

Research to practice: Applying risk/needs assessment to offender classification

Effective classification is critical for the success of any correctional agency. With shrinking financial resources for government, increased scrutiny of correctional practices and greater demands for public safety, the process of making decisions about offender placement, treatment and release becomes even more important.

An offender classification system is only as good as the tools used to make the classification decisions. Moreover, the validity of the tools must be established in terms of the classification decisions to which the tools are applied, not some other interesting, but irrelevant, criteria such as diagnosis or underlying personality constructs.²

Postsentence correctional classification is undertaken to help correctional practitioners make decisions about their clientele in four basic areas: the institutional security level for the offender during incarceration, the release of an offender to the community via such mechanisms as parole or temporary absence, the amount of supervision that is appropriate in the community and the referral of an offender to work, academic, program or treatment options. The ultimate goal is to maximize public and institutional safety and to minimize the offender's illegal or otherwise antisocial behaviour in prison and in the community. To achieve both these goals in the most cost-effective manner, it is important for any offender classification system to focus on the risks, needs and responsivity of its clientele.³

Ontario has had considerable experience with the use of risk/needs assessment in its classification process, beginning in the early 1980s with the Level of Supervision Inventory (LSI).⁴ The LSI is a checklist of 53 items that are scored in binary, or 0-1, format by a trained assessor after conducting an intensive interview with the offender, reviewing all documentation and records of the client, and completing a number of collateral contacts to verify the assessor's earlier findings.

The LSI has been the subject of numerous studies in institutions,⁵ halfway houses⁶ and the community.⁷ It has been shown to be reliable and predictive of possible offender recidivism.⁸ It has also displayed an important dynamic validity component, predicting appropriately the changes in recidivism as criminogenic needs are increased or decreased.⁹ This characteristic sets the LSI apart from many of the earlier tools that focused primarily or exclusively on static historical facts, such as the Statistical Information on Recidivism (SIR) Scale.¹⁰

Although tools focused on static historical facts may be easier to score, it is our view that instruments based totally on the offender's past are less helpful to correctional administrators for two main reasons. First, they neglect many of the present circumstances of an offender, which are also relevant to reoffending,¹¹ thus limiting their ultimate predictive utility. Second, they provide no instruction or direction for the type of management and treatment of an offender which is most likely to bring about positive change, therefore limiting their capacity to help staff lower an offender's degree of risk.¹²

Introducing the LSI-OR

After 15 years' experience with the LSI in the community with probationers and parolees, Ontario decided to update it and expand its use to all offenders under its mandate. The Level of Service Inventory - Ontario Revision (LSI-OR), as it is now called, is a required assessment for all adult inmates undergoing any institutional classification or release decision, for all young offenders both in secure and open custody and for all probationers and parolees. The LSI-OR is readministered every six months and for any subsequent client-related decision.

Initiated in January 1996, this new policy for the LSI-OR is helping the Ministry unify its correctional practice. The policy contributes to increased continuity of care because all staff members are now using a common instrument, working from a common theoretical rationale and basing decisions on a common empirical database in the management, treatment and supervision of their offenders.

To get to this position, however, a large-scale training exercise was required. Designed by Don Andrews, in consultation with ministry resource people from the field, staff training and policy divisions, a series of intensive, two-day training sessions was provided to more than 800 employees.

Although the LSI-OR has maintained the same general format, data collection procedures and scoring system as the LSI, it differs from its predecessor in a number of important ways. Don Andrews worked with a team of ministry staff to decide on the innovations and to design the new test protocol.

Modifications were made only after a review of the risk assessment literature and the meta-analytic studies of the last decade.¹³

A reanalysis of data on the LSI items and extensive consultations with representatives of the many stakeholders in the process (correctional managers, probation officers, prison staff, professional associations, parole board members and staff, support staff and policy makers) was also done. Eight major changes were made to the tool.

