User
Report

RELEASE RISK PREDICTION:
TESTING THE NUFFIELD SCORING
SYSTEM FOR NATIVE AND
FEMALE INMATES

No. 1989-4

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CHAPTER 1
BACKGROUND

1.1 REPORT OBJECTIVES

The Ministry of the Solicitor General of Canada has recently initiated a number of studies aimed at improving understanding of both the processes that lead to decisions to grant or deny early release on full parole, and the risks associated with the release from penitentiary of different types of offenders. During the past 2 years the authors of this report have been engaged in the latest of these studies, "The Parole Decision-Making and Release Risk Assessment Project".

The mandate of that major study includes a broad range of issues related to the release of inmates -- with issues related to the prediction of release risk being top priority. However, until the study is complete, those having to deal with the prediction of risk must rely on prediction methodologies developed some time ago. The most promising of those is a risk prediction scoring system developed by Joan Nuffield[1] using data for inmates released in the early 1970's.

A recent short report[2] utilized data collected especially for our study to explore the extent to which the "Nuffield Scoring System" yielded accurate predictions of the risks associated with male offenders released from penitentiary in more recent years. The report also explored whether other findings of Nuffield regarding actual Parole Board release decisions still hold. The major findings of that report were

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1. The "Nuffield Study" is best described in the full research report of her work, namely: Nuffield, Joan, "Parole Guidelines", Preliminary Version, Third Draft (revised), June 1979. A summary version of the report was later published by the Ministry of the Solicitor General in 1983.

   The report referenced in the next footnote also contains a brief summary of the methodology and results of the Nuffield study.

2. Hann, R.G. and W.G. Harman, "Release Risk Prediction: A test of the Nuffield scoring System", report submitted to the Ministry of the Solicitor General of Canada (1988).

quite positive regarding both the Nuffield Scoring System and the past decisions of the Parole Board.

However, the Nuffield Risk Scoring system was developed using data describing only male "simple warrant of committal" offenders (males who were admitted for reasons other than violation of parole or mandatory supervision). The first set of tests of the scoring system therefore only considered the system's continued usefulness for those types of offenders. However, since no alternative scoring system is currently available, there is an understandable temptation to use the Nuffield system to estimate the release risks associated with:

-   different types of offenders (e.g. females, male parole violators, etc.).

In addition, there is a concern that the scoring system may not work as well for:

-   specific subgroups of male "simple warrant of committal" offenders (e.g. male natives).

Since the Nuffield scoring system was not specifically developed for these particular groupings of inmates, it would seem prudent to test the applicability of the system for those groupings before using it for actual decision-making. The current short report performs such tests for the following important types of offenders (both admitted on simple warrants of committal):

-   native vs. non-native males, and

-   females.

1.2 THE PAROLE DECISION-MAKING AND RELEASE RISK ASSESSMENT PROJECT DATA BASES

A major portion of the Parole Decision-Making and Release Risk Assessment project has been devoted to assembling the different types of data bases necessary to understanding the range of issues related to the parole process and release risk[3].

The databases used in this report were derived from a manual review of non-automated and computerized records and consisting of over 600 variables (prior criminal history, demographic characteristics, sentence type and length, institutional

3   A brief description of the major databases assembled for the project can be found in Hann, R.G., and W.G. Harman, ibid.

experience, escapes, transfers, release process, post-release experience, etc.). The
particular data used in this report related to:

- a 25% sample (792) of all male penitentiary inmates who were released (on
  parole, mandatory supervision, direct discharge, etc) in 1983/84 (eliminating
  from that database all offenders who were not admitted on simple Warrants
  of Committal left 534 inmates -- compared to 2475 for the Nuffield
  combined construction and validation samples); and

- all (87) female penitentiary inmates who were released (on parole,
  mandatory supervision, direct discharge, etc) in 1983/84 (eliminating from
  that database all offenders who were not admitted on simple Warrants of
  Committal left 59) inmates).

The data base also had information on nearly all the variables required to calculate
the Nuffield Release Risk Scores[4], with the following exceptions:

- although Nuffield had information on the exact number of dependents of the
  inmate, our data included only an estimate of whether or not such
  dependents existed, and

- although Nuffield had information on whether or not the inmate had a
  conviction for an indictable offence within 3 years of release, our database
  had such information for only a 2 1/2 year follow-up period[5].

However, these differences are minor compared to the main difference in the two
samples, namely, the year of release. Many attempts to develop risk prediction
scoring systems find that the scoring systems work better for inmates in the
samples from which the data was drawn to construct the system in the first place.
When the systems are validated on similar but different samples of inmates, their
predictive efficiency often decreases. Here we expect a more significant fall in
predictive efficiency since the new "validation" sample includes inmates released at
least 11 years after those in the samples used to construct and validate the Nuffield
Risk Prediction System. A prediction system would be considered very robust
indeed if it were found to still work after such a period of time.

