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# An Evaluation of North Carolina's Intensive Juvenile Probation Program

Prepared for the North Carolina  
Administrative Office of the Courts

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**AN EVALUATION OF NORTH CAROLINA'S INTENSIVE JUVENILE PROBATION PROGRAM**

July 1987

Prepared for the North Carolina Administrative Office of the Courts

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**ACQUISITIONS**

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## SUMMARY

At the request of the North Carolina Administrative Office of the Courts (AOC), the Institute of Government performed an evaluation of the AOC's new pilot program of intensive probation (IP) for juvenile delinquents. The IP program, which began late in 1985 on authority of legislation passed earlier that year, operates in four sites: Wake County, Robeson County, Wilson County, and the City of Greensboro. By March 10, 1987, of 81 youngsters who had been placed on IP, 36 remained on IP; 20 had been committed to training school for a new delinquent act or probation violation; 14 had completed the program successfully; eight had been transferred to regular probation; two had been admitted to a residential program; and one had moved out of the state. Thus, of the 42 intensive probationers who were no longer in the IP program by March 10, 1987 (not counting those who moved out of the state or were admitted to a residential program), 22 (52 per cent) still had not been committed to training school.

The IP program provides assistance and counseling to youth adjudicated delinquent (i.e., guilty of acts that would be criminal for adults) who are likely to be committed to a training school (juvenile correctional institution). Its purpose is to determine whether IP can help those juveniles refrain from criminal behavior and other misconduct and avoid further commitment to training school.

IP is administered by specially-designated court counselors (IP counselors) who receive training in structural family therapy that regular court counselors do not normally receive. IP counselors have less than one-third the average caseload of regular court counselors. IP involves much more contact with the juvenile than does regular probation, including contact during evenings and weekends. It entails close supervision and work with families, school officials, and employers of juveniles. IP counselors advise parents on how to set limits on their children's behavior, and are available 24 hours a day to respond to crises involving the intensive probationer and his family. With their reduced caseloads, IP counselors can monitor probationers' compliance with court orders and conditions of probation more closely than regular court counselors, and can keep the court better informed about their clients' progress.

The authors' evaluation addressed two questions: (1) Would intensive probationers have been committed to training school if IP had not existed? (2) How great was the recidivism of juveniles on IP? We collected data on all juveniles (a total of 44) who were placed on IP from its beginning, approximately October, 1985, through May 31, 1986. (May 31, 1986, was used as a cutoff to allow time for measurement of recidivism.)

To determine whether intensive probationers probably would have gone to training school without the intervention of IP, we developed a statistical model of the probability of commitment to training school, using data collected at the four IP sites on 200 youths adjudicated delinquent from January 1 through June 30, 1984 (before IP began). The "training school risk" (probability of being committed to training school) estimated for the

intensive probationers was in most cases fairly close to the risk estimated for those who actually were committed to training school, including 36 youngsters committed to training school in Period One (January 1 through June 30, 1984), and 26 who were committed in Period Two (December 1, 1985 through May 31, 1986). Also, in most cases intensive probationers' training school risk was much greater than the risk of youngsters placed on regular probation, including 136 placed on regular probation in Period One and 106 placed on regular probation in Period Two. We infer from these results that most intensive probationers probably would have been committed to training school if their court dispositions had occurred in the year before the IP program began.

We compared the recidivism of the 44 intensive probationers with that of 109 delinquents placed on regular probation during Period Two, following each youngster's court record for an average of eight months. (The time and resources available for the study did not allow measurement of the recidivism of youngsters who went to training school.) We defined recidivism as return to court for a new alleged delinquent act or probation violation after being placed on IP or regular probation. (Our comparison of recidivism may be somewhat exaggerated. Intensive probationers' misconduct may have been more visible to the authorities [because of the closer supervision of these youngsters] than that of regular probationers, and also it may have been treated less leniently because the authorities may have felt that intensive probationers "had already had one break.")

The recidivism of intensive probationers was considerably higher than that of regular probationers. Sixty-four per cent of intensive probationers became recidivists during the follow-up period, compared to 34 per cent of regular probationers. Twenty-three per cent of intensive probationers became recidivists two or more times, compared to 7 per cent of regular probationers. Intensive probationers "recidivated" much more rapidly than did regular probationers. Thirty-six per cent of intensive probationers (16 of 44) were committed to training school for new offenses during our follow-up, compared to 7 per cent of regular probationers.

That intensive probationers' recidivism was considerably greater than regular probationers' does not prove that the IP program was ineffective in supervising and rehabilitating its clients. Their recidivism might have been even greater without the efforts of the program.

Twenty-eight of 44 intensive probationers avoided training school commitment during our follow-up. This suggests that the existence of the IP program may have diverted them from training school, but does not necessarily mean that diversion was due to effective treatment. Judges simply may have refrained from committing intensive probationers whom they otherwise would have committed, to allow them to continue to receive the services of the IP program.

As a new program in North Carolina, IP took big risks. It evidently succeeded in selecting as its clients youngsters who were quite likely to be committed to training school. It is not surprising that intensive

probationers recidivated more often, and sooner, than regular probationers. Delinquents who are "bound for training school" are supposed to be high-risk youngsters, in the sense that district judges are not supposed to commit them to training school unless no other way of controlling their behavior in the community is available.

To allocate public resources where they will do the most good is a laudable objective. Those who planned IP sought to avoid allocating the program's resources to low-risk juveniles--those unlikely to become serious repeat offenders. With the advantage of hindsight, we can suggest that the planners may have gone to the opposite extreme. They may have selected clients who were at such a high level of risk that it was difficult for the IP program to help them and their families control their misbehavior.

We suggest a different intake strategy for IP: selecting as clients juveniles who are on regular probation and have a moderate risk of recidivism, rather than a very high risk. (This could be done by using a statistical prediction instrument based on the study data, and by formulating eligibility criteria for IP based on statistical predictions as well as court counselors' clinical assessments.) Probationers at a moderate risk level may be more responsive to treatment and service of the program than are offenders on the brink of removal from the community. Another advantage of this "moderate-risk strategy" would be that it would permit a scientific, controlled evaluation that could measure the effects of IP more accurately than our study could.



