University of Massachusetts Amherst

ScholarWorks@UMass Amherst

Resource Economics Department Faculty
Publication Series

Resource Economics

2002

Screening for adolescent psychopathy among at-risk youth - Initial validation of the survey of attitudes and life experiences

R Rogers

MJ Vitacco

KR Cruise

KW Sewell

CS Neumann

Follow this and additional works at: https://scholarworks.umass.edu/resec_faculty_pubs

Screening for Adolescent Psychopathy Among At-Risk Youth
Initial Validation of the Survey of Attitudes and Life Experiences

Richard Rogers
University of North Texas

Michael J. Vitacco
University of Massachusetts Medical School

Keith R. Cruise
Sam Houston State University

Kenneth W. Sewell
Craig S. Neumann
University of North Texas

Psychopathic youth pose special challenges to clinicians in providing effective treatment and safe management. Because comprehensive assessments of psychopathy are time intensive and require specialized training, programmatic research is needed to develop time-efficient and useful screens that eliminate from further consideration acting-out adolescents who are unlikely to be psychopathic. The clinical utility of the Survey of Attitudes and Life Experiences as a psychopathy screen was investigated by combining three samples of adolescent offenders (total N = 223). Its primary purpose was the identification of nonpsychopaths who were distinguished from adolescents in either the mixed or psychopathic ranges. A Psychopathy Screen (PS) Scale was developed with 24-item (PS-24) and 11-item (PS-11) versions. Both appeared moderately effective in excluding nonpsychopaths from further evaluation. Preliminary data on response styles suggest that these scales are not susceptible to social desirability.

Keywords: psychopathy, delinquents, Psychopathy Checklist, social desirability, social nonconformity

Psychopathy has emerged as an important clinical construct for risk assessment among antisocial adults and delinquent youth. In adult populations, psychopathy represents a substantial risk for both violent behavior and nonviolent offenses (Hemphill, 1998; Salekin, Rogers, & Sewell, 1996). In adolescent populations, psychopathy appears to be a useful construct in understanding violent and delinquent behavior. Adolescent psychopathy appears moderately correlated with aggressive behavior for inpatients ($r = .49$) (Stafford & Cornell, 1997) and inmates ($r = .46$) (Forth, Hart, & Hare, 1990), resulting in more than double the number of violent infractions (Hicks, Rogers, & Cashel, 2000). Modest but significant results have been reported in predicting future arrests for violent behavior

(Brandt, Kennedy, Patrick, & Curtin, 1997; Forth et al., 1990). Beyond violence, adolescent psychopaths appear to engage in a disproportionate number of nonviolent infractions (Hicks et al., 2000). In addition, adolescent psychopathy appears to be associated with increased conduct problems (Toupin, Mercier, Dery, Cote, & Hodgins, 1995), especially aggressive symptoms (Rogers, Johansen, Chang, & Salekin, 1997). Although cautioning against unbridled enthusiasm, Edens, Skeem, Cruise, and Cauffman (2001) suggested that adolescent psychopathy should be considered in clinical evaluations of acting-out youth.

Based on several decades of research, Hare (1985, 1991) developed the Psychopathy Checklist (PCL) and Psychopathy Checklist–Revised (PCL-R), which operationalized the contributions to psychopathy by Cleckley (1976) and other prominent theorists. More recently, the Psychopathy Checklist: Screening Version (PCL:SV) (Hart, Cox, & Hare, 1997) was validated as a briefer measure of psychopathy. Although originally intended as a clinical screen, subsequent research has demonstrated its usefulness as a stand-alone measure of psychopathy (Rogers, 2001). As affirmed by Hare and his colleagues, "the PCL:SV total scores were so strongly and linearly related to the PCL-R total scores that the scales can be considered metrically equivalent measures of the same psychological construct" (Cooke, Michie, Hart, & Hare, 1999, p. 11). Traditionally, the PCL-R (Hare, 1991; Harpur, Hare, & Hakstian, 1989) and PCL:SV (Hart et al., 1997) assess two underlying dimensions of psychopathy: F1, core affective-interpersonal features, and F2, antisocial lifestyle. As a further test of these two dimensions, Rogers et al. (2000) performed a first-order principal axis factoring on the subcriteria composing individual PCL:SV items. These data strongly supported the two-factor model of psychopathy. Although recent research (Cooke & Michie, 2001; Hill, Neumann, & Rogers, 2001) has suggested the possible refinement of F_1 (i.e., subdividing affective and interpersonal components), research continues to offer strong empirical support for the two-factor model.

Adolescent studies of psychopathy (Brandt et al., 1997; Forth et al., 1990; Rogers et al., 1997) traditionally have employed slightly modified versions of the PCL-R and PCL:SV. More recently, Forth, Kosson, and Hare (in press) developed the Psychopathy Checklist: Youth Version (PCL:YV), which parallels the PCL-R criteria but has inquiries tailored to adolescent populations. The PCL:YV has demonstrated high reliability (Forth, 1995) with satisfactory predictive (Forth & Mailloux, 2000) and construct (Cruise, Rogers, Neumann, & Sewell, 2000) validity.