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4. Our database contained information on a large number of variables that were either not considered by
    Nuffield or were considered and were found by her to be of limited use in improving the predictions of risk.
    However, the purpose of our study was to test the existing version of the Nuffield Scoring System, not to
    recalibrate any of its parameters or (possibly) to improve it by considering other information. These latter
    tasks are left to later stages of our project.

5. Because nearly all reconvictions typically occur within 2 1/2 years, we would not expect this difference to be
    overly important. However, we would expect our sample to yield marginally lower estimates of risks -- or
    higher estimates of success rates.

CHAPTER 2
NATIVES COMPARED TO NON NATIVES

2.1 RELEASE RISK

The Nuffield Release Risk Scores were calculated for all inmates in our new validation sample. "Success rates" were then calculated for each group of inmates who received the same score -- where the success rate was defined as the percent of all inmates receiving a particular score who received no conviction for an indictable offence within 2 1/2 years of release.

However, the Nuffield scores for males varied over a quite large range -- from -25 (extremely bad score) to +21 (extremely good score)[6]. This wide range, coupled with our sample size of 534 -- 485 non-natives and only 49 natives -- sometimes resulted in relatively small numbers of inmates (often no inmates) receiving Nuffield scores of particular values. These small sample sizes for individual scores made it very difficult to identify and interpret any trends in success rates.

The usual correction for this problem is to replace success rates for individual scores with rates for groupings of scores. For this report these groupings were determined by dividing the samples up in a manner that ensured that each group contained roughly 10% of the total number of inmates in the smallest of the subsamples of interest[7].

Figure 1 provides a starting point for the analysis by showing -- for all male inmates in the sample -- the relationship between, on the one hand, the Nuffield Risk Scores and, on the other hand, either

1. the success rates of inmates having those scores, or

2. the rates at which inmates with those scores were granted parole.

Figure 1 clearly demonstrates that - for all simple warrant of committal male inmates (Natives and Non-natives combined):

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6. It should be noted that in their original form higher Nuffield scores denoted lower chances of success. Recent uses of the scoring system have multiplied the scores by "-1" to force higher scores to denote higher chances of success.

7. In the first report (Hann R.G. and W.G. Harman, op cit, a 5 cell (or 5 score) moving average success rate was chosen instead.

- Even though The Nuffield Release Risk Prediction Model was developed using data on offenders released over 10 years ago, it continues to be a good predictor of release success (in general, higher Nuffield scores imply higher chances of release success); and

Figure 1

SUCCESS and PAROLE RATES

- Full Parole Decisions of the National Parole Board regarding male offenders were generally consistent with the decisions that would be prescribed by Nuffield's Release Risk score (offenders with higher Nuffield scores are more likely to be released to parole)[8].
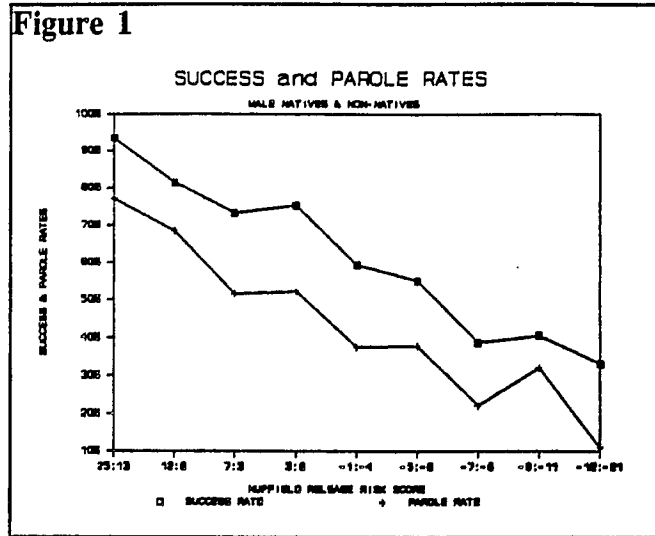
Figure 2 shows the relationship between Nuffield Scores and the chances of release success for Male Native simple warrant of committal inmates -- and compares that relationship to the analogous relationship for Male Non-natives[9].

