Selecting and Using Risk and Need Assessments

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Risk Assessment: An Overview for Drug Courts

The purpose of this document is to provide Drug Court staff with a concise and current overview of important issues relating to offender risk assessment and to provide a list of recommended contemporary risk instruments. Numerous risk scales are currently used in the United States (see Desmarais & Singh, 2013) to assess static risk factors and criminogenic needs (dynamic risk factors that are related to the client's propensity for criminal behavior), of which substance abuse is but one. Almost all of these are applied to predict risk post-adjudication.

Consequently, we set out to identify those risk scales best suited for use by Drug Courts. To do so, we used validity criteria widely accepted in the research literature on risk assessment (see Overview of Risk Assessment Instruments). Those that met all the criteria are described under Recommended Risk Instruments, and those that met only some of the criteria are described under Promising Risk Instruments. These sections are preceded by a general discussion of the issues pertaining to risk assessment, as well as best practices for selecting an instrument to suit a particular Drug Court's needs and capacity.

Advantages, Limits, and Usage of Risk Assessment Approaches in Contemporary Practice

Through the assignment of cases to risk categories or the calculation of scores, risk assessment approaches are designed to identify expected likelihood of a particular outcome (e.g., recidivism) over a specified period of time (e.g., within three years) for an individual offender or client. Statistical scales have been demonstrated to be more reliable and more accurate than clinical judgment alone (see, e.g., Ægisdóttir et al., 2006; Bonta, Law, & Hanson, 1998; Hilton, Harris, & Rice, 2006; Meehl, 1954/1996).

Generic versus specialized risk scales

Specifically, research has demonstrated that accuracy of risk prediction is improved with the use of standardized instruments that weight factors according to their relationship with outcome (factors that are more predictive have greater weight). Currently, many statistical risk scales are designed to predict various client outcomes: general recidivism and violent, sexual, or intimate partner reoffending. In general, specialized scales work better than a generic scale in predicting specific outcomes; that is, if you are concerned about risk of intimate partner violence, you should use an intimate partner risk scale.

Group versus case-level risk assessment

Statistical risk instruments provide scores that are related to recidivism estimates for groups of offenders. Among a group of offenders assessed as high risk using a validated statistical risk scale, their predicted failure rate will be higher than that of a group of offenders assessed as low risk, and such predictions exceed chance. However, if the scale is used on a new sample that is different from the original, accuracy may be degraded. Consequently, a risk scale should not be used for clinical decisions until it has been demonstrated that it works for the population on which it will be used.

Notably, statistical risk scales tend to rely on criminal history (e.g., age of onset, number of convictions) and demographic variables (e.g., current age, number of prior convictions) for predictive accuracy. Most rely on static factors, but recent instruments also consider dynamic, empirically validated risk factors (e.g., antisocial attitudes, severity of substance use), which inform intervention and can potentially change, as demonstrated by risk reassessment. There may also be other factors that Drug Court teams wish to consider at the individual case level to augment or refine their risk assessment. Case-level factors can be used to help better understand unique risk markers and better describe a client's offense pattern to inform case analysis. However, such factors are

unlikely to greatly improve risk *prediction*. As a general practice, overriding statistical risk estimates without compelling and valid reasons would not be considered good practice. Clinical opinion alone would not be considered compelling or valid. To the contrary, the evidence suggests clinical overrides of statistical risk predictions decrease risk prediction accuracy.

Nonetheless, there is merit in combining group- and case-level risk assessments to inform case planning and risk management. We propose that the use of validated risk instruments is a best practice that provides Drug Court teams a valid likelihood of risk. Statistical scales indicate the likelihood of risk, either as categorical rating (low, moderate, or high) or probability (XX% over YY years).

That said, risk scales are not 100 percent accurate; some low-risk cases fail and some high-risk cases succeed. Accordingly, the inclusion of case-specific factors can further refine risk assessment. For example, a statement such as this could be helpful: *When the client is experiencing negative affect, he/she self-medicates to manage symptoms. Accordingly, risk increases during periods of negative affect, as the client will be likely to engage in crime to secure illicit substances.* With increases in risk level, the urgency for action by the supervising officer increases, as imminence of criminal behavior is associated with increased dynamic risks. Finally, some assessors identify specific factors as part of an offense chain in order to better describe the timing and pattern of risk events, thereby providing a formulaic analysis of risk in their assessments.

Validation

The cornerstone of usable risk measures is reliability and validity. Do different practitioners get the same risk score on the same client (reliability), and does it truly reflect risk when outcome is examined (predictive validity). Two aspects of validity are important: (1) *Construct validity* is evidence that the risk scale measures what is intended (relevant items distinguish between low- and high-risk clients' subsequent criminal behavior).

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(2) *Predictive validity* is evidence that the risk scale predicts future criminal behavior. To select for predictive accuracy, we used the AUC (area under curve) statistic for comparing across risk scales, consistent with accepted practice in risk assessment research, and concentrated on assessments with an AUC of .65 and above. This translates to mean that 65% of the time, those with a higher risk score will fail compared to those with a lower risk score. Moreover, in comparing risk assessment approaches, clinical decisions rarely exceed a chance level of predictive accuracy, (i.e., AUC = .50).

The bottom line here is, all other things being equal, Drug Court teams should select the risk scale with the best predictive validity, that is, the highest predictive accuracy. (The field has developed guidelines for a standard index of predictive validity, which we applied in the comparison and final selection of the risk scales described in Recommended Risk Instruments.)

Other Considerations

Other factors are also important to consider when evaluating the selection of an instrument:

1. As stated above, the validation sample should be similar to the individuals to which the instrument will be applied.

2. As the consequences (i.e., impact) for the individual or the public increase, the requirement for high validity increases (Wise, 2014).

3. Look for instruments for which validation studies have been completed using data collected in practical settings by practitioners, not just by researchers. A current review of the research on assessment in correctional settings indicates such validation studies give a better approximation of results in a real-life situation (Desmarais & Singh, 2013), as researchers typically are able to invest greater effort in selection and training of staff.

Static versus dynamic risk in the use of risk assessments

Static risk factors are things that are related to risk but cannot change, such as age of first arrest. *Dynamic risk factors* are items that can change, and the change is associated with changes in risk, such as substance use. An example is increased use of illicit drugs being related to increased risk of reoffending. Use of both static and dynamic risk factors is preferred for optimal prediction and case management.

Static factors can be considered a baseline measure and identify *who* is at risk. Because assessment of static risk should not change over time, it is therefore limited to initial group assignment. Dynamic risk, in contrast, identifies *when* and *why* a person is at risk, leading to improved case planning and risk management approaches. Specifically, dynamic risk reassessments should provide more refined measures of the timing of risk events (Douglas & Skeem, 2005). But while numerous risk scales incorporate dynamic items, their scoring is not sensitive enough to change, so using these scales for risk reassessment has generally not proved helpful to staff.

Encouragingly, there is preliminary evidence with new dynamic risk measures demonstrating that changes in dynamic risk relate to client outcome, and assessments completed within the month preceding the client's failure have greater accuracy than ones done much earlier (Lloyd, Hanson & Serin, 2015).

