Utility of the ASEBA Youth Self-Report (YSR) in Juvenile Delinquency Assessments

Robert A Semel*

Licensed Psychologist, Brooklyn, New York, USA

*Corresponding Author: Robert A Semel, Licensed Psychologist, Brooklyn, New York, USA.

Received: December 19, 2016; Published: January 11, 2017

Abstract

Forensic mental health practitioners who evaluate youths in a context of juvenile delinquency proceedings often include the use of psychological screening tools or more comprehensive assessment instruments as part of a multi-method, multi-informant assessment approach. The results of these delinquency assessments may be helpful in crafting recommendations for the court, particularly for treatment/rehabilitation purposes. The validity of self-report measures administered to youths in the juvenile delinquent population has been questioned, largely because such youths tend to underreport their problems. The current review and commentary focuses particularly on the utility of the Youth Self-Report (YSR) [1] in juvenile delinquency assessments. An abridged review of the empirical literature pertaining to use of the YSR with juvenile delinquents suggests several general findings. On average, youths being evaluated in the juvenile delinquency context do not obtain scores on the broad-band YSR Total Problems, Internalizing Problems, and Externalizing problems scales in the clinical or borderline clinical range. However, on average, such youths obtain moderately elevated scores on the narrow-band “Rule Breaking Behavior” scale (formerly designated the “Delinquent Behavior” scale) that approach or approximate the borderline clinical range or that are equivalent to the average score of youths in the normative YSR clinically-referred group. In contrast, delinquent youths generally do not obtain clinically elevated scores on the Aggressive Behavior scale, which may stem from underreporting of more serious behavior. The YSR has been associated with external correlates including psychiatric diagnoses, delinquency recidivism, substance use, youth psychopathic traits, antisocial cognition and family and psychosocial variables. The YSR preferably should be utilized with the accompanying parent and teacher report forms. Whether for screening or more comprehensive evaluation purposes, the YSR should not be used as the only method of assessing possible internalizing and externalizing problems.

Keywords: Juvenile Delinquency; Multi-Method Assessment; ASEBA; YSR; Underreporting

Introduction

Psychiatric disorders have high prevalence rates among youths in the juvenile justice system [2-4]. More than 60 % of youths in the juvenile justice system have been found to meet diagnostic criteria for one or more psychiatric disorders, excluding conduct disorder [3]. Based on a review of 15 studies of detained male adolescents, Colins., et al. [5] reported a prevalence rate of 69.9 % of any disorder, with conduct disorder occurring most frequently (46.4 %).

As noted by Grisso [6], mental health assessments in juvenile justice may be ordered by the court at different phases in the judicial process and for different purposes. Some assessments occur in the context of pretrial issues (e.g., competence to stand trial, capacity to waive Miranda rights, waiver to criminal court). Pre-disposition evaluations, i.e., evaluations of youths adjudicated delinquent in order to

assist the court in disposition decisions, are probably the most common type of mental health evaluation in juvenile delinquency cases. Youths who are placed in detention or juvenile corrections facilities may also be screened or evaluated for mental health needs. The type or purpose of the evaluation should determine the particular scope and focus of the evaluation and the methodology that is employed. Clinical interviews of youths may range from unstructured, to semi-structured, to structured diagnostic interview, depending on the purpose of the assessment. Assessment tools or measures that are incorporated in the assessment process may vary from brief screening tools to more comprehensive assessment instruments to specialized forensic assessment tools [7]. The Massachusetts Youth Screening Instrument-Version 2 (MAYSI-2) [8] is an example of a brief, self-report screening tool that screens for symptoms of mental and emotional disturbance. As noted by Grisso and Quinlan [9], it is often used in juvenile justice systems as part of an initial intake interview for probation or upon admission to pretrial detention or juvenile corrections facilities. The Minnesota Multiphasic Personality Inventory-Adolescent (MMPI-A) [10] is an example of a more comprehensive personality assessment inventory. The MacArthur Competence Assessment Tool-Criminal Adjudication (MacCAT-CA) [11] is an example of a specialized forensic assessment tool.

