DETERRING DRUG USE WITH INTENSIVE SUPERVISION

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Frank S. Pearson

Institute for Criminological Research
Department of Sociology
Rutgers - the State University of
New Jersey
New Brunswick, New Jersey 08903

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EXECUTIVE SUMMARY

How can society reduce recidivism rates? One strategy is a treatment-oriented approach. In this view, individuals should be given repeated opportunities to become personally rehabilitated. This approach entails trying to persuade the offender that the life of a criminal is not really "the good life" and trying to persuade him or her to adopt methods of self-control to resist temptations to commit new crimes. Efforts by therapists and counselors to persuade offenders to stop committing new crimes (such as crimes of violence, property crime, use of illegal drugs) are only marginally successful.

Another strategy to reduce recidivism is a situation-oriented approach. Society can attempt to deter people from crime by making crime riskier. One way of making crime riskier is with strict supervision when the serious offender is released from prison.

The Rutgers Institute for Criminological Research conducted an evaluation research study of New Jersey's Intensive Supervision Program (ISP) (Pearson, 1988). New Jersey's ISP is run by a statewide unit of 41 specially selected supervising officers managed by the Probation Services Division of the Administrative Office of the Courts. In ISP a careful screening of incarcerated felons takes place, culminating with a panel of judges releasing selected offenders from prison (after they have served three or four months of their prison sentence) into close

supervision in the community. It has an active caseload of more than 600 offenders released from state prisons (with drug offenses or burglary being the most common instant offenses) who are typical of nonviolent prisoners in most state penitentiaries.

New Jersey's Intensive Supervision Program uses a variety of tactics to try to hold recidivism rates down. In ISP participants attend meetings with ISP officers, group counseling sessions, and specialized treatment meetings (such as Narcotics Anonymous). Officers and counselors try to convince the ISP participant to adopt socially acceptable goals and to reject socially unacceptable goals (such as the pleasures of illicit drugs). ISP encourages (indeed, sometimes orders) participants with academic or vocational deficits who show signs of promise to enter programs to improve their academic skills and their vocational skills. ISP officers in one-on-one meetings and in group counseling sessions, try to promote self-discipline so the offender will not give up on legitimate activities, but will maintain the daily effort needed to stay in the program and, eventually, graduate.

ISP also attempts to deter participants from crime and program rule-violations by making this misconduct riskier. Officers supervise participants closely, and any detected rule violation receives some punishment.

Participants in their first three months of ISP are contacted most frequently. The median number of times a participant is contacted by his officer is 31 times per month.

This includes 7 curfew checks per month and 4 urine screens per month. (In the past year ISP sent about 22,000 urine samples for laboratory urinalysis.) The median number of times a participant is contacted face-to-face by his officer is 12 per month during his first six months in the program. This high frequency of supervision is possible because the caseload is about 15 participants per officer.

ISP has a strict policy of revocation for serious program rule violations. Of all the program terminations, about 40 percent are revocations to prison. Approximately 60 percent are successful discharges, typically after about a year-and-a-half in the program.

Through briefings and through the grapevine, the participant should perceive that drug use is likely to be discovered. The participant also should learn that just one positive urine sample can make the difference between remaining at home under ISP or being reincarcerated (when the positive test is considered in light of the participant's behavior as a whole). With two positive urine samples, reincarceration is likely. With three positive samples revocation to prison is a virtual certainty.

Nevertheless, roughly 20 percent -- one in five -- of all those who enter ISP are returned to prison because they produce positive urine tests. The subject of this study is why some people resume drug use and why others do not.

Deterrence and rational choice theories of crime and deviance all share a concern with the probabilistic

administration of punishments in response to misconduct. It is generally true in criminal justice systems that offenders are not punished for each and every offense. Usually, there is only a modest probability that they will experience punishment. (Also, whereas some theories are concerned with the probabilities of punishment as estimated "objectively" by knowledgeable researchers, other theories are concerned with probabilities as they appear "subjectively" to the individual confronting the possibility of engaging in misconduct.)

There are four conceptual emphases in criminological theories which have a deterrence component and which emphasize that motivating stimuli are received only probabilistically. Theories with an objective expected cost emphasis (that is, objective deterrence theories) concentrate on variables that seem to be onerous or punishing from the point of view of criminologists or criminal justice practitioners. Objective expected value theories add a concern with putatively rewarding factors as well as punishment. Subjective expected cost theories concentrate on variables that may seem to be punishing or onerous, from the subjective point of view of the people under study. Subjective expected utility ("rational choice") theories are concerned with variables that seem to be rewarding or punishing from the point of view of the people under study.

In subjective expected utility (SEU) theory, behavioral choices reflect utility estimates weighted by subjective probability estimates. Note that the SEU theory does not assume

that the average person will consciously frame his decision in terms of an SEU equation. SEU theory only assumes that people have (1) stable and logically consistent preferences for the consequences they may experience, and (2) stable and logically consistent impressions of the likelihood of those consequences. The SEU model can be derived from these assumptions.

Our general theoretical expectation before undertaking this study was that, when decisions matter a great deal to people, those people will tend to choose the behaviors associated with higher subjective expected utility. ISP is a relevant ground for this research because remaining in ISP vs. being revoked to prison matters a great deal to the vast majority of ISP participants -- and illicit drug use matters a great deal to some ISP participants.

Three of the four theoretical models discussed above are particularly pertinent to this expectation. These are (1) the objective deterrence model (focusing on objective expected cost, OEC), (2) the perceptual deterrence model (focusing on subjective expected cost, SEC), and the rational choice model (focusing on subjective expected utility, SEU).

The objective deterrence (OEC) model suggests one hypothesis: use of illicit drugs is less likely to occur (1) the more severe the punishment for drug use (as judged by external observers) and (2) the greater the objective probability of experiencing that punishment. Initially, this hypothesis was of secondary interest because we expected that using measures of

subjective ratings of utility and probability would produce more accurate predictions.

The perceptual deterrence (SEC) and rational choice (SEU) models together implied three core hypotheses which were tested in this study. The probability of participants using drugs in ISP is

(1) an inverse function of how much they prefer ISP to prison (SEC, SEU).

(2) a positive function of their utility for drugs (SEU).

(3) an inverse function of their subjective probability that if they were to use drugs they would be revoked to prison (SEC, SEU).

These hypotheses were our primary focus. However, from the outset (as discussed in the proposal for the research grant for this project) we assumed that a simple SEU model would not be sufficient to account for drug use in ISP. This is why items reflecting other factors were included in the interviews. Thus, we also included items on self-reported impulsiveness, peer pressure, etc.

Thus, the central goal of this research project is to study the degree to which deterrence / rational choice variables are effective in reducing rates of drug-use recidivism (or "relapse"). Very few existing empirical studies of deterrence deal with legal punishment that is subjectively perceived (a) to be severe and (b) to occur with appreciable probability. New Jersey's Intensive Supervision Program is particularly well-

suited for this investigation because participants think there is an appreciable likelihood that drug use will result in revocation to prison.

Our research cohort consisted of the 546 incarcerated offenders who were released into ISP between January 1, 1989 and April 30, 1990. We obtained data on key variables early in the individual's exposure to ISP, before most of the drug-use recidivism occurred, and then again after either drug-use recidivism had occurred -- or after they had successfully refrained from drug-use recidivism for at least a year in ISP.

The interviewing began in January, 1989 and concluded at the end of December, 1990. About 95 percent of the research cohort completed Baseline Interviews. Of the 158 participants in the cohort with a positive urine test within one year of their entry into ISP, 128 (81.0 percent) were administered Drug-use Follow-up Interviews by our staff. Eleven refused to be interviewed. The rest were not interviewed because of various logistical and coordination problems.

The cohort is probably fairly representative of offenders serving their first state prison term in the late 1980s and early 1990s. Most were convicted of drug-related crimes: mainly sales of illegal drugs, typically by street-level user/sellers. Probably, some convicted of burglary had committed that crime to get money for drug use. As is the case in most state prison populations, roughly half of ISP participants are minority-group

members. Thirty-six percent are Black; seventeen percent are Hispanic.

The research cohort is also fairly representative of offenders serving their first state prison term in the late 1980s and early 1990s in terms of the frequency of illegal drug use. (The term "drug" is used loosely here, and includes use of marijuana as well as the usual set of "harder drugs.") About two-thirds of the participants self-reported using drugs at a rate of at least one day per month over the year they were free before the imprisonment that eventuated in their release into ISP. About 47 percent were frequent users, reporting drug use at the rate of three or more days per week.

We received 162 first-time drug-use incident reports on members of the research cohort. (These include incidents that occurred after the first year in ISP.) Of these, only 3.7 percent were re-incarcerated in response to their first drug-use incident in ISP. (These cases generally had prior rule violations, such as violations of curfew, that made the drug-use the "last straw" in their particular cases.) However, an additional 13 percent were ordered to serve one or more weekends in jail in response to a drug-use violation. Another 14 percent were restricted to their homes when not working at their jobs or community service work, or attending drug counseling. (This "house arrest" sanction was always strictly enforced, sometimes even with continuous electronic monitoring.) At least 80 percent

of ISP's responses to a first incident of drug-use recidivism seem to be considerable sanctions.

Of the 343 respondents who said they used drugs at a rate of at least one day per month in the year they were free before entering ISP, about 208 (60 percent) never tested positive in any urinalysis for at least a year during ISP. This might be used as a rough estimate of the objective deterrent effects of ISP: about 60 percent of those who used drugs in the year before ISP did not use drugs <u>in</u> ISP.

Because we do not have an arranged, randomized experiment, we cannot <u>prove</u> that the apparent 60 percent drop in drug use was the result of ISP. A skeptic might argue that some portion of the 60 percent might have given up drug use for a year while free in the community even without the urinalyses and deterrent threat provided by ISP. It may be true that a few offenders would have given up drug use without ISP. However, it is unreasonable to assume that a <u>large</u> percentage would have abstained from drug use for at least a full year for reasons completely unrelated to ISP's high-deterrence policies.

We think that very few of the 208 we classified as abstainers were "false negative cases," that is, drug users who never got caught. Although some may have gotten by with using an illicit substance once or twice, very few could have gone undetected using drugs at the rate of one or two episodes per month for at least a year in ISP. ISP officers simply conduct too many unannounced urine tests (and the officers are too

knowledgeable about techniques of deception) for repetitive drug use to go undetected. (Remember that about one in five people who enter ISP are revoked to prison because of drug use.)

ISP includes counseling programs as well as the threat of punishment. For some of the 60 percent who did not test positive for at least a year in ISP, the risks of punishment (including prison) could conceivably have been completely ineffectual with only the counseling producing the drug abstinence. However, for most drug users in ISP the deterrent threat and the counseling probably complemented each other in producing drug abstinence. The deterrent threat probably provided a considerable part of the motivation for drug abstinence, while the counseling may have provided help in attaining the goal of abstinence.

Thus, ISP may have objectively deterred 60 percent from drug use, 50 percent, 40 percent, or a still smaller percentage. However, it is unreasonable in view of these results to favor the null hypothesis that ISP's deterrent threat had no significant effect on drug-using behavior at all. These results are more supportive of the hypothesis that high objective probabilities of months of imprisonment do significantly reduce the rates of drug use.

We conducted Drug-use Follow-up Interviews with 159 participants. (This number includes participants whose first positive urine test occurred after the first year.) In 41 of the 159 drug-use follow-up interviews, the participant denied using a drug in ISP. Thus, 118 participants admitted in our interviews

having used a drug while in ISP. Because several of the 118 who answered our questions about their drug-use in ISP gave more than a single reason, the following percentages total more than 100 percent.

About 36 percent of those who admitted in our drug-use follow-up interviews to having used drugs in ISP cited pressure, stress, or problems as one of the reasons for their use of drugs. These responses may be accurate reasons or they may be excuses initially made to their ISP officers (and later repeated to us) in hope of getting sympathy and avoiding the more severe levels of punishment. However, the most common reason, mentioned by 44 percent, was peer influence. Here "peers" can include friends, lovers, and relatives. ISP officers continually warn against contact with drug-using acquaintances. Thus, peer influence seems less likely to have been offered merely as an excuse by participants, and more likely to have been, in their honest opinion, a causal factor in their drug use.

Another reason, mentioned by about 14 percent of the respondents, was thinking that they would not get caught and/or that they would not be punished severely. If we were to use the latter item as a criterion, we might estimate that about 14 percent of the drug recidivists fit a subjective deterrence model. It was logical for these particular individuals to resume drug use: at the time they thought that they would not be caught and/or that if they were caught they would not be punished severely.

Still another reason (mentioned by 21 percent) was a strong want, need, or desire for the drug.

We also found that only 39 percent of the Drug-use Follow-up Interviewees, compared with 87 percent of the Success Follow-up Interviewees (people who used drugs in the year before ISP but abstained while in ISP) reported feeling no appreciable desire (utility) for drug use while in ISP.

However, these retrospective interviews are less clear about the role of subjective probabilities of severe punishment. For an extremely conservative estimate of the influence of subjective probabilities, recall that in their own accounts of why they resumed drug use 14 percent cited the (low) probability of experiencing severe punishment. For another estimate, we found that of the sixty-six in the Drug-use Follow-up interviews who said that they had thought about the chances of getting caught, 27 percent reported a subjective probability estimate of .3 or less that they would be caught and revoked.

The above explorations of subjective deterrence in ISP are based on interviews with drug-recidivists after they incurred a drug-use incident report and on interviews with former drug users after they had successfully abstained from drug use for at least a year in ISP. No rigorous research design is involved in comparing these groups; they do not constitute an experimental group compared with a control group. Furthermore, the data are retrospective; the participants are presumably relying on their

recollections of their thoughts about the possibility of using drugs weeks earlier.

Can deterrence variables from the Baseline Interview predict subsequent drug-recidivism?

It would have been statistically invalid to explore the data first to locate promising variables and then cite the significance levels for those variables. To avoid this problem, one-fifth of the sample was examined first, reserving the other four-fifths for later, confirmatory analysis. Some analyses on the one-fifth sample were conducted as preliminary tests of the SEU/deterrence models and others were conducted as exploratory data analyses to search for other promising variables that should be included in the model. The remaining four-fifths of the cohort was a confirmatory sample set aside for final hypothesis tests after the exploratory data analyses had been completed.

Many statistical analyses confirmed that measures of the participant's utility for drugs recorded in the Baseline Interview were statistically significant predictors of drug-recidivism later in ISP. These drug-utility measures included frequency of drug use in the year free before entering ISP, frequency of drug use in the last month free before entering ISP, and the number of different types of drugs used in the year before entering ISP.

However, analyses on the one-fifth exploratory sample (and later on the four-fifths confirmatory sample) did not support the hypothesized inverse relationship between drug-recidivism on the

one hand and the interaction between the probability of being returned to prison and the utility of prison (relative to ISP) on the other hand.

What "failed" in these analyses were the measures of the utility of ISP (relative to prison). Approximately 91 percent definitely preferred ISP to prison. Another 3.7 percent rated prison and ISP about the same. Only about 5.4 percent rated prison as more pleasant than ISP. Thus, almost everyone preferred ISP to prison. We believe that the main reason for the failure of the utility-of-ISP/prison variable to predict drug use was the lack of variation in this utility variable.

Measures of the subjective probability of getting revoked to prison for drug use were by themselves not significantly related to later drug use in ISP. However, testing subjective probability by itself is not a relevant test of subjective expected utility. A meaningful test must include the expected utility of using drugs as well as the subjective probability of a revocation to prison. This means that a person who has no inclination to use drug will not use drugs, regardless of his subjective probability estimate of revocation. Another implication is that, for people who are inclined to use drugs, the interactive combination of higher motivation to use drugs and lower probabilities of revocation to prison will predict higher rates of drug use in ISP.

One way of dealing with the theoretically implied different predictions for those motivated to use drugs and those not

motivated to use drugs is to construct predictions "piecewise." Thus, in the hypothesis tests conducted on the four-fifths sample of the cohort set aside for confirmatory analyses, for those who reported zero frequency of drug use in the year prior to ISP we assigned a value slightly higher than those whose probability estimate was "certain to be caught and revoked." The pattern is consistent with SEU theory. The resulting (and statistically significant) negative tau and gamma coefficients show that the values of no motivation to use drugs and higher subjective probabilities of getting returned to prison in the Baseline Interview were associated with drug abstinence later in ISP.

To give another example, this form of analysis was used on the item asking when a participant who tests positive for drug use is most likely to be returned to prison. The response options were: after the first positive urine test, after the second positive urine test, and so forth. For piecewise analysis, we assigned a value of zero for those who reported zero frequency of drug use in the year before ISP. These results are also consistent with SEU theory. The positive tau and gamma coefficients reflect that, "on the average," participants with higher scale values were more likely to use drugs later in ISP. Participants with seemingly no utility for drugs were least likely to use drugs in ISP. For participants who appeared to have some motivation to use drugs (based on their report of having used drugs in the prior year), those who thought it would be <u>un</u>likely for them to be returned to prison for one or two

positive urine tests were more likely to use drugs later in ISP.

Apart from rational choice variables, peer influence was the only other variable consistently related to drug use in ISP. Other analyses involved logistic regressions in which the dependent variable was the dichotomy of drug abstinence vs. drug use in ISP. One independent variable was a multiplicative interaction between drug utility and subjective probability. The other variable (consistently predictive in our analyses) was the question asking: prior to ISP, what percentage of your friends used drugs? This logistic regression analysis also supports the conception of interactive effects of drug utility and subjective probability of punishment. The same statistically significant results were obtained in an event history survival analysis.

Does New Jersey's Intensive Supervision Program actually have a significant deterrent effect upon drug use? The answer is yes. As mentioned, of the 343 respondents who said they used drugs at a rate of at least one day per month in the year they were free before entering ISP, about 60 percent were not detected using drugs in any of the frequent, unpredictably scheduled urine tests done in their first year in ISP.

Why was ISP able to eliminate drug use by a large fraction of former drug users? (And why was ISP probably effective at sharply reducing the frequency of drug use by some of the remaining drug users?) The most plausible answer is that a large fraction of drug users were intimidated (deterred) by the substantial risk of punishments. More formally, the objective

probabilities of experiencing punishments that range from moderate (tighter curfew and more community service work) to severe (revocation to prison) were potent enough to produce significant levels of conformity in a significant fraction of the participants at risk. It is uncertain whether the motivation to use drugs changed in the participants. Clearly, however, the deterrent situation made a significant difference in the drug-using behavior of the participants who had used drugs before entering ISP.

Note that the Intensive Supervision Program had a deterrent effect on drug-use incidents in the program despite the fact that only a small percentage of ISP participants were actually revoked to prison for one incident of drug use. (We are not implying that a larger percentage should be revoked.) However, if ISP policy were to revoke participants for their first drug-use incident, and if this fact were disseminated both officially and through the offender grapevine, the objective deterrent effects of the strict supervision would probably be even greater.

What about the subjective aspects of deterrence, the subjective expected utilities of the participants? The combination of drug-use utility and the subjective probability of receiving severe punishment was a statistically significant factor helping to account for drug abstinence/drug use. Obviously, if participants had little desire to use illicit drugs before ISP, they are unlikely to start using drugs in ISP. What about participants who apparently did have significant levels of

desire (utility) to use illicit substances? There are modest patterns in the data showing that participants with lower subjective probabilities that prison may result were more likely to use drugs in ISP than participants with higher subjective probabilities of prison. As hypothesized, it is the combination of utility and subjective probability that matters.

