Validating the LSI-R on a Sample of Jail Inmates

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Introduction

Over the last decade, the assessment of offenders has become a pivotal cornerstone for correctional practice in the United States. The benefits of an effective risk/need assessment and classification system are numerous and include making better decisions during sentencing, post-sentence programming, and supervision. One such instrument that is gaining widespread use in this country is the Level of Service Inventory – Revised (LSI-R). (Andrews and Bonta 1995). While the benefits of the LSI-R can greatly assist in several aspects of offender management, it is important to investigate its value with different populations in a variety of correctional settings. This article tests the validity of the LSI-R with a random sample of offenders taken from a jail in a major metropolitan area of the southeastern United States.

The LSI-R is a 54-item additive scale that covers 10 criminogenic (crime-producing) domains. The domains include: criminal history; education and employment; financial problems; family and marital relationships; living accommodations; leisure time and recreation interests; companions (non-familial social network); alcohol and drug problems; emotional and mental health; and attitudes, values and belief systems. Not all these domains are weighted equally – criminal history, education/employment, and alcohol/drug use comprise 29 of the 54 items collectively, for example. The LSI-R has become a favored instrument for use in correctional programming as it provides a comprehensive and relevant assessment of criminogenic risk factors (which should serve as the primary treatment targets for intervention). In addition, the vast majority of the items are measured in a "dynamic" fashion (i.e., how that item currently exists and/or functions in the offender's life). These aspects of the LSI-R fit well with overall criminogenic risk/need assessment, reliable classification, viable case planning, and the measurement of progress over time.

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Table 1. Comparison of Jail and Prison Inmates on Selected Factors

Factor	Jail Inmates 1989	Prison Inmates 1991
Violent Offense	23	47
Public Order	23	7
Sex (percent male)	90	95
Age 18-24	33	21
Age 25-34	43	46
Age 35-44	17	23
Education less 8th Grade	15	19
Education Some High School	38	46
Education High School Grad	33	22
Alcohol Use at Time of Offense	41	31

The psychometric properties of the LSI-R have been researched for the last 20 years. The predictive validity of the instrument has been investigated with populations of offenders in the community (e.g., probation), within the prison setting, and residential options such as halfway houses. (see for example Andrews, 1982; Bonta and Motiuk, 1985; Bonta and Motiuk, 1986; Motiuk 1993). The tool has also been investigated using sub-samples of the offender population, such as female offenders, male offenders, and Native Americans, and offenders who have specific traumatic life-experiences such as sexual and physical abuse. (Holsinger, Lowenkamp, and Latessa, 2003; Lowenkamp, Holsinger, and Latessa, 2001). One correctional setting that has yet to be used regarding the exploration of the LSI-R and its potential value is the American jail. While some may assume that prison and jail populations are similar across most relevant criteria, some important differences may exist.

Table 1 presents data selected from the Survey of Prison Inmates (1991) and the Profile of Jail Inmates (1989). While both reports issued by the Bureau of Justice Statistics reveal some similarities across some variables, potentially important differences are noted. For example, 47% of the prison population had been committed for a violent offense, while only 23% of the jail population were being housed for a violent charge. More differences are noted between jail inmates and prison inmates regarding the percent of each population committed for public disorder offenses (23% and 7% respectively). While both populations are predominantly male, jails hold substantially more females. The jail population is decidedly younger overall, with 33% falling into the 18 to 24 age category, compared to prisons' 21%. The jail population also possesses somewhat higher levels of education, with 33% holding a high school diploma, compared to prisons' 22%. Finally, 41% of offenders in the jail population were under the influence of alcohol at the time of their committing offense, while somewhat less of the prison population (31%) met this criterion.

The current study uses a random sample of jail inmates, who were assessed using the LSI-R in 1999. The descriptive properties of what the LSI-R has to offer as an assessment tool, as well as its predictive validity, follow.