Risk assessment and decision making

Risk assessments inform decisions throughout the criminal justice process, and principally at pretrial, sentencing, custody classification, level of community supervision, and release (timing and conditions). At each decision point, risk is considered, and those conclusions are relevant in better managing offender risk to address public safety concerns.

That said, scoring a risk instrument is not the same as *using* a risk instrument (Miller & Maloney, 2013). Alarmingly, many parole officers report that while they score such instruments because they are required to do so, they then ignore or override the results based on their opinion of the case. Not only does such a strategy degrade accuracy (Hanson, 2009) but it fails to reflect due diligence, making staff vulnerable to criticism and potentially liable in the event of client failures.

An important consideration in both risk assessment and decision making, then, relates to due diligence. The process used is critical to defending the Drug Court team's assessment, especially in the event of an unexpected outcome. Hence, the process must be credible and employ

a best practice approach. Drug Court teams must consider appropriate and sufficient sources of information (e.g., interviews with collaterals, review of appropriate administrative records), allocate adequate time to complete the assessment, and utilize an appropriate and validated risk instrument. In short, the rationale for the decision must reflect contemporary practice such that other experts would agree with the manner in which the assessment was conducted. Essentially, in the event of a false negative (incorrectly predicted success), the question is whether the assessor used an approach that is defensible. Due diligence indicates that the decision process is defensible, not that the outcome was accurately predicted.

Representativeness

In addition to those discussed above, other issues related to assessment of predictive validity should be considered:

- As mentioned earlier, performance indicators generated from research data may be different from those derived from data collected by practitioners on the job (Desmarais & Singh, 2013).

- Often assessments are developed using samples that are predominantly male. Research should be undertaken that assesses the predictive accuracy of an instrument across gender if the instrument will be applied to both males and females (Taylor & Blanchette, 2009).

- Similarly, the predictive accuracy of an instrument across differing races and ethnicities should also be evaluated, but this is not commonly done (Desmarais & Singh, 2013).

- Finally, the predictive accuracy of an assessment should be assessed across differing subpopulations, such as those with mental health diagnoses, including substance abuse (Desmarais & Singh, 2013).

Summary

Before being employed in the field, risk assessment instruments should be supported by multiple validation studies, with different samples, published in peer-reviewed journals, and generate predictive performance indicators in the range of good to excellent. Those studies should also include samples that are representative of the agency's client population. We recommend there be evidence of predictive validity from research studies as well as from "real-world" application studies. Finally, as an instrument increases in the breadth of areas assessed and attempts to identify particular problem areas and/or provide diagnostic insights, a need for evidence of construct validity becomes increasingly necessary (i.e., the test measures what is intended). Practitioners are encouraged to consider both static and dynamic risks, to provide a case-based explanation of risk, and to reflect on the limits of risk prediction when making decisions.

Issues for Drug Courts to Consider in Selecting Risk Instruments

Reviews in the literature of the content of various popular risk measures indicate considerable overlap among them (Kroner, Mills, & Reddon, 2005) and that no single measure seems to be preferred in terms of overall predictive accuracy (Desmarais & Singh, 2013; Yang, Wong, & Coid, 2010). Hence, practitioners are obliged to consider other information when determining the preferred risk instrument to use within a particular context for a particular client.

In some cases, these decisions may be made at the agency level, but the decision should nonetheless be considered carefully given the implications for resources and predictive validity. The particular risk instrument(s) should be consistent with the Drug Court's policies and overall mission; complement or augment other assessments currently being used; and be readily explainable to clients, administrators, and the judiciary. All other things being equal, the "best" measure will cost less and take the least time to complete while covering the same content areas with comparable validity.

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Capacity for implementation

Capacity refers to ability of a Drug Court to use a selected risk instrument, in terms of both financial cost and staff resources. It doesn't matter how excellent a particular risk instrument might be if the Drug Court cannot actually apply it as intended. Implementation must consider the time required for staff to complete the instrument and the availability of requisite information to score the instrument (e.g., file and interview data). Implementation must also address the background requirements for using the instrument; more diagnostic instruments may require advanced graduate degrees and/or more training.

Costs, training, and credentialing

The initial purchase cost, as well as ongoing user costs, need to be considered to determine if the selected instrument is affordable for the entire client population. Alternatively, specific referral criteria may need to be developed for restricted use of a costlier instrument, which can be applied to those who most need it while keeping costs in check.

Initial and ongoing training requirements (cost and duration) must also be considered in selecting a particular risk instrument. Further, training and implementation must consider the need for a demonstration of competency by staff with case studies, inter-rater agreement with experts, and requirements for credentialing prior to the instrument's use by the Drug Court team. Importantly, such training would emphasize not only the administration of the risk instrument but guidelines for its integration with other assessments completed by Drug Court teams. Staff turnover will necessitate having procedures in place for ongoing training and support of staff, as well.

Norms, validation, and predictive accuracy

Earlier we mentioned that it is important to a given risk instrument's utility that the sample used to develop and validate it accurately resembles the population to which it will be applied. Similarly, Drug Courts should be provided with normative data on cutoffs and recidivism rates for meaningful subgroups of clients (based on gender, age, and ethnicity) to make the best use of a particular risk instrument.

Linking risk instruments to key decisions by Drug Courts

The general recidivism measures described under Recommended Risk Instruments combine both risk assessment for grouping cases and needs assessments for targeting and allocating treatment resources, using the quadrant model proposed by Marlowe (2012), which matches intervention to risk level and needs. None of the measures have demonstrated exceptional increases in risk prediction through risk reassessments, but they can be helpful in monitoring client change and thus informing supervision over time.

Selection Criteria and Overview of Risk Assessment Instruments

Using the criteria listed below, we reviewed popular risk assessment instruments to yield a list of recommended and promising risk measures for use by Drug Court practitioners. The promising measures fell short on a few of the criteria but were strong enough on others to be worthy of examination. In addition, we determined it was important to include specialized measures of nonsexual violence and intimate partner violence to distinguish between prognostic and exigent risk. Table 1 provides an overview of the recommended and promising instruments across several key aspects. Table 2 does the same for the recommended specialized measures.

Our review of the literature revealed three acceptable risk and need instruments that adequately predict general reoffending: COMPAS, LS/CMI, and PCRA. These measures identify risk groups (different base rates for different scores or risk levels) and inform case planning (needs assessments). All these measures reflect the Central 8 (the top empirically related criminogenic needs), and some consider additional factors such as gender, motivation, and personality that influence clients' response to intervention (referred to as *specific responsivity*). For promising risk scales from the ORAS suite of measures, we selected the Pretrial Assessment Tool and the Community Supervision Tool as being most appropriate for use by Drug Courts.

Our review also led to the selection of the VRAG-R as the preferred violence prediction instrument. Unlike the measures listed above, the VRAG-R is a static, statistical risk

instrument that identifies risk groups but does not inform treatment planning. It is preferred over the VRAG, as it does not require the use of the PCL-R, a diagnostic rating of psychopathy that requires specialized training and credentialing and increases the time to complete the violence risk assessment. Comparisons between the VRAG-R and VRAG indicate comparable predictive accuracy.