A clinical challenge facing psychologists is the effective evaluation of psychopathy for delinquent and con-duct-disordered youth. PCL versions (PCL, PCL:SV, and PCL:YV) are infeasible for large-scale evaluations due to their time-intensive nature.[1] One alternative is the Antisocial Process Screening Device (APSD) (Frick & Hare, 2001), a 20-item behavior-rating scale. However, the APSD faces two possible limitations when used with serious adolescent offenders: First, the primary validation was conducted on relatively young children (M = 8.2 years) (Frick, O'Brien, Wootton, & McBurnett, 1994) with referral issues (e.g., emotional, behavioral, and learning problems) sometimes unrelated to delinquency. Second, its high face validity raises concerns about whether adolescent offenders can easily alter their presentations on the self-administered youth version (see Rogers et al., 2002).

Rogers (1996) developed a clinical screen for antisocial attitudes and adolescent psychopathy, called the Survey of Attitudes and Life Experiences (SALE). The goal was the development of a self-report measure with low face validity that could be used to screen for psychopathy and other antisocial dimensions. Items were derived from a prototypical analysis of 331 forensic experts who identified core clinical characteristics found in antisocial persons. This prototypical analysis (Rogers, Duncan, & Sewell, 1994) included the PCL-R, the *Diagnostic and Statistical Manual of Mental Disorders* (2nd ed.; 3rd ed.; 3rd ed., rev.; and 4th ed.) (American Psychiatric Association, 1968, 1980, 1987, 1994), research diagnostic criteria (Spitzer, Endicott, & Robins, 1978), and International Classification of Diseases (9th ed.) criteria. Four dimensions were identified: (a) unstable self-image, unstable relationships, and irresponsibility; (b) manipulation and lack of guilt; (c) nonviolent delinquency; and (d) aggressive behavior. Items were developed to assess the first three dimensions.[2] From a theoretical-rational perspective, Rogers, Neumann, and Sewell (2001) found support via confirmatory factor analysis for each of these dimensions (i.e., robust comparative fit indexes > .90 and root mean square error of approximation = .05) (Bentler, 1995).

The current investigation integrated original data from programmatic research to address two specific questions. First, does the SALE have utility as a screen for adolescent psychopathy? Because comprehensive assessments of psychopathy place onerous demands on limited professional resources, a brief screen, such as the SALE, would be clinically useful if it eliminated a substantial proportion of nonpsychopaths from further consideration. Second, is the SALE vulnerable to response styles, such as social desirability or social nonconformity? If so, can empirically derived scales be developed to identify SALE protocols likely influenced by specific response styles?

METHOD

Scale Development

The current study approaches scale development via an examination of empirical properties in selecting those items that "discriminate maximally between two groups" (Golden, Sawicki, & Franzen, 1984, p. 245). This empirical approach to scale development has been applied successfully to standard tests, such as the Minnesota Multiphasic Personality Inventory and California Psychological Inventory (see Broughton, 1990). More recent examples include risk assessment measures, such as the Violence Risk Assessment Guide (Harris, Rice, & Quinsey, 1993; Quinsey, Harris, Rice, & Cormier, 1998). Given the effectiveness of both models (Reiter-Palmon & Connelly, 2000), we chose empirical selection over the prevailing theoretical-rational model (Clark & Watson, 1995) for three reasons. First, SALE items have low face validity militating against the formulation of well-defined domains (e.g., psychopathy). Second, most SALE items are not directly endorsed by adolescent offenders; instead, they are typically asked to provide normative responses about how "most people" would perceive specific items/attributes. Third, the prevalence of deception and response styles among offender populations is well documented (see Rogers & Cruise, 2000), further complicating any theory-driven conceptualization of either psychopathy or response styles. Regarding this final point, empirical scale development is well suited for the assessment of persons presenting with specific response styles (Butcher, 2000; Meehl, 2000).

Samples

The current study represented 3 years of programmatic research on adolescent psychopathy. We amalgamated clinical samples (see Cruise et al., 2000; Rogers et al., 2002; Vitacco & Rogers, 2001) as part of this research effort. Although findings are previously reported on other aspects of adolescent psychopathy, the current data on the SALE are entirely original and unpublished.

The Cruise et al. (2000) sample was composed of 105 male adolescents in both short- and long-term detention at the Denton County Juvenile Probation, with an average age of 15.28 years (SD = 1.15). For self-identified ethnicity, the sample was 14 (13.3%) African American, 69 (66.5%) European American, 18 (17.1%) Hispanic American, and 4 (3.8%) other/bicultural.

