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The Youth Comprehensive Risk Assessment (YCRA) as a Treatment Guidance Tool for Adolescents with Behavioral and Developmental Challenges

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1. Introduction

This chapter describes the evolution of the Youth Comprehensive Risk Assessment (YCRA) by first describing the need, then the evolution of the assessment tool, and finally studies that provide validation.

2. The need: Risk factors associated with troubled adolescents

Much has been written about the factors that contribute to troubled adolescence. Hawkins, et al. (1992) and Hawkins, et al. (2000) found mounting evidence that adolescents who are most at risk for committing serious and violent crimes tend to display high levels of risk factors such as alcohol and other drug (AOD) abuse or addiction, lack of parent-child closeness, family conflict, beliefs and attitudes favorable to criminality, early childhood aggressiveness, antisocial behavior, and poor peer acceptance. Additionally, juvenile delinquency has long been associated with certain societal ills, such as easy access to alcohol and other drugs and family splintering (Hawkins, et al., 2000). Huizinga, et al. (2000) noted serious delinquency with co-occurring AOD abuse and mental health problems. However, common clinical practice is to provide broad-based assessment, with heavy reliance on clinical judgment without a self report component. This is now deemed a major limitation to distinguishing higher and lower risk youth (Huizinga, et al., 2000).

It is not uncommon for troubled youth who commit serious and violent crime to find themselves in therapeutic communities (TC) and/or residential treatment facilities (Coll, et al., 2004; Lecroy & Ashford, 1992; Lyons, Kisiel, Dulcan, Cohen, & Chesler, 1997). Indeed, MacKenzie (1999) found that out-of-home placements for delinquent adolescents grew 51\% between 1987 and 1996. Not surprisingly, adolescents treated via out-of-home placements were more likely to report higher levels of AOD abuse and more severe behavioral problems than adolescents treated via outpatient programs (Coll et al., 2003). Despite the severity of initial problems, youth in out-of-home placements typically reported significantly reduced
drug use and criminal activities and improved psychosocial development and interpersonal functioning outcomes after at least six months of treatment (Coll, et al., 2003; Hanson, 2002). Indeed, the professional literature is replete with reports of beneficial outcomes of residential treatment for adolescents and society in general including reduction in recidivism (re-offending), cost-benefit savings for communities and society, and increases in academic performance, and psychological adjustment (French, McCollister, Sacks, McKendrick, & De Leon, 2002; Grietens & Hellinckx, 2003). Consistent with recommendations by Huizinga, et al., (2000) and Hawkins, et al., (2000), Lyons, et al. (1998) noted that to successfully determine the appropriateness of care for those in residential settings, the needs of youth must be assessed in a systematic, reliable, and clinically-relevant manner. Child welfare funding sources are now demanding such information, recommending a thorough assessment process that covers a number of known risk areas (Mordock, 2000). Other studies with residential youth offenders have also indicated that carefully assessing major risk behaviors and promoting intensive, individualized treatment should become the preferred practices for working with youth in residential treatment (Burdsal, Force, & Klingsporn, 1990; Grimley, Williams, Miree, Baichoo, Greene, & Hook, 2000). Individualized comprehensive assessment processes are considered paramount for producing positive outcomes, as is the need to provide information to counselors and other staff members (e.g., teachers, youth workers) in order to enhance the intentionality of their treatment and to increase their ability to appropriately customize treatment plans.

2.1 Site
The adolescent residential treatment site is a Joint Commission for the Accreditation of Healthcare Organizations [JCAHO- now called The Joint Commission (TJC)], accredited 80-bed facility with an on-site accredited school located in the Rocky Mountain Region of the United States. The facility received court-referred adolescents, most of who are involved in criminal activity. Often these referrals are perceived by officers of the court, parents, and the adolescent themselves as their “last chance” treatment before being placed in long term and highly restricted juvenile detention. The residents, ages 11 -18, are court mandated for a variety of offenses ranging from running away to homicide. Treatment at the facility typically consists of a full school day; recreational, outdoor, and equine therapy; and individual, group, and family counseling. Residents average per week one hour of individual counseling, four hours of group counseling, and thirty minutes of family counseling. Although efforts to provide objective evidence of treatment efficacy have always been made by professional staff, pursuit of JCAHO (TJC) accreditation has made this imperative. Case reviews of residents who did not succeed in the program suggested prominent factors of substance abuse, aggression, and running away. Based on these early findings and professional literature reviews, more formal assessment procedures were instituted by professional staff, which ultimately led to the development of a comprehensive risk assessment process, now called the YCRA.