Further, we note the requirement to utilize an intimate partner violence risk scale, as such measures have demonstrated improved predictive accuracy over general violence risk measures when predicting spousal assault. Our review of the literature indicates ODARA has the highest predictive accuracy. Training is available online, including instruction on credentialing cases.

While we have not included specific risk measures for mentally disordered offenders, the VRAG was developed on such a population. Other recommended measures for mentally disordered offenders include the HCR-20 V3 (Historical Clinical Risk Management-20, Version 3; Douglas, Hart, Webster, & Belfrage, 2013) and the START

(Short-Term Assessment of Risk and Treatability; Webster, Martin, Brink, Nicholls, & Desmarais, 2009). Training on HCR-20 V3 can be done online via webinars, and the START user manual is available for purchase for $60.

Selection Criteria for Review of Risk Instruments

- Published as a peer review, not simply on a website.

- Used in at least two distinct agencies or sites.

- Follow-up data for at least twelve months.

- Multiple outcomes considered: technical violations, new charges, new violent charges.

- Preferred norms and cutoffs/base rates provided.

- Predictive validity AUC of at least .65. Some instruments provide predictive accuracy for different outcomes (i.e., technical violations, any new crimes, any new violent crimes).

- Can be statistical scale or structured professional judgment.

By applying the selection criteria to available risk instruments we arrived at the following list:

Recommended instruments

General recidivism:
- Correctional Offender Management Profiling for Alternative Sanctions (COMPAS), *page 10*
- Level of Service—Case Management Inventory (LS/CMI), *page 12*
- Post Conviction Risk Assessment (PCRA), *page 13*

Intimate partner violent recidivism:
- Ontario Domestic Assault Risk Assessment (ODARA), *page 14*

Violent recidivism:
- Violence Risk Appraisal Guide—Revised (VRAG-R), *page 16*

Promising instruments

- Ohio Risk Assessment System (ORAS) —Pretrial Assessment Tool (PAT) and Community Supervision Tool (CST), *page 17*
- Risk and Needs Triage (RANT), *page 18*

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Best Practice Guidelines for Integrating Risk and Clinical Measures

The following are principles we believe highlight best practice guidelines for using statistical risk assessment in clinical practice.

Distinguish between statistical risk and clinical assessment

It is important to be aware that using the risk and need measures described in this fact sheet does not mean that practitioners should not also consider additional assessments of key constructs, such as motivation or treatment readiness, substance use, antisocial attitudes, hostility and anger, and antisocial identity. Nonetheless, to date, client self-reported change does not consistently lead to reduced likelihood of future crime, with the exception of indices of criminal thinking (e.g., antisocial personality, attitudes, beliefs, associates), social support, and substance misuse (Serin, Lloyd, Helmus, Derkzen, & Luong, 2013). Hence, at present, statistical risk assessment accuracy seems more advanced than clinical assessments of change.

Table 1. Summary of Recommended and Promising Risk and Need Assessment Instruments.

Areas Reviewed	Recommended Instruments			Promising Instruments		
	COMPAS	LS/CMI (LSI-R)	PCRA	ORAS-PAT	ORAS-CST	RANT
Predictive validity	Good–Excellent	Good	Excellent	Fair–Good	Fair–Good	Excellent
Gender norms available	Yes	Yes	Yes	Yes	Yes	No
Diversity norms available	Yes	Yes	Yes	No	No	No
Time to complete	10–60 minutes	45–90 minutes (estimated)	Unknown	10–15 minutes	30–45 minutes	15 minutes
Training	2 days (multiple modules)	2 days	2 days	2 days	2 days	90-minute webinar
Training costs	Training fee	Training fee	None	Training fee	Training fee	$500
Initial cost	Not specified	$389 (manuals; 25 uses)	None	None	None	None
Ongoing cost	Optional software hosting	$259 (25 uses)	None	Optional software platform	Optional software platform	$4,500 (25 users for 3 years)
Credentialing	Yes	Yes	Yes	Yes	Yes	Yes
Static or dynamic?	Both	Both	Both	Both	Both	Both
Date developed	1998	2004	2010	2008	2008	2007

Table 2. Summary of Recommended Purpose-Specific Risk Assessment Instruments.

Areas Reviewed	ODARA (Intimate Partner Violence)	VRAG-R (Nonsexual Violence)
Predictive validity	Good–Excellent	Good–Excellent
Gender norms available	No	No
Diversity norms available	Yes	Yes
Time to complete	10–15 minutes	20–30 minutes
Training	Online	Self-training
Training costs	None if online	None
Initial cost	None	$79.95 for book[a]
Ongoing cost	None	None
Credentialing	Yes	No
Static or dynamic?	Static	Static
Date developed	2004	2013

[a]*Violent Offenders: Appraising and Managing Risk,* 3rd ed., by G.T. Harris, M.E. Rice, V.L. Quinsey, & C.A. Cormier, 2015, Washington, DC: American Psychological Association.

For moderate- and higher-risk clients (i.e., those who should be in Drug Courts), Drug Court teams are encouraged to consider the integration of attitudinal measures of criminal conduct, behavioral indices of change in criminal peers and attitudes, changes in client identity (desisting versus active offender), and changes in client priorities (cost and reward analysis; rewards for prosocial behavior such as praise, certificates of completion, reducing frequency of contact, changing hours of interviews to accommodate client; and costs for criminal behavior).

Notably, many Drug Court clients will have criminogenic needs beyond substance use. In addition, age alone is not an overly helpful predictor of criminal conduct. Some older offenders (over 40) repeat crime, although the peak time of criminal activity is early adulthood. Two additional factors regarding client success warrant comment: Despite early promise, aftercare may not universally augment change and enhance client outcome (National Institutes of Health, 1997; Pelissier, Jones, & Cadigan, 2007). However, recent research on Core Correctional Practice indicates that staff interpersonal skills and ability to structure their sessions do lead to improved client outcomes, even after controlling for client risk (Chadwick, DeWolf, & Serin, 2015).