The Rogers et al. (2002) sample was composed of 77 adolescents in short-term detention at the Denton County Juvenile Probation. The sample was predominantly male (50 or 64.9%) with an average age of 15.21 years (SD =

1.38). For self-identified ethnicity, the sample was 12 (15.6%) African American, 42 (54.5%) European American, 12 (15.6%) Hispanic American, and 11 (14.3%) other/bicultural.

The Vitacco and Rogers (2001) sample was composed of 41 male adolescents at Gainesville State School, a maximum security treatment facility under the aegis of the Texas Youth Commission. The sample averaged 16.40 years of age (SD = 1.35). For self-identified ethnicity, the sample was 18 (43.9%) African American, 12 (29.3%) European American, and 11 (26.2%) Hispanic American.

Criterion Groups

A crucial component of the study was the development of criterion groups to assess psychopathy and response styles (i.e., standard, social desirability, and social nonconformity). These criterion groups are detailed below.

Psychopathy. In the presence of low base rates, the most effective screens capitalize on high negative predictive power (NPP) to rule out cases where patterns of psychopathy are unlikely. In addition, clinicians are often concerned about offenders with substantial levels of psychopathy, irrespective of whether they meet the 75% rule (e.g., PCL:YV cut score $\geq$ 30 of 40). For this reason, we followed other researchers (for a review, see Hemphill, 1998) to examine both the "mixed" (i.e., 50% to 74%) and psychopathic ($\geq$ 75%) adolescents. Consistent with the MacArthur study of psychopathy and violence (Skeem, 2002), all participants (N = 223) were classified as either nonpsychopathic (< 50% of psychopathic traits) or mixed/psychopathic ($\geq$ 50% of psychopathic traits).

Response styles. The criterion groups for this portion of the study were based on the simulation design applied to the Rogers et al. (2002) sample. Participants were first administered the SALE under standard instructions. After a 1-day interval, the SALE was readministered under experimental instructions. Participants were randomly assigned to either social desirability (n = 39) or social nonconformity (n = 38) conditions.[3] For the social desirability condition, participants were given instructions to act in a prosocial manner, repudiate past delinquent behavior, and express deference to authority. For the social nonconformity condition, participants were instructed to portray a hardened criminal who is contemptuous of authority. Participants were cautioned to be believable and given an incentive for a credible performance.

Materials

SALE. The SALE is an 80-item questionnaire addressing items with antisocial and psychopathic content. SALE

items were written simply for easy reading comprehension. On average, sentences are 8.27 words long, and nearly all avoid the passive tense (96.3%). Based on the Flesch-Kincaid, the estimated reading level for the SALE is low at the 4.59 grade. To reduce face validity, youth are asked to report their perceptions about persons in general rather than respond to self-damaging inquiries about themselves. For instance, a sample item is, "Most teachers treat kids like they are stupid." These items are organized into five content areas addressing (a) kids and school, (b) relationships, (c) succeeding at life, (d) talking and actions, and (e) crime. Items are rated on a 4-point scale: *disagree completely*, *disagree somewhat*, *agree somewhat*, and *agree completely.* No neutral point was included to minimize equivocal responding (DeVellis, 1991).

Psychopathy measures. Two closely related PCL versions were used as criterion measures. The PCL:SV is highly correlated with the PCL-R total score ($r = .80$) (Hart et al., 1997), with its items closely paralleling PCL-R F_1 and F_2 (see Rogers, 2001). The PCL:SV is highly reliable (Hart et al., 1997) with good construct validity (Rogers et al., 2000). Based on item response theory (IRT) analysis, the PCL:SV items were found to equal or surpass those of the PCL-R in their measurement of psychopathy. Finally, the PCL:SV has been successfully employed with adolescent populations (Hicks et al., 2000). The PCL:YV parallels the PCL-R criteria with only minor alterations to make the items more meaningful to an adolescent population. As reported by Forth (1995), the PCL:YV is highly reliable with young offenders for both total and factor scores. As previously noted, the PCL:YV has been shown to have good construct and predictive validity (Cruise et al., 2000; Forth & Mailloux, 2000).

Procedure

Participants from the three samples were administered the SALE and a PCL under standard instructions. To establish rapport with the research participants, two samples started with either the interview-based PCL:SV (Vitacco & Rogers, 2001) or PCL:YV (Rogers et al., 2002) followed by SALE and other self-report measures. For the remaining sample (Cruise et al., 2000), modules of a child interview (i.e., Diagnostic Interview Schedule for Children Version 2.3) (National Institute of Mental Health, 1991) were used to establish rapport, which was followed by self-report measures and the PCL:YV. For constructing the psychopathy screen, participants were classified by criterion groups. This categorization resulted in 167 (74.9%) for the nonpsychopathic and 56 (25.1%) for the mixed/psychopathic groups.

