Research in Review

Special Focus on *Inmate Assessment*

This issue of *Research in Review* includes a special research briefing paper on the assessment of risk among incarcerated offenders, and a review of a related article on this topic. This issue brings into focus an area of correctional treatment and programming that is pointed out by correctional program planners and evaluators as being critical to effective program design. Most guidelines for effective correctional programming, such as those offered by the National Institute of Justice, indicate that good treatment begins with thorough assessment of inmates' levels of risk, need and responsivity. Most guidelines assert that treatment should be prioritized to high risk, high need inmates.

The assessment of risk most commonly translates into rating the likelihood that an inmate will recidivate upon release to the community. This is an inherently difficult and controversial task. The is as yet no widespread agreement on the most effective means of conducting or interpreting risk assessment. In spite of any remaining ambiguity about methods and approaches, a valid and reliable approach to risk assessment can be of tremendous value to correctional agencies in their ongoing efforts to distribute a relatively scarce pool of treatment resources among a large inmate population.

The briefing paper, *Approaches to Inmate Risk Assessment,* presents a summary of major approaches to the assessment of inmate risk. This paper discusses several instruments that are widely used in risk assessment, and discusses their use in the context of corrections program planning and management. Following this paper is a review of a recently published research article on risk assessment. Both the briefing paper and the article review were prepared by Kristofer "Bret" Bucklen, a Pennsylvania Management Associate who is presently doing a rotation in this office. Finally, included at the end of this issue in an index to pieces found in Volume 4 of RIR.

Upcoming issues of RIR will include briefing papers on aftercare and inmate reentry issues, as well as review of articles on prison work programs and victims issues. We at RIR hope that you find these pieces to be informative, practical and relevant to your work in corrections.

APPROACHES TO INMATE RISK ASSESSMENT

by

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Criminal justice professionals use risk assessment tools as part of a systematic approach to making crucial decisions within the criminal justice system. Risk assessment instruments can provide pertinent information for determining bail, sentencing decisions, security ratings, prison placement, levels of treatment, release decisions, and levels of post-release supervision (Kroner, et al. 2001). Six of the most popular and widely-used risk appraisal instruments are the Psychopathy Checklist-Revised (PCL-R), the Level of Service Inventory- Revised (LSI-R), the Historical/Clinical/Risk Management 20 (HCR-20), the Violence Risk Appraisal Guide (VRAG), the Lifestyle Criminality Screening Form (LCSF), and the Self-Appraisal Questionnaire (SAQ).

There are four broad approaches to risk assessment. The first approach is the unaided clinical assessment. Under this approach, a clinician typically formulates a diagnosis of the level of risk of an offender based solely upon a subjective or intuitive clinical evaluation. Claims have been made that such an unstructured approach possesses an inferior predictive validity compared to an actuarial approach (Lidz, et al. 1993; Mossman 1994). Others, however, view the flexibility of an unaided clinical approach as an advantage (Snowden, 1997; Hart, 1998).

The second approach to risk assessment is the actuarial method. An actuarial tool makes predictions based upon the statistical relationship between an outcome (e.g., violent recidivism) and several objectively measured variables (e.g., age, criminal record, number of misconducts, etc.). While actuarial tools generally improve the consistency of risk assessment, they tend to ignore individual variations in risk and over-emphasize relatively static variables (Hart, 1998). Static variables are factors that cannot be changed (e.g., age at first arrest). Dynamic variables, on the other hand, are factors such as "level of alcohol or drug use" that are identified through recidivism research and that can be targeted and changed through correctional intervention (Latessa, et al. 2001). Actuarial tools that rely heavily on static variables are not very amenable to re-administration over time for the purpose of documenting change in an offender. Re-administration of actuarial tools that make use of a combination of static and dynamic variables is possible but becomes increasingly difficult as the proportion of static variables increases.

A third approach to risk assessment is the structured clinical judgment. This model combines aspects of both the actuarial and the unaided clinical assessment approach. A structured clinical instrument predicts risk through actuarial data collection and sound scientific knowledge, but also allows for flexibility of an individualized clinical assessment.

