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Development and Validation of a Psychological Referral Screening Tool

Canada

Development and Validationof a Psychological Referral Screening Tool

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The points of view expressed in this research report are those of the authors and do not necessarily reflect the views of the Correctional Service of Canada. This report is also available in French. Ce rapport est également disponible en Francais. It is available from the Communications Branch, Correctional Service of Canada, 340 Laurier Avenue Ottawa. Ontario, KlA 0P9.

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Executive Summary

This research describes an alternative to the current procedure of providing relatively undifferentiated psychological assessments for offenders reviewed for release. Presently, all Category 1 offenders and those with overt psychological or psychiatric problems are referred for psychological assessment prior to review by the National Parole Board. The alternative model screens referrals according to factors empirically related to recidivism. Inmates are separated into 3 categories, with the more serious cases receiving a more comprehensive assessment.

Preliminary analyses demonstrate that the derived Referral Screening Form is reliable across time and observers, and correlates significantly with measures of criminal psychopathy and recidivism (the latter provided by the Statistical Information on Recidivism score). These findings suggest that such a screening model might profitably be adopted, although normative data on a larger sample is required to determine appropriate cutoff scores for the 3 categories.

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Description of the Problem

Recent sensational incidents in the community, as reflected by, for example, the Celia Ruygrok and Tema Contra inquiries, have resulted in a heightened concern to identify individuals representing a high risk of reoffending violently. Perhaps because these incidents have involved sexual assaults, correctional and parole decision-makers have looked to psychology and psychiatry for assistance. The past two years have seen a marked increase in the number of referrals to psychologists for parole purposes. Policy guidelines now require that every Category 1 offender be assessed by psychiatrists or psychologists. Case preparation staff are cautioned to refer additional cases that do not meet these criteria based on their offense, but for whom serious concerns exist. The criteria for Category 1 offenses have recently been revised and approximately 62% of all federally incarcerated offenders currently meet these criteria (Population Profile Report, CSC, Dec. 1989).

In addition to the significant problem that there are a greater number of referrals for assessment than current resources can readily provide, there are several other difficulties presented by an offense-based referral system. The volume of referrals not only results in a backlog of offenders awaiting assessment, but also ensures that all case receive a similar, albeit diluted assessment. Nonetheless, some cases may be missed because their offenses fail to meet the criteria but they may represent very serious concerns for other reasons (e.g., they may suffer from mental health problems). With such an emphasis on parole assessments, the variety of duties being performed by institutional psychologists has become very limited. Such a restricted range of duties may begin to have a negative impact on the morale of Correctional Service of Canada psychologists, as well as a negative impact upon recruitment efforts. Even more seriously, psychologists are currently less able to provide treatment services, potentially resulting in some offenders spending longer periods incarcerated. Finally, the literature is clear that predicting future violence is problematic (Monahan, 1981; Quinsey & Maguire, 1986; Webster, Dickens & Addario, 1985). The extent to which psychology may meaningfully contribute to this question requires a much greater emphasis on more comprehensive interviews and specialized psychological testing than is currently possible.

Development of a Screening Model

This model is a three tier approach to psychological assessments for parole purposes and permits psychologists to allocate resources according to specific criteria that are relevant to the questions being asked of them. More serious cases would receive a more comprehensive assessment, i.e., a greater number of interviews and more case-specific psychological testing. Cases are assigned to each tier or category according to their scores on weighted factors that have been empirically demonstrated to predict recidivism. A desirable

feature of this model is that it matches the effort and time investment to the risk presented by the case and the importance of the assessment. In this regard the model is hierarchical, because cases with greater needs, i.e., problems, receive a more comprehensive assessment.

The use of an empirically-derived model should markedly increase the accuracy and specificity of recommendations regarding parole. By allocating resources to need, those offenders most in need of a comprehensive assessment should receive a more detailed assessment. This is not possible with the present system as it does not match the concerns of the case to resource expenditures.