The examination of response styles used a within-subjects analogue design that tested participants first under standard instructions followed by instructions to adopt a specific response style. In the latter case, participants were (a) randomly assigned to either social desirability or social nonconformity conditions and (b) readministered the SALE and PCL:YV by an interviewer masked to the experimental condition and past results from standard administrations.

RESULTS

A preliminary step was to test whether nonpsychopathic and mixed/psychopathic groups differed significantly on the five SALE content domains. A MANOVA revealed significant overall differences, $F(5, 216) = 4.83$, $p < .001$. Each content area was significantly different ($p \leq .01$) in the predicted direction with modest to moderate effect sizes: crime, $d = .41$; succeeding at life, $d = .48$; talking and actions, $d = .52$; kids and school, $d = .53$; and relationships, $d = .65$.

Item selection for a psychopathy screen involved the identification of items that discriminated between nonpsychopathic and mixed/psychopathic adolescent offenders. Via *t* tests (alpha = .05), 24 discriminating items were identified. The average two-tail probability for these 24 items is .0195; therefore, two or fewer items were likely to have been selected as the result of chance variation. As described in the following section, these empirically identified items constituted as the Psychopathy Screen–24 (PS-24).

Screening for Psychopathy

The PS-24 was first examined for its internal consistency; it yielded a moderate alpha of .79 with an average item-scale correlation of .33. The mixed/psychopathic ($M = 63.27$, $SD = 8.89$) was significantly higher than the nonpsychopathic ($M = 54.84$, $SD = 8.07$), $F(1, 221) = 43.57$, $p < .001$, group with a large effect size (Cohen's $d = 1.02$). A cut score (mixed/psychopathic > 51) was selected to optimize NPP. Utility estimates based on this cut score are summarized in Table 1. For purposes of individual classification, the high NPP (0.92) suggests that low scores can effectively eliminate some nonpsychopaths from further evaluation. A limitation of the PS-24 is its modest specificity (.34), indicating that only one third of the nonpsychopaths are eliminated by this cut score. In settings with low base rates for psychopathy, even a modest specificity may be useful in eliminating unnecessary evaluations.

With use of empirical selection, we sought to refine the PS-24. The distribution of scores for PS-24 varied substantially across items for the nonpsychopathic and mixed/ psychopathic groups. Similar to the discrimination index

TABLE 1
The SALE as a Screen for Psychopathy: Effectiveness of Cut Scores for
Standard and Simulation (Social Desirability and Social Nonconformity) Conditions

Condition	n	Scale	Cut	Sensitivity	Specificity	PPP	NPP	Hit Rate
Standard	223	PS-24	> 51	0.91	0.35	0.32	0.92	.48
Standard	223	PS-11	> 13	0.84	0.59	0.45	0.92	.65
Social desirability	39[a]	PS-24	> 51	0.85	0.69	0.58	0.90	.74
Social desirability	39[a]	PS-11	> 13	0.54	0.85	0.64	0.79	.74
Social nonconformity	38[b]	PS-24	> 51	1.00	0.11	0.29	1.00	.34
Social nonconformity	38[b]	PS-11	> 13	1.00	0.18	0.30	1.00	.13

NOTE: SALE = Survey of Attitudes and Life Experiences; cut = cut score for classification in the mixed/psychopathic group; PPP = positive predictive power; NPP = negative predictive power; PS = Psychopathy Screen for either 24- or 11-item scales.
a. A within-subjects comparison of 39 adolescent offenders under standard and social desirability conditions.
b. A within-subjects comparison of 38 adolescent offenders under standard and social nonconformity conditions.

(Golden et al., 1984), we dichotomized the 24 items to achieve maximal identification. To ensure appreciable differences, we adopted a 15% criterion. Specifically, only those dichotomized items endorsed at least 15% more frequently by the mixed/psychopathic group were retained. This empirical procedure resulted in a refined 11-item scale, the Psychopathy Screen–11 (PS-11). For the PS-11, the mixed/psychopathic group averaged 21.0% greater endorsement than their nonpsychopathic counterparts.

The internal reliability of the PS-11 was only moderate (alpha = .66), with an average item-scale correlation of .30. As expected, the mixed/psychopathic ($M = 15.46$, $SD = 2.17$) and nonpsychopathic groups ($M = 13.28$, $SD = 1.53$), $F(1, 221) = 67.76$, $p < .001$, were significantly different. The effect size was large with a Cohen's d of 1.27. As before, a cut score (mixed/psychopathic > 13) was selected to optimize NPP. As reported in Table 1, the utility estimates are substantially improved for the PS-11. In particular, low scores effectively (a) identify nonpsychopaths with few errors (NPP = 0.92) and (b) rule out the majority of nonpsychopaths from further consideration (specificity = 0.59).

