of services and recommendations made to the youth are also not accounted for in the current study. We do not have individual information about the JPOs that may have influenced their practice (e.g., experience, training), and we do not know either the individual or aggregate level of continuity in the JPOs among the years observed (e.g., the JPO in Year 1 for a youth may be different than the JPO for that youth in Years 2 or 3). Also, we have examined only the number of contacts the JPO had with the youth without accounting for various aspects of the contact itself (e.g., length, content, relationship quality) or the types of specific services the JPO may have recommended to the youth that are concurrent to the supervision we observe. We have a view of how the system operates overall regarding the provision of probation supervision to adolescent serious offenders, not an in-depth analysis of probation officer decision-making.

Despite these limitations, there are still important messages that stem from this work. First, these findings apply to serious offenders, who are often viewed as the most challenging and the cases of most concern for community supervision. Within this group, there was a consistent and fairly long-term (three-year) association between the level of antisocial activity and the overall risk score and sex. Given this result, it seems that there is an enduring potential payoff to focusing services on risk factors that can be assessed periodically with these offenders.

It does not appear, however, that risk level (elicited from the study information but most likely available to the JPO through common probation assessment practices) consistently influences level of supervision. Our models predicting number of probation sessions indicate that the youth's age was regularly associated with level of supervision, but level of risk and sex emerged in only one of the three years tested.

The current emphasis of services for these challenging adolescents could be focused on more malleable, time-varying risk factors and could have more impact as a result. More research is needed that alters probation services toward these more targeted goals and tests the effects of these efforts. In addition, more work can be done to educate JPOs regarding the heterogeneity among serious offenders and the potential payoff for incorporating risk assessment into supervision planning.

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