The current report concerns the utility of the Youth Self-Report (YSR) of the Achenbach System of Empirically Based Assessment (ASEBA) [1] in juvenile delinquency assessments. The ASEBA forms have been identified by Hoge and Andrews [12] as being among rating/checklist measures useful in forensic assessments for risk of violence in juveniles. The ASEBA utilizes a multi-informant procedure which includes separate parent (Child Behavior Checklist), teacher (Teacher Report Form) and self-informant (Youth Self-Report) reports. The Youth Self-Report (YSR) is a 112-item measure that assesses a broad spectrum of problems as well as positive functioning in children and adolescents ages 11 - 18. The YSR includes a Total Competence score based on Activities, Social, and School performance. The YSR problem forms contain Total Problems, Internalizing (emotional) and Externalizing (behavioral) scales which were derived from factor analysis, eight syndrome scales, and six DSM-oriented scales developed based on ratings by experts using criteria from the Diagnostic and Statistical Manual of Mental Disorders-DSM IV [13]. The ASEBA is one of the most widely researched and used behavioral rating scales. The test scales are supported by a solid research base and are technically sound, with strong reliability and validity data. ASEBA forms have been shown to significantly discriminate between non referred children and children referred for mental health or special education services. The ASEBA forms were not designed with built-in scales to assess response style. Instead, the ASEBA addresses possible informant bias using cross-informant comparisons which has been noted to be of particular value for assessment in a forensic setting, particularly where different parties to a case are apt to have conflicting views and motivations, as in child custody cases, as well as forensic evaluations of adolescents that may be adjudicated. The ASEBA is based on the concept that an optimal clinical assessment of an individual youth can be performed when multiple informant reports are available. However, in some or many situations, the Youth Self-Report may be used in juvenile delinquency assessments even when parent and teacher report forms are not available.

Sources of Information in Juvenile Delinquency Assessments

Ideally, when a youth is being evaluated to determine a need for mental health treatment, the evaluator is able to employ a multi-method, multi-informant assessment approach [12,14-20]. While it is highly desirable to obtain information about a youth from multiple informants, in forensic contexts sometimes collateral sources such as parents, teachers, or professionals that have been involved with the youth are not accessible. This is more likely to occur when youths have been remanded to detention facilities or placed in juvenile corrections facilities. In some cases only the youth is available to participate in the evaluation [5,12,16,21]. In some jurisdictions the law requires that if a youth is detained and has not been found in a fact-finding hearing to have committed a designated felony act, the dispositional hearing is to commence not more than 10 calendar days after the entry of the fact-finding order. Consequently, an evaluator conducting a pre-disposition evaluation may have a very limited period of time within which to conduct the assessment, and the opportunity to obtain collateral information from sources such as parents, detention facilities, schools, and other agencies might be very limited.

Underreporting of Problems by Youths

With respect to research, the great majority of studies on psychiatric disorders in delinquent adolescents have relied on youth self-
Utility of the ASEBA Youth Self-Report (YSR) in Juvenile Delinquency Assessments

Parents generally reported higher levels of psychopathology in their children than their children reported about themselves [30-34]. Of the few studies that have examined parent report of youth psychopathology in juvenile justice involved youths, results indicated that parents generally reported higher levels of psychopathology in their children than their children reported about themselves [30-34].