The final model of risk assessment is the self-appraisal questionnaire. Under this approach,

the person being evaluated completes a self-report survey containing questions intended to expose levels of criminal thinking, antisocial personality problems, conduct problems, criminal history, alcohol/drug abuse, and antisocial associates. Many professionals view this approach as the most economical since it requires minimal professional training to administer. This approach also considers a greater proportion of dynamic variables that can change over time and minimizes the subjectivity of a clinician's interpretation of answers.

The PCL-R is a structured clinical assessment instrument originally designed to identify psychopaths but has proven effective in identifying violent criminal behavior. Particularly high PCL-R scores are predictive of poor institutional performance and institutional violence (Kroner, et al. 2001). The PCL-R is a 20-item instrument scored on a 3-point scale. It is not particularly user-friendly since it requires considerable time to administer (1 ½ to 2 hrs. per person) and should be administered only by a professional clinician, preferably with a graduate degree in psychology. A kit of 25 PCL-R tests costs approximately $215, making it an overall fairly expensive test. Furthermore, researchers disagree over whether psychopathy is widespread among offenders. For example, pedophiles will often receive a low PCL-R score but nevertheless may be at high risk for sexual reoffending (Hare, 1999). In the past, PCL-R was widely accepted as the most powerful risk assessment instrument, but more recent research has begun to call this into question (see Gendreau, et al., 2001).

The LSI-R tool is a criminal risk and needs assessment instrument that is supplanting the PCL-R as the gold standard of risk assessment. A meta-analysis of over a decade of various research and comparisons of the LSI-R to the PCL-R indicates that the LSI-R is a statistically stronger predictor of both general and violent recidivism, albeit only marginally so in the case of the latter (Gendreau, et al., 2001). Other studies suggest that elevated LSI-R scores are indicative of a greater likelihood of parole violations and institutional misconducts (Bonta, et al., 1990; Bonta, 1989). The focus of the instrument is on personal history and interaction with others in a social context. The LSI-R measures 54 items that are grouped into 10 categories: Criminal History, Education/ Employment, Finances, Family/Marital, Accommodations, Leisure/Recreation, Companions, Alcohol/Drug, Emotional/Personal, and Attitude/Orientation. Criticisms of the LSI-R include failure to consider physical and sexual abuse as risk factors and failure to modify the instrument for the assessment of female offenders (Latessa, et al., 2001). The test is typically administered in half the time of the PCL-R by way of a structured 30 to 45 minute interview. In addition, a kit of 25 LSI-R tests costs $130, which is nearly half the cost of a similar kit of PCL-R tests. Furthermore, it is economical because it does not require a highly trained individual such as a psychiatrist or psychologist to administer it.

The HCR-20 was developed to predict violent behavior in criminal populations and covers three areas: history of criminal activity, clinical assessment of mental health status, and community risk situations that have previously been encountered or are likely to be encountered in the future. Like the PCL-R and the LSI-R, it takes a structured clinical approach to risk assessment. In one study, those who scored above the median on the HCR-20 were 6 times more likely to be violent in the community than those who scored under the median (Kroner, et al., 2001). There is some overlap

between the PCL-R and HCR-20 instruments since one of the 20 items on the HCR-20 test is the total score from the PCL-R test. As a result, the negative cost and time factors associated with the PCL-R test also apply to the HCR-20 instrument.

The VRAG tool is an actuarial instrument developed to predict violent recidivism. The instrument was statistically derived from a sample of 618 male psychiatric offenders but has been demonstrated to apply to non-psychiatric offenders as well (Kroner, et al., 2001). The resulting score is the sum of 20 statistically weighted variables. As with the HCR-20 test, one of the items on the VRAG test is the total score from the PCL-R test. Thus, once again, the time and cost constraints associated with the PCL-R apply to the VRAG as well. Unlike the previous three tests, the VRAG does not require contact between the assessor and the person being assessed. It does require clinical expertise to score it, however. Administrators at the Penetanguishene Mental Health Center indicated that it requires an average of 2.5 days to complete a suitable psychosocial history to score the VRAG test. The VRAG has also been criticized because of its heavy reliance on relatively static factors (Webster, et al., 1994). In a study comparing the predictive ability of the VRAG to the previous three instruments, however, the VRAG was found to be a slightly stronger predictor of minor anti-social behavior, such as minor misconducts and recidivism involving a minor offense (Kroner, et al., 2001).