2.2 Population
The population typically is 45 to 50% female and 50 to 55% male. The ethnic composition tends to be about 90% Caucasian, 5% Hispanic, and 5% African-American. The average age is typically about 14.5 years (range was 12-17). The adolescents are assessed during the first month of their stay by a team of licensed professional counselors, psychologists, and social workers.
2.3 Development of a comprehensive risk assessment process and instrumentation called the YCRA

Efforts of the staff at the adolescent treatment facility to respond to the aforementioned trends and recommendations began approximately fifteen years ago. Specifically, professional staff investigated the presence of common factors among adolescent and child clients who failed to successfully complete their residential treatment programs. Case reviews suggested that the most prominent prediction factors for program failure included high run-away risks, multiple prior placements, aggression, substance use, and poor family resources.

On the basis of these early findings and literature recommendations for individualized comprehensive assessment (Lyons, et al., 1997), more formal assessment procedures were instituted as part of the treatment process. Increased early assessment efforts at admission were designed to ascertain those areas around which youth were the most troubled, needed longer treatment, required greater supervision, and posed a higher risk to self and others. Additionally, it was hypothesized that these efforts would help predict which youth would improve better and/or faster in treatment, and what additional information might be needed about each youth to further enhance treatment efficacy. Treatment staff in residential treatment have historically disagreed on whom was “more troubled or less troubled,” creating clinical discrepancies and inconsistencies. Thus, consistent with suggestions from the professional literature to discern frequency and intensity of risk factors, an identification process was developed to contrast those residents who scored high or “yes” in chemical abuse, conduct-disorder behaviors, criminal thinking, and low family bonding and those who did not. This identification process was deemed important because staff often disagreed on treatment approaches, as well as which residents were at higher risk, needed more help, or functioned most poorly.

To this end, standardized self-report instruments were selected, including the SASSI-A2 (Substance Abuse Subtle Screening Inventory for Adolescents, second edition, Miller, 2001), and the FACES-III (Family Adaptability and Cohesion Scales, Olson, 1985). Additional clinical judgment information was gathered at admission and included the presence of any conduct-disorder behaviors (APA, 1994) and the extent of criminal thinking patterns, which was based on Samenow’s (1998) 17 errors of criminal thinking behavior. Instruments used in this investigation adhered to Mordock’s (2000) recommendations that child and youth assessment processes include both sound clinician-rated measures and standardized client-completed measures. A discussion of the measures used in this study is included below.

2.4 Standardized client-completed measures

To measure chemical addiction/abuse, the SASSI-A2 (Miller, 2001) was utilized. The SASSI-A2 has been shown to be useful in a broad array of contexts, including court systems and mental health settings (F. Miller, 2001). According to Miller, the adolescent form of the SASSI was developed for ages 12 to 18. The SASSI-A2 consists of 52 true/false questions and 26 items with a 0 to 3 scoring format. This allows for self-report of negative consequences of use of alcohol and other drugs. Through research and clinical trials carried out over 16 years (Miller), the test has exhibited greater than 90% accuracy in identifying those with chemical dependency. Miller indicates that items on the SASSI-A2 touch a broad spectrum of topics seemingly unrelated to chemical abuse, which makes the instrument less threatening to abusers. Other studies have validated such findings (see Coll et al., 2003).