Distinguish between prognostic risk (likelihood of recidivism) and exigent risk (impact of risk)

The risk instruments recommended in this document can be used to provide estimates of prognostic risk (i.e., likelihood of failure). Notably, cutoff scores and base rate data provide empirical estimates of rates of failure for

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	Ten Principles for Using Risk Assessment
1.	Do not assume that scoring a risk scale is equivalent to making a decision. The latter necessitates an analysis of the case beyond arriving at a risk estimate.
2.	Use risk scales specific to the type of offender and desired outcome to increase predictive accuracy. For example, a domestic violence instrument is a better predictor of intimate partner violence than a general recidivism measure.
3.	Be aware that static risk scales indicate the group of individuals who are at risk, whereas dynamic risk scales purport to indicate why and when a particular individual is at risk.
4.	Be wary of overriding risk estimates with clinical judgment. Validated risk scales are more accurate in predicting client outcomes than clinical judgment.
5.	Do not use multiple risk scales in the belief that it will increase predictive accuracy. Risk instruments typically assess common factors, so more is not necessarily better.
6.	Ensure proper training in administering a particular risk instrument, as this is more important than job, age, or experience.
7.	Be careful to target a client's multiple criminogenic needs. Recidivism reduction is best realized when more of the client's needs are met.
8.	Match client intervention to risk and need.
9.	Do not target low-risk clients or put them in prolonged treatment with higher-risk clients.
10.	Deliver intervention in a manner consistent with client's level of functioning and motivation, and provide an adequate dosage of intervention to realize reductions in reoffending.

different groups of clients. Reducing risk, however, will necessitate greater supervision, frequency of contact, and intervention for high-risk/high-need cases. Nonetheless, staff will be particularly sensitive to cases where failure is sensational and of significant concern to others, such as violent recidivism (this is why ODARA and VRAG-R are included in this review). Serious violent reoffending is a case in point. An analysis of patterns (types of crimes and victim selection) and density (length of time between reconvictions) of criminal behavior can assist staff in identifying cases for which exigent risk (i.e., impact of failure) is high. Such cases may warrant increases in supervision and risk management strategies beyond that solely reflected in prognostic risk estimates.

Use a multilevel decision framework

We view risk assessment as the start of an assessment process—one that anchors subsequent assessment decisions. As noted earlier, we believe group-level risk estimates can be augmented with clinical content to refine risk assessment and case planning, as reflected in the quadrant model. In this way, it should be possible to make differential supervision and programming decisions based on a multilevel decision framework.

For example, two cases could have comparable scores on the LS/CMI risk assessment and comparable subscale elevations that inform program referrals (e.g., criminal attitudes and substance abuse). At the same time, they could differ markedly on other, empirically relevant factors, such as level of motivation, acceptance of responsibility for criminality, nature of gang affiliation, prior programming and supervision experience, level of aftercare or community support, and mental health symptomatology. Despite their similar group-risk estimates, if the latter factors are aggravating or problematic for one client but not the other, then they should be supervised differently, by attending to those factors that are problematic for the individual client.

In addition, given that those factors are empirically related to risk of reoffending, as the number of aggravating factors increases, so does the likelihood of reoffending, as well as imminence due to the dynamic nature of these factors. Such a multilevel decision framework is consistent with the formulaic risk assessment model and will reflect the due diligence recommended earlier.

Establish written communication strategies to manage decision errors

By now it should be clear that having a clear rationale for the application and use of a particular risk instrument for a particular offender is very important. Providing that rationale in a written decision communicates the care taken in making decisions that balance public safety with client rehabilitation. In addition, considering due diligence to augment risk assessment and providing a case-based assessment further enhance the rigor of such decisions.

Decision error is the term used to describe an outcome that is different from what was predicted. When you predict someone will or will not succeed on supervision, the individual may or may not, depending on various factors often outside your control. An outcome contrary to your prediction is considered an error. We want to optimize our decision making and make the fewest errors, but in the criminal justice system all errors do not have equal impacts. *False negative* describes a situation where someone is predicted to succeed but fails instead. False negative decision errors erode public confidence in Drug Courts. Conversely, *false positive* decision errors wrongly predict that someone will fail but he or she succeeds. The predicted failure leads to increased sanctions or supervision, thereby significantly increasing costs in the criminal justice system and unnecessarily sanctioning those who need it least.

We need to be mindful that with every decision there is the possibility of error, because no one is 100 percent accurate. In particular, we want to ensure that our decisions reflect the due diligence described earlier. Otherwise, these errors may be viewed as mistakes (making the wrong decision because of a poor decision model; failure to use a validated risk instrument). Mistakes imply wrongdoing and liability.

Communication strategies that underscore the empirical, structured method of Drug Court assessments and decisions define evidence-based practice and hence are a goal of this fact sheet. In the absence of such strategies, assessments and decisions—especially in the event of failures—are often viewed as ill-considered, at best, and capricious, at worst.

Description of Recommended Risk Instruments

The instruments described in this section meet all the criteria laid out above. For an overview of these instruments, refer to Tables 1 and 2.

Correctional Offender Management Profiling for Alternative Sanctions (COMPAS)

Correctional Offender Management Profiling for Alternative Sanctions (COMPAS) is a fourth-generation risk and need assessment instrument that is designed to assess both dynamic risk (i.e., criminogenic needs to inform case plans and intervention targets) and static risk. COMPAS estimates four categories of risk, including violent and general recidivism, noncompliance, and failure to appear (Brennan, Dieterich, & Ehret, 2009). It is a web-based tool that includes twenty-two scales grouped into five categories: criminal involvement, relationship/lifestyles, personality/attitudes, family, and social exclusion (Blomberg, Bales, Mann, Meldrum, & Nedelec, 2010). COMPAS also includes strength and protective factors such

as job/educational skills, family bonds, and social and emotional support (Brennan et al., 2009). Scores based on information derived from official records, interviews, and self-report questionnaires from clients are used to arrive at an overall risk score for offenders (Blomberg et al., 2010).

Development

COMPAS was designed by the Northpointe Institute for Public Management. It includes theoretically informed and empirically derived items that have a demonstrated relationship to recidivism. Further, the COMPAS study used separate samples of males and females to develop gender-specific adjustments of all the risk and need factors in the scales (Brennan et al., 2009).

Validation

The initial construction and validation study of COMPAS followed a sample of 393 offenders from a New York probation sample. Over a two-year follow-up period, COMPAS demonstrated good predictive accuracy for the prediction of new arrests (AUC = .72; Brennan et al., 2009).

Replication and diversity

COMPAS is currently used by a number of jurisdictions and states within the United States. Using a sample of 2,328 offenders from probation agencies in an eastern state, Brennan and colleagues (2009) examined the predictive accuracy of the instrument, which predicted any offense (AUC = .68), felony offenses (AUC = .70), and offenses against persons (AUC = .71).

The results also revealed that COMPAS predicted recidivism for male (n = 1,879) and female (n = 449) offenders equally well. Among the sample of female offenders, COMPAS significantly predicted any offense (AUC = .65), offenses against persons (AUC = .76), and felony offenses (AUC = .66). Among the sample of male offenders, COMPAS demonstrated fair-to-good predictive accuracy for any offense (AUC = .68), offenses against persons (AUC = .70), and felony offenses (AUC = .71; Brennan et al., 2009).

In addition, COMPAS demonstrated similar levels of predictive accuracy for African American (n = 296) and Caucasian men (n = 1,412). Among Caucasian men,

COMPAS demonstrated fair predictive accuracy for any offense (AUC = .68), and good predictive accuracy for offenses against persons (AUC = .71) and felony offenses (AUC = .71). Among African American men, COMPAS also demonstrated fair predictive accuracy for any offense (AUC = .67) and good predictive accuracy for offenses against persons (AUC = .72) and felony offenses (AUC = .73; Brennan et al. 2009).