Limitations on the Accuracy of Self-Report Measures Due to Underreporting

Not surprisingly, when considering the prevalence of underreporting by delinquent youths, various investigators have questioned the validity of self-report measures of externalizing and internalizing psychopathology and substance abuse measures administered to youths in the juvenile delinquency population [30-32]. In a study of juvenile delinquent youth with both severe behavioral and psychiatric disorders, Breuk, et al. [30] found no differences in scores on the YSR between the delinquent youth and youths in the general population. In a study of psychiatric disorders among incarcerated male adolescents (N = 196), Vreugdenhil, et al. [32] found that assessment using the Diagnostic Interview Schedule for Children (DISC-C) [35] identified 90% of the youth as meeting criteria for at least one DSM/DISC-C psychiatric disorder. Seventy-six percent were identified as having "any behaviour disorder". In contrast, the Youth Self-Report Total Problems scores identified only 22% of these youths as being in the clinical range. Also, weak associations were generally seen between the YSR empirical and DSM-oriented scale scores and the DSM/DISC-C diagnoses. However, the YSR DSM-oriented scales Attention Deficit Hyperactivity Problems, Oppositional Defiant Problems, and Conduct Problems were significantly associated with their corresponding DSM/DISC-C diagnoses. Also, it is noted that the purpose of their study was to examine the usefulness of the YSR for psychiatric screening rather than as part of a comprehensive, individualized pre-disposition evaluation in which the parent and/or teacher form might also be included. Additionally, Vreugdenhil, et al. [32] compared prevalence rates for clinical problems on the YSR to the DISC-C based only on the YSR Total Problems score and not based on either of the other two "broad-band" YSR scales, i.e., the Internalizing and Externalizing scales. The Total Problems scale is not based on summation of the other two broad-band scales. Therefore, it is informative to consider results of the Internalizing and Externalizing scales on the YSR. Also, Achenbach and Rescorla [1] noted that "...the borderline and clinical ranges help users identify scores that are of enough concern to warrant consideration of needs for professional help" (p. 90). Thus, the borderline clinical range on the YSR may be used to identify youths who may need mental health services. Vreugdenhil, et al. [32] reported that 37% of the youths in their study obtained Externalizing Problems scores in the borderline clinical range and 27% obtained Internalizing Problems scores in the borderline clinical range (there would be an overlap of youths who obtained both Internalizing and Externalizing Problems scores in the borderline clinical range). Also, in the study by Vreugdenhil, et al. [32] prevalence rates for the YSR syndrome scales "Anxious/Depressed" and "Withdrawn/Depressed" were quite comparable in comparison to the prevalence rates for the DSM/DISC-C diagnoses of "Any anxiety disorder" and "Any affective disorder". Thus, in comparison to the DISC-C, the YSR appeared to identify a much lower percentage of youths with possible externalizing problems but a comparable percentage of youths with possible internalizing problems, albeit the YSR Internalizing scales tended to have weak associations with their corresponding DSM/DISC-C diagnoses.

Studies Supporting the Usefulness of the YSR in Juvenile Delinquency Assessments

In contrast to the study by Vreugdenhil, et al. [32], a study by Elgar, et al. [36] of 68 confined male young offenders found higher rates of YSR scores in clinical ranges. In this study, 66.2% of the youths had Total Problems scores in the clinical range, 75.4% of the youths had Externalizing Problems scores in the clinical range, and 43.5% had Internalizing Problems scores in the clinical range. It is noteworthy that 85.5% of the youths had scores on the "narrow band" Delinquent Behavior syndrome scale that were in the clinical range, while only 21.7% had scores in the clinical range on the Aggressive Behavior syndrome scale. Together, the Delinquent/Rule-Breaking Behavior syndrome scale and the Aggressive Behavior syndrome scale compose the Externalizing domain. Thus, the findings by Elgar, et al. [36], albeit with a relatively small sample, suggest that the YSR identified a substantial proportion of youths as having internalizing and/or externalizing problems, and particularly delinquent behavior problems.

Colins [37] recently conducted a study of 405 detained youth in the Netherlands in which he compared youth of different ethnic origins. All tests and clinical interviews were conducted for applied forensic purposes in which evaluation results would be used for legal purposes. The YSR DSM-oriented scales were examined for their screening accuracy of diagnoses based on two structured diagnostic interviews. Results indicated that boys who met criteria for a specific psychiatric disorder obtained higher scores on the corresponding YSR DSM-oriented scale than boys who were not diagnosed with that disorder. The YSR DSM-oriented scales were significant and moderately accurate predictors of the corresponding disorder based on diagnostic interview.

In a study of 790 incarcerated male and female youth Kaszynski, et al. [38] studied prevalence, comorbidity and convergent validity of AXIS II personality disorders. Several structured diagnostic interview schedules were used to identify personality disorders. Several self-report measures, including the YSR, were used to measure psychopathology. Those youth who met criteria for Antisocial P.D., Narcissistic P.D., and Borderline P.D. obtained significantly higher scores on the Aggression and Delinquency scales of the YSR than youth who did not meet criteria for those personality disorders.