Figure 2

SUCCESS RATES BY SCORE

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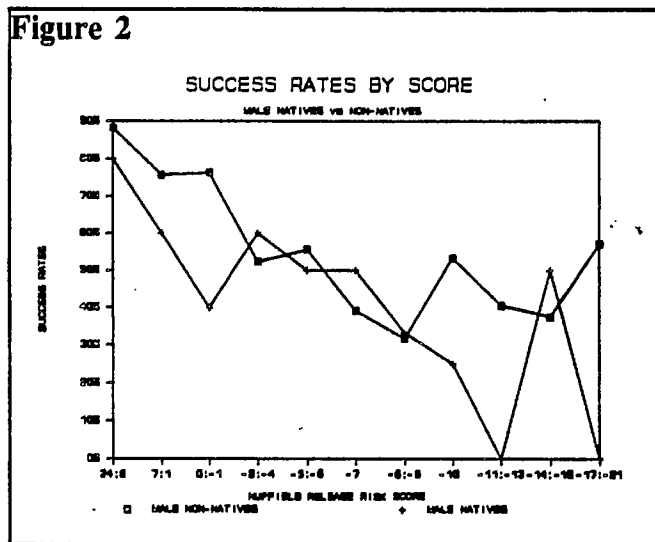
8. The report cited earlier also found that, almost without exception, among any group of male inmates classified by the Nuffield Release Risk system as having the same release risk score, those who were granted parole by the Parole Board were more successful after release than those who were denied parole.

9. Similar comparisons were made for female native and non-native inmates. However, the very small numbers of native female inmates in our sample did not justify the presentation of these results.

First of all, for both groups, higher Nuffield scores are generally associated with higher chances of release success[10].

In fact, with the exception of the Native group within the "-14 to -16" scoring range, the Nuffield scoring system seems to differentiate between the low and high risk inmates at least as well for Native as for Non-native inmates.   More specifically,

    re: Natives,
- the 31% of all Natives that scored lowest on the Nuffield score (i.e. those with scores from "-10 to -17") have a combined chance of success of **20%** -

    as compared to
- the 31% of Natives that scored highest on the Nuffield score (scores from 0 to 24) with a combined chance of success of **60%**.

    re: Non-Natives,
- the 29% of all Non-natives that scored lowest on the Nuffield score (i.e. those with scores from "-7 to -21") have a combined chance of success of **39%** --
    as compared to
- the 43% of all Non-natives that scored highest on the Nuffield score (i.e. those with scores from "1 to 24") have a combined chance of success of **83%**

Secondly, when actual success rates of natives and non-natives are compared, different results are obtained for different ranges of Nuffield scores.   More specifically, success rates for natives and non-natives are

- very **similar** for comparable groups with
  - mid-range Nuffield scores (i.e. scores between -2 and -9),

- but success rates for Natives are **generally lower** than those for Non-Natives for comparable groups with either
  - relatively *high* Nuffield Scores (i.e. scores between +24 and -1), or
  - relatively *low* Nuffield Scores (i.e. -10 and lower) -- with the exception of the "-14 to -16" category.

Finally, one of the problems noted by Nuffield was that, as with most available release risk prediction devices, the devices seldom isolate out groups of inmates with expected success rates approaching "0". The lowest success rates for the

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10. The (different) groupings of scores chosen to calculate group success rates for both Natives and Non-natives were based on the distribution of native inmates among individual Nuffield scores. This choice of grouping may be necessary to allow a comparison between the two groups, but may not be optimal for displaying the results for Male Non-natives. It should also be remembered that no attempt has been made (by either Nuffield or ourselves) to develop "Nuffield Scores" specifically for Natives and Non-Natives. Presumably, such subsample-specific scores would predict release success better for that subsample than would scores based on a combination of data from that and other subgroups of inmates.

most risky categories of Non-Natives is roughly 1 in 3. For the 31% of all
Natives that scored lowest on the Nuffield score (i.e. those with scores from "-10
to -17") 1 in 5 would be expected to succeed after release.

In summary, the Nuffield Scoring System seems to have value for predicting actual
release risk for both Non-natives and Natives. However, some adjustments are
required to interpret most accurately the scores calculated for the two different
groups of inmates. Finally, it should also be noted that the accuracy of the
predictions of "Nuffield-like" scores would likely be improved if such scores were
developed specifically for each of these 2 different subgroups of inmates.

2.2   COMPARISON OF SCORES WITH ACTUAL PAROLE DECISIONS

Nuffield also found that Parole Board decisions did follow the general pattern
suggested by her Release Risk Scores. The Parole Board granted parole to
relatively high proportions of inmates having high scores -- and to relatively low
proportions of inmates having low scores.

The information presented in Figure 3 indicates that Nuffield's findings in this area
do continue to apply -- for our more recent sample of <u>Non-native</u> inmates. As the
Nuffield Scores of Non-native
inmates decrease, the chances of
Non-native inmates being
released to parole steadily
decrease.