The LCSF assesses patterns of criminal thinking (irresponsibility, self-indulgence, interpersonal intrusiveness, and social rule breaking) and is intended to identify career or lifestyle criminals. Theoretically, this instrument was developed within a cognitive thinking framework and is based on the fact that a majority of crime is committed by a relatively small group of offenders. The LCSF is scored on a 14-item scale and includes such variables as "nonsupport of a child", "longest job ever held", "prior arrests", "age at first arrest", and "history of school disciplinary problems". As is evident from the list of variables, it is an extremely static instrument. The test can be administered by a caseworker with minimal training and therefore is fairly inexpensive to administer. Several studies found the LCSF to be predictive of post-release violations over a 1-year period and institutional misconducts over a 6-month period (Walters, et al., 1990; Walters, 1991).

Unlike the other five instruments, the SAQ is a self-administered test. This 67-item self-report questionnaire measures quantitative criminogenic risk-need areas. The SAQ is theoretically and empirically based and targets the predominant predictive areas found in recidivism literature. Evidence suggests that self-report instruments such as the SAQ are as reliable as traditional clinical and actuarial measures in predicting violent and general recidivism (Kuriychuk, 1990; Motiuk, et al., 1992). The SAQ ensures maximal objectivity by avoiding possible misinterpretations of offenders' responses (Loza, et al., 2000). The SAQ is also convenient and economical to administer. Instructions are simple and can be given by a paraprofessional. The test itself usually takes 15 to 20 minutes to complete. The administrator then compares the offender's responses to his/her criminal record sheet to check for inaccuracies. Four or more inaccurate responses render the SAQ invalid. The SAQ may also be administered in a group setting. Another advantage of the SAQ is that more than 50% of the items measured are dynamic factors and thus the SAQ may be re-administered often to document and track changes in the offender. Self-report measures such as the SAQ test are still in

their infancy and still need to be validated with different subtypes of offenders, cross-validated in different settings, and further examined for their predictive validity (Loza, et al., 2000).

Most of the research on risk assessment instruments indicates only minimal statistical differences between the predictive validity of existing risk assessment instruments. Therefore, comparisons between existing instruments such as the six mentioned above should emphasize the theoretical underpinnings, the content and the economic feasibility of each instrument (Kroner, et al., 2001). Since all six risk assessment instruments allow for considerable unexplained variance, future attention must also be given to refining and developing stronger risk prediction instruments.

Test Name	Type	Administrator	Re-administration?	Static/Dynamic	Cost	Administration Time
Psychopathy Checklist Revised (PCL-R)	Structured clinical judgment	Professional psychologist/ psychiatrist	Yes	Static/Dynamic	$215 for 25 tests	1.5 to 2 hours
Level of Service Inventory-Revised (LSI-R)	Structured clinical judgment	Paraprofessional / caseworker	Yes	Static/Dynamic	$130 for 25 tests	30 to 45 minutes
Historical/ Clinical/ Risk Management-20 (HCR-20)	Structured clinical judgment	Professional psychologist/ psychiatrist	Yes	Static/Dynamic	N/a	N/a
Violence Risk Appraisal Guide (VRAG)	Actuarial	Professional psychologist/ psychiatrist	Yes	Static/Dynamic	N/a	2.5 days
Lifestyle Criminality Screening Form (LCSF)	Structured clinical judgment	Paraprofessional / caseworker	No	Static	N/a	N/a
Self-Appraisal Questionnaire (SAQ)	Questionnaire	Self-administered	Yes	Static/Dynamic	N/a	15 to 20 minutes