## I. THE JUVENILE INTENSIVE PROBATION PROGRAM

### A. Background

The origin of North Carolina's new program of intensive probation for juvenile delinquents (hereafter referred to as the "IP program") was in House Bill 1069 of the 1985 session of the General Assembly. This bill, which was never actually enacted, was to establish a "pilot project" in three counties "to provide in depth probation assistance and counseling for juveniles adjudicated delinquent prior to their being sent to training school." The bill required that the North Carolina Administrative Office of the Courts (AOC) select as sites for the project counties that had a "high number of juveniles adjudicated delinquent over the past three years," and called for the AOC to report on the project to the Joint Legislative Commission on Governmental Operations before the General Assembly's 1986 session and to the 1987 General Assembly.

House Bill 1069 also provided that the AOC "contract with an independent agency to carry out an evaluation of the project. . . ." Later, the General Assembly ratified Chapter 756 of the 1985 Session Laws, which, in Section 111, appropriated \$260,000 to the AOC for 1985-87 "to administer an intensive juvenile probation program." This brief section was the only legislation concerning the IP program that was actually ratified. Those who planned the program, however, used the language of House Bill 1069 as a guide.

To plan the IP program, the staff of the AOC worked with a committee of three chief court counselors<sup>1</sup> and one court counselor supervisor. The AOC's efforts resulted in a program with the following goal, as stated in September, 1985, in an unpublished working paper:

To provide in-depth probation assistance and counseling (intensive probation) to juveniles adjudicated delinquent and likely to be committed to training schools; and to determine if those juveniles can successfully benefit from intensive probation, thereby avoiding commitment to training school.

It should be noted that the IP program was established as an experiment. This is clear from the language in the goal statement that calls for determination of whether "juveniles can successfully benefit from intensive probation, thereby avoiding commitment to training school."

The AOC implemented the IP program in four sites: Wake County (in the Tenth Judicial District); Robeson County (in the Sixteenth Judicial District); the City of Greensboro (in the Eighteenth Judicial District); and the City of Rocky Mount and Wilson County<sup>2</sup> (in the Seventh Judicial District). The program operated in the same way in all sites. One special court counselor, known as an intensive probation counselor, was appointed in each site to supervise intensive probationers. Officially, program intake began December 1, 1985, but a few youngsters were placed in the program in October and November of that year. According to AOC data, by March 10, 1987, a total of 81 juveniles had been placed in the IP program--21 in Wake County, 19 in Robeson County, 20 in Greensboro, and 21 in Wilson County. Of those 81, 36 remained on intensive probation as of March 10, 1987, and 45 were no longer in the

program--14 because they completed the program successfully, eight because they were transferred to regular probation, 20 because they were committed to training school for a new delinquent act or probation violation, two because they were admitted to a residential treatment program, and one because he moved out of the state. Of the 42 intensive probationers who were no longer in the program by March 10, 1987 (excluding those who were admitted to a residential program or moved out of the state), 22 (52 per cent) still had not been committed to training school.

#### **B. How Youngsters Are Placed on IP**

Any court counselor may nominate a youth who has been, or is expected to be, adjudicated delinquent for placement on IP. A committee comprised of the nominating counselor, the IP counselor, and the chief court counselor then determine whether the nominated youth is eligible for and likely to be helped by the IP program. If the screening committee members favor a placement, they recommend it to the district court judge currently hearing juvenile matters, who makes the decision to place. Thus far, district court judges have followed all such recommendations.

In recommending placement in the IP program, counselors consider only juveniles who have been adjudicated delinquent<sup>3</sup> by the court, have never been committed to training school, and who they believe would probably--in the absence of the IP program--be committed to training school for their current offense. Counselors consider the following factors in making their recommendations concerning IP placement:

- The seriousness and frequency of the youngster's criminal behavior;
- Whether the youngster is defiant toward authority;
- The youngster's family--the kind of support it is able to give him, and the functioning (or malfunctioning) of the family;
- The youngster's school problems, including behavior, truancy, and academic problems;
- The availability of community resources for the youngster;
- Whether the youngster can benefit from IP services;
- The risk that the youngster poses to the community.

#### **C. How IP Differs from Regular Probation**

IP differs from regular juvenile probation in staff training and pay, the amount of contact between counselor and probationer, supervisory procedures, and availability of the counselor to the juvenile and his or her family. IP counselors receive special training in family therapy, which regular counselors do not normally receive, and receive salaries that are about 10 per cent higher than those of regular counselors.

IP counselors generally have more contact with their clients than do regular counselors. The AOC's standards for the IP program limit IP counselors to a caseload of "no more than ten high risk adjudicated delinquents who can successfully benefit from intensive probation and who otherwise would likely be committed to training school." (The caseload of regular probationers averages about 34 per counselor, according to the AOC's figures for January 1986, and may in some instances be higher.) For intensive probation, the IP counselor must have a minimum of three face-to-face contacts per week with the youth, and at least one of these must be after office hours or on weekends. (In regular probation, one contact per month is the minimum required.) In IP, the counselor must make at least one contact per week with the youth's family or guardian. (Only one such contact per month is required in regular probation.) The IP counselor also must make at least one contact per week with the juvenile's school, employer, and others having important involvement with the youth--for example, mental health personnel who work with the juvenile. (Only one such contact is required in the first 30 days of regular probation.)

Intensive and regular probation also differ with respect to supervisory procedures. Within ten days after a youth has been placed on IP by the court, his counselor must prepare a supervision plan for him, and the chief court counselor must approve it. (In regular probation, 30 days are allowed for these tasks.) The chief counselor must review this plan monthly (in regular probation, it is reviewed quarterly). The youth must remain on IP for at least three months; he may remain up to the statutory<sup>4</sup> maximum of 12 months (in regular probation, there is no minimum period, but the maximum is the same). The court may remove a juvenile from IP by transferring him to regular probation, transferring him to another jurisdiction (for example, if the juvenile's family moves to another judicial district), terminating his probation, or committing him to training school.<sup>5</sup>

#### **D. Services Provided to Intensive Probationers**

The IP program has three main areas of emphasis: (1) accountability of the juvenile for his behavior; (2) treatment of the juvenile that involves the entire family; and (3) education of the juvenile. Intensive probation counselors and their supervisors receive special training in family therapy. They counsel intensive probationers' parents or guardians concerning their setting of expectations and limits for their children's behavior. The IP counselor is available at all hours to respond promptly to crises involving the intensive probationer and his family. Thus, the IP counselor is on duty 24 hours a day. He or she also assists the family in obtaining community services.

The IP counselor pays close attention to the intensive probationer's school situation, making sure that he or she attends school, monitoring conflicts involving the probationer and the school, and responding quickly to school problems. According to the AOC, some intensive probationers would probably have been expelled from school without the problem-solving efforts of IP counselors.