In a large-scale study using a total sample of 91,334 parolees in California, Farabee, Zhang, Roberts, and Yang (2010) examined the reliability and concurrent validity of the COMPAS need scales, as well as the predictive accuracy of the risk scales for predicting any arrest and arrests for violent recidivism. The COMPAS need scales produced an acceptable level of test-retest reliability. The concurrent validity of the COMPAS need scales with the Level of Service Inventory–Revised (LSI-R) was also examined, showing reasonable agreement on most scales.

The results further demonstrated that the COMPAS recidivism risk scale predicted any arrest within two years (AUC = .70), and the COMPAS violent recidivism risk scale predicted violent recidivism within two years (AUC = .65; Farabee et al., 2010).

Training

COMPAS can be purchased from Northpointe at www.northpointeinc.com. Assessors must complete a two-day COMPAS training program. The introductory COMPAS training covers various content areas, such as appropriately administering the COMPAS assessment, interpretation of results, and case planning strategies. Advanced COMPAS training is available, which helps assessors understand offender typology assignments and treatment implications, understand and interpret criminal theory patterns and treatment implications, and link assessment to behavior management plans.

Application to case planning

COMPAS assesses risk and needs of offenders to inform decisions about intervention targets, offender release, supervision, and community placement. Because COMPAS is designed to be used at any point during an offender's supervision, it has the advantage of tracking

offenders from intake to case closure to review an offender's progress, and this information can be used to inform overall case management decisions (Brennan et al., 2009).

Resources

Brennan, T., Dieterich, W., & Ehret, B. (2009). Evaluating the predictive validity of the COMPAS risk and needs assessment system. *Criminal Justice and Behavior, 36*(1) 21–40.

Farabee, D., Zhang, S., Roberts, R.E.L., & Yang, J. (2010). COMPAS validation study: Final report. Sacramento: California Department of Corrections and Rehabilitation. Retrieved from http://www.cdcr.ca.gov/adult_research_branch/Research_Documents/COMPAS_Final_report_08-11-10.pdf

Level of Service–Case Management Inventory (LS/CMI)

The Level of Service tools are empirically based actuarial instruments developed to assess the risk for general offending and violations in offender populations (Andrews & Bonta, 1995; Andrews, Bonta, & Wormith, 2004). Level of Service–Case Management Inventory (LS/CMI), specifically, is a fourth-generation risk assessment tool that measures risk and need factors for male and female youth and adult offenders and also functions as a case management tool. It applies to a variety of settings, including parole, probation, and prison or jail (Andrews & Bonta, 1995). LS/CMI consists of forty-three items that reflect criminal history, education or employment, family or marital situation, leisure and recreation, companions, alcohol or drug problems, antisocial patterns, procriminal attitudes, and barriers to release. It also provides a case management plan, a progress record, a discharge summary, specific risk and need factors, prison experience and institutional factors, and special responsivity considerations.

Development

LS/CMI was developed as a revised version of LSI-R with the specific purpose of functioning as a more gender-neutral tool by including gender-specific risk factors. LS/CMI was developed on a sample of 157,947 youth and adult offenders within the United States and Canada. Additionally, the authors collected normative data on a large sample of female offenders within North America and internationally to develop normative tables for scoring female offenders (Andrews, Bonta, & Wormith, 2008).

Validation

LS/CMI is reported to have good inter-rater reliability (Desmarais & Singh, 2013). A review of LS/CMI's predictive validity found it to be good, consistent, and stable across jurisdictions (Andrews et al., 2004). For instance, for any recidivism (n = 561 probationers) the AUC was .76 compared to an AUC of .65 for violent recidivism and an AUC of .73 for reincarceration. Similar findings were reported for a sample of released inmates (n = 923). AUCs for a sample of female offenders (n = 441) ranged from .69 to .87 depending on community versus institutional samples and general versus violent recidivism. Predictive validity with young offenders (n = 240) was also good to fair—AUC = .73 for any conviction and .64 for any violent conviction. Finally, in two samples of U.S. offenders (n = 442 and n = 484), the AUCs for incarceration were .65 and .69, respectively.

Replication and diversity

LS/CMI is suitable for use with late-adolescent and adult offenders of either gender in various settings, including parole, probation, and prison or jail (Andrews & Bonta, 1995; Andrews et al., 2004, 2008). Normative data were collected for females in the United States, Canada, the United Kingdom, and Singapore (Andrews et al., 2008). Further, Andrews and colleagues (2011) report that numerous evaluations of LS/CMI predictive validity have been conducted outside the United States on samples including males, females, and youths. Rettinger and Andrews (2010) found gender-neutral risk factors from LS/CMI to successfully predict general and violent recidivism in a large sample of adult female offenders (n = 400). In

another study, results of using LS/CMI with street gang members indicated that the tool is a useful predictor of recidivism for gang members (Guay, 2012).

Training

Training to administer LS/CMI is required for individuals who do not have the required B-level qualifications for the Ethical Use of Tests. The training program provides users with information on how to interview the offender, how to properly score the assessment, case management, treatment planning, and service delivery.

Application to case planning

LS/CMI includes a built-in case management tool, which provides a summary of the offender's needs, responsivity considerations, a description of the offender's status at time of discharge (if appropriate), and recommendations for the future. The tool also allows the user to track changes in the offender's risk and need factors over time by including a progress log.

Resources

Andrews, D.A., Bonta, J., & Wormith, J. S. (2004). *User's manual for the Level of Service/Case Management Inventory (LS/CMI): An offender management system.* Toronto, Canada: Multi-Health Systems.

Andrews, D.A., Bonta, J., & Wormith, S. (2008). *Level of Service/Case Management Inventory (LS/CMI) supplement: A gender-informed risk/need/responsivity assessment.* Toronto: Multi-Health Systems.

Post Conviction Risk Assessment (PCRA)

Post Conviction Risk Assessment (PCRA) was developed by the Administrative Office of the U.S. Courts for use in the U.S. Probation and Pretrial Services System. The instrument has two components: The first is completed by an officer following an interview with the offender and a review of collateral sources of information. The second is a self-report section completed by the offender. The instrument includes items related to criminal history, employment, social networks, substance abuse, and cognitions. The instrument also includes a number of additional items that are being tested for inclusion (Lowenkamp, Johnson, Holsinger, VanBenschoten, & Robinson, 2013).

Development

PCRA was developed to assess, classify, and identify potential needs of offenders entering probation supervision or a term of supervised release in the federal system. Data on 185,297 offenders from all federal districts were used to develop PCRA. Data on available standardized risk assessments and data from presentence reports were collected on a smaller sample of offenders to determine if the more detailed data provided better estimation. The sample of offenders was divided into three groups, with one group serving as the construction sample and the other two groups as validation samples (Lowenkamp et al., 2013).