While no model can completely guarantee error-free advice to correctional and parole decision-makers, the proposed model would clearly be more defensible than the present mode those instances when released individuals recidivate violently. The three tier model also attempts to utilize psychologists in those cases where they may have helpful information to provide regard the issues of risk prediction and risk management. Unfortunately, the volume of assessments in present system prohibits such a case-specific approach. The proposed system suggests psychologists invest time in those cases for whom the concerns are greatest, thereby enhancing role psychologists play in the decision process.

Screening Referral Items

The items were selected to reflect criminal history, offense severity, substance abuse, and history of psychiatric or psychological disturbance. Items were selected on the assumption that the information would be important to psychologists, that it would likely be available on file to referring staff, and that the items were relevant to recidivism or community safety concerns. High scores reflect more serious concerns and the need for a more comprehensive assessment. The Referral Screening Form is presented in Appendix A. The items are described below.

1. History of violence

The literature shows a relationship between prior violence and future violent behaviour (Monahan, 198 1; Webster et al, 1985). In addition, there is a strong relationship between violent and psychopathy (Hare, 1981; Hare & McPherson, 1984; Serin, 1990), and psychopathy an recidivism (Hart, Kropp & Hare, 1989; Serin, Barbaree & Peters, 1990). This in not to imply, however, that all violent offenders are psychopathic.

2. Seriousness of offense history

Seriousness of index offense is inversely correlated with recidivism if the offender does no have an extensive or varied criminal history (Nuffield, 1982), e.g., an individual with virtually no prior criminal involvement who kills his spouse

during an argument. Community safety concerns however, dictate that offenses involving homicide should be rated as a more serious concern.

3. Breaches of trust

Offenders with prior breaches of trust or conditional release are more likely to breach subsequent release opportunities (Nuffield, 1982; Serin & Lawson, 1986; Wong, 1984).

4. Substance abuse

While the relationship between substance abuse and recidivism is likely indirect, this is an important issue for risk management strategies. The current scoring has chronic abuse scored higher than situational abuse, i.e., bingeing. This item is less well empirically supported and is included provisionally.

5. Use of weapons

The use of weapons in crimes, particularly if taken to the scene, is very important. There is some research that links use of a weapon to more violent offenders (Hare & McPherson, 1984; Serin, 1990).

6. History of psychological/psychiatric problems

One important function of a psychological assessment should be to review prior psychiatric and psychological interventions and determine, if possible, the extent to which these concerns relate to the offender's criminality (Rogers & Webster, 1989). These issues are important in developing strategies for risk management when the offender is released. At the present, this item is simply dichotomous, mainly for scoring simplicity and enhancing reliability. This means that mental health issues provide a relatively minor contribution to the total score. It may be that a greater range of psychological problems should be included with detailed scoring criteria.

7. History of behavioural problems

This item attempts to measure ~behavioural management concerns, i.e., suicidal behaviour, fighting, early onset of conduct problems. These concerns more directly relate to impulse and anger control issues than mental illness. Again, perhaps a wider range of behaviours might be provided and scoring expanded, so this item's relative contribution would be increased. This item may be more directly related to the task of developing management strategies upon release, than risk prediction per se.

8. Age

Nuffield (1982) among others has demonstrated the relationship between age and recidivism. Younger offenders are more likely to recommit crimes.

9. Number of convictions

Actuarial studies indicate that criminal history is an important predictor or recidivism (Nuffield, 1982). The scoring is quite arbitrary and again it may be more useful to include an expanded range of possible scores.

The Screening Process

It is proposed that Case Management staff complete the Screening Referral Form and attach it to the present Psychological Referral Form. This might be best done at the time of the interview done to complete the Case Management Strategies. The additional work would be minimal, i.e., 5 to 10 minutes, because the Case Management Officer would be familiar with the case. Upon receipt of the Referral Screening Form, the psychologist would assign the offender to a particular category. If, upon interviewing the offender and reviewing the offender file, the psychologists felt a particular case warranted a more comprehensive assessment, they would simply adjust their assessment to reflect the new concerns. A proposed assessment strategy for each of the three tiers or categories is presented in Appendix B.