Because of their lower caseloads and the special supervisory requirements that apply to them, IP counselors check compliance with court orders and conditions of probation more closely than regular counselors are usually able to, and keep the court better informed about their clients.

## II. ISSUES, DATA, AND METHODS

### A. Issues for Evaluation

One of the goals of the IP program is to assist juveniles who are likely to be committed to training school. Therefore, our evaluation sought to determine whether the juveniles placed in the IP program would have been sent to training school in the absence of the program. To do so, we compared juveniles adjudicated delinquent six months before the IP program began with those adjudicated delinquent during the first six months of the program (December 1985 through May 1986).

Another important goal of this experimental program is to learn whether juveniles benefit from its services. Our evaluation is limited to information in court records. We cannot measure benefits to intensive probationers in terms of their personal growth or development. Instead, we have measured recidivism, defined as repeated contact with the juvenile court concerning allegations of delinquency or other misconduct. Recidivism is an indicator of the degree to which the IP program supervises juvenile delinquents and helps them avoid misconduct. If the program can control their behavior and rehabilitate them, their recidivism should be kept to a tolerable level. In examining recidivism, we did not begin with any predetermined standard of what level is tolerable. The administrators of the IP program and other readers of this report will have to set this standard for themselves.

Our measurement of recidivism is limited to youths who were placed on either regular probation or IP during the six months before and after the IP program began. We could not measure the post-confinement recidivism of juveniles committed to training school during the periods we studied because there was not enough time for follow-up of these juveniles before completion of this report. We have, however, captured enough data on those committed to training school to permit further study of their recidivism. (Such further study would have to include collection of data from adult criminal court records because youngsters often reach age 16 by the time they are released from training school, thus leaving juvenile court jurisdiction.)

### B. Data

At the beginning of the study, we determined that with the time and money available, we would be able to collect data on about 400 juveniles. Because few adjudicated delinquents were committed to training school<sup>6</sup> (compared to the number placed on probation), we included all of those committed from all four IP program sites during our sampling periods. We also included all intensive probationers, since they were of special interest. We added a random sample of regular probationers. The totals used in computations in the study were sometimes less than the actual number of youngsters in our samples because of instances of missing or invalid information.

Our sample included two groups. Group One comprised 176 juveniles adjudicated delinquent at the four IP sites from January through June 1984--before IP began. These included all 44 committed to training school, plus a 40 per cent random sample of the 332 placed on regular probation (a total of 132). We followed the juveniles in Group One in the court records until about January 31, 1986; the average follow-up period was 22 months.

Group Two of the sample comprised 200 juveniles adjudicated delinquent at the four IP sites from January through May 1986. These included all 41 committed to training school during that period and all 44 placed on IP. (The 44 intensive probationers included a few who were placed in the program in October, November, and December of 1985.) We also selected a random sample of 31 per cent of the 368 regular probationers adjudicated during the period--a total of 115. The juveniles in Group Two were followed in court records until October 31, 1986; the average follow-up was eight months.

Records maintained by the clerks of the juvenile division of district court and by the juvenile court counselors at the four sites were the sources of data for our study. We did not attempt to follow the youths' criminal court or police records in our samples after they reached age 16. Thus, our measurement of recidivism includes contact with the juvenile court only.

Most of the youngsters in our study had more than one court cycle. (For our purposes, a court cycle begins with the filing of a petition against the child or a motion to revoke probation for a violation of conditions, and ends with the court's disposition of the petition or motion.)<sup>7</sup> We collected data on all court cycles, beginning with the child's first cycle and continuing until the end of the follow-up period. We defined the child's "current adjudication" as the first one that occurred during the sampling period. Court cycles that began subsequent to the current adjudication were counted as recidivism.

### C. Methods Used in Analyses

To respond to the question of whether intensive probationers would have gone to training school in the absence of the IP program, we proceeded as follows. First, we developed a logistic regression model to describe the relationship between various characteristics of a child and his case (such as age, prior juvenile court record, and type of criminal behavior involved) and the child's probability of being committed to training school. (Regression is a statistical procedure that estimates the contribution of each of a number of factors to the probability of a particular outcome, such as court disposition, independently of the possible effects of other factors.) In developing this model, which we call the "disposition model," we considered only data from Group One. Each court cycle was treated as a separate unit of data because it was an instance in which the court had to decide a disposition under certain circumstances. The analysis excluded cycles involving children who previously had been committed to training school, since they would have been ineligible for the IP program even if it had existed at the time of their court dispositions.

The disposition model was the best means available to assess the chance that a particular juvenile would be sent to training school. We used this model to estimate the likelihood of commitment to training school for intensive probationers and regular probationers. The results of the comparison are described in the next section of the report.

We compared the recidivism of intensive probationers with that of regular probationers. (Recidivism began after the juvenile's current adjudication, as explained above.) Here, the unit of analysis was the juvenile rather than the court cycle. In other words, each juvenile was treated as one unit, regard-

less of how many court cycles he or she may have had. Unlike the disposition model in which we observed a court decision at one time and under a given set of circumstances, the recidivism analysis follows a youngster over time to identify the factors that may influence whether or not he or she returns to court on an allegation of additional misconduct.

### III. RESULTS

#### A. Effect of IP on Commitment to Training School

How likely is it that the intensive probationers we studied would have been sent to training school by the court if the IP program had not existed? To answer this question, we estimated the probability of being sent to training school on the basis of the disposition model developed from Group One (pre-IP) data. The disposition model<sup>8</sup> indicated that for juveniles with no prior commitments to training school the following four factors were significantly associated with commitment to training school:

1. The number of times the juvenile had previously been placed on probation by the juvenile court (the more previous probation dispositions, the greater the likelihood of training school);
2. Whether the juvenile had been adjudicated guilty of a felony<sup>9</sup> rather than a misdemeanor (if a felony, the likelihood of training school was greater);
3. The juvenile's age at the time of his offense (the older the youngster, the greater the probability of his or her being committed to training school); and
4. Whether the juvenile's case occurred in Wilson County or Robeson County (cases at these IP program sites were considerably more likely to result in training school than were cases arising in Wake County or Greensboro).