Figure 3

However, an analogous
conclusion does <u>not</u> seem to
apply for <u>Natives</u>. There is
almost a random relationship
between Nuffield Scores and
Parole Release Rates for native
inmates.

The second issue explored in this
section concerns the marked
difference usually found in the
rates at which Natives and Non-
natives are granted parole. In our 2 samples the chance of a Native inmate's being
granted full parole was only 12% -- considerably less than the 47% chance faced
by a Non-native[11].

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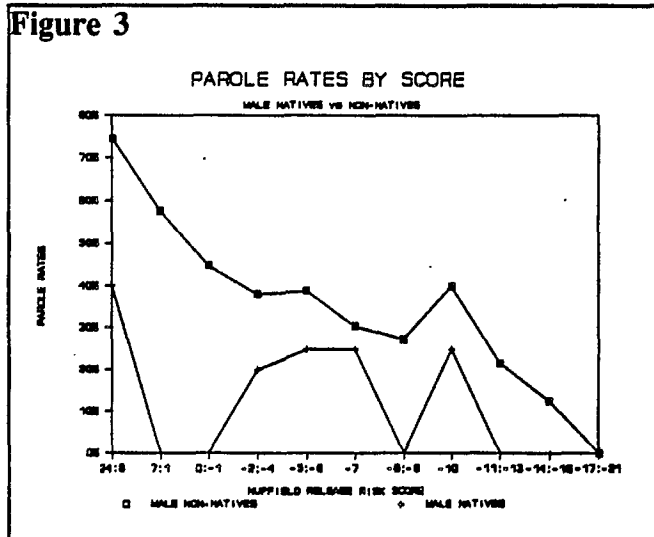
11. As indicated by a simple Chi-square test (before and after a Yates correction), this difference is statistically
     significant at the .0000 level.

The information in Figures 3 and 4 can also be used to begin to investigate two questions related to this issue:

1   whether this difference can be explained by differences in the likely release risks associated with the two groups of inmates (as measured by Nuffield Scores), and

2   whether better use of Nuffield scores in release decisions would have resulted in a smaller difference in the overall rates of parole for Non-Native and Natives -- without increasing overall release risk.

Before investigating either of these questions, it is important to remember that, although the Nuffield Score does incorporate may important types of information that explain differences in the risks associated with release from penitentiary, the Score may not incorporate certain other types of information that might be relevant for explaining differences in the risks associated with specific subgroups of offenders. In addition, it should also be remembered that the analysis presented here is based on relatively small numbers of Native offenders. Any results derived from analysis based on these small samples should be checked through analysis of larger samples.

Nonetheless, with respect to the first question, it is clear that at least part of the explanation for the lower parole rates for Natives could reasonably be attributable to Natives having lower chances of success after release than do Non-Natives. The overall Release Success rate for our sample of Natives was 43%, compared to 64% for Non-natives.

With respect to the second question, it is important to note the conclusion of the first part of this section, a conclusion that implies that Board decisions to parole or not to parole natives do not seem to vary with information on relative risks (as would be provided by Nuffield scores).

In addition, except for the 2 lowest possible scoring ranges, for every level of Nuffield Score, Natives had a lower chance of Parole release than did Non-natives. To the extent that the Nuffield Score "controls for" a fairly wide range of factors that are considered in calculating the score, this finding is of some concern. The finding is especially disconcerting for Native inmates having "mid-range" Nuffield scores, since it has just been shown that these inmates have similar chances of release success to those of Non-natives with similar scores.

The following analysis represents one way of assessing the "costs" of not relating Parole decisions to the predicted success rates of Native inmates (as measured by Nuffield Scores).

First, let us choose "cut-off" scores for both Non-Natives and Natives that generally divide the two samples into inmates with predicted success rates of over 50% vs. 50% or less. For Non-natives this cut off would be at a score of "-5 to -6". For Natives this cut-off would be at a score of "-2 to -4".

Then, if all <u>Non-natives</u> with a score of "-5 to -6" or higher and all <u>Natives</u> with a score of "-2 to -4" or higher had been paroled (and those with lower Nuffield scores had not been paroled), the results would be as summarized in the following table:

	NON NATIVES	NATIVES
Sample Size	485	49
If decisions based Solely on Nuffield Score		
- Number Paroled	343	20
- Parole Rate	70%	41%
Resulting "Nuffield" Success Rates		
(of Parolees)	74%	60%
(of Non-Parolees)	39%	31%
Decision errors		
- Parolees who fail	90	8
- Non-parolees who succeed	56	9
Subtotal	146	17
(% of all decisions)	30%	35%

The results of the hypothetical Nuffield-based release policy compare to the following results of the <u>actual</u> release decisions.