External Correlates of the YSR in Juvenile Delinquent Samples

Several studies in which scores on the YSR were associated with other external correlates will be mentioned. In a study of 214 male and female detained adolescents in Germany, Sevecke, et al. [39] found that the Aggressive Behavior Problems scale of the YSR predicted the total score and four dimensions of the Psychopathy Checklist: Youth Version (PCL:YV) [40]. Concurrent validity was found in both males and females.

Schmidt, et al. [41] studied the reliability and validity of the Youth Level of Service/Case Management Inventory (YLS/CMI) [42], a widely used risk assessment tool, in a sample of 107 male and female juvenile offenders who were evaluated for disposition purposes. The YLS/CMI was found to be moderately correlated with the Total Problems, Externalizing and Internalizing problem scales of the YSR, and highly correlated with the Delinquent Problems scale of the YSR.

In a study of 373 youth offenders, Penney and Skilling [43] found that youth report of Rule-Breaking Behavior on the YSR (designated as “Delinquent Behavior” on earlier editions of the YSR) was associated with increased odds of post-assessment recidivism. In contrast, only caregiver reports of Aggressive Behavior (on the Child Behavior Checklist) in the youths predicted the assignment of clinician-based diagnoses of Conduct Disorder or Oppositional-Defiant Disorder. Both youth and parent reports of Rule-Breaking/Delinquent Behavior were significantly linked with the presence of an identified substance use disorder in youths.

Cashel [33], who studied a sample of 48 court-probated juveniles, found that scores on the Delinquency scale of the YSR predicted adjudications and approached significance for predicting police contacts. Moderate convergence was found between parent report, youth self-report, and results of diagnostic interview of youths for assessing delinquency problems. Cashel concluded that “adolescent self-report may play a critical role in the identification of effective treatment interventions for court-probated youth” (p. 11).

In a study of 85 youth offenders, Butler, et al. [44] found that scores on the Delinquency and Aggressive behavior scales were associated with parent-adolescent alienation. Conduct disordered youth who reported feeling alienated from their parents reported high levels of Aggressive Behavior on the YSR independent of social-contextual risk. With respect to the Delinquent Behavior scale, higher self-reported alienation, greater antisocial thinking and greater social-contextual adversity were all independently predictive of Delinquent Behavior.

In a study of 100 Spanish youth offenders, Alvarez-Lister, et al. [45] studied associations between history of polyvictimization and severity of criminal behavior and severity of psychopathological symptoms. Study results included the finding of a mean YSR Total Problems score in the borderline clinical range and a mean Externalizing Problems score in the clinical range for the total group of youth offenders. Delinquent youths in the highly polyvictimized cluster group obtained Externalizing scores in the clinical range and Internalizing and
Total problems scores in the borderline clinical range. After controlling for demographic and criminal characteristics, youths who were polyvictims were three times more likely to have obtained a clinical level of YSR Externalizing behavior than youth offenders who were less victimized. Polyvictims were almost three times more likely to present with Total problems scores in the clinical range than youths were not polyvictims or were less victimized.

In a study of 133 incarcerated female offenders, Odgers, et al. [46] utilized latent class analysis to identify subgroups among the female offenders. A subgroup of girls who were identified as 'violent and delinquent' had significantly higher YSR Internalizing scores than the subgroup of girls identified as being of low probability of being involved in serious forms of violence and delinquent offending. The 'violent and delinquent' subgroup had significantly higher YSR Externalizing scores than both the low probability group and the group of girls identified as having a high probability of engaging in delinquent acts only (without engaging in serious acts of violent offending).

Aebi, et al. [47] studied a group of 260 male adolescent offenders in a correctional facility in Austria. The study focused on associations between maltreatment histories and psychiatric disorders and criminal behaviors. Latent class analysis identified subgroups of youths with no/mild trauma (NM), emotional and physical trauma (EP), and emotional, physical, and sexual trauma (EPS). Males in the EP and EPS subgroups had higher scores on all YSR problem syndrome scales compared to the NM class. Males in the EPS subgroup had higher scores on the YSR Social Problems and Thought Problems syndrome scales compared to males in the EP class.