Using the disposition model, we estimated the probability of training school for each juvenile in five categories: intensive probationers (all of these were in Group Two); regular probationers in Group One; regular probationers in Group Two; juveniles in Group One committed to training school; and juveniles in Group Two committed to training school. In each category, because youngsters and their cases had different characteristics, there was not one single predicted<sup>10</sup> probability of training school, but a range of predicted probabilities. We compared the predicted probabilities for these five categories. These probabilities are shown in Figure 1 by shaded bars indicating the range from the 25th percentile value of predicted probability to the 75th percentile. The median (50th percentile) is shown as a vertical line within each bar, and the mean is shown as a black triangle.

Most of the estimated probabilities shown in Figure 1 are less than .5. This means that the disposition model predicts that training school is unlikely for most juveniles, even those who actually were committed to training school. In other words, the model tends to underestimate the probability of commitment. Despite the model's underestimation, we use it as a relative measurement of the risk of being committed to training school.

Figure 1 indicates that the "training school risk" (estimated probability of commitment) for intensive probationers in the IP program was between the levels of risk of juveniles sent to training school and those placed on regular probation, but closer to the levels of the training school groups. The median risk (.173) for intensive probationers was well above the 75th

percentile of risk for both the pre-IP and post-IP regular probation groups. The intensive probationers' mean risk (.265) was more than twice as great as the means for the two regular probation groups. The training school risk for the intensive probationers overlapped the ranges of risks estimated for the two training school groups (pre-IP and post-IP), although the intensive probationers' risks were somewhat lower than those of the youngsters sent to training school. Overall, the intensive probationers were much closer to the training school groups than to the regular probation groups, as can be seen by the fact that their range of risks (from the 25th to the 75th percentile) overlapped the range for the training school youngsters more than it overlapped the range for the regular probationers.

Our interpretation of these results is that the IP program selected its clients mainly from the population that would otherwise have been committed to training school, rather than from the population that would otherwise have been placed on regular probation. Thus the program appears to have achieved the goal of serving "juveniles adjudicated delinquent and likely to be committed to training schools."

#### **B. Comparison of Recidivism of Intensive Probationers with Recidivism of Regular Probationers**

To measure how well intensive probationers did under the supervision and treatment of IP counselors, we compared the recidivism of intensive probationers with that of regular probationers. (As explained above, we were unable to examine recidivism of juveniles sent to training school because of insufficient follow-up time after release.) We defined recidivism as the occurrence of a juvenile court petition or motion for review of probation that alleged new delinquency, violation of conditions of probation, or undisciplined<sup>11</sup> conduct. We measured recidivism that occurred after the court disposition on the juvenile's "current adjudication"--that is, his first adjudication of delinquency in the sampling period.

In measuring recidivism, time is an important consideration. The more time that elapses from a given starting point, the greater opportunity a youngster has to get into trouble. We followed the juveniles in our study in court records for varying lengths of time, as explained in Section II of the report. To compare the recidivism of three groups, it was important to measure their recidivism at the same points in time. We compared the groups' "survival curves"--graphs that show the juveniles' estimated probability of "surviving" over time. "Surviving," in this context, means remaining free in the community without becoming the subject of a new court petition or motion--in other words, staying out of trouble with the court.

Figure 2 shows a comparison of the survival curves of the three groups. The curves of the two regular probation groups (pre-IP and post-IP) are very close to each other.<sup>12</sup> The intensive probationers' survival curve is considerably lower than the other two curves. In other words, intensive probationers became recidivists sooner than did regular probationers. For example, after five months, 64 to 73 per cent of the regular probationers "survived," compared to 46 per cent of the intensive probationers. After ten months, 54 to 57 per cent of the regular probationers survived, compared to 32 per cent of the intensive probationers. The difference in the survival curves is statistically significant. (In this study, an observed difference was



considered statistically significant if its probability of being an accident of sampling was less than .05.)

How frequent and how serious was the recidivism of intensive probationers compared to that of regular probationers? To answer this question, we compared intensive probationers to regular probationers from Group Two<sup>13</sup>--that is, juveniles who were placed on regular probation during the same time period as the juveniles who were placed on intensive probation (see Figure 3). Both groups were followed in court records for an average of about eight months. Sixty-four per cent of the intensive probationers became recidivists during the follow-up, compared to 34 per cent of the regular probationers. Twenty-three per cent of the intensive probationers became recidivists two or more times, compared to 7 per cent of regular probationers.

Comparing the seriousness of the first recidivist offenses of intensive probationers and regular probationers produced mixed results. On the one hand, more of the intensive probationers' offenses were noncriminal (juvenile status) offenses--50 per cent, versus 41 per cent for regular probationers. On the other hand, 7 per cent of the intensive probationers' first recidivist offenses were violent felonies, compared to 3 per cent for regular probationers. The percentage of felony charges (including both nonviolent and violent) was the same for both groups' first recidivist offenses: 25 per cent.

From these comparisons, we can say that intensive probationers "recidivated" sooner and more often than did regular probationers, but not necessarily more seriously, in terms of the type of offense charged at their first instance of recidivism.

How do the dispositions of the first recidivist charge for regular probationers and for intensive probationers compare? Considering recidivist dispositions for regular probationers, we found that 72 per cent were placed on regular probation, 3 per cent were placed on IP, 19 per cent were committed to training school (6 per cent received dismissal or continuance of their cases). The dispositions were more severe for intensive probationers (see Figure 3). Eight per cent of recidivist intensive probationers were placed on regular probation, 46 per cent received another placement on IP, and 42 per cent were committed to training school (4 per cent received dismissals or continuances of their cases). In other words, intensive probationers were much more likely to be sent to training school for a recidivist charge than were regular probationers.

Sixteen of 44 intensive probationers in our study were committed to training school for recidivist charges at some point during our follow-up (11 were committed for their first recidivist charge, and five more were committed for a subsequent charge). Thus, although most intensive probationers probably would have been committed to training school initially if they had not been placed in the IP program, 36 per cent<sup>14</sup> (16 of 44) were committed to training school subsequently during our follow-up. In contrast, only 7 per cent of regular probationers in Group Two (eight of 109) went to training school because of recidivism.

On the other hand, 28 (64 per cent) of the 44 intensive probationers in our study were not committed to training school during the follow-up period

(averaging eight months). This suggests that IP kept these juveniles out of training school, at least for the period of the follow-up. Does this mean that IP was successful in rehabilitating its clients who avoided training school for eight months? Perhaps, but not necessarily. To be diverted from training school was a prerequisite for receiving IP's service. This prerequisite should not be confused with the treatment provided by IP and its possible rehabilitative effects. District court judges may have refrained from committing intensive probationers to training school to avoid depriving them of the perceived benefits of the IP program.