	NON NATIVES	NATIVES
Actual Number Paroled	228	6
Actual Parole Rate	47%	12%
Actual Success Rate		
(of Parolees)	81%	83%
(of Non-Parolees)	48%	37%
Decision errors		
- Parolees who fail	43	1
- Non-parolees who succeed	124	16
Subtotal	167	17
(% of all decisions)	34%	35%

Basing parole release decisions <u>for Natives</u> solely on Nuffield scores would have resulted in a significant increase in the parole release rate for Natives-- from 12% to 41%. It is also noteworthy that this large increase in the release rate would

have resulted in no increase in the total number of "decision errors" (i.e. parolees who failed plus non-parolees who succeeded). However, it should be noted that this latter overall finding results from
- a decrease in the number of non-parolees who succeeded (from 16 to 9) balancing,
- an equal increase in the number of parolees who failed (from 1 to 8).

(Of course, since both parts of the above table are based on the same sample of actual releases, the overall success rate of both parole and non-parole releases would not change by using Nuffield scores -- for either Natives and Non-natives. Whether or not these results would apply if the "actual" release decisions for these same cases had been different (i.e. if being granted or being on parole per se actually had a separate impact on success rates) is unknown.)

Similarly, basing parole release decisions solely on Nuffield Release scores would result in a large increase in the parole release rate for Non-Natives as well. However, in this case there would be a decrease in the total number of "decision errors" -- although the decrease would have resulted from
- a decrease in the number of non-parolees who succeeded (from 124 to 56) being greater than
-. the increase in the number of parolees who failed (from 43 to 90).

2.3.   TIMING OF PAROLE RELEASE: NATIVES VS. NON-NATIVES

Even if the National Parole Board decided to release an inmate on parole, the Board still would have discretion as to when that parole release will take place. The timing of parole release is of both policy and operational significance -- especially with regard to the possibility of differences among different groups of inmates, and because of the impact release timing decisions can have on inmate participation in programs and on institutional populations.

A detailed analysis of the timing of different types of release for Native and Non-Native inmates was beyond the scope of this short paper. Nonetheless, we did attempt an initial exploration of the area.

Unfortunately, the relatively small numbers of natives in our sample made it impossible to compare Natives and Non-natives, after controlling for release risk as measured by Nuffield Scores. In fact, since our sample contained only 6 Male Native parole releases (who had previously been admitted on Simple Warrants of Committal), any results should be treated with caution.   For that reason, the following results will be presented without discussion:

- For 232 Male Inmates who were released to parole, the percent of sentence served before parole release was:
  - 46% for the (6) Natives, compared to
  - 41% for the (226) Non-Natives.

-    Although a 5 percentage point difference in these percents could have policy
     and operational significance, in our sample this difference was not
     statistically significant[12]. To argue with confidence that the difference
     would be found in other samples of inmates would require results based on
     a larger sample of cases.

However, the results certainly do indicate the need for further research to
determine whether such results would be forthcoming.

In addition, the results provide evidence which cannot be questioned because of the
sample size. The results corroborate earlier research that shows that, although
inmates become eligible for parole after serving one third of their sentence, the
normal situation is for inmates to be released on parole at a substantially later
point in their sentence.

2.4.   COMPARISON OF SUCCESS RATES: SCORING SYSTEM VS. ACTUAL DECISIONS

The recent earlier noted report by the authors also explored whether Board
Members can, through their experience and expertise, add or better interpret
information that can improve on the decisions dictated by strict adherence to risk
scores.

It has already been noted that Board members' decisions in the past have been
generally consistent with the decisions that would be prescribed by a Release Risk
score. Earlier Figures also show that not all inmates in the lowest risk categories
succeed after release -- and that not all inmates in the highest risk categories fail.
This implies that there is room for improving on the scores.

Figure 4 and Figure 5 directly address the question of whether those released on
Parole have better success rates than do inmates (with the same Release Risk
scores) who are not released by the Board to parole.

For Non-Natives (Figure 4) the answer is definitely in the affirmative. With only

12. Two tailed probabilities of this difference occurring by chance were over .4 -- as measured by a t-test using
    both pooled and separate variance estimates.

    A similar test for (26) Female inmates released to parole (after having been admitted on Simple Warrants of
    Committal) found percents of time served before parole release of:
    -    40% for the (5) Natives, and
   -   35% for the (21) Non-natives.

