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RELIABILITY AND DISCRIMINATIVE  
UTILITY OF THE  
ADOLESCENT COGNITIONS SCALE  
FOR JUVENILE SEXUAL OFFENDERS

**John A. Hunter, Jr., PhD,**  
*Behavioral Studies Program  
The Pines Residential Treatment Center*

**Judith V. Becker, PhD,**  
*Department of Psychiatry  
University of Arizona*

**Meg Kaplan, PhD,**  
*New York State Psychiatric Institute  
Columbia University*

&

**Dennis W. Goodwin, BS**  
*Behavioral Studies Program  
The Pines Residential Treatment Center*

## ABSTRACT

Studies were conducted on the reliability and discriminative utility of the Adolescent Cognitions Scale for juvenile sexual offenders. Results indicate that the scale had only marginal reliability from test to retest conditions, and did not discriminate between groups of juvenile sexual offenders and youth without a history of sexual perpetration. The authors offer hypotheses for the obtained results, and suggest avenues for further research concerning the development of this instrument.

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The cognitions of sexual offenders have been found by clinicians to frequently contain distortions and stereotypic thinking regarding the acceptability of sexually aggressive acts, or sexual contact between adolescents or adults and young children. These distortions often seem to represent attempts on the part of offenders to minimize or rationalize their behavior, or project blame onto the victim, and thus serve to mitigate guilt or a sense of responsibility for wrongdoing.

Abel, Becker, and Cunningham-Rathner (1984) developed a scale for assessing these cognitions in adult sexual offenders and found that it discriminated sexual offenders from a control group of non-perpetrating adults (Abel, Gore, Holland, Camp, et al., 1989). A similar scale was developed for juvenile perpetrators by Becker and Kaplan and is currently being used in a number of treatment settings. This paper addresses attempts by the authors to establish the reliability and discriminative value of this instrument.

## METHOD

### Instrument

The Adolescent Cognitions Scale consists of 32 forced choice items describing sexual attitudes, values, or behaviors which the respondent must either endorse or reject (True or False). Behaviors and attitudes thought to be inappropriate or deviant are described (26 items), as well as beliefs which are considered to be socially responsible and appropriate (6 items). A sum score is derived, reflecting the total number of deviant attitudes or cognitive distortions endorsed.

### Research Participants and Procedure

*Reliability:* Test-retest reliability of the Adolescent Cognitions Scale was assessed by administering this instrument to a sample of 37 adolescent sexual offenders on consecutive days. This sample was drawn from two primary sources: referrals to a New York City based out-patient program for juvenile offenders; and juveniles referred to a residential treatment program for youthful sexual offenders in Virginia. These youth were all administered the instrument as part of a comprehensive evaluation which included a clinical interview; psychophysiological assessment of the sexual arousal pattern; and psychometric assessment. The administration of this instrument was conducted prior to the initiation of treatment services. These research participants ranged in age from 13 to 19, with a mean age of 15.4 years. Racial composition was as follows: 48.6% were caucasian; 43.2% African-American (Black); and 8.1% Hispanic. All of these youths had acknowledged the commission of one or more acts of sexual perpetration against another individual and had been referred for evaluation

and treatment.

*Discriminative validity:* The utility of the Adolescent Cognitions Scale in discriminating between youths who had committed sexual offenses and those who had not ("normal controls") was assessed by comparing scores on the instrument between matched numbers of perpetrating and non-perpetrating youth ( $n = 22$  per group). The sample of juvenile sexual offenders was obtained through referrals to the above referenced programs for youthful sexual offenders in New York and Virginia. The control group of youth was obtained through recruitment of volunteers, via notices and announcements, currently residing in Tidewater, Virginia communities. Youth were recruited who were not currently in mental health treatment, and who had no prior history of sexual victimization or perpetration.

The mean age of perpetrators was 16.0 years ( $SD = 1.4$ ), with a range from 13 to 19 years. The mean age of the controls was 14.8 years ( $SD = 1.6$ ), with a range from 13 to 17 years. Of the perpetrating youth, 40.9% were Caucasian; 54.5% African-American; and 4.5% Hispanic. Of the controls, 45.5% were Caucasian and 54.5% African-American.