Olson’s (1985) FACES III was utilized to measure family functioning and specifically family bonding. FACES III is intended for members of families across the life cycle. The 20 items
with a 1-4 Likert scale were developed to be readable and understandable to adolescents as young as 12 years old. For the purpose of this study, the cohesion scale, defined by Olson as the emotional bonding that family members have toward one another, was used. According to Olson, internal reliability for the cohesion scale is .77 and test-retest reliability is .83. Content validity is reported to be very good (Olson, 1985).

2.5 Clinician-rated measures
Behaviors symptomatic of conduct disorder were assessed by the staff counselors (all holding master’s degrees in counseling or social work and holding state licenses) using previous records and a DSM-IV-TR (APA, 2000) conduct disorder checklist. These interviews were conducted after the adolescent was on-site for at least two weeks. A conduct disorder checklist using the DSM-IV criteria has been recommended in the literature as an effective way for assessment and monitoring conduct disorder behaviors (Miller, Trapani, Fejes-Mendoza, & Eggleston, 1995; Zoccolillo & Rogers, 1992). Criminal thinking was also rated by staff counselors using a scale based upon Samenow’s (1984; 1998) 17 errors in thinking. On two occasions, Samenow visited the facility and trained staff in using his criminal thinking assessment process. Sample inquiries include “For each of the following characteristics, please rate (the youth) on the extent to which he demonstrates these tendencies or thinking patterns:” pride (e.g., refusal to back down, even on little points), victim stance (e.g., conveying a sense of the “poor me” attitude), and anger (e.g., using anger to try and control people). A Likert scale was used to assess each thinking error (1=almost not at all, 2=some, 3=half the time, 4=frequent, and 5=almost all the time). Assessing criminal thinking patterns and errors using Samenow’s (1998) approach has been in clinical use for many years (Coll, Juhnke, Thobro, & Haas, 2003; Coll, Thobro, & Haas, 2004). Examples of such thinking errors include power tactics, refusing to accept responsibility, and lack of empathy (Samenow, 1984, 1998).

3. The youth comprehensive risk assessment
These assessments were initially piloted and reported under an “umbrella” assessment that was employed as a comprehensive risk factor summary based on the six factors developed from the professional literature (listed below). This summary is now used to make level-of-care decisions (i.e. residential, group home, outpatient care). In the piloting phase, scores from the SASSI-A2 and FACES-III, as well as historical and anecdotal information from the client’s record, were included. Additionally, the staff assessments of clients’ criminal thinking patterns and history of conduct-disordered behaviors were also included in the risk assessment. This group of assessments and the protocol followed in the administration and interpretation of the total package became a comprehensive risk factor and social functioning summary called the YCRA (Coll et al., 2004).

The YCRA was submitted and approved as a performance measurement system with the Joint Commission for the Accreditation of Health Organizations (JCAHO, now TJC) (1998). Per the JCAHO approved definition, the YCRA is specifically defined as a clinical assessment process utilized by trained mental health professionals to systematically gather information and make clinical judgments related to six risk areas: (a) risk to self (including risk for suicide, self-harm, becoming a victim, and risk-taking); (b) risk to others (including aggression, sexually inappropriate behavior, and destruction of property); (c) social and adaptive functioning (including developmental disorders, handicaps, cognitive disorganization, and social skills); (d) substance abuse/dependency; (e) family resources; and (f) degree of structure needed.
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(frequency of out-of-home placements and need for supervision). Subscales and individual items from the MPD, SASSI-A2, the conduct disorder checklist, and the criminal thinking assessment, as well as historical and anecdotal information, are used to determine scores in five of the six areas (risk to self, risk to others, social and adaptive functioning, substance abuse/dependency, and degree of structure needed). The FACES III and historical/anecdotal information are used to measure the level of family resources.