General Findings with use of the YSR in Juvenile Delinquency Assessments

An examination of several additional studies suggests several general findings with respect to use of the YSR as an assessment tool with juvenile justice involved youth. Karnik., et al. [48] studied 5964 incarcerated adolescents, with particular focus on ethnic variation in the prevalence of self-reported psychopathology. Of significance for the current discussion, mean scores for all three ethnic groups in both males and females on the (1991 edition) YSR Total Problems, Internalizing, and Externalizing Behavior Problems scales were below the clinical and borderline clinical ranges. However, on the Delinquent Behavior syndrome scale, across ethnic and gender groups all mean scores were above T 62. The grand mean score of the three ethnic and two gender groups was 64.9, approximately equivalent to the borderline clinical range of > 65 in the current edition of the YSR. However, on the Aggressive Behavior syndrome scale mean scores for all of the six subgroups were below the borderline clinical range. Interestingly, for all six subgroups scores on the Thought Problems and the Anxious/Depressed problems scales represented the second and third highest scores, respectively. For some subgroups, such scores were very similar to the mean scores on these scales in the 2001 YSR clinically-referred group.

In a study of 50 male youth offenders, Butler, et al. [34] reported a mean score of 65.3 on the Delinquent Behavior syndrome scale. The Aggressive Behavior syndrome scale mean score was 56.4, below the borderline clinical range. Butler, et al. [44] reported a mean score of 65.16 on the Delinquency scale, in the borderline clinical range, but a mean score of 58.06 on the Aggressive Behavior scale, below the borderline clinical range. Similarly, Cashel [33] reported a mean score of 61.9 on the Delinquent Behavior syndrome scale, and a mean score of 57.6 on the Aggressive Behavior syndrome scale. It is noteworthy that the mean score in the 2001 YSR normative clinically-referred group of male youths (11 - 18 years) on the Rule-Breaking Behavior syndrome scale, formerly designated as the Delinquent Behavior syndrome scale, is 59.7. The mean score for the YSR normative clinically-referred group of male youths on the Aggressive Behavior syndrome is 61.3.

In a study of 226 male and female incarcerated adolescent offenders, Campbell., et al. [49] reported mean scores in the clinical range on the YSR Externalizing Problems scale and on the Delinquent Behavior problems scales. The mean score on the Aggressive Behavior syndrome scale was similar to that of the YSR clinically-referred norm group. Also, higher scores on the Delinquent Behavior and Aggressive Behavior scales were associated with higher scores on the Psychopathy Checklist: Youth Version (PCL:YV).

Two studies that reported YSR raw scores rather than standard T scores will be mentioned. In studies by Breuk, et al. [30] and by Imbach, et al. [50], the juvenile delinquent/forensic samples obtained scores on the Externalizing Behavior Problems scale and on the Delinquent Behavior syndrome scale that were not significantly different from those of a representative sample of clinically referred youth or a matched clinic sample. In the study by Breuk, et al. [30], youths in the juvenile delinquent sample scored significantly lower than the clinical youth group on the Aggressive Behavior syndrome scale.

Finally, in my currently unpublished data set (N = 50) of YSR scores obtained from delinquent youths (72% male) undergoing evaluation for disposition, scores on each of the broad-band scales were below borderline clinical ranges. However, mean scores on the Rule-Breaking Behavior syndrome scale and on the DSM-oriented Conduct Problems scale (60.1 and 60.2, respectively) approximated the mean scores obtained by the YSR normative clinically-referred group. In contrast, the mean score on the Aggressive Behavior syndrome scale (56.1) was lower than that of the clinically-referred group.