Methodology

Participants. The participants in this study include 49 offenders who were booked into jail during the months of November 1998 to March of 1999. They were randomly selected from a population list generated during April of 1999. Thirty-one of the offenders (63%) are male while 18 (37%) are female. Twenty-seven of the offenders (55%) are white while 22 (45%) are African American. The average age of the offenders included in this sample is 33.

Measures. The measures in this study include the composite score from the LSI-R and a measure of recidivism. In addition, we developed a measure that identified offenders who were sent to prison directly from jail (for a period of time that was longer than the entire follow up period) and/or those offenders who were at risk in the community for less than 12 months. The use of only those cases that were truly at risk in the community for a reasonable period of time allowed for a more realistic test of predictive validity

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The composite score from the LSI-R comes from the assessment of the 49 offenders by three individuals trained in the administration and scoring of the instrument. The scoring of the instrument was completed by reviewing case history information, prior record, and demographic data available in the jail's information system and through a structured interview with each offender. Each interview with an offender took approximately one hour to complete.

Our measure of recidivism is based on subsequent bookings into the county jail for any misdemeanor or felony charge excluding traffic cases. The decision to define recidivism based on these criteria involved a desire to insure true antisocial/criminal behavior had occurred by ignoring very minor and incidental offenses. All offenders involved in the analyses were tracked for three years from the date of the LSI-R assessment.

Results

Table 2 matches the percentage of offenders who received a new booking post-release from the jail by risk category. The risk categories were derived based on a visual inspection of the data, placing the LSI-R scores into natural groupings. This resulted in scoring bands of 0 to 19 points (Low risk), 20 to 27 points (Moderate risk), 28 to 36 (High risk), and 37 and higher (Very high risk). Cross-tabulations revealed the percentage of each risk category that received a new post-release booking. As the category of risk increased (from Low to Very high), the percentage of offenders who received a new booking increased substantially. In addition, the correlation between total LSI-R score and a booking for a new offense was relatively high ($r = .40$) and within the limits of previously published literature. (Gendreau, Goggin and Smith 2002). Much like the data presented in Table 2, the positive correlation coefficient indicates that as LSI-R score increased, the likelihood of reoffending increased as well.

This represents an important finding in several different capacities. First, the predictive validity of the LSI-R is supported by these findings, through the meaningful differentiation of risk levels within the offender population using objective, dynamic criteria. In addition, by identifying those offenders who are truly high risk, with multiple criminogenic needs, resources and the provision of within-jail services can be better focused. This in turn can potentially alleviate the raw number of bookings into the jail setting. Finally, the information gleaned from such an assessment can become increasingly valuable when jails are forced to release pre-trial or sentenced inmates due to overcrowding. By using such an assessment, those offenders who pose the least risk to the community can be released.

Table 2. Percent With New Booking by Risk Category

Risk Category	Percent With New Booking	Category N
Low	11	1/9
Moderate	46	5/11
High	64	9/14
Very High	80	4/5

Discussion

The research in this article set out to answer an increasingly important question: Does the LSI-R provide risk prediction on a jail-based sample? Based on the results contained in Table 2, in addition to the positive correlation of .40 between total LSI-R score and recidivism, it appears that the instrument maintains predictive validity on offenders who were booked into the jail facility under investigation.

These results hold implications for the practice of offender assessment on this highly transient offender population. Jails have become increasingly burdened by severely overcrowded conditions. A high need exists for a mechanism through which low risk offenders can be released with some confidence. In addition, jails will likely be depended upon to offer increasing amounts of rehabilitative treatment services in the future, particularly to those who have been sentenced and committed. A third generation risk/need assessment such as the LSI-R should provide the cornerstone in order to help make the release decision with confidence and to create a comprehensive case plan for intervention (either within or outside of the jail setting).

Future research should focus on a number of different areas. Research should examine the relationship between the LSI-R and customary jail classification systems. If it is found that the LSI-R can be used to accurately classify offenders, the utility of the instrument is further enhanced. While the results presented above are encouraging regarding the validity of the LSI-R, it should be noted that the sample size gleaned from this one facility was relatively small. As such, future research should use larger samples, including those from a variety of different geographic locales.

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