The high-deterrence environment that ISP provides produces a considerable level of effective control of illegal behavior. However, a substantial level of drug use still occurs despite the high-deterrence environment. Why was ISP unable to reduce drug use still further? We speculate that three factors may have played a role.

First, our data support the influence of social modeling. Peer influence has an important independent effect upon drug use. Most participants thought (at least when they were on their own) that it was unacceptably risky to use a drug in ISP. However, it appears that when some of these participants were confronted with drug-using "peers" (friends, lovers, or relatives), the "peer pressure" or "social modeling" at least temporarily overcame the deterrent effects of the strict supervision in ISP. This suggests that in addition to personal sensitivity to the utilities and the probabilities operative in their environment, people are sometimes influenced by social models that go against their own subjective expected utility assessment of a preferable course of action.

Second, lack of skills of self-control may be another reason for the observed failures to deter drug use. A person may have the right combination of utilities and probabilities pointing the person in the direction of drug-abstinence. However, the person may lack will-power or self-discipline. These people intended to "be deterred" but succumbed to momentary temptations; they hadn't the self-controlling skills to implement their intended conformity to the deterrent threat.

Third, much human behavior reflects the operation of operant conditioning. The SEU rule may direct that drug-abstinence is the course of action likely to maximize utility. Simultaneously, a personal history of operant conditioning may exist in which dozens or hundreds of episodes of seeing particular drugs available (discriminative stimuli) triggered the behavior of drug ingestion, which soon felt very rewarding and therefore more strongly conditioned (reinforced) the habit. Most people most of the time seem to engage in behavior out of "habit" rather than guided by thoughtful decision making.

In conclusion, deterrence works, but it is not a panacea. Strict supervision with a credible threat of substantial punishment deterred (in our opinion) at least 10 percent and conceivably as much as 60 percent of drug users from resuming use for at least a year. Apart from potential sources of error in this research, we are reluctant to claim the 60 percent figure exclusively for deterrence, because ISP is not just a high deterrence environment. ISP also relies on counseling to try to

persuade the ISP participant to reject the pleasures of illicit drugs. ISP officers and substance-abuse counselors try to establish both self-control and group emotional support to promote drug abstinence.

This research project focused on deterrence rather than on content areas that should be stressed by counseling programs. Nevertheless, it seems plausible (and consistent with the data we have examined) that two areas of substantive content are particularly likely to be helpful in reducing drug-use recidivism. One area of counseling content is to train drug-dependent people on techniques of self-control and self-reinforcement to counter the effects of their own histories of operant conditioning into drug use. Another area of counseling content is to train people to develop and use their own pro-social models for behavior and to learn specific verbal skills to counter and deflect "peer pressures" to resume drug use.

Although some counseling programs do try to work in these two areas, the "technology" of such treatment is still relatively undeveloped. These areas of correctional counseling in combination with credible deterrent threats in the early months of treatment are among the most promising in the fields of corrections and rehabilitation.

ACKNOWLEDGMENTS

This report on research conducted on urinalysis-based deterrence of drug use among offenders in New Jersey's Intensive Supervision Program would not have been possible without the help of many people. Professor Jackson Toby, the Director of the Institute for Criminological Research at Rutgers University was deeply involved in the project behind the scenes. He periodically reviewed the progress of this project, and offered valuable advice of the sort one can only obtain from a nationally known senior researcher with several decades of research experience. He also provided a great deal of editorial assistance in writing this report.

We are grateful to the National Institute of Justice for providing not only the funding to undertake this project, but also many words of encouragement along the way. Special thanks go to Winifred Reed, NIJ's grant monitor for this project.

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CH. 1: APPROACHES FOR REDUCING RECIDIVISM

A well-established correlation exists between the use of such illegal drugs as heroin and cocaine and the commission of crimes such as robbery, burglary, and larceny. There is general agreement that the "drugs and crime correlation" reflects, at least in part, a causal connection: use of certain illegal drugs increases, on the average, crimes against property (Graham, 1987; Gropper, 1985; Johnson and Wish, 1986) The causal connection partly reflects the fact that most drug users must engage in illegal activity, such as selling illegal drugs or stealing, in order to be able to afford frequent purchases of drugs (Wilson, 1990). Recently, research funded by the National Institute of Justice found that, in 22 large American cities, from 46 percent to 80 percent of male arrestees tested positive for the recent use of illegal drugs (National Institute of Justice, 1991). Reducing the incidence of drug use by offenders should also reduce the incidence of crimes against property significantly. But, how <u>can</u> recidivist drug use be reduced?

Talcott Parsons' Theory

Talcott Parsons in The Structure of Social Action reviewed the work of some of the major theorists in social science: Alfred Marshall, Vilfredo Pareto, Emile Durkheim and Max Weber. He synthesized from their approaches a minimal conceptual framework for human action which he term a "voluntaristic theory of action." Parsons concluded that any minimally satisfactory understanding of human behavior must bear in mind that individuals have learned goals (things they strive for), alternative means to the goals, conditions that they cannot affect and must adapt to, normative ideas (such as moral values and social norms) that define some means to be preferable and other means to be impermissible. Finally, realization (effort) is required to fulfill a chosen means and attain a goal (Parsons, 1937: 44-47, 77-78, 732-733).

These ideas help illuminate the nature of criminal behavior. Some criminal behavior occurs because the person has learned goals that conflict with the law, e.g., the goal of experiencing the "high" from illegal drugs. For other crimes the goal is acceptable (e.g., having money), but the individual has insufficient commitment to the social norms that forbid illegal means. For example, the norm "Thou shalt not steal" may have been lost from the individual's personal code of conduct. Often part of the problem is insufficient "realization," insufficient effort on the part of the individual. Some individuals are

inclined to the quick and easy means of criminal behavior, because they did not learn how to "tolerate frustration" and "defer gratification." That is, they did not adequately learn how to continue putting effort into legitimate behavior even when it is tiring and frustrating to do so.

Approaches for Reducing Recidivism

What general approaches for reducing recidivism are suggested by this framework? One strategy is a treatment-oriented approach. The implication is that the individual has engaged in criminal behavior due to unsatisfactory personality characteristics. In this view, individuals should be given repeated opportunities to become personally rehabilitated. This approach does not always mean "going easy" on an offender (Toby, 1981). One tactic within this rehabilitative strategy is to try to convince the criminal to adopt socially acceptable goals and to reject socially unacceptable goals (such as the pleasures of illicit drugs). A second is to persuade the criminal to reject normative ideas that it is acceptable to use force or fraud to obtain what one wants. A third tactic is to train the individual so that previous obstacles to achieving goals (illiteracy, for example) can be surmounted and become <u>means</u> toward achieving goals. Examples would be training in basic academic skills and in vocational skills. A fourth tactic is to try to strengthen skills of self-discipline so that the offender will not give up

on legitimate activities but will maintain the daily effort needed to conform to social norms.

Just as education depends on sincere effort from students, successful rehabilitation depends on effort from convicted criminals -- as well as effort from the officers and staff in probation systems, correctional systems, and/or parole systems. The best way to obtain sincere effort from convicted offenders is to convince them that staying out of trouble with the law will "pay off" better for them than crime will.

This brings us to another strategy to reduce recidivism: a situation-oriented approach. Thus, society can attempt to deter people from crime by making crime riskier. Previously attractive criminal means toward goals are made riskier, so that the criminal will choose the legitimate means instead. Another tactic is to make legitimate means toward goals more promising (e.g., by finding legitimate jobs for the offenders).

In many correctional systems in the United States the large number of convicted felons has overwhelmed the capacity of correctional facilities to use severe punishment (incarceration) to deter potential offenders. Many jurisdictions have begun to rely more on community correctional programs to handle felons as well as misdemeanants. The first large-scale program of intensive community supervision was Intensive Probation Supervision in Georgia (Erwin, 1984). This was soon followed by New Jersey's Intensive Supervision Program, similar in objectives, but rather different in structure.

New Jersey's Intensive Supervision Program

The Rutgers Institute for Criminological Research conducted an evaluation research study of New Jersey's Intensive Supervision Program (ISP) (Pearson, 1988). New Jersey's ISP is run by a statewide unit of 41 specially selected supervising officers managed by the Probation Services Division of the Administrative Office of the Courts. In ISP a careful screening of incarcerated felons takes place, culminating with a panel of judges releasing selected offenders from prison (after they have served three or four months of their prison sentence) into close supervision in the community. It has an active caseload of over 600 offenders released from state prisons (with drug offenses or burglary being the most common instant offenses) who are typical of nonviolent prisoners in most state penitentiaries.

ISP participants are typical of felons in most minimum-security prisons and many medium-security prisons in the United States. Approximately 90 percent are male. Approximately one-third are black and one-sixth Hispanic. Typically, their instant offenses were small-time drug sales or burglary. Most had at least one prior felony conviction. Most do not have high school diplomas, and most have drug or alcohol problems.

New Jersey's Intensive Supervision Program (ISP) has four main goals: 1. To improve the use of scarce prison resources by releasing selected offenders from incarceration into the

community after they serve three or four months of their prison term, thus saving prison space for more serious offenders.

2. To deliver intermediate level punishment that is more severe than probation but less severe than a long prison sentence.

3. To hold down rates of recidivism.

4. To operate a cost effective program.

Ten major components of the program are intended to facilitate achievement of the four ISP objectives:

1. Participants must serve a few months in prison as part of the punitive dimension of the program. In fact, participants serve at least two months in prison and the median time served is about three-and-a-half months.

2. A screening procedure exists to select participants. The program rules exclude offenders who have committed a crime of violence or a sex crime or who have a mandated period of ineligibility for parole. Fifty percent were convicted of property crimes (mainly burglary and theft). Forty-seven percent of those entering ISP were convicted for distributing drugs. Two-thirds of ISP participants had at least one prior felony conviction. The Screening Board and the ISP Resentencing Panel of Judges also use other criteria in the selection process (Pearson, 1985).

3. At this writing the total active caseload is 618.

4. The supervision contacts are much more frequent than those possible in ordinary probation or parole. By design,

participants in their first three months of ISP are contacted most frequently. The median number of times a participant is contacted by his officer is 31 times per month. This includes 7 curfew checks per month and 4 urine screens per month. (In the past year ISP transmitted approximately 22,000 urine samples for laboratory urinalysis.) The median number of times a participant is contacted face-to-face by his officer is 12 per month during his first six months in the program. This high frequency of supervision is possible because the caseload is about 15 participants per officer.

5. There is a strict policy of revocation for serious program rule violations. For example, one or two drug-use violations in combination with other evidence of insufficient effort in the program (e.g., a curfew violation) will result in a return to prison. In general, three drug-use violations will, by themselves, result in a return to prison.

Of all the program terminations, approximately 40 percent are revocations to prison. Approximately 60 percent are successful discharges after about a year-and-a-half in the program. Approximately half of the revocations, that is, 20 percent of the program terminations, are due to drug usage while in ISP.

The next most common reason for revocation is curfew violations, followed by commission of new crimes, and, after that, miscellaneous program rule violations.

6. Payment of fines, restitution, fees, and so forth is strictly required. All participants who have successfully completed ISP have made all of their required payments of fines, restitution, family support, program fees, and victim fund payments.

7. Employment is expected of all able-bodied participants. (Of course, there are transitional periods of unemployment as offenders newly released into ISP search for jobs, as seasonal layoffs occur, and so forth.) Only 3 to 4 percent of the active participants in ISP are unemployed per month.

8. Participants perform 16 hours of unpaid community service work every month while they are in the program.

9. Participants with an identified problem, such as drug abuse, alcoholism, or gambling, are required to attend counseling or treatment, such as Alcoholics Anonymous, Narcotics Anonymous, or other reputable treatment programs.

10. Each participant has a community sponsor. This is a reputable person in the community who provides further advice, support, and assistance (such as providing rides to work) for the participant.

New Jersey's Intensive Supervision Program uses a variety of tactics to attempt to hold recidivism rates down. ISP uses meetings with ISP officers, group counseling sessions, and specialized treatment meetings (such as Narcotics Anonymous) to try to convince the ISP participant to adopt socially acceptable goals and to learn to reject socially unacceptable goals (such as

the pleasures of illicit drugs). ISP encourages (indeed, sometimes orders) participants with academic or vocational deficits who show signs of promise to enter programs to improve their academic skills and their vocational skills. ISP officers in one-on-one meetings and in group counseling sessions, try to strengthen participants skills of self-discipline so the offender will not give up on legitimate activities, but will maintain the daily effort needed to stay in the program and, eventually, graduate.

ISP also includes situation-oriented tactics to reduce recidivism. The requirement that participants be gainfully employed should help to demonstrate to previously "work-averse" participants that legitimate work is normal, bearable, and at least somewhat remunerative. The other major situational tactic to hold recidivism in check is an attempt to deter participants from crime and program rule-violations by making this misconduct riskier. Participants are supervised closely, and any detected rule violation receives some punishment. Repeated drug use is punished with revocation and return to prison.

Just two or three incidents of drug use results in being returned to prison for about a year. ISP provides an objective environment with high-deterrence features. That is, detected drug use results in significant punishment, and drug use will most likely be detected (through urinalysis). Through briefings and through the grapevine, the participant should (subjectively) perceive that drug use is likely to be discovered. The

participant should also learn that just one positive urine sample can make the difference between remaining at home under ISP or being reincarcerated (when the positive test is considered in light of the participant's behavior as a whole). With two positive urine samples reincarceration is quite likely. With three positive samples revocation to prison is a virtual certainty.

Nevertheless, roughly 20 percent -- one in five -- of all those who enter ISP are returned to prison because they produce positive urine tests. The subject of this study is why some people resume drug use and why others do not.

CH. 2: DETERRENCE AND RATIONAL CHOICE MODELS

Persuading criminals who have a drug problem to stop using drugs has not been generally successful. Perhaps a more promising strategy is to use a deterrent threat along with efforts at persuasion to motivate drug-using offenders to make serious efforts to desist from drug abuse. Drug users may be more likely to abstain from illicit drugs if the "carrots" (the pleasures of a drug-free life described by counselors and therapists) are accompanied by the "stick" of likely punishment for resuming drug use.

Four Deterrence-oriented Models

In its simplest form, deterrence theory emphasizes that any specific type of criminal conduct is less likely to occur (1) the more unpleasant the punishment for that crime, and (2) the greater the likelihood of experiencing that punishment (Andenaes, 1952; Ball 1955; Gibbs, 1968; Tittle and Logan, 1973). This line of thought can be traced back to the classical theorists, Beccaria (1809) and Bentham (1843). Some of these theorists (e.g., Bailey, 1980), argue that the swiftness of punishment is another factor in deterring specific criminals from repeating their offense. Thus, the severity, certainty, and celerity of punishment are the cornerstones of deterrence theory.

Miller and Anderson (1986) point out the conceptual variation that exists in deterrence analyses in modern criminology. First, many scholars have tended to give emphasis to only one or two of the three deterrence variables (the severity, certainty, and celerity of punishment). Most modern criminologists have stressed the importance of the certainty (probability) variable. Few have devoted much work to the celerity (swiftness) variable.

Second, some researchers have tended to concentrate on just one unit of analysis for deterrence. That is, some have concentrated on aggregate units of analysis (e.g., relating crime rates in states to average probabilities of receiving a prison sentence and the average length of prison terms served in those states). These researchers are concerned with trying to estimate the aggregate objective probability and severity of legal punishments. They then try to relate these variables to observed variations in aggregate crime rates. By contrast, another unit of analysis is that of individuals as subjects in a study. The latter type of investigation is usually referred to as "perceptual deterrence" because the individual respondents in the studies are asked about their perceptions of the probability that they will be caught and punished and about their perceptions of how unpleasant the punishment would be for them. This differential emphasis upon aggregates or individuals overlaps another distinction common in thought about deterrence: general deterrence versus specific deterrence. Specific deterrence

focuses upon whether punishing specific individuals deters those individuals from repeating their offense. General deterrence focuses upon whether aggregate patterns of punishment deter people-in-general from committing an offense.

Third, scholars in the area of deterrence vary in terms of whether they are concerned only with punishment, or also with the gain (or reward) that the individual may receive. In some terminological schemes this might be said to be a departure from deterrence theory (in a narrow sense) to a broader "economic," "rational choice," or "subjective expected utility" theory (Pearson and Weiner, 1985; Piliavin, et al., 1986). Thus, some scholars are concerned not only with negative utility (punishing or unpleasant consequences), but also with positive utility (rewarding or pleasing consequences) (Becker, 1968; Block and Heineke, 1975; Ehrlich, 1973).

Here is the logic involved. Under an "objective expected value" model, an individual would be expected to choose a behavioral option that has the maximum net positive value weighted by the expectation (probability) of actually experiencing the consequence. (For example, an individual would pick a $1.00 lottery with a one-in-a-hundred chance of winning a $1,000 television over a $1.00 lottery with a one-in-a-thousand chance of winning a $9,000 car.)

A subjective expected utility (SEU) model is more sophisticated. First, SEU theory recognizes that individuals have important personal differences in the intensity of

attraction they feel for specific consequences ("One man's meat is another man's poison.") Thus, utility judgments (personal assessments of desirability) are used rather than "objective" measures of value. Second, SEU theory posits that objective probability estimates should not be used to weight the utilities; rather subjective probability assessments are the relevant weights. Individuals form judgments of how probable or improbable various outcomes are, and these subjective probabilities affect their behavioral choices. Thus, according to SEU theory, behavioral choices reflect utility estimates weighted by subjective probability estimates. Confronted with alternative actions (e.g., use an illicit drug or do not use it), a person whose utility preferences and probability assessments are internally consistent will choose the alternative action associated with the greater subjective expected utility.

The four conceptual emphases in criminological theories that have a deterrence component and that recognize the probabilistic effect of motivating variables upon human behavior are summarized in Table 2.1. Theories with an objective expected cost emphasis (that is, objective deterrence theories) concentrate on variables that seem to be onerous or punishing from the point of view of criminologists or criminal justice practitioners. Objective expected value theories add a concern with putatively rewarding factors as well as punishment. Subjective expected cost theories concentrate on variables that may seem to be punishing or onerous, from the subjective point of view of the people under

study. Subjective expected utility theories are concerned with variables that seem to be rewarding or punishing from the point of view of the people under study.

Table 2.1. Four Emphases of Criminological Theories with a Deterrence Component.

	PUNISHMENT (COST) FOCUS	PUNISHMENT AND REWARD FOCUS
OBJECTIVE VARIABLES	Objective Expected Cost (OEC): "objective deterrence"	Objective Expected Value (OEV): "aggregate economic models"
SUBJECTIVE VARIABLES	Subjective Expected Cost (SEC): "perceptual deterrence"	Subjective Expected Utility (SEU): "rational choice theory"

Formal Models of Subjective Expected Utility

As mentioned, in SEU theory, behavioral choices reflect utility estimates weighted by subjective probability estimates. Suppose that an individual must choose which behavior (b) of alternative behaviors to engage in (e.g., b=1, use an illicit drug; or b=2, do not use it). We shall assume that the person assesses the possible consequences (c_i) of the behavior in terms of his/her preferences (utility) and how likely the consequence is (probability). SEU theory predicts that individuals will choose the behavior associated with the larger sum of probability-weighted utilities, that is, the behavior associated

with the greater subjective expected utility. This is stated formally in Equation 1. Similar formulations can be found in Chernoff and Moses (1959: 81); Ehrlich (1974: 73); and Pratt, Raiffa, and Schlaifer (1964).