Effects of Social Desirability

The effects of social desirability were evaluated for SALE scales via a within-subjects analogue design. For the PS-24, adolescent offenders in the social desirability condition ($M = 51.51$, $SD = 7.87$) score significantly lower than the standard condition ($M = 55.28$, $SD = 7.82$), $F(1, 76) = 2.33$, $p < .05$. However, the effect size is only modest (Cohen's $d = 0.48$). Importantly, the PS-24 was a more effective screen under social desirability than standard instructions. Although maintaining a high NPP (0.90), its specificity nearly doubled to 0.69. Its increased efficacy is also demonstrated that the majority of identified cases (positive predictive power [PPP] = 0.58) warrant the mixed/psychopathic classification.

A parallel analysis was performed on the PS-11. Unlike the PS-24, the differences between criterion groups were negligible. Scores under the social desirability condition ($M = 12.82$, $SD = 1.39$) were virtually the same as the standard condition ($M = 13.35$, $SD = 1.31$), $F(1, 76) = 1.76$, $p > .05$. As expected, the effect size is modest (Cohen's $d = 0.39$). Regarding the cut score, the PS-11 saw a modest decrement in NPP (0.79), whereas the specificity (0.85) increased. Overall, the hit rate was slightly improved from .65 to .74 under social desirability instructions.

Effects of Social Nonconformity

Adolescent offenders occasionally assume the role of social nonconformity (i.e., callous, hardened criminals who are contemptuous of authority). Therefore, we tested the role of social nonconformity in an analogue design. As anticipated, social nonconformity ($M = 68.47$, $SD = 11.24$) resulted in much higher scores on the PS-24 than administrations under standard conditions ($M = 53.92$, $SD = 9.38$), $F(1, 74) = 9.38$, $p < .001$. The resulting effect size is large (Cohen's $d = 1.40$). Not surprisingly, the NPP (1.00) remained very high, whereas the specificity plummeted (0.11).

Similar results were found for the SALE PS-11, with higher scores for social nonconformity ($M = 16.84$, $SD = 2.79$) than standard instructions ($M = 13.61$, $SD = 1.92$), $F(1, 75) = 5.85$, $p < .001$. Likewise, the effect size was large with a Cohen's d of 1.35. An examination of utility estimates (see Table 1) yielded similar results: NPP = 1.00 and specificity = .18.

Because social nonconformity had dramatic effects on both SALE scores and utility estimates, we constructed a Social Nonconformity Index (SNI). Like other scales, the SNI was constructed empirically based on a high likelihood ($p < .001$) that each item differed between social nonconformity and standard conditions. This scale has a moderately high internal consistency (alpha = .85). As ex-

TABLE 2
Utility Estimates on the SALE in Screening for Social Nonconformity With the Social Nonconformity Index (SNI)

SNI Cut Score	Sensitivity	Specificity	PPP	NPP	Hit Rate
> 33[a]	0.89	0.68	0.32	0.97	.71
> 49[b]	0.19	1.00	1.00	0.88	.88

NOTE: SALE = Survey of Attitudes and Life Experiences; cut score = adolescent offenders exceeding these criteria are classified as engaging in social nonconformity; PPP = positive predictive power; NPP = negative predictive power.
a. Cut score for identifying adolescent offenders needing full evaluations of social nonconformity.
b. Cut score for identifying adolescent offenders who are very likely to be responding with social nonconformity.

pected, marked differences were found between social nonconformity ($M = 44.89$, $SD = 9.69$) and standard conditions ($M = 30.66$, $SD = 6.75$), $F(1, 259) = 11.19$, $p < .001$, with a very large effect size (Cohen's $d = 1.97$).

Two cut scores were generated for the SNI (see Table 2). The first cut score (> 33 for social nonconformity) is especially effective at ruling out adolescents not engaging in a nonconforming response style (NPP = 0.97). In addition, most nonconforming adolescents scored above the cut score (sensitivity = 0.89). A second cut score (> 49 for social nonconformity) was proposed for extreme elevations on the SNI. Because none of the 220 adolescent offenders under standard instructions scored above 48, extreme endorsements (> 49) yielded a perfect PPP and specificity. Although extreme elevations occur only infrequently for nonconforming offenders (sensitivity = 0.19), these occurrences signal a high probability of social nonconformity.

DISCUSSION

Edens et al. (2001) expressed strong reservations about the misuse of adolescent psychopathy in predictions of violence and related issues. A more appropriate use of this clinical construct is to identify youth with substantial psychopathic features that are likely to complicate treatment and their effective management in juvenile facilities. The time-intensive nature of interview-based assessments, such as the PCL:YV, militates against their standardized application to large institutional populations. A psychopathy screen is clearly needed for the efficient management of professional resources.

Current efforts to establish the SALE as a psychopathy screen were moderately successful at reducing the number of antisocial youth needing further evaluation. By deliber-

ately using items with low face validity, the accuracy of the screen may have been diminished for that minority of antisocial youth who would be forthright about their psychopathic characteristics.[4] As described in subsequent paragraphs, however, various forms of deception are common in delinquent and psychopathic populations. Therefore, the development of a psychopathy screen with low face validity is definitely warranted.