Intensive probationers, by the time they reached the point of juvenile court disposition, were probably more predisposed to delinquency than were regular probationers. As explained in the previous subsection, the disposition analysis indicates that most intensive probationers would have been committed to training school without the intervention of the IP program. This probably means they were more likely to be serious repeat offenders than regular probationers were. In committing a youth to training school, a district court judge bases his disposition on his assessment of the youth's prospects for staying out of trouble if left in the community.<sup>15</sup> Presumably, the judge and those who advise him have some ability to recognize factors associated with repeated delinquency.

That intensive probationers' recidivism occurs sooner and is more frequent than that of regular probationers may simply mean that at the time of placement on IP, intensive probationers were more predisposed to repeated delinquency than were regular probationers when placed on probation. Our results do not support the conclusion that the IP program was ineffective in supervising and rehabilitating intensive probationers. Without the efforts of the IP program, their recidivism might have been even greater.

The IP program may unintentionally have affected our measurements of recidivism. The closer supervision given to intensive probationers may have made their misconduct more visible to court counselors and police, and hence more likely that it would result in a juvenile petition. Also, if intensive probationers are regarded as having received a "break" (by being placed on IP instead of being sent to training school), the authorities may have less tolerance for their misconduct than they would have for the misconduct of regular probationers. This lower tolerance would also make the filing of petitions<sup>16</sup> against intensive probationers, and subsequent sanctioning, more likely than it would be for the regular probationer in a similar situation. We cannot say how much of the difference in recidivism between intensive and regular probationers may have been caused by the increased visibility of misconduct due to close supervision, or to the authorities' lower tolerance of juvenile offenders who have already had a "break."

In this study, we were unable to measure statistically the difference in recidivism between intensive probationers and regular probationers apart from the effects of other factors. The effects of IP probably cannot be disentangled from the effects of characteristics of juveniles and their cases because, as explained above, intensive probationers were probably much more likely to become recidivists to begin with than were regular probationers. Only a controlled evaluation (see the next section) could reliably measure the effectiveness of the IP program in controlling recidivism.

#### IV. CONCLUSIONS AND SUGGESTIONS

We think it is fair to conclude that at the time we studied it, the IP program was meeting one of its objectives: preventing initial commitment to training school for most of the juveniles who were placed in the program. Nevertheless, a substantial proportion of intensive probationers--about a third--were committed to training school within an average of eight months after placement in the program.

The recidivism of intensive probationers appears high compared to that of regular probationers. We say "appears" because our measurement of intensive probationers' recidivism may be exaggerated as a result of the close supervision they received, or because court counselors and other authorities may have been less tolerant of intensive probationers' post-placement misconduct as a result of their already having received a "break." We must qualify the finding of "high" recidivism in another way. We could not estimate what the recidivism of intensive probationers might have been after release from training school, if they had been committed to training school instead of being placed on IP. Perhaps this recidivism would have been even higher than what was observed.

Keeping these qualifications in mind and using regular probationers' recidivism as a yardstick, we tentatively conclude that the IP program had difficulty controlling the recidivism of intensive probationers. If this is a valid interpretation of our findings, it is not surprising. After all, intensive probationers were selected precisely because they were high-risk juvenile offenders.

By focusing on high-risk offenders for IP, the program's planners tried to avoid using valuable resources on juveniles who were unlikely to be sent to training school. For example, they did not want to allocate the program's resources to juveniles who appeared in court for the first time for very minor offenses. The planners wanted to use the IP program where it would do the most good in terms of avoid training school and of rehabilitating offenders. But perhaps in their efforts to avoid including low-risk juveniles in the IP program, the planners have gone to the opposite extreme, selecting clients who are at such a high risk level that it has been difficult for IP (or any other non-residential program) to help them.

The IP program has been a deliberate experiment. Its techniques, as far as we know, have never before been tried in North Carolina. That is why its planners provided for an evaluation. This evaluation (our study's results) suggests that the program selected high-risk clients whose recidivism was difficult to control. In our view, the next step in the IP program should be to consider what action to take on the basis of the initial results.

We suggest that consideration be given to a different intake strategy: selecting clients for the IP program who are not at either extreme of the risk spectrum--i.e., clients who do not have a low risk of training school and recidivism,<sup>17</sup> but do not have an extremely high risk either. If risk could be measured on a scale from zero to ten, we might say that the IP program's intake has been operating at about eight or nine on the scale. We suggest moving the intake back to five or six on this hypothetical risk scale--in

other words, that the program select as its clients adjudicated delinquents who have a moderate, rather than an extremely high, likelihood of recidivism.

Consider the advantages of this suggested intake strategy. First, moderate-risk delinquents and their families may be more responsive than those selected in the past to the treatment and services of the IP counselor. In selecting moderate-risk delinquents as clients, the IP program would not be intervening to prevent their imminent commitment to training school, since they would not be in danger of immediate commitment. But the program might have more success in preventing subsequent commitment than it has had with high-risk delinquents.

Another advantage to the "moderate-risk strategy" is that it would allow more accurate measurement of the effects of IP treatment and service than our present evaluation has been able to provide,<sup>18</sup> using random assignment of IP-eligible juveniles to a treatment group (on IP) and a control group (receiving regular probation service). This evaluation procedure, known as a randomized experimental design, is well known to social scientists. It is probably more likely to detect small (but important) effects of a program than an after-the-fact design like the one used in our evaluation.

A randomized evaluation would operate as follows. Because the IP program is likely to continue to be small, it should not be difficult to identify a group of adjudicated delinquents eligible to receive IP service that would be at least twice as large as the IP program could actually handle. Immediately after adjudication of delinquency and before disposition, court counselors would screen juveniles to identify those eligible for IP services. Those eligible would be randomly assigned to either intensive probation or regular probation. The district judge, if he or she decided to impose probation, would impose either intensive probation or regular probation in accordance with the assignment scheme. (This assignment procedure would not only produce comparable treatment and control groups, but would also ensure fairness in choosing who is to receive the limited service of the IP program.) The recidivism of the IP group and the control group would then be compared to determine the difference in effectiveness between IP service and regular service.<sup>19</sup>

If the AOC wished to try the "moderate-risk" approach as suggested here, we would use the data gathered in the present evaluation to develop a recidivism-risk score for regular juvenile probationers. Both this score and the clinical judgment of court counselors would be used to determine eligibility for the IP program. The Institute has used a similar approach in the adult criminal justice system in its evaluations of the "Repay" sentence-planning program in Hickory and the Sentencing Alternatives Center in Greensboro.<sup>20</sup> If this approach were taken, we would recommend that recidivism data be collected, not only from court counselor records, but also from police records.<sup>21</sup>