Validation and reliability

During its development PCRA was initially validated on a split sample. Scores were significantly correlated with any arrest and produced AUC values in the "excellent" range (AUC = .71, .71 .73, and .78, respectively, for construction, validation, subsequent case plan validation, and long-term follow-up). The article published by Lowenkamp et al. (2013) also included analysis on the inter-rater agreement of PCRA, as well as on a small prospective validation study. The inter-rater agreement analysis indicated that agreement in scoring, across four case studies, ranged from 87% to 100%. The small (n = 356) prospective study on the predictive validity of PCRA produced an AUC of .76 (Lowenkamp et al., 2013).

Replication and diversity

A second study, using a sample of 113,281 offenders (Lowenkamp, Holsinger, & Cohen, 2014) assessed the validity of PCRA in predicting arrest for any criminal offense and arrest for a violent offense across gender, race, and ethnicity. The outcomes were predicted at six, twelve, eighteen, and twenty-four months. The AUC values for any criminal offense and for violent offenses ranged from .70 to .77. This range in AUC values held across subsamples of males and females, Caucasians and non-Caucasians, and Hispanics and non-Hispanics.

In a third study, Cohen and VanBenschoten (2014) assessed the relationship between changes in the PCRA score and changes in expected and actual revocation rates. Data on just over 15,000 offenders having two or

more PCRA assessments indicated that changes in the PCRA score are associated with changes in revocation rates. That is, offenders whose PCRA score increases have higher revocation rates than do offenders whose PCRA score remains the same or decreases over time. Similarly, offenders whose PCRA score decreases have revocation rates lower than those of offenders whose PCRA score remains the same or decreases over time.

Training

A two-day training program is required for use of PCRA. It provides information on how to administer and score the assessments. Certification following training is also required.

Application to case planning

PCRA was designed to provide estimates of the risk level of offenders and to assist federal probation officers in their case planning and management of offenders under supervision.

Resources

Cohen, T.H., & VanBenschoten, S.W. (2014). Does the risk of recidivism for supervised offenders improve over time? Examining change in the dynamic risk characteristics for offenders under federal supervision. *Federal Probation* 78(2), 41–56.

Johnson, J.L., Lowenkamp, C.T., VanBenschoten, S.W., & Robinson, C.R. (2011). The construction and validation of the federal Post Conviction Risk Assessment (PCRA). *Federal Probation, 75*(2), 16–29.

Lowenkamp, C.T., Holsinger, A.M., & Cohen, T.H. (2014). PCRA revisited: Testing the validity of the Post Conviction Risk Assessment (PCRA). *Psychological Services, 12*(2), 149–157.

Lowenkamp, C.T., Johnson, J.L., Holsinger, A.M., VanBenschoten, S.W., & Robinson, C.R. (2013). The federal Post Conviction Risk Assessment (PCRA): A construction and validation study. *Psychological Services, 10*(1), 87–96.

The Ontario Domestic Assault Risk Assessment (ODARA)

Ontario Domestic Assault Risk Assessment (ODARA)) is an empirically based actuarial tool that was developed as a frontline risk assessment instrument used to assess the risk, frequency, and severity of future intimate partner violence. ODARA includes thirteen empirically derived items that are both specific to domestic violence (e.g., prior domestic assault, threatening to harm or kill anyone during the index offense, unlawful confinement of victim during index offense) and general predictors of criminal behavior (e.g., prior nondomestic assault, prior sentence to a term of thirty days or more, prior failure on conditional release, violent outside the home to people other than partner). Each item is scored present or absent (0/1) with scores ranging from 0 to 13. Total scores are arranged into one of seven risk categories, with higher scores related to increased probability of future intimate partner assaults within a shorter time frame (Hilton et al., 2004).

Development

ODARA was developed using the Ontario Municipal Provincial Police Automated Cooperative (OMPPAC) system and Canadian Police Information Centre (CPIC) to identify a sample of 689 cases from the province of Ontario that had a victim report or police report of physical contact by a man against his current or former wife or common-law wife, regardless if he was charged or convicted of a spousal assault (Hilton et al., 2004).

ODARA was developed to be a frontline risk assessment tool that would be easily scored and not require victim participation. Specifically, it was developed using only readily available information, such as police incident reports, criminal records, and correctional files (Hilton et al., 2004).

Validation

ODARA was initially validated using a diverse sample of 689 cases. Before testing, the sample was

divided into a construction sample of 589 participants and a validation sample of 100. In the construction sample, ODARA demonstrated high predictive accuracy for new wife assaults, yielding an AUC of .77 with an average follow-up period of five years. Further, ODARA was significantly related to frequency, severity, and time until future wife assault. In the cross-validation sample of 100 cases, ODARA also demonstrated high predictive accuracy (AUC = .72; Hilton et al., 2004).

Replication and diversity

Police departments in Ontario, as well as a number of agencies in Nova Scotia, Saskatchewan, and New Brunswick, are currently using ODARA. In the United States, Maine has now legislated the use of ODARA. Using a sample of 286 ethnically diverse offenders from the greater Toronto area in Ontario, Hilton and Harris (2008) found that ODARA was moderately predictive of domestic violence recidivism, yielding an AUC of .67. When equal samples of recidivists and nonrecidivists were used, ODARA yielded high predictive accuracy (AUC = .74).

Using a sample of 150 incarcerated male domestic violence offenders, Hilton, Harris, Popham, and Lang, (2010) found that ODARA yielded an AUC of .64 and also significantly predicted severity and time of reoffense for future wife assaults.

Rettenberger and Eher (2013) cross-validated ODARA with a high-risk German sample of sexually motivated intimate partner violence offenders (n = 66), yielding an AUC of .71 for domestic violence recidivism. ODARA demonstrated moderate predictive accuracy for violent recidivism (AUC = .69) and general recidivism (AUC = .66). Gray (2013) reported similar predictive validity (AUC = .68) for domestic violence recidivism (n = 1,423; seven distinct samples).

Training

Training on ODARA is available to a wide range of professionals, including clinicians, health care workers, probation officers, and other practitioners. Face-to-face training is available, takes approximately seven to eight hours to complete, and consists of an item-by-item overview of ODARA scoring, interpretation statistics and graphics, application, related research, and exercises that involve

scoring ODARA using a simulated police investigation (Hilton & Ham, 2015). An online training portal is also available, which consists of five chapters: Introduction, Learning Modules, Practice Cases, Certification, and Special Features. Practice cases are provided in video and written formats, with the correct scoring explained. The program takes four to six hours to complete, and no cost is associated with the training.

In a recent paper, the electronic training program was evaluated and compared to the effect of face-to-face training on the ability to accurately and reliably score ODARA. The results demonstrated that both modes of training produced comparable levels of skill acquisition (Hilton & Ham, 2015). More information can be found at http://odara.waypointcentre.ca/. Large agencies are encouraged to import the training onto their learning management platform.

Application to case planning

ODARA was developed for frontline police officers to help inform decisions on postarrest custody, but it is also suitable for use by health care workers, probation officers, clinicians, and victim services. Specifically, ODARA was designed for use after completing a domestic violence investigation and is used at bail hearings for men charged with domestic assault to determine if there is an increased likelihood that they will commit another offense if released. Therefore, ODARA can help identify and improve decision making about detention of cases at risk for persistent domestic violence, which can ultimately improve offender risk management and victim safety (Hilton et al., 2004).