Preliminary Results on the Screening Model

Two raters were instructed in the use of the Referral Screening form and acquainted with CSC reports. The two raters obtained National Parole Board files on cases used in earlier research projects with the author and for whom other important information was available (e.g., ~psychopathy ratings). Some of the offenders in the sample had also been assessed by the author for parole purposes. A total of 120 cases were randomly sampled from a larger sample (n = 260).

Interrater reliability results were available for 35 cases (r =.94, p <.001). the coefficient alpha, a measure of internal consistency, was .56. A review of the item-total correlations presented in Table 1 indicates that three items - breach of trust, history of psychological or psychiatric problems, and age, have a low correlation with the total score. Because this is intended to be a screening instrument it is not highly critical, and perhaps desirable, that all items be highly correlated. Figure I presents the frequency distribution of the total scores on the Referral Screening Form for the sample of 120 offenders. 'Me mean, standard deviation, mode, median, and range for the Referral Screening Form total scores are presented in Table 2.

In addition to investigating the psychometric properties of the Referral Screening Form, an important goal of this research was to demonstrate the validity of the instrument. Correlations between the Referral Screening Form and the Psychopathy Checklist (Hare, 1985) (r. = .42,12 < .001), and actuarial risk prediction scores, e.g., the Statistical Information on Recidivism (1: = -.61, 11 < .001) support the validity of the instrument Both file and interview information were used to complete the Psychopathy Checklist (PCL) whereas the Statistical

Information on Recidivism (SIR) scale (formerly called the Recidivism Prediction Scale by Nuffield, 1982) was on file, but only available for 64 cases. Figures 2 and 3 present frequency distributions for the SIR scale and the PCL respectively.

Groups were derived by assigning an equal percentage of cases to low, medium and high groups on the Referral Screening Form. The groups were compared in terms of criminal psychopathy and risk. Nonpsychopaths were those-inmates scoring less than 19 on the 20-item PCL, and psychopaths were inmates scoring greater than or equal to 29 on the 20-item PCL. The 20-item PCL has a maximum score of 40 and these cutoffs are comparable to those suggested by Hare (1985). An equal percentage of cases were assigned to low, medium and high risk groups on the Nuffield scale. Table 3 presents the percentage of cases in each of the 9 different cells, comparing the Screening Form groups and psychopathy ($x2$ (4) = 18.3, ~$p < .00$ 1). Table 4 presents the percentage of cases in each of the 9 different cells, comparing the Screening Form groups and risk ($x2$ (4) = 14.7, p *<.005).*

Discussion

The present study demonstrated that the proposed Referral Screening Form may be reliably completed and that it has content validity, in that it measures important information related to risk. These findings suggest that an instrument such as that developed holds promise and might be profitably adopted. The group comparisons, however, indicate that the Referral Screening Form cannot be considered a substitute for either the PCL or the Nuffield scale. This is not surprising since the goal was to measure important factors relating to both risk and psychological disturbance. Additional research is required to develop normative data, to review the scoring criteria and consider adding or deleting specific items.

This research project was conducted in an attempt to demonstrate the utility of an instrument that can be easily completed from existing file information and that might be helpful to psychologists in assigning resources for assessment purposes. Essentially the Referral Screening Form has met this goal. The next step, after developing norms on a larger sample, would be to implement the conceptual framework outlined earlier. That is, to screen the large volume of referrals, i.e., Category 1 offenders, and to determine the specific assessment strategy required for each offender. It may be that offenders who have a sufficiently low score on the Referral Screening Form need not be seen by a psychologist, i.e., Case Management reports may be sufficient, unless additional information suggests psychological intervention might be helpful. Without adequate norms on which to base cutoff scores, it is unclear exactly how many offenders would fall into each of the three categories. It is also unclear whether existing resources could provide a comprehensive assessment for up to 16% of the total number of referrals, i.e., 1 standard deviation or above the mean score.

There will clearly be regional and institutional disparities in terms of the number of offenders requiring the more comprehensive assessment.