The YCRA has met the rigorous criteria necessary for inclusion on JCAHO’s list of approved performance measurement systems. The YCRA has met or exceeded system adherence to all of the JCAHO quality principles, including sampling, standardization, monitoring, documentation, feedback, education, and accountability (JCAHO, 1998). The YCRA used a non-equal interval Likert scale of 1 to 4x2 (8) based on the recommendations of child welfare experts (CWLA roundtable, 1999), with 1 being slight, 2 being mild, 3 being moderate and four times two (8) being severe and requiring immediate treatment interventions. The distinction between three and eight (4x2) was deemed very important to bring immediate treatment foci to these severe areas. An initial research investigation found that the YCRA predicted adolescent offenders’ struggles with poor social skill development and life meaning (Coll, Thobro, & Haas, 2004). Currently, clinicians at the adolescent treatment facility where the YCRA was developed systematically gather information from these assessments and develop treatment goals and interventions related to the six risk areas. At 6-month intervals, the residents undergo a re-evaluation, which is designed to make adjustments in treatment planning and decisions about discharge (including timeframe and placement options). Two additional research studies are summarized here to provide further validation to the robust utility of the YCRA for assessment and effective treatment planning and implementation.

3.1 The YCRA distinguishes higher and lower risk youth

In using the YCRA, 13 residents indicated none of the risk factors present at high levels, 19 residents indicated one indicator present at a high level, and 18 indicated two indicators present at high levels. These 50 residents were categorized as “lower risk”. Twenty-seven of the residents indicated three indicators present at high levels, and 20 indicated all factors present at a high level. As clinical and other professional staff (e.g., teachers, administrators) strongly agreed that this warranted ‘high risk’ status, these 47 residents were categorized as “higher risk”. These two groups were used in the following analyses.

The “higher risk” residents were compared with the “lower risk” residents. T-test analyses and effect size calculations (Cohen, 1988; Dunlop, Cortina, Vaslow, & Burke, 1996) ascertained statistically significant differences and the magnitude of the differences between the two groups on clinical perceptions from professional staff on the six YCRA areas.

The higher risk residents were reported by staff to have significantly more problems with social functioning ($t = 2.95, df = 95, p = .004; d = .70$), substance abuse ($t = 2.12, df = 95, p = .037; d = .44$), and needed a significantly higher degree of structure in treatment ($t = 2.94, df = 95, p = .005; d = .74$). They also exhibited a significantly higher risk to self ($t = 2.20, df = 95, p = .03; d = .48$), and to others ($t = 3.98, df = 95, p = .000; d = .93$). Analyses indicated that higher and lower risk youth were not significantly different in family resources available, with both groups reporting high need for such resources.

Cohen (1988) suggested that effect sizes ($d$) of .20, .50, and .80 be considered small, medium, and large, respectively. Based on these criteria, effect sizes fell in the medium to large range. The conclusion can thus be made that these results have not only statistical significance but also practical significance. Another way to interpret effect sizes is by transforming them into...
percentiles (Gall, Borg, & Gall, 1996). The range of reported effect sizes equates to percentile differences ranging from 17 to 42 percentile points. The large percentile point differences between the groups support the practical significance of these findings.

In terms of specific treatment strategies for higher risk to self, Coll, Thobro, and Haas (2004) noted that depressed adolescents show very different symptomology than adults, typically with fewer verbal expressions of depression, and with much more disruptive behaviors. As Capuzzi and Gross (1996) indicated, depressive behavior in adolescents is commonly found in irritable mood rather than depressed mood, and in somatic complaints and social withdrawal. Interventions now being implemented for helping depressed adolescents include asset building, focusing on increasing sense of self-worth and reducing isolation, teaching stress management, encouraging better communication and problem solving skills, helping promote inner directedness (e.g., through journaling), and providing appropriate psychotropic medications (Jongsma, Peterson, & McInnis, 1996).

The results of this study also reveal poor family resources (including low bonding) as a major treatment issue for all youth investigated. Bowlby’s (1988) therapeutic tasks for building better attachment and healthy human development are currently being infused into family, group, and individual interactions at this facility. Two key therapeutic tasks identified for building a secure base include exploring various unhappy and painful aspects of life with a trusted facilitator and consistent encouragement, sympathy, and, on occasion, guidance.