Equation (1)

$$SEU(b) = \sum_{i=1}^{n} p_i u_i$$

On general, conceptual grounds, how promising are the four criminological theories in which deterrence is a main component? SEU theory may seem to be the most promising because it concentrates on how the choice situation appears (subjectively) to the individual and on the rewards that may result as well as the costs. However, the worth of a theory depends mainly on its degree of predictive accuracy. In <u>some</u> situations subjective (cognitive or attitudinal) variables may add only insignificant predictive power to the objective (external) variables. (In other situations the cognitive or attitudinal variables may be more predictive than external predictors.) Furthermore, in <u>some</u> situations reward effects may be relatively insignificant while punishment effects may predominate in determining the choice.

Note that the SEU theory does <u>not</u> assume that the average person will <u>consciously</u> frame his decision in terms of the equation presented. SEU theory only assumes that people have

(1) stable and logically consistent preferences for the consequences they may experience, and (2) stable and logically consistent impressions of the likelihood of those consequences. The SEU model can be derived from these assumptions (see for example, Davis, 1970:49-64; Luce and Raiffa, 1957:12-38; Pratt, et al., 1964; Solberg, 1982:93-119). The theory is the reverse of the idea that people formulate and solve SEU equations to determine what they should prefer to do. Rather, the theory is that if a person has stable and logically consistent preferences and probability assessments, a social scientist who applies the SEU equation will have an improved way of predicting that person's behavior.

It is worth reiterating that the four deterrence-oriented theories are derived from core assumptions about the stability and logical consistency of utilities and subjective probabilities.

Note that the objective deterrence and aggregate economic models could be cast in the tradition of operant conditioning theory (e.g., Alhadeff, 1982; Lea, 1987, Pearson, 1976: 97-107). However, most deterrence-oriented theories do not use the imagery of habit or conditioned stimulus-response connections to explain criminal behavior (or law-abiding behavior). Rather, the imagery is that of conscious choice in line with the individual's thoughts about what rewarding or punishing consequences may result, and how likely those consequences are. Thus, the conditioned-response model is more a conceptual competitor of

deterrence-focused theories than a conceptual ally. (Rachlin [1987] traces this conceptual divergence to the different approaches taken in psychology by Skinner [1938] and Tolman [1938].)

There are some practical difficulties in testing deterrence-focused theories. One difficulty is that ideally a person's preferences and probability assessments should be inferred from controlled laboratory experiments from which the person's preferences and assessments are revealed in his patterns of choice behavior. This is impractical in research on criminal behavior. Researchers generally must rely on the individual's subjective reports of what his preferences and probability assessments are. Respondents may lie or may honestly misperceive their own preferences and assessments.

In practical tests of these theories, we assume that the individual's preferences and probability assessments are stable from the time of measurement through the time of behavioral choice. This will not be correct in every case. For example, it would not be a fair test of SEU theory if the individual prefers ISP to prison at the time of measurement, but (unknown to the researcher) he changes his opinion so that he prefers prison to ISP before his (observed) behavioral choice to use drugs while in ISP.

Another practical disadvantage is that innumerable preferences may be relevant to real-world choice situations. Some of these preferences might be indirect and difficult to

measure. For example, how can one accurately measure the utility that would result from going along with peer pressure to use a drug (rather than antagonizing one's peers)?

A Rational Choice Model of Potential Drug use in ISP

In ISP there are certain especially relevant possible outcomes for a participant: experiencing the sensation of drug use (versus not experiencing it) and experiencing a return to prison (versus continuing to experience ISP). Let us consider these factors within a subjective expected utility framework. The subjective expected utility of a behavior is the sum of the probability-weighted utilities of each relevant event variable (i). For example, event variable i = 1 might designate the drug sensation variable (with values of yes or no). Event variable i = 2 might designate the return-to-prison variable (with values of yes or no.)

In this situation, the following equations would apply.

Equation 2: SEU(abstain from drug use) =

+ p(no drug sensation if abstain) x u(no drug sensation)
+ p(drug sensation if abstain) x u(drug sensation)
+ p(no prison if abstain) x u(no prison)
+ p(prison if abstain) x u(prison)

Equation 3: SEU(drug use) =

+ p(no drug sensation if drug use) x u(no drug sensation)

+ p(drug sensation if drug use) x u(drug sensation)

+ p(no prison if drug use) x u(no prison)

+ p(prison if drug use) x u(prison)

Equations 2 and 3 add the probability-weighted utilities to yield the total SEU associated with the alternative behavioral choices. However, this assumes that the utilities can be expressed in a common unit of measure (e.g., units of utility, dollars, hours of work). In this study we do not have a common unit of measure, so we cannot provide exact predictions from the full models of equations 2 and 3. (We might have included an item asking "How many days in prison would you be willing to spend for one day of drug use?" However, it is questionable how many drug users could respond to this particular item honestly and accurately when questioned by researchers during their first few weeks in the Intensive Supervision Program.)

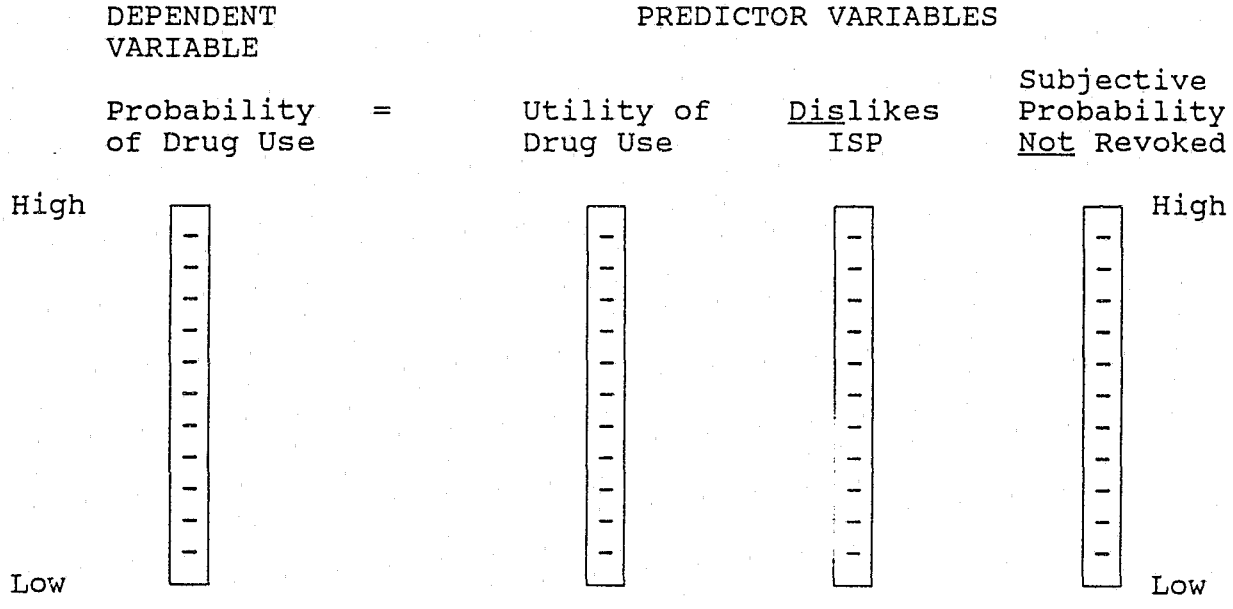
We can, however, analyze the SEU model in terms of separate variables and test the variables separately.

In this particular situation of deciding whether or not to use drugs in ISP, we lose little if any accuracy with the following simplifications of equations 2 and 3. The probability of experiencing a drug sensation if the individual uses the drug is 1. The probability of experiencing a drug sensation if the

individual does not use the drug is 0. The probability of the individual experiencing a return to prison because of drug incident reports if the individual does not in fact use drugs is (approximately) 0. (Not only are false positives relatively uncommon, but ISP does not revoke persons for one positive urine test unless there is other evidence of serious rule violation in the program.)

The situation is simplified further for anyone who prefers to continue in ISP rather than being revoked to prison. Evidence suggests that almost all ISP participants fall in this category. Due to these simplifications, the perceptual deterrence component of the model is that the probability of ISP participants using drugs will be an inverse function of (1) their subjective probability that if they were to use drugs they would be revoked to prison and (2) how much they prefer ISP to prison. The other component of the more general economic or SEU model adds the hypothesis that their probability of using drugs will be a positive function of (3) their utility for drugs. These hypotheses are graphically presented in the thermometer-style scales in Figure 2.1. Here the probability of drug use in ISP is graphically related to a combination of three other scales: (1) high motivation to use drugs, (2) relatively low liking of ISP in comparison to prison, and (3) low subjective probability of revocation to prison for drug use.

Figure 2.1. Thermometer Graphs Illustrating the Hypothesized Rational Choice Relationship between Drug Use and the Combination of High Utility for Drugs, Low Liking of ISP Relative to Prison, and Low Subjective Probability of Revocation to Prison.



Previous Research on Deterrence and Crime

One of the landmark reviews of research on deterrence is that of Tittle and Logan (1973). At that time most criminologists thought that deterrence theory was, generally speaking, not supported by the facts. Tittle and Logan considered a broad range of research evidence, including psychological research on learning patterns, research on the effects of capital punishment, laboratory experiments using highly-structured, socially interdependent situations derived from the mathematical theory of games and field experiments attempting to elicit compliance behavior from subjects (e.g., reporting higher levels of income to the Internal Revenue Service).

For example, Tittle and Logan noted a study of parking violations by faculty members on a university campus. The researcher (Chambliss, 1966) found that an increase in the severity of penalties and the probabilities of receiving the penalties was followed by a significant reduction in violations in his sample of 43 faculty members. Chambliss noted that the change in effective deterrence was irrelevant for some of the faculty, namely, those fifteen faculty members who had not violated the parking rules even before the change in penalties was instituted.

Tittle and Logan discussed research by Gibbs (1968) and Tittle (1969) that studied official aggregate statistics on the

severity and certainty of imprisonment with aggregate crime rates. These and similar aggregate cross-sectional studies are consistent with deterrence theory.

Tittle and Logan also reviewed the early (cross-sectional) perceptual deterrence research that had been reported (e.g., Claster, 1967; Jensen, 1969; Waldo and Chiricos, 1972). These studies found that, with individuals as the unit of analysis, lower incidence of self-reported offenses was correlated with higher subjective assessments of the probability and severity of punishment for those offenses.

Tittle and Logan inferred from the research existing at that time that "[a]t this point we can safely say only that sanctions apparently have some deterrent effect under some circumstances" (1973: 385).

A few years later, as part of the National Research Council's study of deterrence and incapacitation, Daniel Nagin (1978) presented a critical review of the empirical evidence that had accumulated on general deterrence and crime rates. He agreed that this body of research does find significant inverse relationships between variables such as aggregate estimates of the probability and severity of terms of imprisonment on the one hand and aggregate crime rates on the other hand. However, Nagin offers three competing interpretations of the observed inverse relationship. First, systematic variations in data-reporting procedures by police agencies might account for some of the observed relationship. Second, because of the cross-sectional

nature of the aggregate-level research and the multiplicity of variables that might be operating, hypotheses other than the deterrence hypothesis may account for the observed inverse relationship. For example, it is possible that higher rates of criminal behavior may overwhelm police, court, and correctional resources. To the extent that this is true, higher rates of criminal behavior cause lower probability of and length of imprisonment, rather than the deterrence interpretation that lower probability and severity cause higher crime rates. Nagin argued that the available research could not prove how much of the observed inverse relationship is due to deterrence and how much is due to competing hypotheses (such as the overwhelming of criminal justice resources).

Third, even if higher probability and length of imprisonment is causing lower crime rates, to some extent this might not reflect deterrence, but rather incapacitation. That is, the incarcerated criminals might be willing and unafraid to commit new robberies and burglaries (i.e., they are undeterred). However, they are unable to commit those crimes because they are locked away in prison.

Nagin (1978: 135) concluded that

> Yet, despite the intensity of the research effort, the empirical evidence is still not sufficient for providing a rigorous confirmation of the existence of a deterrent effect. Perhaps more important, the evidence is woefully inadequate for providing a good estimate of the magnitude of whatever effect may exist.

In the 1980s published research in the perceptual deterrence tradition tended to move beyond cross-sectional studies to panel studies. These studies attempt to use deterrence theory for predictions of offenses (usually self-reported offenses). Many of these studies have found that subjective perceptions of sanction risk are relatively unstable over time. Furthermore, the investigators have inferred that the seeming deterrence effects found in cross-sectional studies may mainly reflect an experiential effect. The deterrence model is that, if first people perceive the risk of substantial punishment to be low, then later they will engage in the offense. This recent research suggests that the causal connection is more likely to be in the opposite direction. Many people first engage in the offense, are not caught and punished, and later form perceptions of low sanction risk associated with the offense. This is the experiential effect (Greenberg, 1981; Minor and Harry, 1982; Paternoster et al., 1983a, 1983b, Saltzman et al., 1982).

Williams and Hawkins's (1986) review of perceptual deterrence research includes a discussion of panel studies in this area. They conclude that subjective perceptions of legal sanctions tend to be unstable over time and the experiential effect tends to be greater than the alleged deterrent effect.

However, in the sections in which they assess this type of research, Williams and Hawkins point out several methodological limitations. First, of the five samples used in the panel studies, four involved only adolescents. The exception was a

study of adults as well as adolescents by Piliavin et al. (1986). A second criticism stems from the seeming instability of perceptions of the probability of punishment. Because these studies involved substantial time lags (on the order of 3-12 months), they could have failed to detect deterrent effects that may exist on a shorter time scale. Williams and Hawkins note that "obtaining self-reported [criminal] involvement data for briefer intervals (e.g., days or weeks) would be generally impractical" (1986: 556). Third, as Andenaes (1974) and Gibbs (1975) pointed out, the threat of legal punishment might have indirect crime preventive effects. For example, the threat of legal consequences (arrest, trial, and punishment) might carry along with it "extralegal sanctions" such as social disapproval by members of the community.

Lawrence Sherman (1988), acknowledging his reliance on prior review articles by Farrington (1983) and Farrington, Ohlin, and Wilson (1986), discusses randomized experiments on the effects of criminal sanctions on recidivism. He discusses studies that fall into three broad categories: those that show that (1) sanctions make no significant difference in recidivism, (2) sanctions increase recidivism, and (3) sanctions decrease recidivism.

First, several arranged, randomized experiments have found no significant differences in recidivism. Most of these studies involved differences between the experimental group and the control group that are difficult to assess in terms of differences in severity of punishment. For example, some

experimental designs contrasted the effect of arresting youth found engaging in misconduct with the effect of warning them that they will be dealt with more severely if they are caught again. Other studies contrasted formal court processing (e.g., hearings, probation) vs. assigning offenders to counseling programs.

A couple of these studies finding no significant differences involved contrasts between a response of incarceration and a response of required attendance at a community-based rehabilitation program. The Silverlake experiment studied boys (15 to 17 years old) assigned to incarceration in a juvenile residential facility vs. those assigned to a community-based program (Empey and Lubeck, 1971). Lamb and Goertzel (1974) studied 110 adult offenders sentenced to jail who were randomly assigned either to the jail or to an alternative community rehabilitation center. Although the experimental group did have a lower rate of parole revocation over the six-month follow-up period (17 percent vs. 27 percent for the control group), the differences were not statistically significant for this relatively small sample of cases.

Second, a few arranged, randomized experiments have found <u>significantly higher recidivism in the group receiving more severe legal sanctions than that found in the group receiving milder punishment</u>. For example, Sherman discusses an experiment conducted by Lincoln, Klein, Teilmann, and Labin (no date):

> The experiment randomly assigned apprehended juveniles to four different treatments ranked in their formality and severity: release, two types of diversion, and formal charging. The more formal and official the processing, the

> more frequent was the juveniles' repeat criminality over a two-year follow-up period (Sherman, 1988: 89)

Third, Sherman found only two arranged, randomized experiments with significantly lower recidivism in the group receiving more severe legal sanctions than that found in the group receiving milder punishment. In one study of the effects of arresting shoplifters (Sherman, 1988: 90), the investigators concluded that arrest (and possibly rough treatment) was associated with lower recidivism. However, this effect was not found throughout the overall experimental sample. It was only found in three particular subsamples: (1) "sloppy" dressers, (2) those who were not cooperative or who did not seem scared at being caught, and (3) Blacks.

The only true experiment with actual sanctions and with across-the-board results supporting deterrence theory that Sherman could find at that time was the Minneapolis Domestic Violence experiment (Sherman and Berk, 1984). Suspects in incidents of domestic assault (wife battery) were randomly assigned to one of three police responses: (1) arrest, (2) advice (usually including informal efforts at mediation), or (3) an order to leave the premises for at least eight hours. Sherman summarizes this study as follows:

> [A]mong 314 cases of misdemeanor domestic assault, those in which the offender was randomly assigned to arrest produced significantly lower prevalence and longer failure time of repeat violence than those in the offender was assigned to the nonarrest alternative treatments, at least over a six-month follow-up period. The difference in prevalence of

> repeat violence was approximately a 50 percent relative reduction with arrest, from 20 to 10 percent (Sherman, 1988: 90).

Berk and Newton (1985) pursued the theme of the Minneapolis Domestic Violence experiment in a county in California. Unable to use an arranged, randomized design, they used advanced non-experimental statistical techniques to analyze 783 wife-battery incidents over a 28-month period. Police made arrests in 207 of the incidents. The researchers studied police records containing a variety of information about these incidents and about whether any new incidents occurred after the police intervened. They concluded that arrests substantially reduced the rate of new incidents of wife battery.

The history of science (and certainly of social science) reveals many seemingly well-conducted studies that are followed by replications that do not result in the same findings. Because of this and because of a rush to change police policy in the wake of the Minneapolis experiment, the National Institute of Justice funded replications of the experiment in six other cities. The first of these replications (Dunford, Huizinga, and Elliott, 1990) randomly assigned suspects to the same type of police responses used in Minneapolis (arrest, mediation, or separation). Here, as in Minneapolis, the cases were followed for six months. In contrast to the original experiment, here no significant differences were found in rates of repeat offenses of wife battery.

Lurigio and Davis (1990) conducted an arranged, randomized experiment in Cook County, Illinois testing whether a threatening letter would increase compliance with restitution orders. In a sample of 223 cases, 112 were randomly assigned to a condition of being mailed a registered letter specifying their delinquency in making their ordered restitution payment and warning that failure to comply promptly would result in a referral to the court for further action, including the possibility of incarceration. The remaining 111 cases did not receive any correspondence and served as a control group. The hypothesized main effect of the threat of legal sanctions was supported by the data. Whereas subjects in the control group paid an average of 15 percent of the ordered payments during the course of the experiment, subjects receiving the threat of legal sanctions paid an average of 24 percent of the amount ordered during that amount of time.