Rogers and Cruise (2000) found that most adolescent and adult psychopaths tend to deny or minimize the consequences of their criminality. Moreover, psychopaths likely use their conning and manipulation during important social interactions, such as psychological assessments. In evaluating psychopathy and conduct disorders, psychologists may resort to face-valid measures that are comparatively easy to manipulate in a socially desirable direction. Indeed, the use of face-valid measures with delinquent and psychopathic populations is apparently based on the tenuous assumption that these adolescents will be honest and forthright about their conning and manipulation of others.

Clinicians have traditionally asked referred adolescents to disclose illegal and self-incriminating information. For example, clinicians using the Diagnostic Interview for Children and Adolescents–Revised (Reich, Shayka, & Taibleson, 1991) ask blatantly incriminating questions such as, "Have you ever *forced* anyone to do sexual things with you?" (Reich et al., 1991, p. 29). Even if some adolescent psychopaths are not typically engaging in conning and manipulation, the expectation of self-damaging self-disclosures seems unrealistic. An important facet of the current study was its systematic attempt to reduce the transparency of its assessment in evaluating antisocial attitudes and psychopathy. Toward that objective, the SALE provides an indirect appraisal of adolescents via their perceptions of others (e.g., youth, family, and society). Importantly, adolescents can endorse antisocial attitudes and behavior on the SALE without engaging in self-incrimination.

An entirely unexpected result was the improvement in utility estimates when adolescent offenders adopted a social desirability response style. Subject to replication, this finding suggests that efforts to present as prosocial appear to backfire on an indirect measure of antisocial attitudes and psychopathy. Beyond reduced transparency, a possible explanation for this surprising result is the complexity of the task. First, adolescent offenders are asked to engage in perspective taking in rating how others experience certain behaviors and relationships. Second, these adolescents must further modify this perspective taking to reflect social desirability. As observed by Ward, Keenan, and Hudson (2000), offenders often have marked deficits in perspective taking, limiting their ability to understand others' experiences and vantage points. Therefore, measures

such as the SALE may succeed in neutralizing social desirability because of these deficits in perspective taking. This finding deserves further testing at two levels. First, can this finding be replicated with the SALE? Second, does this approach (i.e., reduced transparency plus perspective taking) constitute an effective paradigm for nullifying the effects of social desirability with other measures and populations?

Grisso (1998) described briefly how some adolescents attempt to adopt the role of a hardened criminal as a response style. Very little research (Rogers et al., 2002) has attempted to investigate social nonconformity and its effect on the assessment of psychopathy. As expected, adolescent offenders were able to manipulate the SALE in a psychopathic direction. For example, SALE scores on the PS-24 increased an average of 14 points under the nonconformity condition. Initial data on the SNI were very encouraging on its ability to detect social nonconformity. Socially nonconforming offenders, in expressing their callous "don't care" attitudes, appear to endorse items indiscriminately that espouse an antisocial perspective. Naturally, the usefulness of SNI cut scores requires cross-validation.

Beyond response styles, the current data suggest that the SALE may be moderately useful in excluding from further consideration those adolescent offenders not requiring a fuller evaluation of psychopathy. Based on the PS-24, the number of unnecessary assessments is reduced by approximately one third. Given its very brief demands on professional time (1-2 minutes), even this modest reduction is time effective. For the PS-11, time efficiency is substantially improved, with the majority of non-psychopaths being effectively excluded. Although these are important findings based on multiple samples, further validation is essential. One long-term goal is the amalgamation of additional samples so that the PS-24 and PS-11 can be refined further via IRT analysis.

In closing, the assessment of psychopathy is a daunting diagnostic task with both adult and adolescent offenders. We strongly believe that the most effective measures are interviewed-based methods (e.g., the PCL:SV and PCL:YV) that integrate collateral data into their determinations (see Rogers, 2001). However, time-efficient self-report measures may also play a valuable role in screening out those offenders who do not require comprehensive evaluations. Toward that end, measures such as the SALE may eventually prove to be effective screens for psychopathy while systematically addressing response styles.

NOTES

1. Hare (1991, p. 6) estimated 2½ to 3 hours of professional time for each Psychopathy Checklist–Revised.

2. Efforts to generate items were stymied by high face validity; the purpose of questions about specific aggressive behavior (e.g., use of a weapon in a fight or sexual assault) was immediately apparent.

3. Originally, 40 participants were assigned to each condition. However, 3 participants were removed, 2 did not accurately recall the instructions, and another reported a negligible effort.

4. Reiter-Palmon and Connelly (2000) found that empirically developed scales composed of theory-based items (i.e., high face validity) were superior to scales with low face validity. However, they observed the increased vulnerability of theory-based items to deliberate distortions.