In terms of the risk factors of social and adaptive functioning and need for supervision, the facility staff is currently integrating social skill feedback and intensive supervision (e.g., on-on-one supervision) within the context of ‘Life Space Intervention’ (Brentro, et. al., 1998). Life Space Intervention is a humanistic, developmental approach that accents on-on-one interactions at ‘teachable moments’ (e.g., when processing recent antisocial behaviors) by getting the youth’s perspective, clarifying perceptions, and helping youth develop strategies to succeed. Challenge is inherent in delivering effective treatment strategies for youth offenders. Progress can be a slow process and the aforementioned interventions require consistent and compassionate involvement.

The agency is also exploring stepped-care treatment to increase efficiency and effectiveness (e.g., focusing on less expensive, intrusive writing therapies in combination with more expensive, intrusive face-to-face counseling). For example, writing therapy and especially distance writing (between youth and family members, school counselors, et al.) has proven to be quite powerful (L’Abate, 2011). L’Abate (2011) recently indicated that especially with impulsive, acting out adolescents, distance writing (with properly targeted workbooks) greatly helps these adolescents to learn to think before acting.

### 3.2 The YCRA distinguishes treatment strategies for more ‘disengaged’ youth

The second research study investigated what significant YCRA differences existed between more family disengaged youth and less disengaged (Per FACES III assessment) and what were the treatment implications.

For comparison purposes, youths were grouped into “disengaged” (n = 155) and “nondisengaged” (n = 143), that is, separated, connected, and enmeshed per the FACES-III cut off scores (Olson 1986). The t-test analysis indicated significant differences between the groups scoring significantly higher in behaviors related to destruction of property (p = .05, ES = .25), deceitfulness or theft (p = .002, effect size [ES] = .36), and serious violation of the rules (p < .000, ES = .56). There was no significant difference between the groups for aggression to people and animals (p = .578).
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The t-test analysis also indicated significant differences between the groups for other at-risk behaviors, per the YCRA, with the disengaged group scoring significantly higher in risk to self (p < .000, ES = .46) and substance abuse (p = .006, ES = .33) and significantly lower in family resources (p < .000, ES = .52).

Further supporting the statistical and practical significance of this study, based on effect sizes, are Gall, Borg, and Gall’s (1996) criteria. These researchers noted that another effective way to interpret small, medium, and large effect sizes is by transforming them into percentiles. The range of reported effect sizes equates to percentile differences between the groups, ranging from 17% for smaller effect size differences to 42% for larger effect size differences. The large percentile point (effect size) differences. Again, the large percentile point (effect size) differences between the groups in this study support the practical significance of these findings. (For example, differences between the groups for risk to self would be at least 25%.)

A family intervention program to address these and other questions is currently being piloted at this treatment facility. Components of the intervention include ongoing discussion and specific goal setting with families based on the FACES-III Cohesion Scale items (e.g., spending time together and asking each other for help) and thorough asset searching to reinforce strengths and adoptable functioning of the youths and family. As Olson (2000) recommended, counselors are being active in structuring and monitoring family interaction to block or interrupt disruptive family interactions. The youth offender counselors at this agency are also striving to set modest concrete objectives to be reached through small increments of change to reduce anxiety and help families maintain change over time, per Olson’s suggestions.

In addition, systemic interventions agency-wide are currently being discussed and have been inspired by the “Bridge Program” (Crowley & Bishop, 2008). New practices and policies under review include introducing families to staff members who are involved with their children, creating a calendar of events to keep families better informed, and inviting family members to go along on field trips and to attend special activities. Also, as previously mentioned, distance writing is also being implemented as a less intrusive strategy to increase family bonding (L’Abate, 2011).

This emerging comprehensive program certainly needs to be empirically tested. Yet, intentional individual, family, and agency-wide systemic interventions for adolescents and their families are being developed on the basis of these results. The uses of the FACES-III, Conduct Disorder Checklist, and YCRA have added needed consistency. The FACES-III, Conduct Disorder Checklist, and YCRA assessment processes are also reducing subjectivity. The results of this investigation are being used in more effective policies and practices and in providing more intentional training of caregivers, clinicians, teachers, families, and others to understand and help develop youths and their families’ strengths.