Sherman's (1988) review of the relative lack of <u>experimental</u> evidence in support of the deterrent effects of legal sanctions concludes with a discussion of the implications to be drawn from the mixed results found. First, most of the experiments dealt with mild sanctions (e.g., required attendance at a community-based program). Very few studied the effects of incarceration vs. nonincarceration. (Exceptions include the Lamb and Goertzel (1974) study and the Minneapolis domestic violence study.)

Second, it may be that significant deterrent effects exist only for certain kinds of offenders and certain kinds of crimes. Third, it may be that <u>speed</u> (celerity) of punishment is an

important interactive factor. Perhaps deterrent effects are more likely to be significant when the punishment is not only severe but also not delayed until many months after the offense has been committed.

There have been studies using "interrupted time series analysis" to investigate the effects upon drunk driving rates of having the police administer breathalyser tests in a variety of situations and arrest motorists found with illegal levels of alcohol. Ross (1973) examined motor vehicle accident and fatality rates over the years 1961 to 1970. The data revealed a sharp drop in these variables just after the police breathalyser crackdown. The drop in motor vehicle accidents was concentrated at times on weekends when drinking and driving commonly occurs, but not during non-drinking hours on weekdays. Thus, it was plausible that there was a real decrease in drunk driving that accounted for the decline in accidents. Ross (1973: 31) noted that "although evidence is strong that the Road Safety Act was initially effective, it is now equally clear that this effect dissipated within a few years."

Homel (1988) reviewed the research on deterrence of drinking and driving behavior and conducted two studies of his own on the deterrence of drunk driving in Australia. One was a study of a random breath tests (RBT) crackdown. The other was a study of the effects of penalties received by drunk drivers. The results of both studies were consistent with deterrence theory. Homel reported that

> The effect of arrest certainty was as marked as that of any other variable in the models, indicating that the fear created by RBT was a major influence on behavior. This inference is supported by the reasons which people gave for not drinking and driving, with those citing fear of arrest as a reason for making more changes to their behavior than those who cited other reasons (Homel, 1988: 237).

The effects of severity of punishment were more difficult to interpret. However, Homel summarizes the role of this variable as follows.

> A balanced conclusion on the importance of penalty severity would be that when the perceived chances of arrest are high, perceived penalty severity can have some deterrent impact in addition to that of arrest certainty, particularly among those who have already suffered legal punishments for drinking and driving (Homel, 1988: 238).

Speckart, Anglin, and Deschenes (1989) used a sophisticated statistical technique (commonly referred to by the name of the software package, LISREL) to model the longitudinal relationships among legal sanctions, narcotics use, and property crime. They found that legal supervision contact (i.e., probation or parole) in conjunction with urine testing was significantly, inversely related to concurrent narcotics use. They note that "the amount of contact and urine testing are both closely associated with detection activities which could easily lead to reincarceration" (Speckart, Anglin, and Deschenes, 1989: 49).

Hypotheses Tested in This Study

Prior to undertaking this study, our own view of the rational choice/deterrence model of human behavior was that you will find rationality in (almost) all of the people some of the time and in some of the people a fair amount of the time, but you won't find rationality in all of the people all of the time. Why do we make this assertion? First, most people are logically inconsistent in their choice behavior some of the time. Second, most people most of the time engage in behavior out of "habit" rather than out of thoughtful decision making. Most of the time people do not try to think about and "weigh" the contingencies of reinforcement that confront them, rather they respond as prior contingencies of reinforcement have conditioned their behavior (Skinner, 1974). Third, (overlapping the previous point) most people most of the time are influenced by cultural patterns, by social norms, and by informal social sanctions from relatives, friends, and acquaintances. Fourth, nevertheless, there <u>is</u> a substantial degree of rationality in (almost) all of the people some of the time. Edwards, having reviewed the research literature on decision-making through the mid-1960s concluded that:

> More detailed analysis of such experiments (e.g., probability learning experiments) indicates that substantial deviations from rationality seldom occur unless they cost little; when a lot is at stake and the

> task isn't too complex for comprehension, men seem to behave in such a way as to maximize expected utility (1968: 38, 41).

Katona's (1975) discussion of the choice behavior of consumers and businessmen makes a similar point.

> [The consumer] is also capable of acting intelligently. When he feels that it really matters, he will deliberate and choose to the best of his ability....
>
> Problem-solving behavior is a relatively rare occurrence, which prevails under the impact of strong motivational forces (Katona, 1975: 218).

Our general theoretical expectation prior to undertaking this study was that, when decisions matter a great deal to people, those people will tend to choose the behaviors associated with higher subjective expected utility. ISP is a relevant ground for this research because remaining in ISP vs. being revoked to prison matters a great deal to the vast majority of ISP participants -- and illicit drug use matters a great deal to some ISP participants.

Three of the four theoretical models discussed above are particularly pertinent to this expectation. These are (1) the objective deterrence model (focusing on objective expected cost, OEC), (2) the perceptual deterrence model (focusing on subjective expected cost, SEC), and the rational choice model (focusing on subjective expected utility, SEU).

The objective deterrence (OEC) model suggests an hypothesis of secondary importance in this study: use of illicit drugs is

less likely to occur (1) the more severe the punishment for drug use (as judged by external observers) and (2) the greater the objective probability of experiencing that punishment. This hypothesis was of secondary interest because we expected that using measures of subjective ratings of utility and probability would produce more accurate predictions.

The perceptual deterrence (SEC) and rational choice (SEU) models together implied three core hypotheses which were tested in this study. The probability of participants using drugs in ISP is

(1) an inverse function of how much they prefer ISP to prison (SEC, SEU).

(2) a positive function of their utility for drugs (SEU).

(3) an inverse function of their subjective probability that if they were to use drugs they would be revoked to prison (SEC, SEU).

These hypotheses are our primary focus. However, from the outset (as discussed in the proposal for the research grant for this project) we assumed that a simple SEU model would not be sufficient to account for drug use in ISP. This is why items reflecting other factors were included in the interviews. Thus, we also included items on self-reported impulsiveness, peer pressure, and so forth.

Some combinations of predictors are straightforward. If an individual strongly desires the drug experience and would prefer

to be back in prison rather than in ISP, he will use a drug. If an individual has little or no desire to experience illicit drugs, he will not use drugs in ISP even if he prefers prison to ISP. (Such a person could petition to be returned to prison; he need not use drugs to be returned to prison.)

For other individuals, ISP is a "mixed-motive situation," and the choice is not straightforward. On the one hand, these pre-ISP-drug-users would like to use drugs in ISP; on the other hand, they do not want to be revoked to prison. For these individuals, drug-recidivism should be a function of (1) the utility of drug-use, (2) the utility of remaining in ISP weighted by the subjective probability of being able to remain in ISP if they use drugs, and (3) the utility of prison weighted by the subjective probability of being revoked to prison. For these individuals, drug recidivism will be directly related to the utility of drugs and inversely related to the interaction between the probability of being returned to prison and the utility of prison (relative to ISP). For these individuals, conversely, drug <u>abstinence</u> will be inversely related to the utility of drugs and directly related to the expected utility of remaining in ISP until successful discharge.

A meaningful test must include the expected utility of using drugs <u>as well as</u> the subjective probability of a revocation to prison. One implication of this theoretical orientation is that a person who has no inclination to use drug will not use drugs, regardless of his subjective probability estimate of revocation.

The other implication is that for people who are inclined to use drugs, the interactive combination of higher motivation to use drugs and lower probabilities of revocation to prison will predict higher rates of drug use in ISP.

CH. 3: RESEARCH METHODS

Research Goals

The central goal of this research project was to study the degree to which subjective deterrence/rational choice variables are effective in reducing rates of drug-use recidivism (or "relapse"). Very few existing empirical studies of deterrence are concerned with legal punishment that is subjectively perceived (a) to be severe and (b) to occur with appreciable probability. New Jersey's Intensive Supervision Program is particularly well-suited for this investigation because participants think there is an appreciable likelihood that drug use will result in revocation to prison.

According to the main hypotheses, the probability of participants using drugs in ISP is (1) an inverse function of how much they prefer ISP to prison, (2) a positive function of their utility for drugs, and (3) an inverse function of their subjective probability that if they were to use drugs they would be revoked to prison.

Secondary goals of this study are (1) to assess whether the Intensive Supervision Program had any objective deterrent effect on drug use by participants in the program, and (2) to understand the effect of other social psychological factors upon rates of drug-use recidivism.

Research Design and Data Collection

The Prospective Structure

Before- and After- Measures. Of course, an arranged, randomized experiment is the most rigorous way of testing hypotheses. We were not able to conduct a true experiment; all we had available was before- and after- information. We estimated that studying all of the incarcerated offenders who were released into ISP between January 1, 1989 and April 30, 1990 would provide an adequate number of cases for this research project. In that time 546 offenders were released into ISP, forming the research cohort.

Our intent was to obtain measures on key variables early in the individual's exposure to ISP, before most of the drug-use recidivism occurred, and then again after either drug-use recidivism had occurred -- or after they had successfully refrained from drug-use recidivism for at least a year in ISP. Our before-data include:

1. ISP official records. These include such variables as age, date of release from prison into ISP, etc..
2. ICR Baseline Interviews. These were conducted by interviewers employed and supervised by the Institute for Criminological Research (ICR). The preferred timing was after the offender had been in ISP for a couple of weeks. This meant that the individual had a chance to react to ISP not just on the basis of how the program had been described

to him, but on the basis of his or her personal experience. It was also desirable to schedule the Baseline Interview before a month had elapsed in order to minimize Baseline Interviews with participants after they had a drug use incident in ISP. (In fact, due to practical problems in carrying out the research, in several instances Baseline Interviews did not occur until after the first incident of drug-use recidivism in ISP. In general, these wrong-time-sequence Baseline Interviews were excluded from the analyses. They were included only when error was unlikely to be introduced, for example, concerning the individual's self-reported drug-use during the year he or she was free prior to entering ISP.)

Our after-data include:

1. ISP official records. These include such variables as the date and type of incidents of apparent violations of ISP rules (including positive urinalysis results indicative of illicit drug use in ISP), the punishment and/or counseling ordered in response to such incident reports, the date and type of exit from ISP (e.g., revocations to prison, successful discharge from supervision). The incident reports cover January 1, 1989 through mid-April, 1991. Thus, the cohort was covered for least a year "at risk" in ISP. Because ISP participants are tested three or four times each month at unpredictable times, few continuing

users are likely to go undetected ("false negatives") over more than a year in ISP.

2. ICR follow-up interviews. These interviews were of three types:

   A. Drug-use follow-ups. Target: individuals receiving a (first) drug-use incident report in ISP.

   B. Alcohol-use follow-ups. Target: individuals receiving a (first) alcohol-use incident report in ISP.

   C. Success follow-ups. Target: Individuals whose Baseline Interview indicated drug-use prior to ISP but who completed a full year in ISP without receiving any drug-use incident reports.

In each of the above three types of follow-up interviews participants were asked many questions again that they had been asked in the Baseline Interview. With these follow-up data, we can see whether changes have occurred in their opinions about ISP, their assessments of utilities, or their estimates of the probabilities of getting caught and punished for drug use.

Methods of Data analysis. Some of the analyses conducted in this study use as a dependent variable the percentage of persons at risk who used drugs while in ISP. Other analyses entailed survival analysis. In this context, this is a method of studying the proportions of offenders (defined at their entrance into ISP as "drug-non-recidivists") as they either remain drug-non-

recidivist or change to a recidivist state (relapse). Survival analysis takes into account the participants' differing lengths of time at risk in the program.

As mentioned, we expected that other variables (e.g., peer influence) would add to the predictive power of the SEU and deterrence models. Because it would be inappropriate to explore the data first to locate promising variables and then cite the statistical significance levels for those variables, one-fifth of the sample was examined first. Some analyses on this one-fifth sample were conducted as preliminary tests of the SEU/deterrence models and others were designed to search for other promising variables that should be included in the model. The remaining four-fifths of the cohort was set aside for final hypothesis tests after the exploratory data analyses had been completed.

The Retrospective Structure

Drug-Use Follow-ups. Participants who were subjects of ISP drug-use incident reports (generally because of positive urinalysis results) were contacted to arrange a second interview. In this second interview many questions that had been asked in the Baseline Interview were asked again in order to determine whether there had been a change in the participants' opinions, attitudes, and beliefs about ISP and drug use. In addition, the ICR interviewers also asked the participants open-ended questions concerning <u>why</u> the participant had used drugs. Later in the follow-up interview, specific questions were asked about the

possible effects of the perceived likelihood of getting caught, as well as other factors, on their drug-use relapse. This is retrospective survey material, of course. After being caught engaging in drug-use recidivism, participants were providing information on their post hoc utilities and subjective probability assessments and also providing their own open-ended account of their relapse.

Alcohol-Use Follow-ups. These interviews were similar to the Drug-Use Follow-ups, except that the questions were tailored to the subject of alcohol use in ISP.

Success Follow-ups. These interviews were similar to the Drug-Use Follow-ups, except that the questions were tailored to the temptations to use drugs while in ISP and why the participant had been able to refrain from recidivist drug use while in ISP.

Practical Problems and Completion Rates

Transportation and Coordination Problems. Because ISP officers make multiple supervision visits to ISP participants' homes each month, our project plan was that interviewers employed by the Institute for Criminological Research (ICR) would make appointments to ride along with ISP officers in State cars as they made their rounds of visits to ISP participants' homes. If this had worked out, the research project interview could be conducted while the ISP officer spoke with other family members

and reviewed the participant's diary and budget records in another room. After the research project began, ISP found that the time required for the ICR interviews (averaging about a half hour per participant) would greatly delay the officers on their rounds of field visits. Because the officers already work over 50 hours per week and because the high frequency of field contacts is a crucial part of the Intensive Supervision Program, ISP decided that ICR interviewers could not travel with the officers as they made their contacts. Consequently, ICR interviewers were required to use their own cars to travel to and from interviews throughout the state of New Jersey.

This left us with two options: (1) incur additional costs in order to obtain the number of cases we had proposed for the project (a number necessary so that substantively important relationships could attain the conventional .05 level of statistical significance) or (2) cut back on the number of cases in order not to incur a cost overrun. We chose to interview the full sample we had originally planned (option 1), and we have had to bear the burden of about $15,000 in additional costs.

Interviewer Turnover. ICR planned to hire three or four part-time interviewers to conduct the interviews during the two-year data collection period. The interviewers expressed no concerns or reservations about the nature of the job either during their training period or when they accompanied the Study Director to observe him conduct actual field interviews. Yet, most of the interviewers that ICR hired and trained quit with

little or no advance notice. (In all, fifteen interviewers had to be hired during the data-collection period.) These abrupt departures inevitably created gaps of several weeks in the schedule of interviewing while ICR advertised for replacement personnel, interviewed candidates, checked their references, and trained the new interviewers for the job.

The single most important reason for the abrupt quitting by interviewers was their fear of conducting these interviews on their own, particularly when the interview necessitated going into "bad neighborhoods." However, they were also embarrassed to admit their fears to the Study Director -- until interviewing checks showed that they had completed very few interviews (or none) over the span of several weeks. In response to this "bad neighborhood" problem, ISP tried to make it possible to conduct the interviews at field offices and group counseling sites whenever this was practical. When other solutions were not practical, ICR encouraged its employees to conduct the interviews at a local diner, rather than enter a home in a seemingly "dangerous" neighborhood.

The other main reason for the high rate of interviewer turnover was that the interviewers were college graduates who were supplementing their income. When "things picked up again" in their main career, or when they found a better paying part-time job, they would generally quit right away.

Drug Use / Drug-Follow-up Interview Lag Time. There was an unavoidable lag time of about three weeks between when a urine sample was taken from a participant and when ICR received a copy of the ISP drug-use incident report in the mail. Consequently, in roughly half of the cases participants were returned to prison because of recidivist drug use before ICR interviewers could contact them and conduct a follow-up interview. For the first six months of the data-collection period, no one at ICR had permission to conduct follow-up interviews in jails or prisons. For approximately the next year, only the Study Director of this project had permission to arrange interviews in the jails or prisons. For the last six months, only the Study Director and one senior interviewer had permission to conduct interviews in jails and prisons.

Because of these practical problems, a <u>backlog of both baseline and follow-up interviews</u> that needed to be done arose -- particularly in the first six months of the project. Gradually, most of the backlog was cleared up. However, as will be noted in the tables below, some participants who were part of the backlog in the first six months of our research had been ejected from ISP and returned to prison for many months without being approached for an interview. Instead of trying to do follow-up interviews more than six months after the event of recidivist drug use, we gave up on those cases.

The interviewing began in January, 1989 and concluded at the end of December, 1990. The final status of Baseline Interviews

is shown in Table 3.1. About 95 percent were completed successfully.

TABLE 3.1. Baseline Interview Final Status for all Admissions to Cohort.

Status of Baseline Interview	Number	Percent
Completed successfully	516	94.5
Not contacted in time	14	2.6
Refused	11	2.0
Absconded	2	0.4
Died (overdose) before contact	1	0.2
Died (other) before contact	1	0.2
Voluntary Early Exit from ISP	1	0.2
TOTALS	546	100.1

Table 3.2 shows that, of the 158 participants in the cohort with a positive urine test within one year of their entry into ISP, 128 (81.0 percent) were administered Drug-use follow-up interviews by ICR staff. (A few additional drug-use follow-up interviews were conducted with persons whose first drug-use incident occurred after their first year in ISP.) Eleven refused to be interviewed and ten were not contacted soon enough after the incident -- because of the problems discussed above.

TABLE 3.2. Drug Follow-up final status for all participants in the cohort with a positive urine test within one year.

Status of Drug Follow-up Interview	Number	Percent
Completed successfully	128	81.0
Refused	11	7.0
Not contacted in time	10	6.3
Alcohol Follow-up Already Done	5	3.2
Full Schedule, Could not Interview	2	1.3
Success Follow-up Already Done	1	0.6
Absconded	1	0.6
TOTALS	158	100.0

Table 3.3 shows that, of the 76 participants in the cohort with an alcohol-use incident report within one year of their entry into ISP, 38 (50.0 percent) were administered Alcohol-use follow-up interviews by ICR staff. That this completion rate seems poor is largely an artifact of our decision to interview participants at most twice: one Baseline Interview and one Follow-up Interview (if the circumstances warranted it). If the 17 alcohol-use participants who had already contributed a Drug-use Follow-up Interview were to be counted and also the 3 former drug-users who had completed a Success Follow-up, the completion rate would be 76 percent.

TABLE 3.3. Alcohol Follow-up final status for all participants in the cohort with an alcohol incident report within one year.		
Alcohol Follow-up Interview	Number	Percent
Completed successfully	38	50.0
Drug Follow-up Already Done	17	22.4
Not contacted in time	12	15.8
Refused	4	5.3
Success Follow-up Already Done	3	3.9
Full schedule, could not interview	2	2.6
TOTALS	76	100.0

The relatively small numbers in Table 3.4 reflect three facts: (1) success interviews were designed to be conducted only with participants who indicated in the Baseline Interview that they had used an illicit drug in the year they were free before entering ISP; (2) we operationalize "success" as completion of at least a full year in ISP without producing a positive urinalysis result; (3) we therefore had only a few months to arrange success interviews before these participants "graduated" from ISP.