1. The LSI-OR has fewer items than the original LSI. After eliminating the accommodation and recreation sections and some individual items that were redundant, the instrument now has 43 items (instead of 53), grouped into eight categories or subscales.
2. The concept of client strength or protective factors is introduced, consistent with the developmental literature on children at risk. These strength factors are not simply the absence of risk factors and may add unique predictive power to the assessment process.¹⁴
3. In addition to the routinely scored "general" risk/needs items, a list of supplementary or "specific" risk/needs items is used. Because of their infrequent occurrence but their potential for great clinical importance when they are present, these items may be used to override the actuarial-based risk level.
4. Greater attention is given to the eight category or subscale scores and the clinical profile these scores produce. By plotting a risk/needs graph after completing the assessment, the correctional

practitioner may more easily make the links with programming, supervision and case management.

5. The number of risk levels has been increased from three (low, medium and high) to five, by subdividing low and high risk into low and very low, and high and very high. Ultimately, the number of risk levels in any scale or instrument is decided arbitrarily by the developer or the agency using it. Such a decision usually depends on confidence in the instrument's ability to discriminate between groups on the basis of small differences in scores. Numerous LSI studies have demonstrated a nice linear relationship between the number of risk items present for an offender and that offender's probability of recidivism. An accurate scheme with few levels of risk classification essentially gives up some of its important predictive validity. Therefore, a five-level system of risk was used so the decision maker or case manager would be working with a more precise, and consequently more accurate, system of offender classification.
6. The concept of the clinical override is given more prominence: every assessment must include a review of the risk level generated by the general risk/needs indicators in conjunction with the specific risk/needs indicators and the client's strengths. The assessor is then required either to endorse or modify the overall risk level on every assessment.
7. The introduction of a section devoted to "other clinical issues" (such as social, health and mental health needs) marks an important addition to the traditional offender risk/needs assessment process. A humane and caring correctional agency cannot overlook these non-criminogenic needs. Moreover, attending to them can have an indirect impact on other treatment areas through the responsivity principle (see 8, below).
8. A section on "special responsivity considerations" has also been needed. Responsivity, Andrews' third principle of effective correctional treatment,¹⁵ is the least understood and the most seldom applied. Only recently has it begun to receive the systematic attention and research it deserves.¹⁶ Although not technically part of the risk/needs assessment in that they are not counted in the risk score or level, two added sections on "other clinical issues" and "special responsivity considerations" must be considered in the broader case management of the offender. They may also have an indirect impact on an offender's changing risk level. This occurs because the responsivity of a client often has a moderating effect on interventions that are otherwise appropriate and because responsivity can be affected by successfully addressing a non-criminogenic need, which in turn increases the effectiveness of the intervention. To take an extreme example, providing a hearing aid to a hearing-impaired offender may affect the offender's responsivity because of the greater potential for communication as well as increased motivation from appreciating the service provided. Increased responsivity can then affect subsequent intervention and, finally, the offender's risk. A hearing aid by itself, however, would have no impact or, worse, would improve an offender's ability to be a good thief.

The LSI-OR also includes a number of supplementary pages for text related to offence information, case notes and discharge summaries, as well as sections for administrative decision making and sign off. Again, these in-house, ministry-specific administrative sections were introduced to maximize the connection between the offender's risk/needs assessment, the practitioner's case management and the administrator's decision making.