Another issue raised by this alternative referral model is that of risk management. One potential advantage of the more comprehensive assessment is that possible strategies to either reduce the likelihood that an offender will reoffend or to identify antecedents to failure will be provided. These strategies will be case-specific, much in the way relapse prevention has been applied to the treatment of sexual offenders (Pithers, Kashima, Cumming, Beal & Buell, 1988).

Such case-specific information, however, requires not only that psychologists have sufficient time to complete more comprehensive assessments, but also some consensus regarding the issues of risk management, the causes of crime, i.e., criminogenic factors, and normative information on potentially useful psychological test instruments. Regarding the latter, the Correctional Service of Canada needs to review the psychological tests currently used to assess risk and predict violence. Norms should be compiled and distributed nationally. A preliminary initiative would be to complete a survey of CSC psychologists to determine the tests they use and any available normative data and research findings. Finally, training workshops should be developed and provided regionally to ensure all CSC psychologists are familiar with the current research and clinical issues. These efforts would substantially enhance the utility of the psychological assessment provided correctional and parole decision-makers.

Tables

Table I
Item-Total Correlations (corrected for overlap)

	Item-total	**alpha if Item deleted**
1. History of violence	.46	.45
2. Offense severity	.29	.53
3. Breaches of trust	.15	.61
4. Substance abuse	.40	.48
5. Use of weapons	.42	.52
6. Psychological problems	.18	.55
7. Behavioural problems	.41	.52
8. Age	.18	.56
9. Number of convictions	.27	.55
alpha = .56		

Table 2
Descriptive Statistics on the Referral Screening Form

Mean = 12.3	Kurtosis = .21
Standard Deviation = 3.9	Skewness = -.18
Mode = 15.0	Range = 0 to 19
Median = 13.0	

Table 3
Percentage of Offenders in Screening and Psychopathy Groups

Screening Groups	Nonpsychopaths	Psychopathy Mixed	Psychopaths
Low	20.0	13.3	3.3
Medium	5.8	14.2	8.3
High	5.8	20.0	9.2
X2(4) = 18.3, p <.001			

Table 4

Percentage of Offenders in Screening and Risk Groups

Screening Groups	Risk Groups		
	Low	Moderate	High
Low	4.7	6.3	20.3
Medium	7.8	9.4	10.9
High	20.3	15.6	4.7

$X2(4) = 14.7, p < .005$

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Appendices

Appendix A

Psychological Referral Screening Form

		Score
1. History of Violence	**No** violent offenses	0
	1 violent offense	1
	2-3 violent offenses	2
	4-5 violent offenses	3
	> **5** violent offenses	4

- include sexual crimes, robbery, poss. weapon, assault, etc.

2. Seriousness	no victim	0
	victim threatened verbally	1
	victim threatened w/weapon	**2**
	victim physically injured	**3**
	death	**4**

- consider most serious crime in lifetime.

3. Breaches of Trust (ever)	on bail without incident	0
	breach bail, probation	1
	breach parole	2
	UAL	**3**
	ELC/prison breach	**4**

4. Substance Abuse	**N/A**	**0**
	minor	1
	situational (binge)	2
	chronic	3

- for 1 year prior to present offence

5. Use of Weapons	No	0
	Yes	1

- in commission of crimes; does not include possession of weapon.

6. History of psychological/ psychiatric problems	No	0
	Yes	1

- include previous admission to psychiatric hospital; **if** previously on psychiatric medication.

7. History of behavioural problems	No	0
	Yes	1

- prior suicide attempts, fighting in jail, conduct problems, age < 16.

8. Age	**>** 39	0
	39 to 21	1
	< **21**	**2**
9. Number of convictions	**1 -** 3	0
	4 or more	1
	Total Score	_____

Appendix B

Parole Assessment Referral Process

Inmate Meets Offence category I

Referral Completed

Screening Form Completed

Screening Assessment
(Score = 0-7)
short interview
file review
Raven's
MMPI
Actuarial scale (RPS)

Report completed

Routine Assessment
(score = 8-12)
1 1/2 - 2 hour interview
file review
Raven's
MMPI
Actuarial scale (RPS)
Acturarial scale (VPS)
Psychopathy rating (PCL)
Interpersonal behaviour survey
MAST
DAST