The perpetrating group of youth were found to have a significantly higher mean age than the control group,  $t(42) = -2.75$ ,  $p < .01$ , and therefore age was run as a covariate in the subsequent comparison of group mean scores on the Adolescent Cognitions Scale. No significant difference was found between the two groups on race using the Chi Square statistic.

## RESULTS

Phi correlation coefficient tests were conducted for each of the 32 items on the scale, and on the sum score, between initial and next day administrations of the instrument. Cronbach's alpha tests were utilized to further assess the inter-item reliability of this measure. Results revealed that 17 of the 32 items were significantly positively correlated between initial test and retest conditions ( $p < .05$ ). Four items showed no variance between subjects on either initial and/or post-test responses, and thus no correlations could be produced. Eleven items did not significantly correlate. Correlations ranged from  $-.14$  to  $.88$ . A correlation of  $.68$  ( $p < .001$ ) was obtained between initial and post-tests for total number of distortions endorsed. A standardized item alpha of  $.45$  ( $p < .05$ ) was obtained for the initial test; with the post-test producing an alpha of  $.71$  ( $p < .05$ ).

A one-way ANCOVA was conducted between perpetrator and control groups using the sum score (total number of distortions) as the dependent measure. No significant difference between groups was found. The mean sum scores for the respective groups were as follows: perpetrators (mean = 4.0,  $SD = 3.3$ ) and

controls (mean = 5.2, SD = 5.1).

## DISCUSSION

Based on the above results, revisions of the scale appear to be necessary. The authors would like to offer hypotheses about the meaning of the obtained results, and suggest avenues for further research concerning the development of this instrument. In its present format, the Adolescent Cognitions Scale contains items which may lend themselves to a social desirability response bias. Such a response bias could attenuate differences in scores on the scale between perpetrating and non-perpetrating youth and, thus, confound results. Further assessment must be conducted to determine the extent to which items on this scale correlate with established social desirability scales (e.g., Crowne and Marlowe, 1964). The finding of such confounds would argue for reformatting the scale to counterbalance these tendencies (Saunders, 1991; and Rick, 1981). Such problems could be compounded by range restriction associated with a "True/False", as opposed to a Likert-scale answer format. This latter problem could help account for the moderate reliability co-efficients which were obtained. It is noted that the adult form of the cognitions scale has a Likert scale format. The adolescent version was originally formatted as "True" or "False" in an attempt to make it easier for low functioning juveniles to comprehend.

Another possibility which requires further exploration is that juvenile sexual offenders have not yet built-up the rigid and distorted thinking patterns frequently seen in adult offenders and, thus, do not appear significantly different cognitively from non-perpetrating youth. A parallel for such developmental fluidity is seen in the sexual arousal patterns of juvenile offenders which often reflect undifferentiated arousal, as contrasted with the predominately pedophilic arousal often seen in adult offenders. Studies involving the comparison of the thinking patterns of juvenile and adult sexual offenders would be helpful.

In summary, the above results suggest only marginal reliability and internal consistency of the Adolescent Cognitions Scale, and do not support the utility of the scale as it is presently constructed in differentiating between perpetrating and non-perpetrating groups of juveniles. The authors are therefore of the opinion that the scale in its current form is not adequate for clinical purposes and should only be used for research. Revisions of the scale appear to be necessary and are currently under way. Future research relevant to increasing an understanding of the thinking patterns of juvenile perpetrators, and the development of a scale for measuring cognitions, is encouraged and believed to be important to the field.

## REFERENCES

- Abel, G.G., Becker, J.V., & Cunningham-Rathner, J. (1984). Complications, consent, and cognitions in sex between children and adults. *International Journal of Law and Psychiatry*, 7, 89-103.
- Abel, G.G., Gore, D.K., Holland, C.L., Camp, N., et al. (1989). The measurement of the cognitive distortions of child molesters. *Annals of Sex Research*, 2, 135-152.
- Crowne, D.P., & Marlowe, D. (1964). *The approval motive: Studies in evaluation dependence*. New York: Wiley.
- Rock, D.L. (1981). The confounding of two self-report assertion measures with the tendency to give socially desirable responses in self-description. *Journal of Consulting and Clinical Psychology*, 49, 743-744.
- Saunders, D.G. (1991). Procedures for adjusting self-reports of violence for social desirability bias. *Journal of Interpersonal Violence*, 6, 336-344.