The preceding studies indicate that, with some exceptions, mean scores on the broad band YSR scales typically were below clinical or borderline clinical ranges. However, with respect to the Rule-Breaking (Delinquent) Behavior syndrome scale, the aforementioned studies suggest that, on average, delinquent youths being assessed with the YSR obtain scores similar to or higher than the mean score of the clinically-referred normative group for the YSR or the mean score of a clinic sample from the local population. Thus, on average, despite tendencies to underreport, deny, or minimize problems on self-report measures, the average score of adjudicated delinquents on the Rule-Breaking Behavior syndrome scale was equivalent to that of the clinically-referred normative sample in the current ASEBA edition or a specific clinical sample selected from the local population. This indicates that, on average, youths in the juvenile justice system self-report rule-breaking behavior at a level on par with youths known to be of clinical concern. In contrast, the same studies that were reviewed suggest that such youths tended not to report use of aggressive behavior at a level on par with clinically-referred youth. One may speculate that given their involvement in the juvenile justice system, such youths would be more cautious about admitting to displays of physically aggressive, assaultive, or threatening behavior even while acknowledging more general rule-breaking behavior. The studies reviewed also suggested that, in general, youths involved in the juvenile justice system do not report internalizing/emotional problems on the YSR at levels of clinical concern. An exception was the study by Elgar, et al. [36] which found a high prevalence of Internalizing problems in confined male youth offenders. The study by Karnik, et al. [43] of a large sample of incarcerated youth found mildly elevated, subclinical scores on the Thought Problems and Anxious/Depressed problems scales. Mild elevations on these scales may have in part reflected situational reactivity to being incarcerated.

Discussion

The Youth Self-Report of the ASEBA was developed as one component of a multi-informant assessment procedure that includes parent and teacher report forms. The YSR should preferably be used as intended, that is, as part of a multi-informant assessment procedure. An optimal clinical assessment of an individual youth can be performed when multiple informant reports are available. To the extent that the YSR is used without availability of parent and/or teacher report, it should be accompanied by other assessment procedures. Whether for screening or more comprehensive evaluation purposes, the YSR should not be used as the only method of assessing possible internalizing and externalizing problems. An abridged review of studies that utilized the YSR in juvenile justice contexts suggests several general findings. Most studies indicate that, on average, juvenile justice involved youths do not obtain scores on the YSR broad-band scales that are within the clinical or borderline clinical range. However, on average, youths obtain scores on the Rule-Breaking Behavior syndrome scale, formerly designated as the Delinquent Behavior scale, that approach or approximate the borderline clinical range or are equivalent to the average score of the normative clinically-referred youth sample. Thus, despite tendencies to underreport, deny, or minimize problems, juvenile justice involved youths, on average, tend to report rule-breaking behavior that may be regarded as being of clinical concern or approach being of clinical concern. In contrast, such youths tend not to report aggressive behavior at levels on par with the clinically-
referred YSR norm group. Acts of aggression may be perceived by delinquent youths themselves as more serious than non-aggressive misconduct; hence, the tendency to not report, or to underreport such behavior. Some individual youths may greatly underreport problems on the YSR so that the results would not represent an accurate picture of their problems. However, the same youths likely would under-report or deny problems on other assessment measures as well as during interviews. All self-report measures are susceptible to response bias, as are structured, semi-structured, and unstructured interviews, since they depend on the ability and willingness of the individual to provide accurate information [51]. The use of a multimethod, multi-informant assessment approach is critical in the assessment of juvenile delinquents, notwithstanding practical limitations in obtaining data from multiple sources. A brief review of the literature pertaining to juvenile delinquency also found that the YSR has been associated with external correlates including psychiatric diagnoses, delinquency recidivism, severity of offense, substance use, youth psychopathic traits, antisocial cognition, family and psychosocial variables, maltreatment history, and with clinician-rated risk assessment measures.

Bibliography

Utility of the ASEBA Youth Self-Report (YSR) in Juvenile Delinquency Assessments


24. Branson CE and Cornell DG. "Correspondence of the Millon Adolescent Clinical Inventory (MACI) and the Personality Inventory for Youth (PIY) in juvenile offenders". Journal of Forensic Psychology Practice 7.4 (2008): 65-100.


Utility of the ASEBA Youth Self-Report (YSR) in Juvenile Delinquency Assessments