Ontario's experience with the LSI-OR

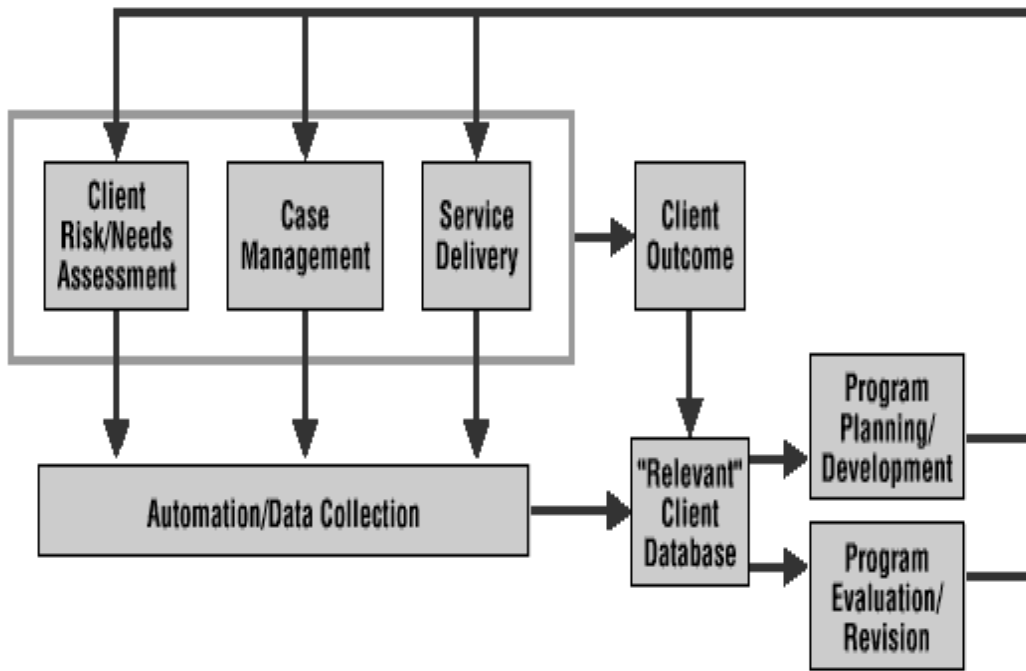
Summary data on the LSI-OR are routinely entered by field staff on the Ministry's Offender Management System (OMS), which was modified to include these data. Incorporating a risk/needs component into the offender database serves three principal functions. It allows the Ministry to monitor important client characteristics so programming and facilities can be designed to meet the needs of the clientele and, thereby, accommodate the characteristics of the offender population on more than just security. It also provides a relatively easy mechanism for continued research on the instrument. Finally, it allows system-wide establishment of quality assurance.

Earlier empirical research¹⁷ and recent field consultations revealed that the quality and accuracy of individual assessments can deteriorate with time and in the absence of continued training and supervision.

Following Colorado's example,¹⁸ where detailed examinations of large databases revealed a small, but bothersome incidence of scoring anomalies, the Ministry established a policy of flagging impossible or extremely unlikely scores or score combinations for further investigation, correction or clarification. Similarly, when aggregated data on a group of offenders from a specific location are inconsistent with the norms for that particular client group, the anomaly is brought to the attention of the local manager. The relationship between risk/needs assessment, case management, an empirical database and program design, evaluation and modification is illustrated schematically in Figure 1.

Figure 1

Development of a System for Program Planning: Schematic Overview



In the first nine months of implementation, LSI-OR data have been collected on more than 26,000 offenders. Some descriptive statistics are provided below. Sentenced inmates score considerably higher than probationers or parolees (see Figure 2). Young offenders score consistently higher than adults, regardless of gender or sentence type, and males tend to score higher than females (see Table 1). What is particularly interesting is that even though the distribution of scores differs for various offender groups, (especially inmates and probationers) the recidivism rates for any given score remain very similar, indicating that whether a given number of risk/needs items is present for an inmate or for a probationer, the likelihood of recidivism is virtually the same (see Figure 3).