## NOTES

1. In North Carolina, a court counselor is a juvenile probation officer.
2. In operation, the IP program did not include any probationers from the City of Rocky Mount during the period we studied because Wilson County contributed so many. Our study groups of regular probationers and juveniles committed to training school were drawn from Rocky Mount as well as from Wilson County.
3. In North Carolina law, a delinquent juvenile is a youth less than 16 years of age who has committed an act that would be a criminal offense if committed by a person aged 16 or older. N.C. Gen. Stat. § 7A-517(12) (1986).
4. N.C. Gen. Stat. § 7A-649(8) (1986).
5. Notice must be provided and a hearing must be held for any of these removals from IP. Commitment to training school requires a petition alleging new delinquent behavior or a motion for review alleging violation of probation, plus a court adjudication that the juvenile is delinquent or in violation of probation. See N.C. Gen. Stat. § 7A-649, 7A-658 (1986).
6. When we structured our study data on the computer, a small number of juveniles initially included in the sample as committed to training school were reclassified as regular probationers. This happened because we reclassified each juvenile in the sample--unless he was an intensive probationer--according to the very first court disposition he received during the sampling period (January 1-June 30, 1984, for Group One, and December 1, 1985-May 31, 1986, for Group Two). Since a few youngsters initially classified as "training school" had earlier been placed on regular probation during the same sampling period, they were reclassified as "regular probation."
7. If additional petitions or motions were filed while the first one was pending, we followed the court's handling of all of the contemporaneous petitions or motions and recorded just one disposition for the respondent (juvenile). In recording the alleged offense, we selected the most serious one if there were two or more.
8. To develop the disposition model, we used logistic regression [see Frank E. Harrell, Jr., "The LOGIST Procedure," in Stephanie P. Joyner, ed., SUGI Supplemental Library User's Guide (Cary, N.C.: The SAS Institute, 1983), p. 181, and references cited therein]. With N=397, the model explained 26 per cent of the total log-likelihood (this is analogous to an  $R^2$  of .26 in ordinary least-squares regression). It correctly classified 83.6 per cent of the dispositions considered. This is not as accurate as it sounds. If we had predicted that no juvenile would be committed to training school, we would have been correct in 78.8 per cent of the cases. Thus the model improved only slightly on this base rate of 78.8 per cent. Using a predicted probability of .5 or more for a prediction of training school, the model had a sensitivity of

42.9 per cent, a specificity of 94.6 per cent, a false positive rate of 32.1 per cent, and a false negative rate of 14.0 per cent.

9. In other words, an act that would have been a felony if the juvenile had been an adult.

10. Although we speak of the model "predicting," what we are doing with it might better be termed "post-dicting." We calculate an after-the-fact estimate of the probability that would have been estimated if we had had the model before the dispositions actually occurred.

11. Undisciplined behavior," also known as a "juvenile status offense," is noncriminal misconduct such as unlawful absence from school or running away from home. See N.C. Gen. Stat. § 7A-517(28) (1986).

12. The survival curve for the post-IP regular probationers is slightly higher than that of the pre-IP regular probationers. This means that recidivism was slightly less for regular probationers after IP began than before it began. This may be because some of the riskiest juvenile offenders in the second study period were being placed on IP rather than on regular probation.

13. Regular probationers in Group One had a longer follow-up, and thus their recidivism cannot be compared directly with that of intensive probationers.

14. As explained in Section I, from the beginning of the IP program through March 10, 1987, 20 of 81 youngsters placed on IP subsequently went to training school for new offenses--about 25 per cent. This is lower than the 36 per cent we measured for the 44 intensive probationers we studied. There is reason to believe that after our study period (from IP's beginning through May 31, 1986), the program tended to take juveniles with somewhat lower risks of training school.

15. N.C. Gen. Stat. § 7A-652(a) (1986) provides that a district court judge may commit a delinquent juvenile to training school only if "the judge finds that the alternatives to commitment . . . have been attempted unsuccessfully or are inappropriate and that the juvenile's behavior constitutes a threat to persons or property in the community."

16. In North Carolina juvenile court procedure, a court intake counselor must approve the filing of a petition before the district court can consider it. See N.C. Gen. Stat. §§ 7A-530 through 7A-536 (1986).

17. We have not analyzed this extensively, but factors associated with a risk of training school probably are also associated with the risk of recidivism.

18. Two potential problems made this kind of experimental design inappropriate for the present study. Both concern the selection of high-risk juveniles for the current IP program. If juveniles had been selected for IP

from a pool of eligibles, the remainder would most likely have gone to training school. While there, their recidivism would presumably have been zero, but it would have been necessary to measure their post-training school recidivism. This would have created major data collection problems. Since most of the controls would have "aged out" of juvenile court jurisdiction by the time of release from training school, it would have been necessary to follow their recidivism using records from the adult criminal justice system. The IP group would have had to be followed up for an equivalent amount of time. The second problem is the ethics of selecting some youngsters at random for training school and others for community treatment. This problem could be resolved by limiting IP eligibility to moderate-risk juveniles who are not in imminent danger of commitment.

19. Although a randomized evaluation design like the one suggested here is probably the most reliable way of determining the effect of IP treatment, it is not perfect. Suppose that a randomized design were used and that the treatment group (IP clients) showed lower recidivism than the control group (regular probationers). The difference in recidivism could be caused by something other than the effectiveness of IP's treatment. For example, regular court counselors might become demoralized about not being involved in the IP program and therefore become ineffective, causing increased recidivism for control-group probationers. Cook and Campbell suggest ways of checking for this sort of problem. [See Thomas D. Cook and Donald T. Campbell, Quasi-Experimentation: Design and Analysis Issues for Field Settings (Boston, Mass.: Houghton Mifflin Co., 1979), pp. 56-59.]

20. See S. H. Clarke, Effectiveness of the Felony Alternative Sentencing Program in Hickory, North Carolina (Chapel Hill, N.C.: Institute of Government, University of North Carolina, February 1986); W. LeAnn Wallace and S. H. Clarke, The Sentencing Alternatives Center in Guilford County, North Carolina: An Evaluation of Its Effects on Prison Sentences (Chapel Hill, N.C.: Institute of Government, University of North Carolina, April 1987).