    These latter results also would not be statistically significant if they were drawn from a sample. However,
    they are based on the total population of Female parole releases in 1983/84. It is therefore appropriate to
    state that -- as compared to Female Non-native inmates -- Female Native Releases were released to parole
    only after serving a longer proportion of their sentence. Whether this difference can be attributed to other
    factors (e.g. release risk) would require further analysis, possibly using a larger sample cases.

one exception, among groups of
Non-native inmates classified by
the Nuffield Release Risk system
as having the same release risk
score, those who were granted
parole by the Parole Board were
equally or more successful after
release than those who were
denied parole.

Whether these findings are due to
a "selection" and/or to a
"supervision" effect[13], these
findings are -- for non-native
offenders of every level of
release risk -- clearly supportive
of the "total" parole process.

Figure 4

SUCCESS RATES BY SCORE

Figure 5 provides similar information for Natives. Although the results seem
similar to those obtained for Non-natives, the combination of small sample sizes
and very low parole release rates
mitigates against the drawing of
any conclusions.

In summary, the results presented
in this part of the report are
clearly supportive of the Nuffield
Scoring System -- for both Non-
natives and Natives. However,
the results also indicate that there
is scope for improving and
applying scores for both groups
of inmates.

Figure 5

SUCCESS RATES BY SCORE

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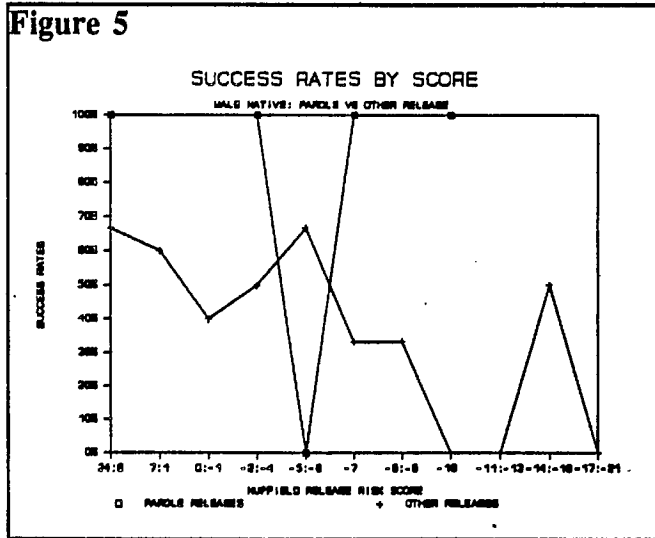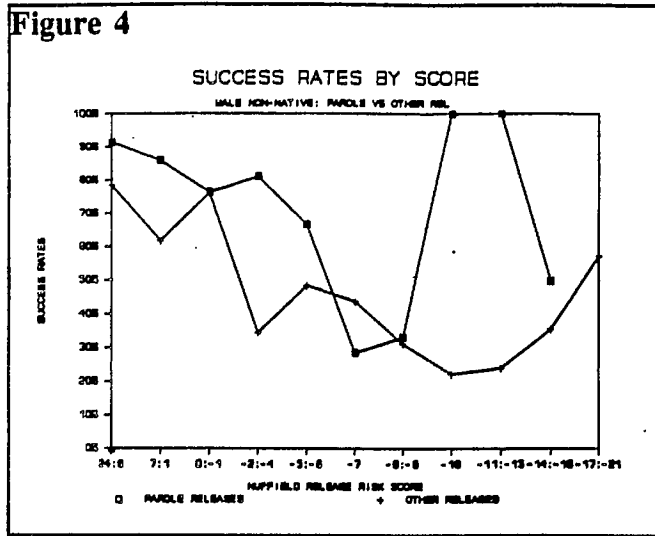
13. i.e. to the Parole Board's special abilities to improve on the risk scoring system's predictions of risk (the
special "selection" effect), or to the positive impacts of the parole release and supervision processes per se
(the "supervision" effect).

CHAPTER 3:

FEMALES COMPARED TO MALES

3.1 RELEASE RISK

Attention is now turned to consideration of the degree to which the Nuffield Scoring system is appropriate for use with female offenders. The Chapter will follow the same format as the previous Chapter, except that female inmates will be compared to male inmates.

However, natives accounted for 24% of female releases in our sample -- a percent that was considerably above the analogous percent for male releases (9%). In light of the differences between non-native and native male releases discussed in the previous chapter, it was decided to base any comparisons on data from male non-natives and female non-natives[14].

Nuffield Release risk Scores were calculated for all Female and Male Non-Native inmates in our sample. As in the previous Chapter, the small sample size (for females) required the replacement of success rates for individual scores with rates for groupings of scores. These groupings were chosen in a manner that ensured that, for females, each scoring group contained roughly 10% of the total number of female Non-native inmates.

Figure 6 shows the relationship between Nuffield Scores and the chances of release success for Female Non-Native simple warrant of committal inmates.