Figure 2

Distribution of LSI-OR Scores for Inmates and Probationers*

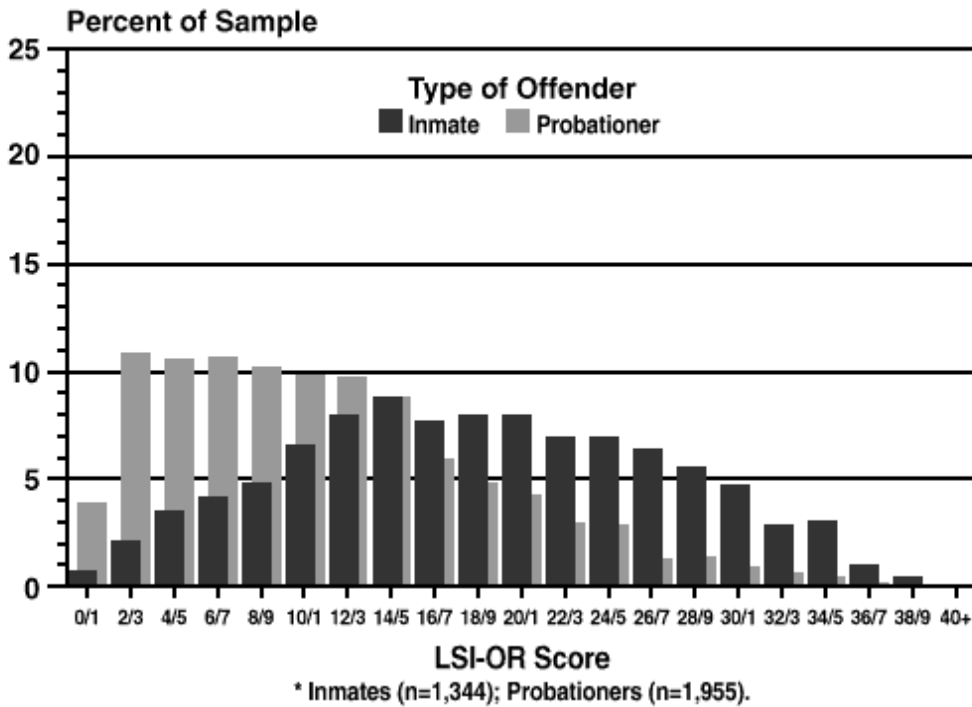
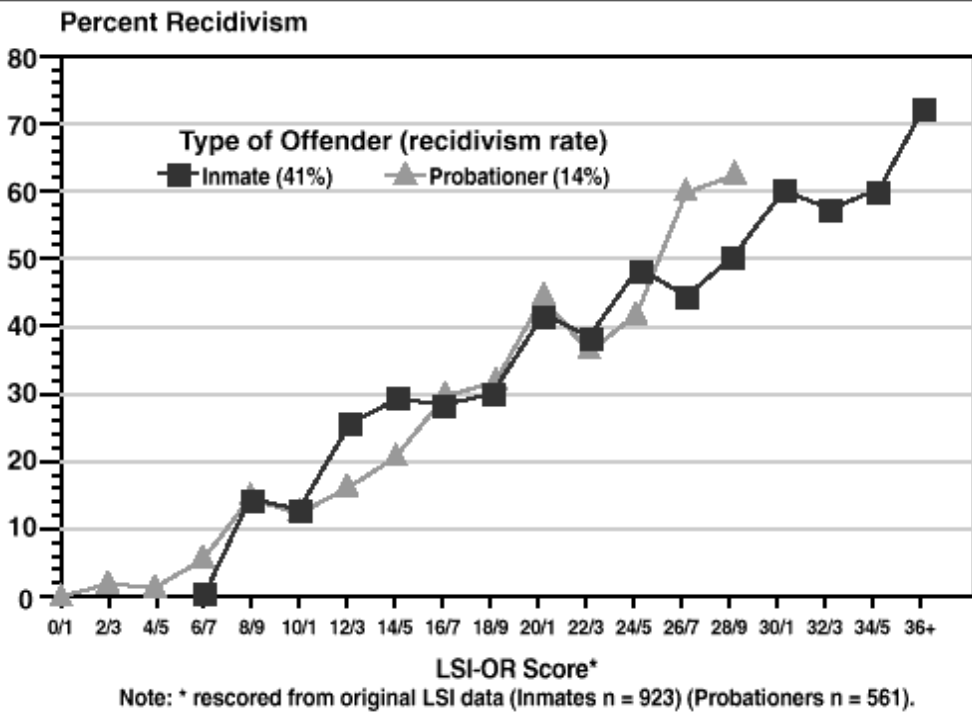


Figure 3

Probationer and Inmate Recidivism (to Prison) as a Function of LSI-OR Score



Including more detailed information on the Ministry's OMS has also provided an opportunity to examine the use of the professional override. Initially, there was concern that the fear of underestimating a client's risk (making a "false negative" error) would far outweigh concern about overestimating a client's risk

(making a "false positive" error) because of the vastly different consequences of each and the inherently cautious mindset these differences instill in correctional practitioners. To date, the use of the override has not been excessive, nor has it been applied more frequently to increase an offender's risk category.