4. Discussion

The goal of this chapter was to provide information to the counselors and other staff (e.g., teachers, youth workers) so that they could increase the intentionality of treatment and customize their treatment plans appropriately. Whereas this assessment tool was developed to improve services at one facility, it also may inform treatment procedures beyond as indicated by the identification of key mental health risk factors. Based on the YCRA additional studies explored here, treatment strategies at the facility have been implemented to assure and improve quality. The following includes an overview of the treatment provided.
Most of the referrals to the facility from the county court systems do not indicate a high need for substance abuse assessment and treatment (typically only about 20% to 30% of the referrals indicated a possible chemical dependency problem). Through the use of the YCRA, the facility now has changed its policy of comprehensive chemical abuse assessment from “when indicated” to “mandatory”. Facility professionals have found Prochaska and DeClemente’s (1992) stages-of-change model particularly helpful in conceptualizing youth as related to the YCRA, particularly the five stages of change: precontemplation, contemplation, preparation, action, and maintenance. Some youth are now more clearly identified in the “precontemplator” stage of motivation for change, defined as not considering change in problem behaviors, and lacking significant awareness related to these behaviors, even though such behaviors have brought a great deal of trouble. Such conceptualization has assisted staff in providing consistent interventions based upon Motivational Enhancement Therapy (e.g., Change Plan Worksheet, rolling with resistance) as well as reducing personal frustration and impatience (Miller & Rollnick, 2002).

YCRA factors such as higher risk to others (e.g. assault, sexual aggression, destruction of property) and poor social and adaptive functioning are common. Facility professionals are reporting benefits from YCRA information provided about conduct disorder and criminal thinking as social interactive dysfunctions that continue across generations and have severe consequences for others. This social-historical context within which the youth has functioned is often overlooked, frequently leading to failed treatment (Kazdin, 1993). Richters and Cicchetti (1993) emphasized the importance of early identification and treatment of conduct disordered behavior, which occurs when using the YCRA. Some effective strategies for reducing such risk according to Hawkins, et al. (2000) are being incorporated at the facility through YCRA assessment, including encouraging youth involvement in active classroom instruction; emphasizing interactive teaching and cooperative learning; using tutoring of the socially rejected youth; and providing assertiveness training. Solution focused counseling and Glasser’s WDEP (wants, doing, evaluation, plan) approach are also being implemented as sound practices to promote insight and behavior change (Corey, 2001).

4.1 YCRA limitations and future research
The population is drawn from a single institution. Future YCRA research should include a larger number of participants from a diversity of residential youth settings. Future research should follow participants longitudinally to measure treatment outcomes.

5. Conclusion
This chapter provided evidence for the value of using the YCRA to formally assess risk factors, via clinical observation and self-reports. This emerging process needs to continue to be empirically tested. Yet, it can be argued that a more efficient system of care is developing for adolescents at this particular facility. The use of the YCRA has added consistency at this treatment facility. Lyons, et al. (1997) noted that the current youth offender assessment procedures rely too heavily on subjective ratings that are strongly influenced by clinician’s idiosyncratic approaches. The assessment process described here reduces such subjectivity. The results are now being used in more effective training of caregivers, clinicians, teachers, families, and others to understand youths’ individual needs and strengths.

For more information visit www.youthriskassessment.com
6. References


In the book "Mental Illnesses - Evaluation, Treatments and Implications" attention is focused on background factors underlying mental illness. It is crucial that mental illness be evaluated thoroughly if we want to understand its nature, predict its long-term outcome, and treat it with specific rather than generic treatment, such as pharmacotherapy for instance. Additionally, community-wide and cognitive-behavioral approaches need to be combined to decrease the severity of symptoms of mental illness. Unfortunately, those who should profit the most by combination of treatments, often times refuse treatment or show poor adherence to treatment maintenance. Most importantly, what are the implications of the above for the mental health community? Mental illness cannot be treated with one single form of treatment. Combined individual, community, and socially-oriented treatments, including recent distance-writing technologies will hopefully allow a more integrated approach to decrease mental illness world-wide.

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