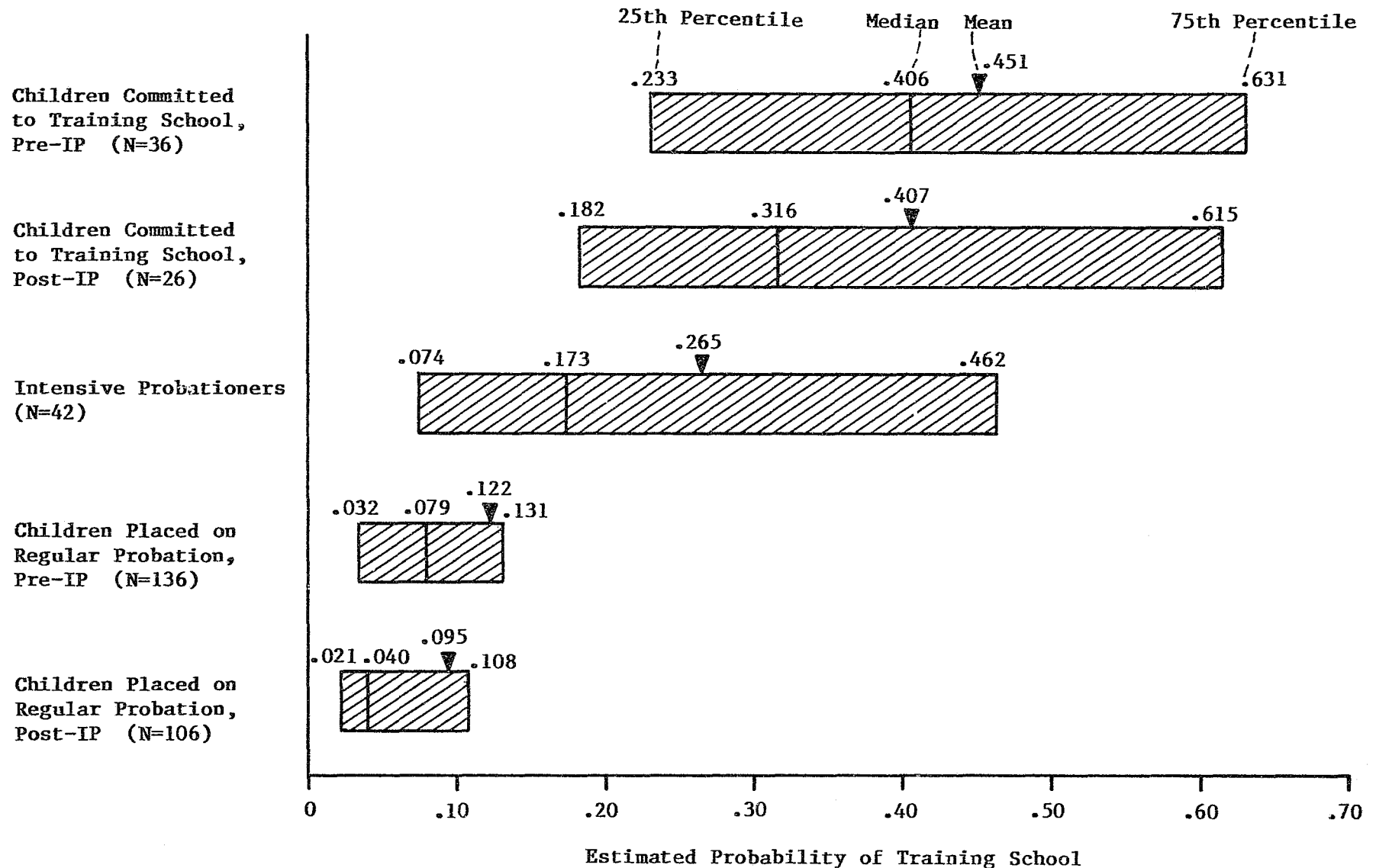
21. Using police records would reduce the likelihood that the IP program's intervention might distort the measurement of recidivism--for example, by altering recordkeeping or by affecting the filing of petitions.

Figure 2.     Probability of "Survival" Without New Juvenile Court  
                  Petition or Motion, by Time Elapsed from Initial Juvenile  
                  Court Disposition, Regular Probationers and Intensive  
                  Probationers Compared

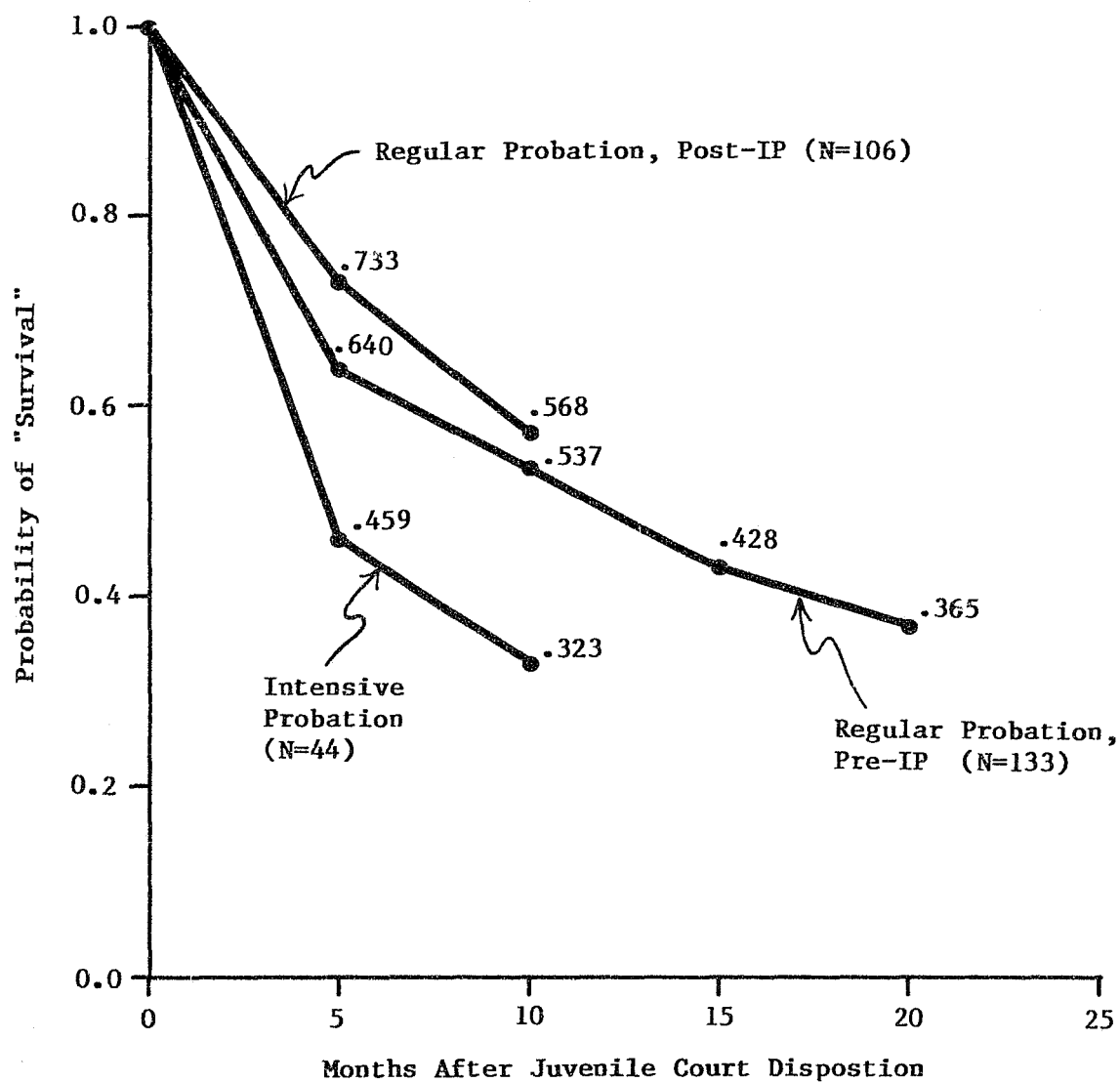
Figure 3.     Frequency, Seriousness, and Court Disposition of  
                  Recidivist Charges<sup>1</sup> Compared for Intensive Probationers<sup>2</sup>  
                  and Regular Probationers<sup>3</sup>