Table 1

Average LSI-OR Scores for inmates, Probationers and Parolees by Age and Gender *						
Sample	Inmates		Probationers		Parolees	
	(n)	Average Score	(n)	Average Score	(n)	Average Score
Young offenders	172	23.48	356	13.32	0	
Male	171	23.46	304	13.54	0	
Female	1	26.00	52	12.02	0	
Adult offenders	1 172	18.07	1 639	10.95	58	11.36
Male	1 111	18.07	1 380	11.13	56	11.30
Female	61	18.00	259	10.00	2	13.00
All offenders	1,344	18.76	1 995	11.37	58	11.36
Male	1 282	18.79	1 684	11.56	56	11.30
Female	62	18.13	311	10.33	2	13.00

Note: * all records from LSI-OR implementation phase (January 1996)

Approximately 88.6% of the risk levels have been left unchanged. Use of the override was divided fairly evenly between decisions to classify upward by increasing the risk level (6.2%) and decisions to classify downward by lowering the risk level (5.1%). Most reclassifications were to the adjacent level of risk although some were over two-to-four levels, usually because certain ministry policies require automatic or administrative overrides. Current analyses are looking at whether the strengths and added concerns correlate with the override and, if so, which ones.

Users have been quite accepting of these changes to the original LSI. Probation and parole officers have been particularly encouraged by the changes that reflected their concerns. While hundreds of recommendations were recorded during the field consultations, and not all could be accommodated, many of the more popular themes, such as the specific risk/needs items, are found in the LSI-OR. Many suggestions contradicted each other, however. For example, some staff requested greater simplicity in the instrument, while others called for more details and a more comprehensive or complex tool.

At the institutional level, acceptance of the LSI-OR has been more varied, partly because it has a wider range of applications in the prison setting and partly because risk/needs assessment had not previously been part of the inmate classification process.

Because the LSI-OR has been linked with offender recidivism, however, its application to inmates in conjunction with parole, temporary absence and electronic monitoring programs has been received quite

well by practitioners and the Ontario Board of Parole. Although administration of the LSI was not a routine requirement for these programs, it was often used by professional staff on a voluntary basis.

The administration of the LSI-OR as part of the inmate classification process has been greeted with some scepticism for a few reasons. Some staff confuse the concept of risk to reoffend with the security level of an institution, perhaps because both classification schemes have traditionally used the same terminology of "maximum," "medium" and "minimum." Second, inmates score higher on the LSI-OR in comparison to probationers (Table 1), resulting in a high percentage rated as high risk. This is sometimes automatically translated into maximum security.

When staff members come to this conclusion on a particular offender, they may decide that the assessment instrument is in error. However, such a view overlooks the twofold value of using the LSI-OR as part of the institutional classification process. First, it provides an index of the client's risk to reoffend, which in itself is important for any kind of community-based decision or activity. Equally important, it profiles the offender's criminogenic risks and needs, which should then be considered not just in terms of institutional placement but also in terms of assignment to the appropriate programs and services once the offender has been placed in a facility.

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 2. D.A. Andrews, J. Bonta and R.D. Hoge, "Classification for Effective Rehabilitation: Rediscovering Psychology," *Criminal Justice and Behaviour*, 17 (1990): 19-52. See also M.S. Motiuk and L.L. Motiuk, "Offender Classification: The Predictive Accuracy of the Megargee MMPI-Based, LSI and SIR Systems," Paper presented at the Canadian Psychological Association Annual Convention (Quebec City, 1992).
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 6. J. Bonta and L.L. Motiuk, "The Diversion of Incarcerated Offenders to Correctional Halfway Houses,"

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13. Gendreau, Little and Goggin, "A Meta-analysis of Predictors of Adult Offender Recidivism."

14. R.D. Hoge, D.A. Andrews and A.W. Leschied, "An Investigation of Risk and Protective Factors in a Sample of Youthful Offenders," *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 37 (1996): 419-424.

15. Andrews, Bonta and Hoge, "Classification for Effective Rehabilitation."

16. See September 1995 edition of *Forum on Corrections Research*. See also S. Kennedy and R. Serin, *Treatment Readiness and Responsivity: Contributing to Effective Correctional Intervention*, Workshop presented at the 4th Annual Research Conference of the International Community Corrections Association (Austin, Texas, 1996).

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18. B. Bogue, "The ABC's of Implementing a New Risk/Need Assessment System on a State Wide Basis," Paper presented at the International Association of Residential and Community Alternatives' Third Annual Research Conference (Ottawa, Ontario, October 1996).