Resources

Hilton, N.Z., & Harris, G.T. (2009). How nonrecidivism affects predictive accuracy: Evidence from a cross-validation of the Ontario Domestic Assault Risk Assessment (ODARA). *Journal of Interpersonal Violence, 24*(2), 326–337.

Hilton, N.Z., Harris, G.T., Rice, M.E., Lang, C., Cormier, C.A., & Lines, K.J, (2004). A brief actuarial assessment for the prediction of wife assault recidivism: The Ontario Domestic Assault Risk Assessment. *Psychological Assessment, 16*(3), 267–275.

Violence Risk Appraisal Guide–Revised (VRAG-R)

Violence Risk Appraisal Guide—Revised (VRAG-R) is a twelve-item empirically derived actuarial risk assessment instrument designed to predict violent recidivism. Items include whether offender lived with both parents until age 16, elementary school maladjustment, substance abuse, marital status, nonviolent criminal history, failure on conditional release, age at index offense, violent criminal history, sex offending, number of prior admissions to correctional institutions, conduct disorder score, and antisociality. Total scores are arranged into one of nine risk categories with the last category reflecting the highest risk (Rice, Harris, & Lang, 2013).

VRAG-R is not commercially available but is presented in book form in Harris, Rice, Quinsey, & Cormier, 2015).

Development

VRAG-R was developed to be a simpler and easier-to-score version of the original VRAG instrument (Rice et al., 2013). VRAG is also a twelve-item actuarial risk assessment tool designed to predict violent recidivism; however, it requires access to extensive case histories and clinical assessments of personality disorders and psychopathy. The VRAG item pertaining to alcohol abuse history was expanded and simplified to include both alcohol and drug use and relabeled Substance Abuse. Further, the total PCL-R score was replaced by facet 4 of PCL-R and renamed Antisociality. The developmental sample (n = 1,261) of the original VRAG was used to develop and validate the VRAG-R, with 691 of the participants randomly assigned to a construction sample and 300 participants assigned to a validation sample (Rice et al. 2013).

Validation

During testing of VRAG-R, both the developmental and validation samples demonstrated excellent predictive accuracy for the prediction of violent recidivism (AUC = .76 and .75, respectively). Using the entire sample of 1,261 offenders, the VRAG-R also demonstrated a high level of predictive accuracy, yielding an AUC of .76 compared to an AUC of .75 for VRAG. Among offenders known to have committed at least one sexually motivated offense (n = 745), VRAG-R yielded an AUC of .74 for the prediction of violent recidivism (Rice et al., 2013).

Among 127 offenders who were under the age of 18 at the time of their index offense, VRAG-R again demonstrated excellent predictive accuracy (AUC = .74). Further, VRAG-R demonstrated moderate predictive accuracy for the prediction of violent recidivism among offenders over the age 50 (n = 133; AUC = .69; Rice et al., 2013).

Replication and diversity

Because VRAG-R was so recently developed, it has not yet been replicated with different offender types. However, the original VRAG is a well-validated instrument, with replications yielding moderate to high predictive accuracy with a diverse set of offender populations, including sex offenders (AUC = .73 for violent recidivism; AUC = .65 for sexual recidivism; Harris et al., 2003), female offenders (AUC = .65 for violent recidivism; Coid et al., 2009), offenders with intellectual disabilities (AUC = .73 for violent recidivism; Gray, Fitzgerald, Taylor, MacCulloch, & Snowden, 2007), and forensic patients (AUC = .80 for violent recidivism; Harris, Rice, & Cormier, 2002).

Training

Training on VRAG-R is not formally provided. The items and scoring criteria, along with validation data, are presented in Harris et al., 2015.

Application to case planning

The original VRAG has been used to help inform decisions on reintegration and parole, level of restrictiveness, and resource allocation related to the long-term management of violent offenders (Rice et al., 2013).

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Resources

Harris, G.T., Rice, M.E., & Quinsey, V.L. (1993). Violent recidivism of mentally disordered offenders: The development of a statistical prediction instrument. *Criminal Justice and Behavior, 20*(4), 315–335.

Rice, M.E., Harris, G.T., & Lang, C. (2013). Validation of and revision to the VRAG and SORAG: The Violence Risk Appraisal Guide–Revised (VRAG-R). *Psychological Assessment*, 25(3), 951–965.

Promising Risk Instruments

The instruments described in this section fulfill most but not all of the criteria presented in the Overview of Risk Assessment Instruments section. ORAS has not been published in a peer-reviewed article; RANT has been published in a peer-reviewed article with prediction data. Both are used by multiple agencies at present, including in the case of RANT some Drug Courts. Neither ORAS nor RANT has been the subject of an independent validation study. For an overview of these instruments, refer to Table 1.

Ohio Risk Assessment System (ORAS): Pretrial Assessment Tool (PAT) and Community Supervision Tool (CST)

Ohio Risk Assessment System (ORAS) includes five actuarial instruments for assessing recidivism risk among offender populations, two of which are discussed in this summary: Pretrial Assessment Tool (PAT) and Community Supervision Tool (CST; Latessa, Smith, Lemke, Makarios, & Lowenkamp, 2009). The assessments use both static and dynamic factors to identify the criminogenic needs of offenders, who are then placed into risk categories ranging from low-risk to high-risk (Desmarais & Singh, 2013).

Development

ORAS was developed through a collaboration between the Ohio Department of Rehabilitation and Corrections and the University of Cincinnati's Center for Criminal Justice Research. The purpose was to create a system of risk assessments appropriate for each point in the criminal justice system. Structured interviews were conducted with approximately 1,800 offenders at each of four stages: pretrial, community supervision, prison intake, and community reentry. Information on offender recidivism was then collected during a one-year follow up period for each offender in the sample (Latessa et al., 2009).

PAT, specifically, was developed based on data collected from a large sample of adult offenders ($n = 342$). Data were collected on offender history of criminal behavior, pretrial supervision history, drug and alcohol abuse, employment, residential stability, medical and mental health, and criminal attitudes and associations. Outcome data included (1) whether an offender failed to attend a mandatory court appearance and (2) whether the offender committed a new offense while out on release (Lowenkamp, Lemke, & Latessa, 2008).

Initial data for CST were collected from a sample of 678 offenders being supervised in the community in Ohio. Potential predictors of recidivism were organized under several domains: criminal history; education, employment, and finances; family and social support; neighborhood problems; substance abuse; antisocial associates; and antisocial attitudes and behavioral problems (total of thirty-five items; Latessa et al., 2009).

Validation

During its development PAT was validated on a split sample. Scores were significantly correlated with both outcome measures (AUC = .65 and .63 for failure to appear and new arrest, respectively). This assessment was also found to successfully differentiate between low, medium, and high-risk offenders (Lowenkamp et al., 2008).

Lowenkamp et al. (2008) also found good validity for ORAS-CST. Results indicated a strong correlation between CST risk score and recidivism (AUC = .71). The relationships between risk level and recidivism for males (AUC = .71) and for females (AUC = .67) were also relatively strong. Further, when compared to the LSI-R and Wisconsin Risk/Needs Assessment instruments, CST showed good concurrent validity (Latessa et al., 2009).