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Risk assessment instruments can provide pertinent information for determining bail, determining sentencing decisions, assigning security ratings, assigning prison placement, determining levels of treatment, and determining release decisions as well as levels of post-release supervision. This article assesses and compares the predictive accuracy of five popular risk appraisal instruments: The Psychopathy Checklist-Revised (PCL-R), the Level of Service Inventory- Revised (LSI-R), the HCR-20, the Violence Risk Appraisal Guide (VRAG), and the Lifestyle Criminality Screening Form (LCSF). Each of these five tests was administered to a cohort of 97 male offenders during initial classification. Two types of outcome variables were measured - institutional misconducts while incarcerated and post-release recidivism incidents.

The PCL-R was an instrument originally designed to identify psychopaths but has proven effective in identifying violent criminal behavior. Particularly high PCL-R scores are predictive of poor institutional performance and institutional violence. The PCL-R is a 20-item instrument scored on a 3-point scale.

The LSI-R tool is a criminal risk and needs assessment instrument. The focus of the instrument is on personal history and interaction with others in a social context. The LSI-R measures 54 items that are grouped into 10 categories: Criminal History, Education/Employment, Finances, Family/Marital, Accommodations, Leisure/Recreation, Companions, Alcohol/Drug, Emotional/Personal, and Attitude/Orientation. Research suggests that elevated LSI-R scores are indicative of a greater likelihood of parole violations, recidivism, and institutional misconducts.

The HCR-20 was developed to predict violent behavior in criminal populations and covers three areas: history of criminal activity, clinical assessment of mental health status, and community risk situations that have previously been encountered or are likely to be encountered in the future. Those who scored above the median on the HCR-20 test were 6 times more likely to be violent in the community than those who scored under the median. There is some overlap between the PCL-R and HCR-20 instruments since one of the measures on the HCR-20 test is the total score from the PCL-R

The VRAG tool is an actuarial instrument that was developed to predict violent recidivism. The instrument was statistically derived from a sample of psychiatric offenders but has been demonstrated to apply to non-psychiatric offenders as well. As with the HCR-20 test, one of the items on the VRAG test is the total score from the PCL-R test.

The LCSF assesses patterns of criminal thinking (irresponsibility, self-indulgence,

interpersonal intrusiveness, and social rule breaking) and is intended to identify career or lifestyle criminals. The LCSF has been predictive of post-release violations over a 1-year period and institutional misconducts over a 6-month period.

The conclusion of this article is that there are no strong or statistically significant differences between these five instruments in the prediction of anti-social behavior. There was some evidence that suggested a greater accuracy with the LSI-R and VRAG tests but the difference was minimal. The LSI-R was found to be a slightly stronger predictor of recidivism involving a violent offense. The VRAG was found to be a slightly stronger predictor of minor anti-social behavior including minor misconducts and recidivism involving a minor offense. While this article provides no strong quantitative basis for differentiating between the predictive ability of the five risk assessment instruments, the authors point out that there are qualitative differences in theoretical underpinnings and content that can shed additional light on the source of risk. The final conclusion of this article is that all five instruments allow for considerable unexplained variance and therefore attention must be given to developing and refining risk prediction instruments.

The statistical results of the research in this article do not allow for strong conclusions. While this study clearly points out the need for further development of risk assessment tools and the need for further exploration of qualitative differences between existing risk assessment tools, the study falls short of taking the next step towards exploring these qualitative differences. Some methodological weaknesses (a small sample size and an overlap of content between instruments) may have contributed to the weak statistical results. In any case, further analysis of these five risk assessment tools is needed in order to identify the accuracy and utility of each.

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Daryl G. Kroner and Jeremy F. Mills. 2001. "The Accuracy of Five Risk Appraisal Instruments in Predicting Institutional Misconduct and New Convictions." *Criminal Justice and Behavior*, 28(4), 471-486. (Number 4).

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