REFERENCES

American Psychiatric Association. (1968). *Diagnostic and statistical manual of mental disorders* (2nd ed.). Washington, DC: Author.

American Psychiatric Association. (1980). *Diagnostic and statistical manual of mental disorders* (3rd ed.). Washington, DC: Author.

American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (3rd ed., rev.). Washington, DC: Author.

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.

Bentler, P. M. (1995). *Structural equation program manual*. Encino, CA: Multivariate Software, Inc.

Brandt, J. R., Kennedy, W. A., Patrick, C. J., & Curtin, J. J. (1997). Assessment of psychopathy in a population of incarcerated adolescent offenders. *Psychological Assessment*, *9*, 429-435.

Broughton, R. (1990). The prototype concept in personality assessment. *Canadian Psychology*, *31*, 26-37.

Butcher, J. N. (2000). Dynamics of personality test scores. The empirical manifesto revisited. *Journal of Clinical Psychology*, *56*, 375-386.

Clark, L. A., & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. *Psychological Assessment*, *7*, 309-319.

Cleckley, H. (1976). *The mask of sanity* (4th ed.). St. Louis, MO: C. V. Mosby.

Cooke, D. J., & Michie, C. (2001). Refining the construct of psychopathy: Towards a hierarchical model. *Psychological Assessment*, *13*, 171-188.

Cooke, D. J., Michie, C., Hart, S. D., & Hare, R. D. (1999). Evaluating the screening version of the Hare Psychopathy Checklist–Revised: An item response theory analysis *Psychological Assessment*, *11*, 3-13.

Cruise, K. R., Rogers, R., Neumann, C., & Sewell, K. W. (2000, March). *Measurement of adolescent psychopathy: Testing the two-factor model in juvenile offenders*. Paper presented at the biennial convention of the American Psychology-Law Society, New Orleans, LA.

DeVellis, R. F. (1991). *Scale development: Theory and applications*. Newbury Park, CA: Sage.

Edens, J. F., Skeem, J. L., Cruise, K. R., & Cauffman, E. (2001). Assessment of "juvenile psychopathy" and its association with violence: A critical review. *Behavioral Sciences and the Law*, *19*, 53-80.

Forth, A. E. (1995). *Psychopathy and young offenders: Prevalence, family background, and violence* (Program Branch Users Report). Ottawa: Ministry of the Solicitor General of Canada.

Forth, A. E., Hart, S. D., & Hare, R. D. (1990). Assessment of psychopathy in male young offenders. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, *2*, 342-344.

Forth, A. E., Kosson, D. S., & Hare, R. D. (in press). *The Psychopathy Checklist: Youth Version (PCL:YV)*. Toronto, Canada: Multi-Health Systems.

Forth, A. E., & Mailloux, D. L. (2000). Psychopathy in youth: What do we know? In C. B. Gacono (Ed.), *The clinical and forensic assessment of psychopathy* (pp. 25-54). Mahwah, NJ: Lawrence Erlbaum.

Frick, P. J., & Hare, R. D. (2001). *Antisocial Process Screening Device*. Toronto, Canada: Multi-Health Systems.

Frick, P. J., O'Brien, B. S., Wootton, J. M., & McBurnett, K. (1994). Psychopathy and conduct problems in children. *Journal of Abnormal Psychology*, *103*, 700-707.

Golden, C. J., Sawicki, R. F., & Franzen, M. D. (1984). Test construction. In A. S. Bellack & M. Hersen (Eds.), *Research methods in clinical psychology* (pp. 233-265). New York: Pergamon.

Grisso, T. (1998). *Forensic evaluation of juveniles*. Sarasota, FL: Professional Resource Press.

Hare, R. D. (1985). *The Psychopathy Checklist*. Unpublished manuscript, University of British Columbia, Vancouver, Canada.

Hare, R. D. (1991). *Manual for the Hare Psychopathy Checklist–Revised*. Toronto, Canada: Multi Health Systems.

Harpur, T. J., Hare, R. D., & Hakstian, A. R. (1989). Two-factor conceptualization of psychopathy: Construct validity and assessment implications. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, *1*, 6-17.

Harris, G. T., Rice, M. E., & Quinsey, V. L. (1993). Violent recidivism of mental disordered offenders: The development of a statistical prediction instrument. *Criminal Justice and Behavior*, *20*, 315-335.

Hart, S. D., Cox, D. N., & Hare, R. D. (1997). *Manual for the screening version of Psychopathy Checklist–Revised (PCL:SV)*. Toronto, Canada: Multi-Health Systems.

Hemphill, J. (1998). Psychopathy and recidivism: A review. *Legal and Criminological Psychology*, *3*, 139-170.

Hicks, M. M., Rogers, R., & Cashel, M. L. (2000). Predictions of violent and total infractions among institutionalized male juvenile offenders. *Journal of the American Academy of Psychiatry and Law*, *28*, 183-190.