Report completed

Comprehensive Assessment
(score = 13 - 21)
3-4 interv9iews
file review
Raven's
MMPI
Actuarial scale (RPS)
Actuarial scale (VPS)
Psychopathy rating (PCL)
Interpersonal Behaviour Survey
MAST
DAST
Inventory of Drinking Situations
Buss Durkee Hostility Inventory
Multidimensional Anger Inventory

Report Completed

Figures

Figure 1
Referral Screening Form

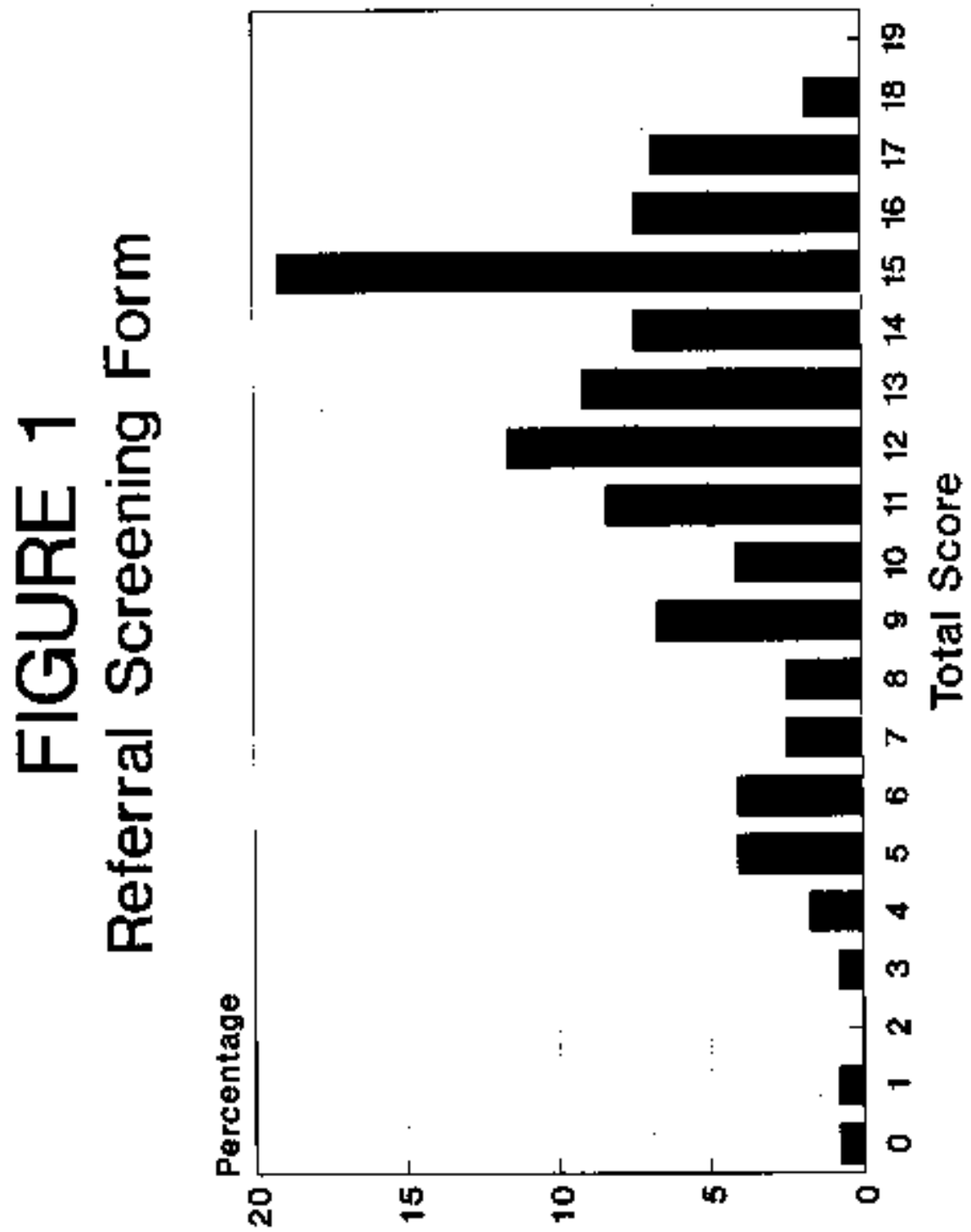

Figure 2
Recidivism Prediction

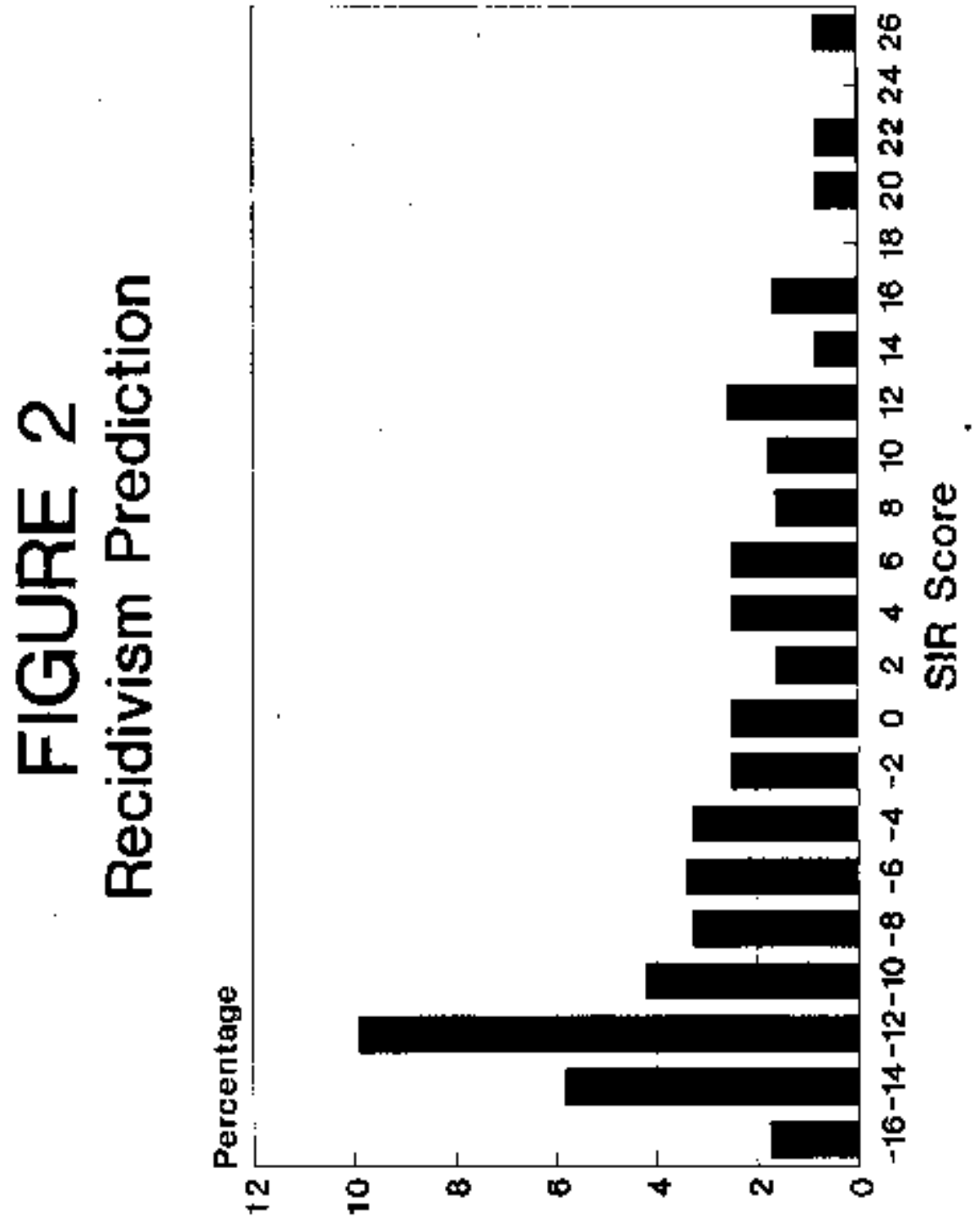
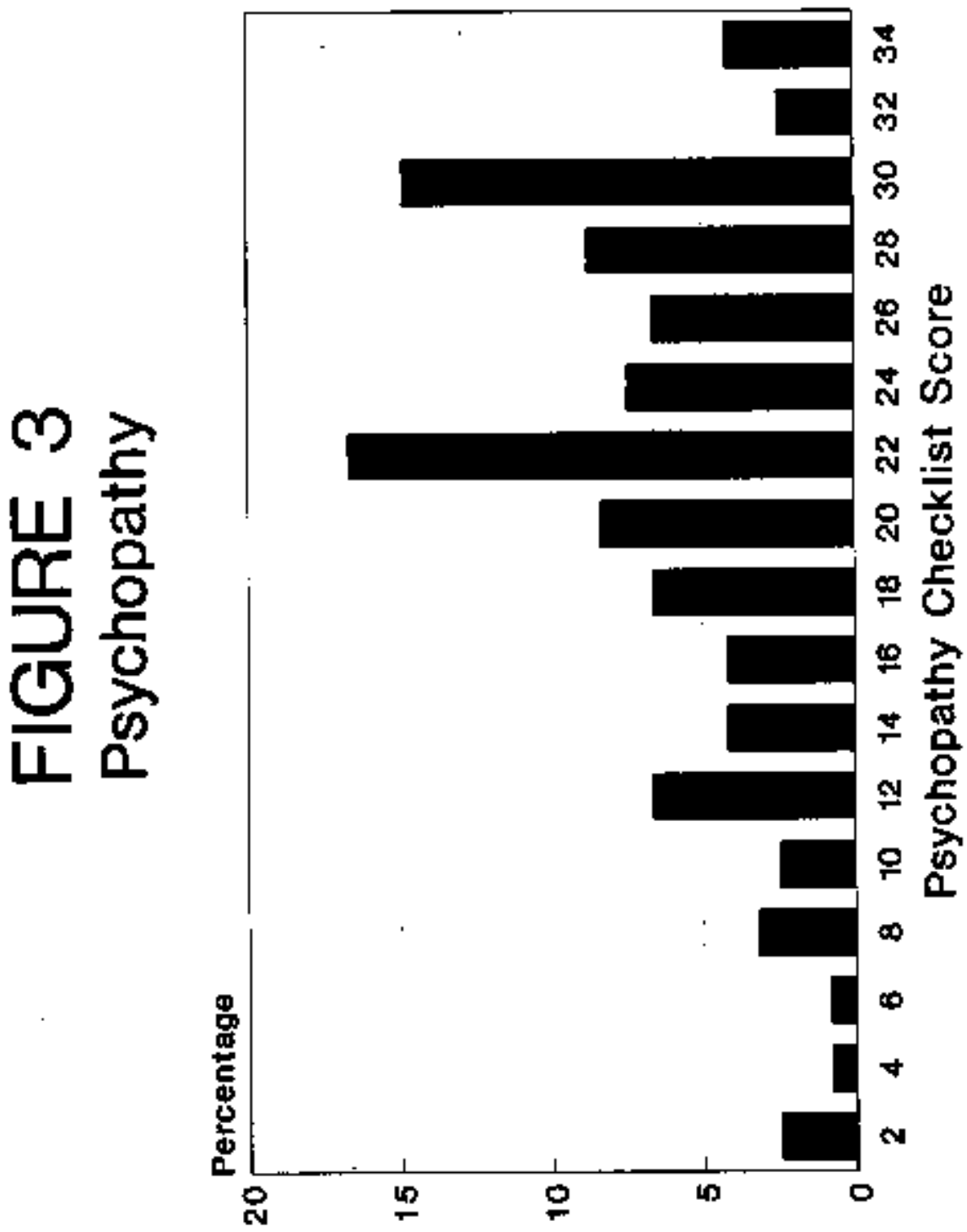
Figure 3
Psychopathy