TABLE 3.4. The Final Status of Success Follow-up Interviews.		
Success Follow-up Interview	Number	Percent
Completed successfully	84	78.5
Not contacted in time	18	16.8
Interview refused	4	3.7
Too long out of ISP	1	0.9
TOTALS	107	99.9

Issues of Generalizability

Characteristics of the Research Cohort

In New Jersey, prison inmates are permitted to apply for release into the Intensive Supervision Program, provided that their conviction was not for a violent crime, a sex crime, or for an offense carrying a minimum period of parole ineligibility. ISP conducts a careful, multi-step screening process of applicants. The screening culminates in a hearing held by a Resentencing Panel of three superior court judges who decide whether or not to release a particular prisoner to ISP.

Several background characteristics of prisoners released into ISP between January 1, 1989 and April 30, 1990 (the research cohort for this study) are presented in tables 3.5 through 3.12.

The cohort is probably fairly representative of offenders serving their first state prison term in the late 1980s and early 1990s. Most were convicted of drug-related crimes: mainly sales of illegal drugs, typically by street-level user/sellers. Probably some convicted of burglary had committed that crime to get money for drug use. As is the case in most state prison populations, roughly half of ISP participants are minority-group members. Thirty-six percent are Black; seventeen percent are Hispanic.

Table 3.5. Age of ISP Participants.		
AGE	Frequency	Percent
Up to 20	25	4.6
20 to 25	171	31.3
25 to 30	153	28.0
30 to 35	81	14.8
35 to 40	55	10.1
40 and Older	61	11.2
Total	546	100.0

Table 3.6. Sex of ISP Participants.		
SEX	Frequency	Percent
Male	474	86.8
Female	72	13.2
Total	546	100.0

Table 3.7. Race/Ethnicity of ISP Participants.		
RACE/ETHNICITY	Frequency	Percent
White	256	46.9
Black	195	35.7
Hispanic	93	17.0
Other	2	.4
Total	546	100.0

Table 3.8. Offense Imprisoned For, Prior to Release Into ISP.		
OFFENSE	Frequency	Percent
Drugs Sales	341	62.5
Property	162	29.7
White Collar	9	1.6
Other	34	6.2
Total	546	100.0

Table 3.9. Number of Indictable Convictions Before Offense that Led to Release into ISP.

Value	Frequency	Percent
0	356	65.2
1	118	21.6
2	42	7.7
3	17	3.1
4	9	1.6
5	4	.7
Total	546	100.0

Table 3.10. Number of State Prison Terms Served Before Offense that Led to Release into ISP.

Value	Frequency	Percent
0	508	93.0
1	26	4.8
2	7	1.3
3	5	.9
Total	546	100.0

Table 3.11. Drug Treatment Recommended at Time of Release into ISP.

Recommendation	Frequency	Valid Percent
Inpatient	2	.4
Outpatient	390	72.1
None	149	27.5
Missing Data	5	-
Total	546	100.0

Table 3.12. Alcohol Treatment Recommended at Time of Release into ISP.

Recommendation	Frequency	Valid Percent
Inpatient	3	.6
Outpatient	208	38.5
None	329	60.9
Missing Data	6	-
Total	546	100.0

The research cohort is also fairly representative of offenders serving their first state prison term in the late 1980s and early 1990s in terms of the frequency of illegal drug use. (The term "drug" is used loosely here, and includes use of marijuana as well as the usual set of "harder drugs.") As Table 3.13 shows, 66 percent of the cohort members answering this question self-reported using drugs at a rate of at least one day per month over the year they were free before the imprisonment that eventuated in their release into ISP. About 47 percent were quite frequent users, reporting drug use at the rate of three or more days per week.

Table 3.13. In the Year Before You Went into Prison, on the Average, How Many Days Did You Use Drugs?

Response #	Value Label	Frequency	Valid Percent
0	No days	173	33.7
1	1 or 2 days per month	33	6.4
2	1 day per week	21	4.1
3	2 days per week	47	9.1
4	3 days per week	45	8.8
5	Every other day	18	3.5
6	4 days per week	19	3.7
7	5 days per week	14	2.7
8	6 days per week	8	1.6
9	Nearly every day	58	11.3
10	Every day	78	15.2
	No Answer	2	
	Not Interviewed	30	
TOTAL		546	100.0

The Choice Situation Confronting the Offenders

Most convicted felons released into the community have been made aware at some point that if they recidivate, and if they are caught and reconvicted, they are likely to be recommitted to prison. Unlike most felons in this situation, ISP participants are frequently reminded that a return to drug use while in ISP will put them at substantial risk for a return to prison. ISP officers frequently remind the participants that they will be risking their freedom if they return to drug use. Perhaps more importantly, ISP participants observe first-hand that a particular other participant no longer attends meetings because he has been returned to prison due to positive urine tests. (Indeed, the re-arrests to re-incarcerate drug-users often take place at group counseling meetings, at community service meetings, or other ISP functions.) Approximately half of the revocations that occur in ISP are due in part to drug usage while in the program.

Thus, ISP is not representative of the levels of objective deterrence found in most correctional systems. ISP analytic generalizability is to <u>environments with high objective deterrence levels</u>. If significant deterrent effects exist in criminal justice and correctional systems, they should be detectable in this setting.

Key Measures

Drug Use in ISP

Drug use in ISP was operationalized in terms of ISP drug-use incident reports covering January 1, 1989 through mid-April, 1991. Most analyses that we undertook concerned use of illicit drugs within the first year of a person's experience in ISP.

In some cases the drug-use incident report cited more than one positive urinalysis result (e.g., when the urine samples were taken within a day or two of each other). Because ISP participants are tested three or four times each month at unpredictable times, few continuing users are likely to go undetected (that is, be "false negatives") over more than a year in ISP. ISP officers simply conduct too many unannounced urine tests (and the officers are too knowledgeable about techniques of deception) for repetitive drug use to go undetected. For example, on an unannounced basis, ISP officers of the same sex as the participant will observe the act of urination. (Participants have been known to hide vials of "clean" urine in their underwear to pour into the laboratory vials.) To give another example, when a participants reports that he is unable to urinate, he is given time and plenty of water to facilitate the urination. If the participant still reports that he cannot urinate, he may be put on report for failure to produce a urine sample -- and he will be the subject of a higher frequency of unannounced "random" drug tests. As an indicator of the stringency of the drug

testing, recall that about one in five people who enter ISP are revoked to prison because of drug use.

In six cases we judged that the drug-use incident was erroneous (a "false positive" report). In these six cases the ISP participant had not been known to use drugs prior to ISP, and the participant's ISP officer mentioned reasons for doubting the laboratory result in this particular case, and the participant did not produce any subsequent positive results in ISP.

Deterrent Sanctions in ISP

Participants revoked from ISP and returned to prison with only one drug-use incident report generally had at least one other, non-urinalysis program violation (e.g., curfew violation, failure to attend drug-treatment counseling, etc.). The combination of drug use with the other type of violation(s) was deemed sufficient for revoking their ISP status and returning them to serve their prison sentence Nevertheless, ISP enforces a remarkably strict enforcement policy against use of illicit drugs while in the program. For example, Table 3.14 focuses on participants with two or more drug or alcohol incident reports by April, 1991 (the conclusion of our data collection). About 59 percent of these participants had been revoked to prison. Another 2 percent were in jail pending a revocation hearing by the ISP Resentencing Panel of judges. Those with three drug-use incident reports had a revocation rate of virtually 100 percent.

Table 3.14. Status of Participants with Two or More Drug or Alcohol Incident Reports at the Close of Data Collection.

Value Label	Frequency	Valid Percent
Revoked to Prison	51	58.6
Jail, Pending Revoc. Hearing	2	2.3
Successful Discharge	21	24.1
Still Active in ISP	13	14.9
COLUMN TOTAL	87	99.9

We received 162 first-time drug-use incident reports on members of the research cohort. (These include incidents that occurred after the first year in ISP.) Table 3.15 shows that only 3.7 percent were re-incarcerated in response to their first drug-use incident in ISP. (Recall that this 3.4 percent in all likelihood had prior rule violations, such as violations of curfew, that made the drug-use the "last straw" in their particular cases.)

However, an additional 13 percent were ordered to serve one or more weekends in jail in response to a drug-use violation. Another 14.2 percent were restricted to their homes when not working at their jobs or community service work, or attending drug counseling. Inspection of all of the entries in the table suggests that, even short of full incarceration in response to a

first incident of drug-use recidivism, at least 80 percent of these responses were appreciable sanctions.

Table 3.15. The Most Severe of the Responses By ISP to First-time Incidents of Drug Use.

Value Label	Frequency	Valid Percent
Warrant, Prison	6	3.7
Weekend(s) in Jail	21	13.0
Home Detention	23	14.2
In-patient Treatment	4	2.4
Harsher Curfew	73	45.1
More Community Service Work	15	9.3
More N.A. Meetings	4	2.4
Special Drug Counseling	6	3.7
Other ISP Responses	10	6.2
COLUMN TOTAL	162	100.0

Utility of Drugs

Most of our analyses of a participant's utility or "strength of motivation" to use drugs were based on the following items in the Baseline Interview concerning drug use just before the incarceration that led to the person's release into ISP.

39. Did you use any drugs during the month before you went into jail or prison?

    10. Yes.
    5. I'm not sure. [Skip to item 41.]
    0. No. [Skip to item 41.]

40. [If yes] In the month before you went into prison, on how many days did you use drugs?

    10. every day.
    9. nearly every day.
    8. about 6 days a week.
    7. about 5 days a week.
    6. about 4 days a week.
    5. about every other day.
    4. about 3 days a week.
    3. about 2 days a week.
    2. about 1 day a week.
    1. 1 or 2 days in the month.
    0. No days.

41. In the year before you went into prison, on the average how many days did you use drugs?

    10. every day.
    9. nearly every day.
    8. about 6 days a week.
    7. about 5 days a week.
    6. about 4 days a week.
    5. about every other day.
    4. about 3 days a week.
    3. about 2 days a week.
    2. about 1 day a week.
    1. 1 or 2 days in the month.
    0. No days.

42. In the year before you went into prison, what drug or drugs did you use? Circle as many as you used.

10. Marijuana.
9. Cocaine (coke)
9b. Crack
8. PCP (angel dust).
7. LSD (acid).
6. Heroin (smack).
5. Downers (barbiturates, sedatives, tranquilizers).
4. Uppers (speed, methedrine, amphetamines, crank).
3. Other (what? _____).
0. No drugs.

(Dis)Utility of Prison

Our analyses of the (dis)utility of prison were structured (as the real-life choice situation was framed) relative to the utility of remaining in ISP. Our analyses of this dimension were based on one or the other of the following two items from the Baseline Interview.

5. On a scale of 0 to 10 which do you prefer, ISP or prison?

10. ISP is much better than prison.
9.
8.
7.
6.
5. I feel the same about both; in the middle.
4.
3.
2.
1.
0. ISP is much worse than prison.

50. ISP is not pleasant, and prison is not pleasant. How many months on ISP would it take to be as unpleasant as 6 months in prison?

10. 30 months in ISP is about the same as 6 months in prison.
9. 27 months in ISP is about the same as 6 months in prison.
8. 24 months in ISP is about the same as 6 months in prison.
7. 21 months in ISP is about the same as 6 months in prison.
6. 18 months in ISP is about the same as 6 months in prison.
5. 15 months in ISP is about the same as 6 months in prison.
4. 12 months in ISP is about the same as 6 months in prison.
3. 9 months in ISP is about the same as 6 months in prison.
2. 6 months in ISP is about the same as 6 months in prison.
1. 3 months in ISP is about the same as 6 months in prison.
0. 1 month in ISP is about the same as 6 months in prison.

Subjective Probability of Prison

Our analyses of the subjective probability of prison were based on the following items from the Baseline Interview.

47b. Suppose an average person who is in ISP used drugs just once. What would you guess are his chances of not only getting caught but also getting revoked to prison because he used drugs that one time?

10. 100% (certain to be caught and revoked to prison)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance to be caught & revoked)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance to be caught and revoked)

48b. Suppose a really street-smart person who is in ISP used drugs just once. What would you guess are his chances of not only getting caught but also getting revoked to prison because he used drugs that one time?

10. 100% (certain to be caught and revoked to prison)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance to be caught & revoked)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance to be caught and revoked)

49. How strict do you think ISP is when a participant tests positive for drug use? Do you think an ISP participant is most likely to be returned to prison...

6. after the 6th positive urine test or perhaps not at all.
5. after the 5th positive urine test.
4. after the 4th positive urine test.
3. after the 3rd positive urine test.
2. after the 2nd positive urine test.
1. after the 1st positive urine test.
X. I don't have any idea about this.

Peer Influence

One of the variables that was included to supplement the deterrence/SEU model was peer influence upon the participant's choice whether to resume drug use while in ISP or abstain. As the subsequent chapters will show, this variable was rather consistently predictive of drug-use recidivism. The variable was operationalized in terms of the following item from the Baseline Interview:

46b. Before you went to prison, what percentage of your friends used marijuana or other illegal drugs?

10. 100% (all of them used drugs)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (about half of them used drugs)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (none of them used drugs)

CH. 4: ANALYSES OF FOLLOW-UP INTERVIEWS

When we received a drug-use incident report on a participant, we tried to contact him (or her) in order to conduct a follow-up interview. The interview schedule of questions included two open-ended questions that asked (in slightly different ways in different sections of the interview) the opinion of the participant on why he had used the illicit drug while in ISP. Some gave more than one reason in one or the other (or both) of the items. We coded up to three reasons for each of the two items.

Drug-use follow-up interviews were conducted with 159 participants. (This number includes participants whose first positive urine test occurred after the first year.) In 41 of the 159 drug-use follow-up interviews, the participant denied using a drug in ISP. Thus, 118 participants admitted in our interviews having used a drug while in ISP. Because several of the 118 who answered our questions about their drug-use in ISP gave more than a single reason, the following percentages total more than 100 percent.

Table 4.1 shows that 36 percent of those who admitted in our drug-use follow-up interviews to having used drugs in ISP cited pressure, stress, or problems as one of the reasons for their use

Table 4.1. Reasons Participants Mentioned in Response to: "Why Did You Use the Drug?" and/or "When You Were Thinking about Using the Drug, What Things Made You Decide to Go Ahead and Use It?"

Type of Reason Mentioned	Number Who Mentioned It	Percent Who Mentioned It
Peer Influence	52	44.1
Pressure, Stress, or Problems	43	36.4
Emotions (Sad, Angry, Frustrated, etc.)	27	22.9
Utility of Drug Use (Strong Want or Desire)	25	21.2
Low Probability and/or Severity of Punishment	17	14.4

of drugs. These responses may be accurate reasons or they may be excuses initially made to their ISP officers (and later repeated to us) in hope of getting sympathy and avoiding the more severe levels of punishment. The most common reason, mentioned by 44 percent, was peer influence. Here "peers" can include friends, lovers, and relatives. ISP officers continually warn against contact with drug-using acquaintances. Richard Talty, the Director of the Intensive supervision Program, has noted that most ISP officers consider contact with drug-using peers to be a compounding of the infraction of drug use rather than a mitigating factor. Thus, peer influence seems less likely to have been offered merely as an excuse by participants, and more likely to have been, in their honest opinion, a causal factor in their drug use.

Another reason, mentioned by 21 percent, was a strong want, need, or desire for the drug.

Still another reason, mentioned by about 14 percent of the respondents, was thinking that they would not get caught and/or that they would not be punished severely. If we were to use the latter item as a criterion, we might estimate that about 14 percent of the drug recidivists fit a subjective deterrence model. It was logical for these particular individuals to resume drug use: at the time they thought that they would not be caught and/or that if they were caught they would not be punished severely.

Table 4.2 shows that there is a substantial difference between the Drug-use Follow-up Interviews and the Success Follow-up Interviews (interviews with people who used drugs in the year before ISP but abstained while in ISP). The drug users who abstained from drug use while in ISP were more likely to report feeling no appreciable desire (utility) for drug use while in ISP (87.3% compared with 38.8%). The mean score of the abstainers on this scale was 8.4, compared with a mean of 37.3 for the drug users.

Table 4.2. Merged Responses to Follow-up Items: "Did you ever feel a desire to get and use Marijuana or any other illegal drug while in ISP?" and "When you thought about using the drug, how strong was the urge?"

Label on Response Scale	Numeral on Response Scale	Drug-use Follow-up	Success Follow-up
No desire / Hated idea	0	54* 38.8%	69* 87.3%
	10	2 1.4%	1 1.3%
	20	2 1.4%	-
	30	8 5.8%	1 1.3%
	40	2 1.4%	-
In the middle	50	37 26.6%	2 2.5%
	60	4 2.9%	-
	70	5 3.6%	1 1.3%
	80	5 3.6%	2 2.5%
	90	3 2.2%	1 1.3%
Loved idea of using drug	100	17 12.2%	2 2.5%
TOTAL		139 99.9%	79 100.0%

* Includes respondents who answered that they felt no desire to use drugs in ISP.

Those who reported in the follow-up interview that they did feel a desire to use an illicit drug while in ISP and thought about the chances of getting caught were asked: "When you were thinking about using a drug and the chances of getting caught, what did you think the chances were that you might not only get caught but also get revoked to prison if you used the drug?"

Only 12 of the Success Follow-ups both felt a desire for drugs and also assessed the likelihood of getting revoked if they were to use drugs. Table 4.3 is a crosstabulation of the subjective probabilities of getting caught and revoked to prison by drug-recidivist versus drug-abstainer status. The mean score of the abstainers was 69.2, compared with a mean of 58.0 for the drug users. (If we could assume independent random sampling variation, this difference would not satisfy the .05 level of significance.) Thus, although the direction of the difference in responses is a slight indication that assessment of the probability of punishment might help to explain differences in drug-recidivism for a minority of drug-users in ISP, the number of drug abstainers is small and the difference is not statistically significant.

Table 4.3. "When you were thinking about the chances of getting caught, what did you think the chances were that you might not only get caught, but also get revoked to prison if you used the drug?"

Label on Response Scale	Numeral on Response Scale	Drug-use Follow-up	Success Follow-up
No chance to be caught	0	7 10.6%	-
	10	3 4.5%	-
	20	4 6.1%	1 8.3%
	30	4 6.1%	-
	40	-	1 8.3%
Fifty/fifty chance	50	15 22.7%	4 33.3%
	60	2 3.0%	-
	70	7 10.6%	1 8.3%
	80	6 9.1%	-
	90	4 6.1%	-
Certain to be caught	100	14 21.2%	5 41.7%
TOTAL		66 100.0%	12 99.9%

* Since few of the Success Follow-ups felt a desire to use drugs, few considered the chances of getting caught if they were to use drugs.

The preceding tables give the main patterns of responses found in the drug-use follow-up interviews. To provide some context for these analyses and more detail, we present direct quotes of answers given in response to the question:

> We researchers at Rutgers University wanted to interview participants who have had some difficulty with ISP. ISP has given us a list of people that they have written a drug incident report on, and your name was on the list. Please think back to the time you used the drug in ISP. Why did you use the drug?

(Preceding each answer is the Study ID number assigned to the participant.)

2 "Peer pressure.... Thought I could beat the system."