Replication and diversity

The original sample upon which PAT was developed and validated consisted of 25.4% female offenders, 14.6% African American offenders, and 44.1% offenders of a race other than African American or Caucasian (Lowenkamp et al., 2008). The initial sample collected for the development of CST included 24.3% female offenders, 27% African American offenders, and 3% offenders of an "Other" race. Ultimately, the authors determined different cutoff scores for the final risk levels for males and females (Latessa et al., 2009). While this speaks somewhat to the diversity of the ORAS tools, replication studies conducted independently from the tool's developers are necessary before making judgments about the applicability of this tool to other diverse populations.

Training

A two-day training program is required for use of ORAS. It provides information on how to administer and score the assessments, as well as how to develop case management plans from the assessment tools. ORAS can be scored by hand or through software platforms available from the University of Cincinnati.

Application to case planning

ORAS assessments are designed not only to provide estimates of the risk level of offenders but also to assist professionals in their case planning and management for offenders within the community.

Resources

Latessa, E., Smith, P., Lemke, R., Makarios, M., & Lowenkamp, C. (2009). *Creation and validation of the Ohio Risk Assessment System: Final report.* Center for Criminal Justice Research, School of Criminal Justice, University of Cincinnati, Cincinnati, OH. Retrieved from http://www.ocjs.ohio.gov/ORAS_FinalReport.pdf

Lowenkamp, C.T., Lemke, R., & Latessa, E. (2008). The development and validation of a pretrial screening tool. *Federal Probation, 72*(3), 2–9.

Risk and Needs Triage (RANT)

Risk and Needs Triage (RANT) is a web-based support tool that is designed to assess both criminogenic risk and clinical need factors for nonviolent drug-involved offenders. RANT includes nineteen items, including criminogenic risk items (e.g., age of onset of substance abuse, delinquency, criminal history, treatment history) and clinical need items (e.g., substance dependence or addiction, serious mental illness). Scores on RANT are arranged into one of four risk-and-need quadrants, where the type of correctional disposition is matched to the risk-and-need score. Offenders scoring high-risk and high-need are referred to Drug Courts, whereas those scoring high-risk and low-need are assigned to neighborhood probation. Offenders scoring low-risk and high-need are assigned to traditional parole, and those scoring low-risk and low-need are assigned to administrative probation, diversion, or a probation reporting center (Marlowe et al., 2011).

Development

RANT was developed by the Treatment Research Institute in collaboration with the Minnesota Fourth Judicial District's Research Division for use with adult offenders arrested primarily on drug- or alcohol-related offenses. It includes empirically derived risk and need items that have a demonstrated relationship to recidivism for drug-involved offenders. RANT was developed to provide a quick and reliable assessment for managing the large number of offenders who were being diverted from incarceration into community-based programs (Marlowe et al., 2011).

Validation

The initial field study of RANT followed a sample of 627 felony drug and property offenders at pretrial or shortly after sentencing. It examined the predictive validity of RANT for rearrest and reconviction. Using a twelve-month follow-up period, RANT significantly predicted rearrest and reconviction. The results further indicated that high-risk offenders were significantly more likely to be arrested (AUC = .71) and convicted (AUC = .67)

for a new offense compared to low-risk offenders. Although the result was not statistically significant, those offenders that were classified as high-need were more likely to be rearrested for a new offense compared to low-need offenders (AUC = .62). In addition, those offenders classified as both high-need and high-risk had the highest rearrest (44%) and reconviction rates (31%), whereas those offenders classified as low-risk and low-need had the lowest rearrest (14%) and reconviction rates (10%; Marlowe et al., 2011).

Replication and diversity

Information on validation with diverse samples is not available in published papers. Several replication studies are available, but these consider the clinical application of RANT to case planning rather than examining predictive accuracy.

Training

Training on RANT is available to a wide range of criminal justice professionals. Assessors must complete an hour-and-a-half-long web conference training, which costs $500. The RANT training covers a review of each of the nineteen items as well as specific coding rules. RANT can be purchased from the Treatment Research Institute at www.trirant.org. It is available for a three-year term for $2,000 for five users or $4,500 for twenty-five users.

Application to case planning

RANT assesses both the risks and needs of offenders to improve decision making related to the level of community supervision and type of treatment. It takes no more than fifteen minutes to complete and provides immediate scoring reports, which can improve overall case management decisions to increase their likelihood of success in the community.

Resources

Marlowe, D.B., Festinger, D.S., Dugosh, K.L., Caron, A., Podkopacz, M.R., & Clements, N.T. (2011). Targeting dispositions for drug-involved offenders: A field trial of the Risk and Needs Triage (RANT)™. *Journal of Criminal Justice*, 39(3), 253–260.

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Glossary of Key Terms

case plan   A written plan that identifies a client's criminogenic needs and treatment requirements. Typically, it includes the ranking of needs from most to least serious and an indication of the intensity of programming required, based on risk assessment.

central eight   The eight most strongly identified risk factors, as identified through meta-analysis of research on criminal behavior.

clinical judgment   Decisions made unaided by statistical or structured methods.

cognitive social learning theory of crime   A learning theory of crime that attends to both social and cognitive factors, as well as behavior.

crime desistance   The cessation of criminal behavior, most often described as a process of change rather than an instantaneous event.

criminogenic needs/factors   Changeable risk factors that, when reduced, result in reduced criminal behavior. Sometimes referred to as *dynamic risk factors*.

dynamic risk factors   Risk factors that can change, unlike static factors. Such change is related to reduced criminal behavior.

effect size   an outcome measure indicating the degree of the relationship between two variables *or* the impact of an intervention.

inter-individual differences   Differences in criminal behavior between individuals.

intra-individual differences   Differences in criminal behavior over time and across situations for the same individual.

meta-analysis   A quantitative method of combining the results of independent studies (usually drawn from the published literature) and synthesizing summaries and conclusions that may be used to detect and evaluate trends among the results.

motivational interviewing   A type of interview that focuses on providing nonjudgmental feedback about an offender's risks and experience of problems. It avoids labels and confrontation and assists the offender to generate goals for behavior change.

protective factors   Factors that insulate or reduce the negative effects of risk factors, increasing the likelihood of positive outcomes.

responsivity   General responsivity relates to the issue of matching offenders to programming that is cognitive-behavioral and based on adult learning. Specific responsivity is the understanding of the need to match intervention to the offender's gender, ethnicity, language, motivation level, and so on.

risk assessment   The determination of risk or probability of reoffending through the systematic review of static and dynamic factors.

risk management   The application of risk assessment information to differentially allocate resources such as programming and supervision to manage changes in risk over time.

static risk factors   Risk factors with a demonstrated correlation with criminal behavior. They cannot change over time or with intervention.

treatment readiness   A multidimensional construct that considers the contribution of individual (internal) and setting (external) factors in terms of an offender's potential for engagement in treatment.

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