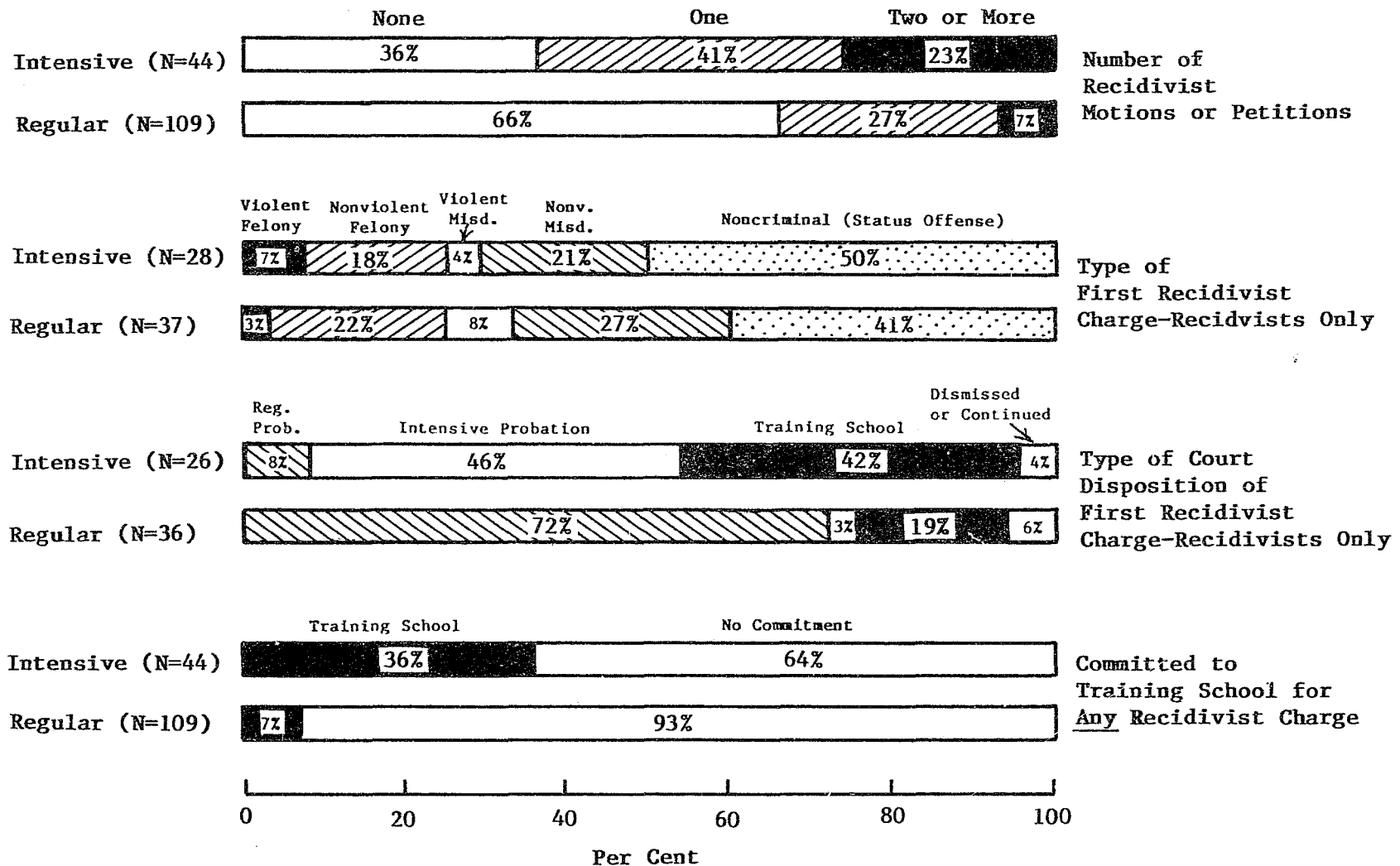
**Figure 1. Comparison of Predicted Probability of Training School for Five Groups**



**Figure 2.** Probability of "Survival" Without New Juvenile Court Petition or Motion, by Time Elapsed from Initial Juvenile Court Disposition, Regular Probationers and Intensive Probationers Compared



**Figure 3.** Frequency, Seriousness, and Court Disposition of Recidivist Charges<sup>1</sup> Compared for Intensive Probationers<sup>2</sup> and Regular Probationers<sup>3</sup>



<sup>1</sup>Charges in petitions or motions filed during follow-up averaging eight months.

<sup>2</sup>N=44

<sup>3</sup>N=109. Includes only regular probationers in Group Two.

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