12 "The reason was: I was unhappy and depressed. I came home to a miserable home. I had to move in with my uncle, imposing on him. ISP didn't help me move into another place.... I took it out of frustration. That was a dumb move. I should have known that it was wrong."

14 "I was around the wrong people. It was a bad day: my fifteen-year-old told me she was drunk the night before. I did one line of coke, and my officer 'violated' me. I know of other people who got caught using coke, and they didn't get violated. I thought if I was honest, I wouldn't get violated."

34 "I was bored, and it just got to me.... I wanted a change, so I just did it."

37 "I was having problems at work and problems with my ex-girlfriend.... Pressures from job and girlfriend."

119 "Other guys had said that they had a dirty urine and not gotten sent back. I figured if I had three strikes [positive urine tests], I would try one strike. I fell into the trap of being around the wrong people at the wrong time. I didn't have a job, and my officer said I would go back. I figured they are going to send me back for <u>something</u>, not just for not having a job."

133 "They have stuff in drugstores that clean out your urine.... I thought about if I'm going back to jail or not if I use. But somebody told me if I drink vinegar that would clean out my system. It made me really sick to my stomach."

139 "I was having a health problem and turned to drugs, heroin and cocaine, to cope with problems."

174 "Seeing people in the treatment program. They were talking about ways to beat the system: clean your urine out so urinalysis wouldn't detect it.... Seeing everybody else use it.

190 "I was in a serious depression. My fiance, who is my live-in girlfriend, left me. I didn't know the NA [Narcotics Anonymous] guys. My community sponsor left the state. I didn't have a good rapport with my ISP officer. Some old friends at a party offered me stuff. And I noticed that some guys had two positive urines, and they just got extra community service [work required].

197 "I was under a lot of pressure. ISP puts people under a lot of pressure. You feel like you're boxed in.... I just didn't give a shit. I had just been released [for a few weeks], but I started feeling down. I can be self defeating at times.... I was notified that my ex-wife wants her fiance to adopt my son.

211 "I ran into an old friend who invited me to his house where he began smoking cocaine. After smelling it, I decided to smoke it."

239 "I was feeling down and feeling tired of the program. I felt like I was still in jail. I just took the first drug without thinking about the consequences. I thought I wouldn't get caught this once. I thought I could 'get over' [con the program]. They said 'Stay away from old associates,' but in [name of city] all my old friends use drugs. Everywhere you turn there are drugs. Temptation is everywhere."

242 "I was under stress...had fines backed up, child support backed up, money problems.... I just got tired of it.... Drugs took a lot off my mind, and I didn't pay for drugs all the time!"

254 "I don't know. I didn't wake up thinking: 'I am gonna get high.' I thought I could get away with it."

275 "I was at a card game, and friends were smoking [marijuana], and I just simply took a few hits."

283 "I was having personal problems. And drinking wiped me out so I had no control."

292 "Well, first I drank for personal reasons. Then, after being drunk in a bad state of mind, used drugs. It's a long story: depression, stress, not succeeding. A lot of excuses, but none good enough.... [Friends] came around with the stuff, and I was drunk at the time."

297 I had a fight with my girlfriend. I didn't get to see my son because of curfew, NA meetings, and community service. I felt depressed, so I smoked some pot and drank a few beers."

311 "I went to cash my check at a bar near my job. I saw some people I work with drinking at the bar, and I had a drink with them. Then I went to a housing project with them with the intention of getting high. And I did use drugs.... I wanted to be a part of the group."

365 "Pressure. I was working seven days a week and going to meetings and counseling at [name of counseling service]. So-called counselling, because we never talked about drug use. A problem with drugs doesn't go away quickly. It needs long-term, good counselling.... [Friends] told me I could beat the urine testing."

372 "I was just around the wrong people at the wrong time.... [Friends said] 'Try this....you'll feel better'".

396 "I didn't think I'd get caught."

405 "I was around with these guys, and they started talking about drugs, and I wanted to get high again.... I was with my cousin who said, 'Let's go and get high.'"

424 "I was feeling down, and the drug was offered. I didn't think about it, I just did it."

441 "Family problems, stress, pressure."

445 "I couldn't find a job. I didn't want to be in the house at 6:00 pm [curfew]. I was rambunctious. I figured: if they catch me, they catch me. A couple of friends came around saying, 'Let's go get high.... Here's how to beat the urine."

487 "I was around the wrong people. I guess peer pressure. And I didn't think I'd get caught.... [Friends] were there, and they had it."

492 "A friend of mine was smoking cocaine, and I smelled it, and just took a puff off of it. I used it out of stupidity -- just on the spur of the moment.... I didn't think I would get caught."

509 "Spur of the moment...with the wrong crowd."

515 "A girl I met was on cocaine. Before you know it, I was smoking along with her. In order to be with her, I had to get high."

517 "Friends were doing drugs and influenced me to participate. I was feeling lonely and depressed and availability of drugs was there."

519 "I was with some people using drugs, and I fell into the party.... They said 'come on,' and told me how to beat the urine test.

525 "I was feeling depressed about my uncle with a heart problem in the hospital and turned to using the drug to forget about this."

526 "I used the drug just out of habit, because of prior drug usage.... [Friends] made it available, and they encouraged me to 'have fun.'"

537 "My friends were using drugs, and they asked if I wanted to, and I did. They were smoking marijuana.... I wanted to be a part of what was going on in the group."

541 "I had a lot of problems in my living situation. I couldn't find and keep a job. The stress and strains were tremendous. I happened to meet an old school friend who suggested doing some drugs. ... [She] saw I was upset and offered the drug to me.

543 "I was influenced to use cocaine by an ISP participant in our group and figured I had one chance to get high, and I did. I figured that ISP would not return me for one positive urine."

The preceding quotations are open-ended responses from the drug-use follow-up interviews. The success interviews were designed for participants who reported having used drugs prior to ISP and who made it through at least a full year in ISP without being the subject of a drug-use incident report. As expected, virtually all of the 85 participants we talked with in Success Follow-up Interviews denied using drugs in ISP. We followed this up by asking, "Did you ever feel a desire to get and use marijuana or any other illegal drug while in ISP?" About 83 percent of these successful respondents answered, "No." (This response concluded the interview.) In most cases, this response probably indicated that the utility of drug use for them was quite low. However, in retrospect, we wonder whether some of these respondents may have meant that they had not "felt a desire to use drugs" because they were afraid of the risks involved. We have no way of knowing whether some had this in mind.

The relatively few successful (drug-abstinent) participants who answered "Yes" to "Did you ever feel a desire to get and use marijuana or any other illegal drug while in ISP?" were then asked what things had made them decide <u>not</u> to go ahead and use the drug. The open-ended answers they gave are listed below.

21 I would call my sponsor from NA [Narcotics Anonymous]. ... [later in the interview] I work hard, race radio-controlled cars [a hobby] ... Go to NA and work the steps in the program...one step at a time!

40 Thinking about disappointing my parents and my girlfriend .... The fear of jail deterred me.

84 The consequences.

104 Thinking about my son, my health.

107 Realize I can't control myself when I start [to use a drug]. ... I use physical activity. Plenty of work. Keep your mind occupied.

118 I think about my family and freedom.

121 My support group. Thinking about the long term consequences. Thinking the "high" through. Without NA, I would not have remained sober for almost two years.

165 If you use, you will get caught.

180 Loss of freedom.

253 I'm getting married, have a good job, I think clean, and everything in general is better straight.... Sooner or later, you're going to hear someone tell your "story" at an NA or AA meeting.... Meetings are very helpful.

429 Thinking about my wife, family, business, my kid....

475 NA leadership. ... I go to programs [ISP, NA], work, and family. ... To make the program work, you've got to make the change yourself. Go to meetings.

524 The consequences of drug use in ISP and my life. ... Going to jail.

The Success Follow-up Interviews suggest that three factors may be particularly important in the drug-abstinence of these participants: (1) the utility of drug use was relatively low, (2) they remained aware of the credible deterrent threat in ISP ("the consequences"), and (3) they cited counseling as helping them "stay straight." (Narcotics Anonymous was mentioned most frequently, probably because this is the most prevalent form of drug abuse counseling in ISP).

The above explorations of subjective deterrence in ISP are based on interviews with drug-recidivists after they incurred a drug-use incident report and on interviews with former drug-users after they had successfully abstained from drug use for at least a year in ISP. No rigorous research design is involved in comparing these groups; they do not constitute an experimental group compared with a control group. Furthermore, the data are retrospective; the participants were presumably relying on their

recollections of their thoughts about the possibility of using drugs weeks earlier.

Thus, these recollections of the drug-successes and drug-recidivists confirm that their differential utility of drug use was a major explanatory factor. Twenty-one percent mentioned reasons we subsume under the utility of drug use.

However, these retrospective interviews are less clear about the role of subjective probabilities of severe punishment. For an extremely conservative estimate of the influence of subjective probabilities, recall that in their own accounts of why they resumed drug use 14 percent cited the (low) probability of experiencing severe punishment. For a more generous estimate, note that of the sixty-six in the Drug-use Follow-up interviews who said that they had thought about the chances of getting caught, 27 percent reported a subjective probability estimate of .3 or less that they would be caught and revoked.

However, comparable or higher percentages of drug-recidivists cited emotional influences (23%), stressful events in their lives (36%), and, most commonly, peer influence (44%).

CH. 5: PREDICTIONS FROM BASELINE INTERVIEWS

In this chapter we analyze the relationships between variables measured early in the participant's experience of ISP and subsequent drug-abstinence or drug-use recidivism. The tests of hypotheses reported here thus involve truly prospective predictions rather than cross-sectional analyses. Hypothesis tests that were not contemplated prior to the collection of the data were first tested on a 20 percent exploratory data analysis subsample of the research cohort.

General Patterns of Drug-Use Recidivism

As expected, the utility that drug use had for ISP participants in the year they were free (prior to being committed to state prison and then being released into ISP) was predictive of drug use later on while they were in ISP. Tables 5.1 and 5.2 show that frequency of drug use and the number of different drugs used are each significantly related to later, recidivist drug use. Figure 5.1 is a survival analysis showing the survival time until a drug-use incident occurred (if one did occur). It can be seen that the participants who admitted drug use prior to ISP tested positive for drug use far more quickly than those who denied such prior drug use.

Table 5.1. Recidivist Drug Use by Frequency of Drug Use in the Final Month Free Before Entering ISP.

Count, Row Percent	DRUG-USE INCIDENT REPORT WHILE IN ISP		
USE OF DRUGS MONTH BEFORE	No	Yes	Row Total
No days	198 83.2	40 16.8	238 53.4
1 or 2 days per month	11 68.8	5 31.3	16 3.6
1 day per week	7 77.8	2 22.2	9 2.0
2 days per week	24 82.8	5 17.2	29 6.5
3 days per week	17 73.9	6 26.1	23 5.2
Every other day	7 87.5	1 12.5	8 1.8
4 days per week	9 100.0		9 2.0
5 days per week	6 85.7	1 14.3	7 1.6
6 days per week	4 66.7	2 33.3	6 1.3
Nearly every day	17 73.9	6 26.1	23 5.2
Every day	47 60.3	31 39.7	78 17.5
Column Total	347 77.8	99 22.2	446 100.0

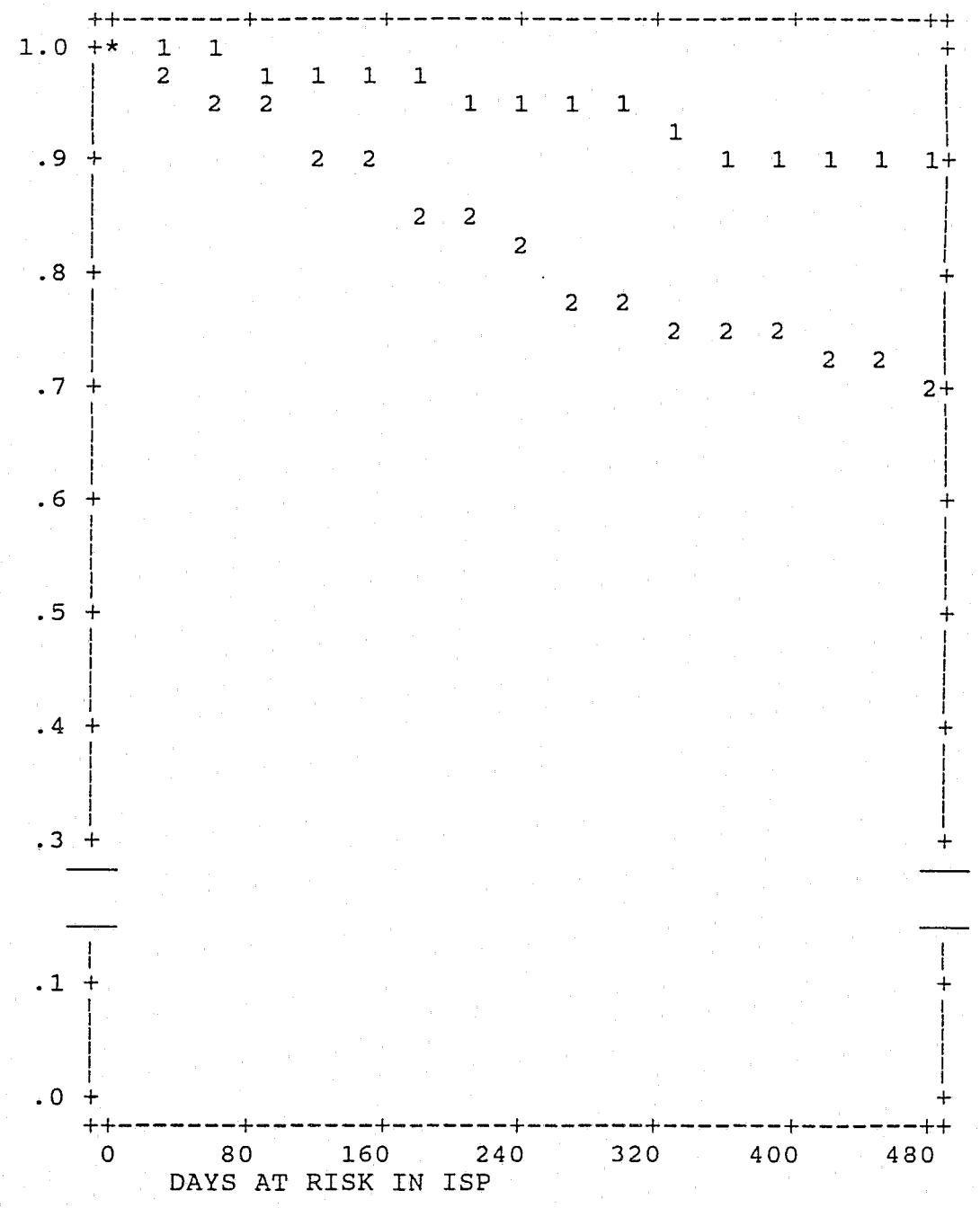
Kendall's Tau C = .150 (T-value = 3.39)
Gamma = .304 (T-value = 3.39)

Table 5.2. Recidivist Drug Use by Number of Different Drugs Used in the Year Free Before Entering ISP.

Count, Row Percent	DRUG-USE INCIDENT REPORT WHILE IN ISP		
# DIFFERENT DRUGS USED	No	Yes	Row Total
0	158 90.8	16 9.2	174 36.6
1	84 70.6	35 29.4	119 25.0
2	83 75.5	27 24.5	110 23.1
3	27 75.0	9 25.0	36 7.6
4	15 75.0	5 25.0	20 4.2
5	5 50.0	5 50.0	10 2.1
6	2 50.0	2 50.0	4 .8
7	2 66.7	1 33.3	3 .6
Column Total	376 79.0	100 21.0	476 100.0

Kendall's Tau C = .174 (T-value = 4.42)
Gamma = .334 (T-value = 4.42)

Figure 5.1. Survival Time to Drug-Use Incident, Grouped by Drug Use in Year before ISP (1 = None, 2 = Some Drug Use)



LEE-DESU STATISTIC 20.933; D.F. = 1; PROB. = 0.0000

GROUP	LABEL	TOTAL N	UNCEN	CEN	PCT CEN	MEAN SCORE
1		150	13	137	91.33	54.920
2		327	88	239	73.09	-25.193

Table 5.3 shows that the particular type of drug used prior to ISP seems to be related to drug-use recidivism. Relatively few persons citing prior use of "uppers" or marijuana relapsed to drug use in ISP. Relatively higher percentages of those citing use of crack cocaine (as opposed to the less potent ways of ingesting cocaine), LSD, and PCP relapsed to drug use in ISP. These patterns may be related to the substance's intrinsic powers to addict people or induce psychological dependency. Then, again the relationships may be spurious. Perhaps the real connection is depth of involvement in drug use. This would mean that those more deeply involved would be more likely to try a variety of drugs, and those less deeply involved would limit themselves to occasional, "social use" of uppers, marijuana and cocaine.

In fact, crosstabulations controlling for use of one, two, or three-or-more drugs prior to ISP showed that citing marijuana as a drug used was associated with recidivist drug use about 9 to 13 percentage points lower than those who did not mention marijuana. Cocaine <u>per se</u> was linked with higher drug-use recidivism, but only when the participant reported using other types of drugs as well. Using the same controls for numbers of drugs used, citing crack as a drug used was associated with recidivist drug use ranging from 8 to 49 percentage points higher than those who did not mention crack. However, because the numbers of cases per cell dwindles in such trivariate crosstabulations, the associations just mentioned did not reach the .05 level of statistical significance.

Table 5.3. Recidivist Drug Use by Having Used a Particular Type of Drug in the Year Free Before ISP.

Count, Row Percent	DRUG-USE INCIDENT REPORT WHILE IN ISP		
DRUG USE IN YEAR PRIOR ISP	No	Yes	Row Total % (N)
No Drug Use	88.3	11.7	100.0 (163)
"Uppers"	78.6	21.4	100.0 (28)
Marijuana	74.7	25.3	100.0 (186)
Cocaine	73.0	27.0	100.0 (222)
Heroin	69.4	30.6	100.0 (62)
"Downers"	66.7	33.3	100.0 (33)
Crack Cocaine	60.9	39.1	100.0 (46)
LSD	60.0	40.0	100.0 (20)
PCP	56.3	43.8	100.0 (16)

Table 5.4 shows that, of the 343 respondents who said they used drugs at a rate of at least one day per month in the year they were free before entering ISP, about 60 percent never tested positive in any urinalysis for at least a year during ISP. This might be used as a rough estimate of the objective deterrent effects of ISP: about 60 percent of those who used drugs in the year before ISP did not use drugs <u>in</u> ISP.

Table 5.4. Drug Use after Entering ISP by Drug Use in the Year before Entering ISP.

		Drug Use before ISP		
		Less than One Day per Month	At Least One Day per Month	Row Total
Drug Use After Entering ISP?	No	144 83.2%	208 60.6%	352 68.2%
	Yes	29 16.8%	135 39.4%	164 31.8%
	Column Total	173 100.0%	343 100.0%	516 100.0%

Because we do not have an arranged, randomized experiment, we cannot <u>prove</u> that the apparent 60 percent drop in drug use was the result of ISP. A skeptic might argue that some portion of the 60 percent might have given up drug use for a year while free in the community even without the urinalyses and deterrent threat provided by ISP. It may be true that a few offenders would have given up drug use without ISP, but it is unreasonable to assume that a <u>large</u> percentage would have abstained from drug use for at

least a full year for reasons completely unrelated to ISP's high-deterrence policies.