Hill, C., Neumann, C. S., & Rogers, R. (2001). *Dimensions of psychopathy in offenders with Axis I disorders*. Manuscript submitted for publication.

Meehl, P. E. (2000). The dynamics of "structured" personality tests. *Journal of Clinical Psychology*, *56*, 367-373.

National Institute of Mental Health. (1991). *NIMH Diagnostic Interview Schedule for Children, Version 2.3*. Rockville, MD: Author.

Quinsey, V. L., Harris, G. T., Rice, M. E., & Cormier, C. A. (1998). *Violent offenders: Appraising and managing risk*. Washington, DC: American Psychological Association.

Reich, W., Shayka, J. J., & Taibleson, C. (1991). *Diagnostic Interview for Children and Adolescents (DICA-R-A): Adolescent version*. St. Louis, MO: Washington University Press.

Reiter-Palmon, R., & Connelly, M. S. (2000). Item selection counts: A comparison of empirical key and rational scale validities in theory-based and non-theory-based item pools. *Journal of Applied Psychology*, *85*, 143-151.

Rogers, R. (1996). *Survey of Attitudes and Life Experiences (SALE)*. Unpublished test, University of North Texas, Denton.

Rogers, R. (2001). Focused forensic interviews. In R. Rogers (Ed.), *Handbook of diagnostic and structured interviewing* (pp. 296-337). New York: Guilford.

Rogers, R., & Cruise, K. R. (2000). Malingering and deception among psychopaths. In C. B. Gacono (Ed.), *The clinical and forensic assessment of psychopathy: A practitioner's guide* (pp. 269-284). New York: LEA.

Rogers, R., Duncan, J. C., & Sewell, K. W. (1994). Prototypical analysis of antisocial personality disorder: *DSM-IV* and beyond. *Law and Human Behavior*, *18*, 471-484.

Rogers, R., Johansen, J., Chang, J. J., & Salekin, R. T. (1997). Predictors of adolescent psychopathy: Oppositional and conduct-disordered symptoms. *Journal of the American Academy of Psychiatry and Law*, *25*, 261-271.

Rogers, R., Neumann, C. S., & Sewell, K. W. (2001). *CFA data on the SALE*. Unpublished raw data, University of North Texas, Denton.

Rogers, R., Salekin, R. T., Hill, C., Sewell, K. W., Murdock, M. E., & Neumann, C. S. (2000). The Psychopathy Checklist–Screening Version: An examination of criteria and subcriteria in three forensic samples. *Assessment*, *7*, 1-15.

Rogers, R., Vitacco, M. J., Jackson, R. L., Martin, M., Collins, M., & Sewell, K. W. (2002). Faking psychopathy? An examination of response styles with antisocial youth. *Journal of Personality Assessment*, *78*, 31-46.

Salekin, R. T., Rogers, R., & Sewell, K. W. (1996). A review and meta-analysis of the Psychopathy Checklist and Psychopathy Checklist–Revised: Predictive validity of dangerousness. *Clinical Psychology: Science and Practice*, *3*, 203-215.

Skeem, J. L. (2002, March). *Psychopathy, treatment involvement, and subsequent violence among civil psychiatric patients*. Paper presented at the American Psychology and Law Society Conference, Austin, TX.

Spitzer, R. L., Endicott, J., & Robins, E. (1978). Research diagnostic criteria for the use in psychiatric research. *Archives of General Psychiatry*, *35*, 773-782.

Stafford, E., & Cornell, D. G. (1997, August). *Psychopathy as a predictor of adolescents at risk for inpatient violence*. Paper presented at the American Psychological Association, Chicago.

Toupin, J., Mercier, H., Dery, M., Cote, G., & Hodgins, S. (1995). Validity of the PCL-R for adolescents. *Issues in Criminological and Legal Psychology*, *24*, 143-145.

Vitacco, M. J., & Rogers, R. (2001). Predictors of adolescent psychopathy: The role of impulsivity, hyperactivity, and sensation seeking. *Journal of the American Academy of Psychiatry and Law*, *29*, 374-386.

Ward, T., Keenan, T., & Hudson, S. M. (2000). Understanding cognitive, affective, and intimacy deficits in sexual offenders: A developmental perspective. *Aggression and Violent Behavior*, *5*, 41-62.

Richard Rogers, Ph.D., is a professor of psychology at the University of North Texas and recently authored two books, *Handbook of Diagnostic and Structured Interviewing* and *Conducting Insanity Evaluations*.

Michael J. Vitacco, Ph.D., is a postdoctoral fellow at the University of Massachusetts Medical School.

Keith R. Cruise, Ph.D., is an assistant professor of psychology at Sam Houston State University.

Kenneth W. Sewell, Ph.D., is the director of clinical training and a professor of psychology at the University of North Texas.

Craig S. Neumann, Ph.D., is an assistant professor of psychology at the University of North Texas.