Figure 6

SUCCESS RATES BY SCORE

MALE vs FEMALE NON-NATIVES

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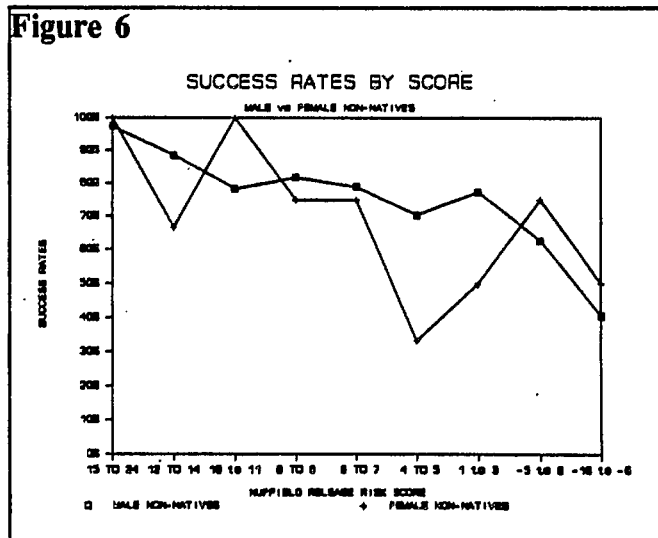
14. A comparison of Female Natives and Male Non-natives would have been especially difficult since there were only 14 Female Natives in our sample.

That relationship is also compared to the analogous relationship for <u>Male Non-natives</u>.

The strong relationship for Male Non-Natives between Nuffield scores and the chances of release success is again borne out for Male Non-natives. However, although the analogous relationship for <u>Female</u> Non-natives is present at a very general level, it is obviously weaker and less regular[15].

With this observation in mind, the actual success rates of natives and non-natives are roughly similar:

-   both overall, with the overall Success rates for Female and Male Non-natives being 67% and 64%, and

-   more specifically, for Female and Male Non-natives with comparable Nuffield scores -- with the exception perhaps of the those with scores between +5 and +1.

Finally, as noted earlier, most available release risk prediction devices seldom isolate out groups of inmates with expected success rates approaching "0". For the 35% of all Female Non-natives that scored lowest on the Nuffield score (i.e. those with scores from "+3 to -16"), roughly 44% would be expected to succeed after release.

In summary, the Nuffield Scoring System does seem to be somewhat indicative of release risk for Female Non-natives -- but its value is considerably less than that for Male Natives and especially Male Non-natives[16]. Before it could be recommended for use for Females, more work would be needed to develop a scoring system specifically for this group of inmates.

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15. It should also be remembered that no attempt has been made (by either Nuffield or ourselves) to develop "Nuffield Scores" specifically for Females (either Natives or Non-natives). Presumably, such subsample-specific scores would predict release success better for such subsamples than would scores based on a combination of data from that and other subgroups of inmates.

16. In fact, use of the Nuffield Scores for determining whether or not to release Female Non-natives to Parole (i.e. by releasing all inmates with Scores associated with a Success Rate over 50%) would yield the same number of wrong release decisions as would releasing all Female Non-natives. ("Wrong" being defined as either the release of an inmate who fails, or the denial of release to an inmate who succeeded after release.)

3.2   COMPARISON OF SCORES WITH ACTUAL PAROLE DECISIONS

The overall parole release rates for Female and Male Non-natives were very similar; 49% and 48%, respectively. In addition, the information presented in Figure 7 indicates that the Parole Board granted parole to relatively high proportions of inmates having high scores, and to relatively low proportions of inmates having low scores -- for both Male and Female Non-natives.