In a skeptical frame of mind, one will bear in mind that there probably were some false negative urinalysis tests. That is, some percentage of participants may have used marijuana, cocaine, heroin/morphine substances, uppers, downers, LSD, or PCP without being detected by the urinalysis. This could occur if two of the unpredictable urine tests happened to be over a week apart, and the participant used the day after the first test. The traces of the illicit substance in the urine may have dropped below detectable levels by the next urine test. Suppose that we were to assume that 10 percent of the 208 prior drug users who seemingly did not use drugs in ISP actually had used drugs. (Even though we think that would be a gross overestimate of the true error rate.) Moving those twenty-cases from abstainers in ISP to the drug-users in ISP category would only decrease the abstainer percentage from 60 percent to 55 percent.

We think that very few of the 208 we classified as abstainers were in a meaningful sense drug users in ISP. Although some may have gotten by with using an illicit substance once or twice, very few could have gone undetected using drugs at the rate of one or two episodes per month for at least a year in ISP. First, recall the high frequency of urine tests in ISP. It could conceivably be true that the false negative percentage might be as high as 10 percent on any single urine test. However, consider the chances of avoiding any positive reading on

each and every one of the 40 or so urinalyses that prior drug users experience just in their first year in ISP. The chances of cumulative false negative misclassification over a full year is surely much lower than 10 percent. Second, ISP is aware of the hazards of habitually spacing the urine tests several days apart. ISP officers sometimes schedule urine tests only one or two days apart. They occasionally find some very surprised and chagrined participants.

Another point of interest in Table 5.4 is that, of the 173 participants whose response was that they had not used drugs at all or at a rate of less than one day per month before entering ISP, 29 tested positive for drug use after entering ISP. It is conceivable that some of these participants were drug-free before ISP and that something about the program made them start using drugs despite the apparent deterrent threat. (In our drug-use follow-up interviews, a couple of participants did blame the program for their drug use, claiming to be exasperated by the restrictions.) Perhaps a couple more of the 29 had false positive urinalysis results, and did not really use a drug in ISP. We think the false positive rate is low not only because of the assurance of the laboratory that conducts the urinalyses, but also because we have usable follow-up interviews with 27 of these 29 cases, and ten (37 percent) of them admitted using drugs in ISP.

Another possibility to consider is whether some of the 29 participants who selected zero as their response to this item did

so because they only used drugs fewer than six times per year, and their continued infrequent use while in ISP was detected by the frequent urinalyses. However, Table 5.5 shows that using the BNODRUG item (any illegal drug use in the year before ISP) does not significantly alter the pattern: here the rough estimate is that 61 percent were objectively deterred from drug use in ISP.

However, the most plausible explanation of the 29 dubious cases in Table 5.4 is that they actually had used drugs at least monthly before ISP even though they did not say this in the Baseline Interview. Street-smart drug users might think that if they consistently deny any prior drug use, even when talking to the researchers from Rutgers University, they might be monitored a little less closely by ISP officers. Thus they would have a better chance of resuming drug use without getting caught. If, post hoc, we recategorize the 29 as drug-users-before-ISP, then

Table 5.5. Drug Use after Entering ISP by Any Drug Use in the Year before Entering ISP.

		Drug Use before ISP		
		Used No Drug in the Year	Used at Least One Drug in the Year	Row Total
Drug Use After Entering ISP?	No	133 84.2%	219 61.2%	352 68.2%
	Yes	25 15.8%	139 38.8%	164 31.8%
	Column Total	158 100.0%	358 100.0%	516 100.0%

the rough estimate becomes 56 percent deterred from drug use while in ISP. (This gives ISP all of the "blame" for failing to deter those 29 cases of drug use in ISP without giving it credit for deterring any of the 144 who might really have been drug-users-before-ISP.)

ISP includes counseling programs as well as the threat of punishment. For some of the 60 percent who did not test positive for at least a year in ISP, the risks of punishment (including prison) could conceivably have been completely ineffectual with only the counseling producing the drug abstinence. However, for most drug users in ISP the deterrent threat and the counseling probably complemented each other in producing drug abstinence. The deterrent threat probably provided a considerable part of the motivation for drug abstinence, while the counseling may have provided help in attaining the goal of abstinence.

Thus, ISP may have objectively deterred 60 percent from drug use, 50 percent, 40 percent, or a still smaller percentage. However, it is unreasonable in view of these results to favor the null hypothesis that ISP's deterrent threat had no significant effect on drug-using behavior at all. These results are more supportive of the hypothesis that high objective probabilities of months of imprisonment do significantly reduce the rates of drug use.

Psychological and social psychological research has shown that in some circumstances objective changes in the probabilities and amounts of reward and/or punishment can alter individuals'

behavior without them being aware of the influence. In short, objective deterrence of drug use need not be accompanied by subjective awareness of being deterred.

Can deterrence variables from the Baseline Interview predict variation in drug-recidivism at a later time for ISP participants?

The orienting model we have been using is the Rational Choice / Subjective Expected Utility (SEU) model. In this project, the theory entails the prediction that an individual will use an illicit drug while in ISP if the SEU associated with drug use is greater than the SEU associated with abstaining from drugs. One hypothesis is that whether or not an individual uses an illegal drug in ISP primarily depends on (1) the individual's utility (desire) for the experience of using an illegal drug, and (2) the individual's subjective expected utility of prison, relative to ISP. Some combinations of predictors are straightforward. If an individual strongly desires the drug experience and would prefer to be back in prison rather than in ISP, he will use a drug. If an individual has little or no desire to experience illicit drugs, he will not use drugs in ISP even if he prefers prison to ISP. (Such a person could petition to be returned to prison; he need not use drugs to be returned to prison.)

For other individuals, ISP is a "mixed-motive situation." Hence, the choice is not so clear-cut. On the one hand, these

pre-ISP-drug-users would like to use drugs in ISP; on the other hand, they do not want to be revoked to prison. For these individuals, drug-recidivism should be a function of (1) the utility of drug-use, (2) the utility of remaining in ISP weighted by the subjective probability of being able to remain in ISP if they use drugs, and (3) the utility of prison weighted by the subjective probability of being revoked to prison. For these individuals, drug recidivism will be directly related to the utility of drugs and inversely related to the interaction between the probability of being returned to prison and the utility of prison (relative to ISP). For these individuals, conversely, drug abstinence will be inversely related to the utility of drugs and directly related to the expected utility of remaining in ISP until successful discharge.

We expected that other variables (e.g., peer influence) would add to the predictive power of the SEU and deterrence models. Because it would be inappropriate to explore the data first to locate promising variables and then cite the statistical significance levels for those variables, one-fifth of the sample was examined first. Some analyses on this one-fifth sample were conducted as preliminary tests of the SEU/deterrence models and others were designed to search for other promising variables that should be included in the model. The remaining four-fifths of the cohort was set aside for final hypothesis tests after the exploratory data analyses had been completed. Due to coordination problems and the practical difficulties of

conducting house-to-house interviews on a state-wide basis, we were unable to contact several participants until after a drug-use incident report was filed. To preserve the correct time sequence of Baseline measurements occurring first and ISP drug-use/abstinence occurring later, these cases with problematic time sequence have been excluded from the analyses we report here.

Many statistical analyses confirmed that measures of the participant's utility for drugs recorded in the Baseline Interview were statistically significant predictors of drug-recidivism later in ISP. These drug-utility measures included frequency of drug use in the year free before entering ISP, frequency of drug use in the last month free before entering ISP, and the number of different types of drugs used in the year before entering ISP.

However, analyses on the one-fifth exploratory sample (and later on the four-fifths confirmatory sample) did not support the hypothesized inverse relationship between drug-recidivism on the one hand and the interaction between the probability of being returned to prison and the utility of prison (relative to ISP) on the other hand.

What "failed" in these analyses were the measures of the utility of ISP (relative to prison). Table 5.6 focuses on participants who used drugs in the year prior to ISP. Approximately 91 percent definitely preferred ISP to prison.

Table 5.6. How Many Months on ISP Would It Take To Be As Unpleasant As Six Months in Prison? (Shown Are Only the Participants Who Used a Drug At Least One Day Per Month Prior to ISP.)

Response #	Value Label	Frequency	Valid Percent
0	1 month	9	3.0
1	3 months	7	2.4
2	6 months	11	3.7
3	9 months	18	6.1
4	12 months	44	14.9
5	15 months	20	6.8
6	18 months	34	11.5
7	21 months	18	6.1
8	24 months	18	6.1
9	27 months	3	1.0
10	30 months	114	38.5
	Don't Know	1	
	No Answer	1	
	Not Asked*	43*	
TOTAL		341	100.0

* As a result of the early field interviews we added questions that seemed promising. This was one of those questions not asked in the early interviews; it was added to the list of questions later.

Another 3.7 percent rated prison and ISP about the same. Only about 5.4 percent rated prison as more pleasant than ISP. Thus, almost everyone preferred ISP to prison. We believe that the main reason for the failure of the utility-of-ISP/prison variable to predict drug use was the lack of variation in this utility variable.

Another issue to be raised is that of the possibility of instability in utilities. Maybe most people prefer ISP to prison at the time of the Baseline Interview but as they experience more months of this demanding program (and as the unpleasantness of prison may fade in their memories) many would switch to preferring prison to ISP. (This could reflect a "The grass in always greener in the neighbor's yard" phenomenon.)

In fact, instability of the utility of ISP relative to prison does not seem to be too much of a problem. As Table 5.7 shows, most participants were rather stable in these utilities. Most did not alter their ISP/prison preferences from the Baseline Interview to the Drug-use Follow-up Interview. Although several did lower their rating of ISP, few seemed to prefer prison. Furthermore, because the Drug-use Follow-up Interview occurred after a drug-use incident, these follow-up ratings followed unpleasant confrontations with their ISP officers (which might be expected to make ISP seem less pleasant.)

Table 5.7. Among those with a Drug Use Follow-up Interview, Stability of Preference Rating of ISP relative to Prison.

	Time T1 Baseline Preference of ISP Relative to Prison											
T2	0	10	20	30	40	50	60	70	80	90	100	Row Sum
0	6					1					2	9
10		1										1
20											2	2
30				1							2	3
40					1							1
50						6					7	13
60							1		1		2	4
70								4		1	3	8
80									2			2
90											2	2
100		1				3	1		3	1	99	108
Col Sum	6	2		1	1	10	2	4	6	2	119	153

Pearson's r = +.65

What about possible instability in the participants' subjective assessments of the probability of getting caught and revoked to prison, if they were to use drugs while in ISP.

As Table 5.8 shows, there may be a little less stability in this measure, but the main trend is one of stability. Notice that in this table as well, the Pearson product-moment correlation coefficient is still about +.6.

Table 5.8. Among those with a Drug Use Follow-up Interview, Stability of Estimates of the Probability that a Street Smart Person Who Used Drugs Just Once Would be Caught and Revoked to Prison.

	Time T1 Baseline Subjective Probability											
T2	0	10	20	30	40	50	60	70	80	90	100	Row Sum
0	5					1	1				3	10
10		6		1		1						8
20		1	2		1	1						5
30				2		1			1	1		5
40	1			1	1	1				1		5
50	2	1				19	3	1	4	4	7	41
60							3		1			4
70						1	2	3	1	1	4	12
80				1			1		11		3	16
90						3			2	5	4	14
100						4			1		14	19
Col Sum	8	8	2	5	2	32	10	4	21	12	35	139

Pearson's r = +.60

Measures of the subjective probability of getting revoked to prison for drug use were by themselves not significantly related to later drug use in ISP. However, testing subjective probability by itself is not a relevant test of subjective expected utility. A meaningful test must include the expected utility of using drugs as well as the subjective probability of a revocation to prison. This means that a person who has no inclination to use drugs will not use drugs, regardless of his subjective probability estimate of revocation. Another implication is that, for people who are inclined to use drugs, the interactive combination of higher motivation to use drugs and lower probabilities of revocation to prison will predict higher rates of drug use in ISP.

One way of dealing with the theoretically implied different predictions for those motivated to use drugs and those not motivated to use drugs is to construct predictions "piecewise." Thus, in the hypothesis tests conducted on the four-fifths sample of the cohort set aside for confirmatory analyses, for those who reported zero frequency of drug use in the year prior to ISP we assigned a value slightly higher than those whose probability estimate was "certain to be caught and revoked." As Table 5.9 shows, the pattern is consistent with SEU theory. The negative tau and gamma coefficients show that the values of no motivation to use drugs and higher subjective probabilities of getting returned to prison in the Baseline Interview are associated with

Table 5.9. Baseline Interview Answers to "Suppose a really street-smart person who is in ISP used drugs just once. What would you guess are his chances of not only getting caught, but also getting revoked to prison?" Related to later Drug Use in ISP. (Four-fifths Confirmatory Sample Only.)

LABEL ON RESPONSE SCALE	NUMERAL ON RESPONSE SCALE	NO DRUG INCIDENT IN ISP	ONE OR MORE DRUG INCIDENTS IN ISP	ROW TOTALS
No chance	0	5 83.3%	1 16.7%	6 100.0%
	10	3 75.0%	1 25.0%	4 100.0%
	20	6 100.0%	-	6 100.0%
	30	3 60.0%	2 40.0%	5 100.0%
	40	2 100.0%	-	2 100.0%
50/50 chance	50	32 62.7%	19 37.3%	51 100.0%
	60	5 50.0%	5 50.0%	10 100.0%
	70	5 83.3%	1 16.7%	6 100.0%
	80	13 72.2%	5 27.8%	18 100.0%
	90	19 21.2%	8 29.6%	27 100.0%
Certainly Revoke	100	45 75.0%	15 25.0%	60 100.0%
No Drug Utility	Assigned "101"	112 90.3%	12 9.7%	124 100.0%
Column Totals		250	69	319

Kendall's Tau C = - .199 (T-value = -4.09)
Gamma = -.352 (T-value = -4.09)

drug abstinence later in ISP. The T-values are statistically significant at the .05 level.

To give another example, this form of analysis was used on the item asking when a participant who tests positive for drug use is most likely to be returned to prison. The response options were: after the first positive urine test, after the second positive urine test, and so forth. For piecewise analysis, we assigned a value of zero for those who reported zero frequency of drug use in the year before ISP. As Table 5.10 shows, the pattern is consistent with SEU theory. The positive tau and gamma coefficients reflect that, "on the average," participants with higher scale values were more likely to use drugs later in ISP. Participants with seemingly no utility for drugs were least likely to use drugs in ISP. For participants who appeared to have some motivation to use drugs (based on their report of having used drugs in the prior year), those with higher scale values had a higher incidence of drug use later in ISP. In other words, those who thought it would be unlikely for them to be returned to prison for one or two positive urine tests were more likely to use drugs later in ISP.

Table 5.10. Baseline Interview Answers to "Do you think an ISP participant is most likely to be returned to prison .. after the __ positive urine test?" Related to later Drug Use in ISP. (Four-fifths Confirmatory Sample Only.)

Label on Response Scale	Numeral on Response Scale	No Drug Incident in ISP	One or More Drug Incidents in ISP	Row Totals
No Drug Utility	Assigned "0"	112 90.3%	12 9.7%	124 100.0%
	1st Pos. Urine	56 74.7%	19 25.3%	75 100.0%
	2nd Pos. Urine	53 82.8%	11 17.2%	64 100.0%
	3rd Pos. Urine	23 57.5%	17 42.5%	40 100.0%
	4th Pos. Urine	1 50.0%	1 50.0%	2 100.0%
Column Totals		245	60	305

Kendall's Tau C = .199 (T-value = 3.93)
Gamma = .410 (T-value = 3.93)

This analysis involves a combination of effects. On the one hand, about 41 percent of the cases were clustered in the "no drug utility" row, thus contributing a lot to the observed pattern. On the other hand, the measure of the subjective probability of revocation was also associated with the incidence of drug use.

Apart from rational choice variables, peer influence was the only other variable consistently related to drug use in ISP. Table 5.11 presents the percentages of participants with a drug-

use incident by the percentages of their friends who used drugs (prior to ISP) and by the participant's own prior drug use. The general tendency is that drug use in ISP increases as the categories reflect higher percentages of peer drug use, within each of the categories of the participant's own reported use of drugs prior to ISP. (The lone exception is a cell with only 3 cases.) This admittedly indirect evidence suggests that peer influence was one important factor in recidivist drug use.

Table 5.11. Percent with a Drug-Use Incident by Prior Drug Use by Friends and by the Participant's Own Prior Drug Use.

	% Drug Incident (Base)	BEFORE YOU WENT TO PRISON, WHAT PERCENTAGE OF YOUR FRIENDS USED DRUGS?			
		Under 5%	5% to 84%	Over 85%	ROW TOTAL
IN MONTH BEFORE ISP, ON HOW MANY DAYS DID YOU USE DRUGS?	No days	9.7 (62)	17.7 (124)	25.0 (28)	214
	1-5 days per week	33.3 (3)	16.7 (60)	20.8 (24)	87
	Nearly every day	- (0)	31.4 (35)	39.6 (53)	88
	COL TOTAL	65	219	105	(389)

In other analyses, variables were constructed to reflect a multiplicative interaction between the subjective probability of a participant's not getting revoked if he were to use drugs and a composite measure of the utility of drug use. This composite

drug utility measure was the frequency of drug use in the month free before entering ISP plus the number of different types of drugs used.

One example of the analyses conducted in terms of a multiplicative interaction between drug utility and subjective probability is presented in Table 5.12. This was part of the confirmatory hypothesis testing conducted on the four-fifths sample from the cohort. Here the dependent variable is the dichotomy of drug abstinence vs. drug use in ISP. One independent variable is the drug utility x subjective probability variable. The other variable (consistently predictive in our analyses) is the question asking: prior to ISP, what percentage of your friends used drugs? The logistic regression analysis also supports the conception of interactive effects of drug utility and subjective probability of punishment. These patterns were also found in analyses done on all participants in the cohort. In the analyses on all of the participants, the computed significance levels naturally were more impressive because of the additional number of cases.

Table 5.12. Logistic Regression of Whether or Not Participants had a Drug Incident in ISP (Dichotomy) by a measure of past involvement with drug users and a measure of the combined influence of drug utility and subjective probability.

N = 388	CONSTANT	DRUG UTILITY X PROBABILITY OF NO PRISON	BEFORE ISP, % OF FRIENDS USING DRUGS.
B Coefficient	-2.1156	.8157	.0111
B's Std. Error	.2585	.4045	.0039
Wald Statistic	66.96	4.067	8.068
df	1	1	1
Significance	.0000	.0437	.0045
Antilog of B		2.261	1.011

Another example of the confirmatory analyses using the multiplicative effects of drug-utility and subjective probability is presented in Table 5.13. This is an event history survival analysis. The dependent variable is, roughly speaking, the number of days a participant "survived" in ISP without a drug-use incident report. Those who did receive a drug-use incident report at some point while in ISP were credited with the number of days they were drug-free up to that point. The independent variables were the same as in the previous table. Again, both independent variables have statistically significant effects on drug use in ISP.