Figure 7

PAROLE RATES BY SCORE
MALE vs FEMALE NON-NATIVES

However, although for Male Non-Natives the chances of parole release decrease steadily as Nuffield Scores decrease, the pattern is different for Female Non-natives. For the latter group of inmates, the chances of parole release fluctuate virtually randomly within a high range (50% to 100%) for those with (high) Nuffield Scores between +24 and +6. The chances of parole release are then much lower for Female Non-natives with (lower) Nuffield Scores between +5 and -16 -- i.e. in the range between 0% and 25%.. This suggests that Parole Board decision-making for females is consistent with a model of behaviour based on the notion that there are generally two groups of female inmates: those suitable for parole, and those not suitable. For Male Non-natives, the decision-making is more consistent with a behavioural model that recognizes more gradations in inmates' suitability for parole.
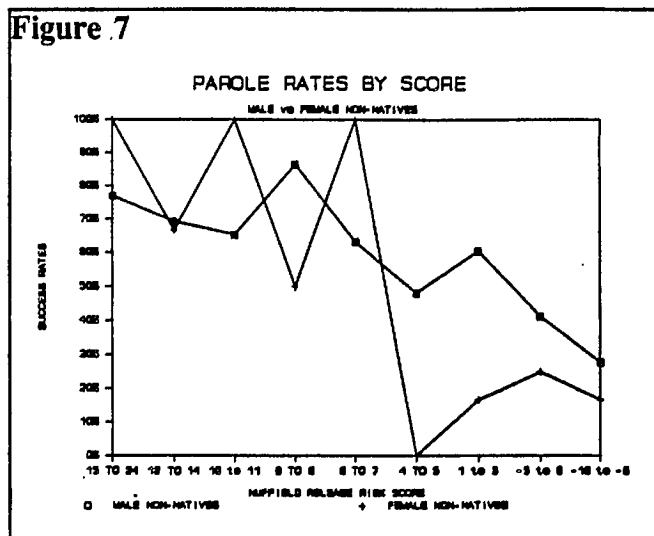
3.3.   TIMING OF PAROLE RELEASE: FEMALE VS. MALE NON-NATIVES

As with Natives, we also attempted an initial exploration of whether or not there were differences among Female and Male Non-native inmates with regard to the timing of parole release.

Unfortunately, again the relatively small numbers of Female Non-natives in our sample who were released to parole made it difficult to compare Female and Male Non-natives, after controlling for release risk (as measured by Nuffield Scores). Since our sample contained only 21 Female Non-native parole releases (who had previously been admitted on Simple Warrants of Committal and for whom we had valid release timing data), any results should be treated with caution.

With this caution in mind, the following results are presented without discussion:

- the percent of sentence served before parole release was:
    - 41% for the (226) Male Non-Natives
      and
    - 35% for the (21) Female Non-Natives.

- Although a 6 percentage point difference in these percents could have policy and operational significance, in our sample this difference was not statistically significant. To argue with confidence that Males would be released earlier than females in other samples of inmates would require results based on a larger sample of cases.

It is also interesting that Females (contrary to Males) are on average released to parole soon after the statutory minimum of one third of their sentence.

3.4. COMPARISON OF SUCCESS RATES: SCORING SYSTEM VS. ACTUAL DECISIONS

Figure 8 provides information relevant to the question of whether Female Non-native inmates released on Parole have better success rates than do Female Non-native inmates (with the same Release Risk scores) who are not released by the Board to parole.

The small sample sizes (22 females released to parole and 23 released otherwise) prevent any firm conclusions. However, with only one exception (those with Nuffield scores in the range "+1 to +3"), among groups of Female Non-native inmates classified by the Nuffield Release Risk system as having the same release risk score, those who were granted parole by the Parole Board were equally or more successful after release than those who were denied parole.

Figure 8
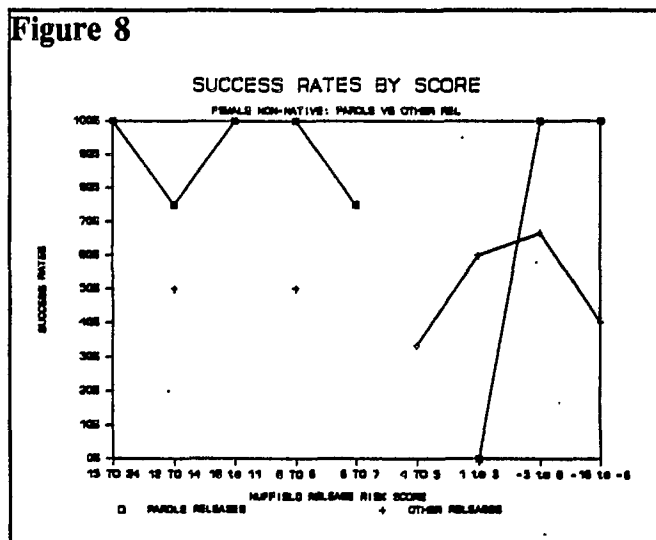
As noted before, whether these findings are due to a "selection" and/or to a "supervision" effect, they are -- for Female Non-native offenders of nearly every level of release risk -- clearly supportive of the "total" parole process.

3.5.   CONCLUDING COMMENTS

In summary, the results presented in this report are clearly supportive of the
Nuffield Scoring System -- especially for Male Non-natives but also -- albeit to a
lesser extent -- for Male Natives. The results were less satisfactory for Female
Non-native inmates. However, the results also indicate that there is scope for
improving and applying scores for all groups of inmates, but for Natives and
Females in particular. Finding such improvements will be one of the major tasks
addressed by the Ministry's Parole Decision - Making and Release Risk Assessment
Project.

Storage