Table 5.13. Event History Survival Analysis: Time to a Drug Incident in ISP by a measure of past involvement with drug users and a measure of the combined influence of drug utility and subjective probability of prison.

N = 390	CONSTANT	DRUG UTILITY X PROBABILITY OF NO PRISON	BEFORE ISP, % OF FRIENDS USING DRUGS.
Parameter Coefficient	-8.233	.7028	.01016
Parameter's Std. Error	.2324	.3348	.003400
Parameter's F Ratio	1255.2	4.405	8.924
Antilog of the Parameter	.0002657	2.019	1.010
Antilog Std. Error		.6761	.003435
Antilog F Ratio		2.273	8.834

The preceding section outlines analyses that used Baseline Interview information to help predict whether or not persons would engage in drug use in the ensuing year. Analyses using measures of the disutility of prison were not significant, but this may be due to the lack of variance in these measures: almost everyone thought that prison was much worse than ISP. The other longitudinal predictions show that the interactive effect of drug utility with the subjective probability of punishment is statistically significant. Another significant predictor from the Baseline Interview is the question on (prior to ISP) what percentage of their friends used drugs.

In the earlier exploratory data analyses conducted on the one-fifth of the cohort set aside for that purpose, some other variables had seemed promising. The most promising of these was the Baseline Interview item "I have a lot more street smarts than most people." The more street-smart participants were more likely to have drug incidents later in ISP. However, even this variable did not consistently survive the later stage of confirmatory hypothesis testing. The nature of its involvement is unclear. Perhaps street smart persons think they can avoid being caught when even most other street smart persons would get caught. Perhaps being street smart is more an <u>effect</u> of being in the drug culture than it is a <u>cause</u> of drug use. Perhaps street smart people were more likely to lie in the Baseline Interview. For example, they might have been more likely to conceal prior drug use and to overstate their true subjective probabilities of getting caught in hope that somehow they would not be monitored as closely.

CH. 6: CONCLUSION AND IMPLICATIONS

Does New Jersey's Intensive Supervision Program actually have a significant deterrent effect upon drug use? The answer is yes. Sixty-six percent of ISP participants (343) self-reported having used an illegal drug at a rate of at least one day per month during the year they were free prior to entering ISP. Sixty percent of these "prior users" (208) were not detected using drugs in any of the frequent, unpredictably scheduled urine tests done during at least a year ISP.

When those 29 who denied monthly drug use prior to ISP but who nevertheless did receive a drug-use incident report in ISP were included in the analysis, about 56 percent of drug users apparently abstained from drug use for at least a year while in ISP.

Why was ISP able to eliminate drug use by a large fraction of former drug users? (And why was ISP probably effective at sharply reducing the frequency of drug use by some of the remaining drug users?) The most plausible answer is that a large fraction of drug users were intimidated (deterred) by the substantial risk of punishments. More formally, the objective probabilities of experiencing punishments that range from moderate (tighter curfew and more community service work) to severe (revocation to prison) were potent enough to produce significant levels of conformity in a significant fraction of the participants at risk. It is uncertain whether the motivation to

use drugs changed in the participants. Clearly, however, the deterrent situation made a significant difference in the drug-using behavior of the participants who had used drugs before entering ISP.

Note that the Intensive Supervision Program had a deterrent effect on drug-use incidents in the program despite the fact that only a small percentage of ISP participants were actually revoked to prison for one incident of drug use. (We are not implying that a larger percentage should be revoked.) However, if ISP policy were to revoke participants for their first drug-use incident, and if this fact were disseminated both officially and through the offender grapevine, the objective deterrent effects of the strict supervision would probably be even greater.

What about the subjective aspects of deterrence, the subjective expected utilities of the participants? The combination of drug-use utility and the subjective probability of receiving severe punishment was a statistically significant factor helping to account for drug abstinence/drug use. (Again, this model does not imply that the average person will think in terms of equations containing subjective expected utility estimates.) Obviously, if participants had little desire to use illicit drugs prior to ISP, they are unlikely to start using drugs in ISP. What about participants who apparently did have significant levels of desire (utility) to use illicit substances? There are modest patterns in the data showing that participants with lower subjective probabilities that prison may result were

more likely to use drugs in ISP than participants with higher subjective probabilities of prison. As hypothesized, it is the combination of utility and subjective probability that matters.

The high-deterrence environment that ISP provides produces an appreciable level of effective control of illegal behavior. However, a substantial level of drug use still occurs despite the high-deterrence environment. Why was ISP unable to reduce drug use still further?

Pearson and Weiner (1985) attempted to integrate the key concepts of twelve of the most prominent theories of criminal behavior within a simple conceptual framework. At a micro-level of analysis (rather than a social structural level) six concepts seemed to capture the essence of the theories. One of the six integrative constructs is rules of expedience. This refers to learned, cognitive processes that are oriented toward maximizing utility. The rational choice / subjective expected utility models are clear-cut examples of rules of expedience that may govern human behavior. There are other rules of expedience, however. Social modeling is another pervasive rule of expedience. The essence of social modeling is to imitate the behavior patterns exhibited by other people, especially people whose opinions you care about ("significant others"). The principle underlying the social modeling rule of expedience is: If these significant others are engaging in a behavior, you will probably find it rewarding as well.

One reason that a substantial amount of drug use occurs despite the high-deterrence environment, is that subjective expected utility rules of expedience are not the only operative rules. Social modeling rules can be operative too, and they may direct people in ways opposed to the SEU rules. The role of social modeling is supported by our data: peer influence has an important independent effect upon drug use. Most participants thought (at least when they were on their own) that it was unacceptably risky to use a drug in ISP. However, it appears that when some of these participants were confronted with drug-using "peers" (friends, lovers, or relatives), the "peer pressure" or "social modeling" at least temporarily overcame the deterrent effects of the strict supervision in ISP. This suggests that in addition to personal sensitivity to the utilities and the probabilities operative in their environment, people are sometimes influenced by social models that go against their own subjective expected utility assessment of a preferable course of action.

In a few cases, the peer pressure to use drugs focused on telling the participant that he was unlikely to get caught if he used the drug. (In terms of the rational choice model, the peers attempted to convince the participant that his subjective probability of serious punishment was far too high.) In some instances this advice included telling the participant that some specific substance (e.g., vinegar) would "clean" his urine or "mask the drug.") (Bad advice.)

As mentioned, the subjective probability estimates were fairly stable from the time of the Baseline Interview to the time of the Drug-use Follow-up Interview ($r = +.60$). Nevertheless, some participants did report lower subjective probabilities over time. A substantial decline in the subjective probabilities prior to the first use of drugs in ISP would, of course, be consistent with the rational choice / deterrence model.

Another of the six integrative constructs is behavioral skill. This is the idea that although cognitive rules provide direction, nothing worthwhile will occur unless the cognitive rules are skillfully implemented. There are many types of behavioral skills, including learned physiomotor abilities. However, self-control and self-discipline are also learned skills that can determine whether or not cognitive "strategies" are effectively implemented. Lack of skills of self-control may be another reason for the observed failures to deter drug use. A person may have the right combination of utilities and probabilities pointing the person in the direction of drug-abstinence. However, the person may lack will-power or self-discipline. These people intended to "be deterred" but succumbed to momentary temptations; they hadn't the self-controlling skills to implement their cognitive strategy of deterrence.

Still another of the integrative constructs seems relevant to the failures of the rational choice / deterrence model, namely, the signs of favorable opportunities construct. This is the idea that much human behavior reflects the operation of

of contingencies of reinforcement. As a result of operant conditioning, certain stimuli (learned, discriminative stimuli) act as triggers of behavior patterns. Through operant conditioning, aspects of the environment function as signals to the individual that a particular type of behavior is likely to be rewarded. This can operate independently of or in opposition to the individual's rules of expedience.

The SEU rule may direct that drug-abstinence is the course of action likely to maximize utility. Simultaneously, a personal history of operant conditioning may exist in which dozens or hundreds of episodes of seeing particular drugs available (discriminative stimuli) triggered the behavior of drug ingestion, which soon felt very rewarding and therefore more strongly conditioned (reinforced) the habit. Most people most of the time engage in behavior out of "habit" rather than guided by thoughtful decision making.

The preeminence of conditioned signs of favorable opportunities to experience pleasure over cognitive rules of expedience may be especially likely when people are under stress or in an emotional state. In the Drug-use Follow-up Interviews 43 percent accounted for their drug use in terms of pressure, stress, or problems. Another 27 percent mentioned being in an emotional state (sad, angry, frustrated, etc.). Some of these answers may be little more than excuses for their misconduct. However, it is possible that in some cases such disturbances did

exist and that clear thinking was supplanted by conditioned responses to use drugs for "self-medication."

In conclusion, deterrence works, but it is not a panacea. Strict supervision with a credible threat of substantial punishment deterred (in our opinion) at least 10 percent and conceivably as much as 60 percent of drug users from resuming use for at least a year. Apart from potential sources of error in this research, we are reluctant to claim the 60 percent figure exlusively for deterrence, because ISP is not just a high deterrence environment. ISP also relies on counseling to try to persuade the ISP participant to reject the pleasures of illicit drugs. ISP officers and substance-abuse counselors try to establish both self-control and group emotional support (e.g., Narcotics Anonymous) to promote drug abstinence.

This research project focused on deterrence rather than on content areas that should be stressed by counseling programs. Nevertheless, it seems plausible (and consistent with the data we have examined) that two areas of substantive content are particularly likely to be helpful in reducing drug-use recidivism.

One area of counseling content is to train drug-dependent people on techniques of self-control and self-reinforcement to counter the effects of their own histories of operant conditioning into drug use. In many instances, clearly pointing out a credible risk of severe punishment will not suffice. Some people will on some occasions experience strongly conditioned

signs of favorable opportunities for drug use (discriminative stimuli) that are more potent than the rules of expedience they have learned. Only countervailing operant conditioning is likely to supplant those "bad habits."

Another area of counseling content is to train people to develop and use their own pro-social models for behavior and to learn specific verbal skills to counter and deflect "peer pressures" to resume drug use. The maxim Just say 'No' may be one small part of the pressure-resisting tool-kit, but it is not sufficient by itself. Recovering drug-users need to take inventory of the social models they should really value and learn to use those "positive" social models and peers in their efforts to remain drug-free. It is also true that most recovering drug users are going to come into contact with old acquaintances with whom they used drugs. Therefore, they will need effective verbal skills (that have been ingrained to become "second nature") to resist those negative social models.

Although some counseling programs do try to work in these two areas, the "technology" of such treatment is still relatively undeveloped. These areas of correctional counseling in combination with credible deterrent threats in the early months of treatment are among the most promising in the fields of corrections and rehabilitation.

REFERENCES

Alhadeff, David A. 1982. Microeconomics and Human Behavior: Toward a New Synthesis of Economics and Psychology. Berkeley, CA: University of California Press.

Andenaes, Johannes. 1952. "General Prevention - Illusion or Reality?" Journal of Criminal Law, Criminology, and Police Science 43:176-198.

_____. 1974. Punishment and Deterrence. Ann Arbor, MI: University of Michigan Press.

Bailey, William C. 1980. "Deterrence and the Celerity of the Death Penalty: A Neglected Question in Deterrence Research." Social Forces 58:1308-1333.

Ball, John C. 1955. "The Deterrence Concept in Criminology and Law." Journal of Criminal Law, Criminology, and Police Science 46:347-354.

Beccaria, Cesare B. 1809. Essays on Crimes and Punishment. New York: Gould.

Becker, Gary S. 1968. "Crime and Punishment: An Economic Approach." Journal of Political Economy 78:189-217.

Bentham, Jeremy. 1843. Principles of Penal Law. Edinburgh.

Berk, Richard A. and Phyllis J. Newton. 1985. "Does Arrest Really Deter Wife Battery? An Effort to Replicate the Findings of the Minneapolis Spouse Abuse Experiment." American Sociological Review 50:253-262.

Block, Michael and John M. Heineke. 1975. "A Labor Theoretic Analysis of the Criminal Choice." American Economic Review 65:314-325.

Chambliss, William J. 1966. "The Deterrent Influence of Punishment." Crime and Delinquency 12:70-75.

Chernoff, Herman and Lincoln E. Moses. 1959. Elementary Decision Theory. New York: Wiley.

Claster, Daniel S. 1967. "Comparisons of Risk Perception between Delinquents and Non-Delinquents." Journal of Criminal Law, Criminology, and Police Science 58:80-86.

Davis, Morton D. 1970. Game Theory. New York: Basic Books.

Dunford, Franklyn W., David Huizinga, and Delbert S. Elliott. 1990. "The Role of Arrest in Domestic Assault: The Omaha Police Experiment." Criminology 28:183-206.

Edwards, Ward. 1968. "Decision Making: Psychological Aspects." International Encyclopedia of the Social Sciences 7:34-32.

Ehrlich, Isaac. 1973. "Participation in Illegitimate Activities: A Theoretical and Empirical Investigation." Journal of Political Economy 81:521-565.

_____. 1974. Participation in Illegitimate Activities: An Economic Analysis. Edited by Gary S. Becker and William M. Landes. New York: Columbia University Press.

Empey, Lamar and Steven G. Lubeck. 1971. The Silverlake Experiment. Chicago: Aldine.

Erwin, Billie. 1984. Evaluation of Intensive Probation Supervision in Georgia. Atlanta, GA: Georgia Department of Offender Rehabilitation.

Farrington, David P. 1983. "Randomized Experiments on Crime and Justice." Crime and Justice: An Annual Review of Research 4:257-308, edited by Michael Tonry and Norval Morris. Chicago: University of Chicago Press.

Farrington, David P, Lloyd Ohlin, and James Q. Wilson. 1986. Understanding and Controlling Crime. New York: Springer-Verlag.

Gibbs, Jack P. 1968. "Crime, Punishment, and Deterrence." Southwestern Social Science Quarterly 48:515-530.

_____. 1975. New York: Elsevier.

Graham, Mary G. 1987. "Controlling Drug Abuse and Crime: A Research Update." NIJ Reports, March/April. Washington, D.C.: National Institute of Justice.

Greenberg, David F. 1981. "Methodological Issues in Survey Research on the Inhibition of Crime." Journal of Criminal Law and Criminology 72:1094-1101.

Gropper, Bernard A. 1985. "Probing the Links Between Drugs and Crime." NIJ Research in Brief, February. Washington, D.C.

Homel, Ross. 1988. Policing and Punishing the Drinking Driver: A Study of General and Specific Deterrence. New York: Springer-Verlag.

Jensen, Gary F. 1969. "'Crime Doesn't Pay': Correlates of a Shared Misunderstanding." Social Problems 17:189-201.

Johnson, Bruce D. and Eric D. Wish. 1986. "Highlights of Research on Drug- and Alcohol-Abusing Criminals." Summary Report Prepared for the National Institute of Justice. New York: Narcotic and Drug Research, Inc.

Katona, George. 1975. Psychological Economics. New York: Elsevier.

Lamb, H. Richard and Victor Goertzel. 1974. "Ellsworth House: A Community Alternative to Jail." American Journal of Psychiatry 131:64-68.

Lea, S. E. G. 1987. "Animal Experiments in Economic Psychology." Pp. 48-64 in Advances in Behavioral Economics, edited by Leonard Green and John H. Kagel. Norwood, NJ: Ablex Publishing Corporation.

Lincoln, S. B., M. W. Klein, K. S. Teilmann, and S. Labin. No Date. "Control Organizations and Labeling Theory: Official Versus Self-Reported Delinquency." Unpublished Manuscript. Department of Sociology: University of Southern California.

Luce, R. Duncan and Howard Raiffa. 1957. Games and Decisions. New York: Wiley.

Lurigio, Arthur J. and Robert C. Davis. 1990. "Does a Threatening Letter Increase Compliance With Restitution Orders?: A Field Experiment." Crime and Delinquency 36:537-548.

Miller, J. L. and Andy B. Anderson. 1986. "Updating the Deterrence Doctrine." The Journal of Criminal Law and Criminology 77:418-438.

Minor, W. William and Joseph Harry. 1982. "Deterrent and Experiential Effects in Perceptual Deterrence Research: A Replication and Extension." Journal of Research in Crime and Delinquency 19:190-203.

National Institute of Justice. 1991. "Drug Use Forecasting: April to June 1990." Research in Action, April, 1-12. Washington, DC: National Institute of Justice.

Nagin, Daniel. 1978. "General Deterrence: A Review of the Empirical Evidence." Pp. 95-139 in Deterrence and Incapacitation: Estimating the Effects of Criminal Sanctions on Crime Rates, edited by Alfred Blumstein, Jacqueline Cohen, and Daniel Nagin. Washington, D.C.: National Academy of Sciences.

Parsons, Talcott. 1937. The Structure of Social Action. New York: Free Press.

Paternoster, Raymond, Linda E. Saltzman, Gordon P. Waldo, and Theodore G. Chiricos. 1983a. "Estimating Perceptual Stability and Deterrent Effects: The Role of Perceived Legal Punishment in the Inhibition of Criminal Involvement." The Journal of Criminal Law and Criminology 74:270-297.

Paternoster, Raymond, Linda E. Saltzman, Gordon P. Waldo, and Theodore G. Chiricos. 1983b. "Perceived Risk and Social Control: Do Sanctions Really Deter?" Law and Society Review 17:457-479.

Pearson, Frank S. 1976. Variables Affecting Levels of Cooperation in Prisoner's Dilemma Games. diss. Ann Arbor, MI: University Microfilms International.

_____. 1985. "New Jersey's Intensive Supervision Program: A Progess Report." Crime and Delinquency 31:393-410.

_____. 1988. "Evaluation of New Jersey's Intensive Supervision Program." Crime and Delinquency 34:437-448.

Pearson, Frank S. and Neil Alan Weiner. 1985. "Toward an Integration of Criminological Theories." The Journal of Criminal Law and Criminology 76:116-150.

Piliavin, Irving, Craig Thornton, Rosemary Gartner, and Ross Matsueda. 1986. "Crime, Deterrence, and Rational Choice." American Sociological Review 51:101-119.

Pratt, John W., Howard Raiffa, and Robert Schlaifer. 1964. "The Foundations of Decision Under Uncertainty: An Elementary Exposition." Journal of the American Statistical Association 59:353-375.

Rachlin, Howard. 1987. "Animal Choice and Human Choice." Pp. 48-64 in Advances in Behavioral Economics, edited by Leonard Green and John H. Kagel. Norwood, NJ: Ablex Publishing Corporation.

Ross, H. Laurence. 1973. "Law, Science and Accidents: The British Road Safety Act of 1967." Journal of Legal Studies 2:1-78.

Saltzman, Linda E., Raymond Paternoster, Gordon P. Waldo, and Theodore G. Chiricos. 1982. "Deterrent and Experiential Effects: The Problem of Causal Order in Perceptual Deterrence Research." Journal of Research in Crime and Delinquency 19:172-189.

Sherman, Lawrence W. 1988. "Randomized Experiments in Criminal Sanctions." Pp. 85-98 in Lessons from Selected Program and Policy Areas, edited by Howard S. Bloom, David S. Cordray, and Richard J. Light. New Directions for Program Evaluation. San Francisco: Jossey-Bass.

Sherman, Lawrence W. and Richard A. Berk. 1984. "The Specific Deterrent Effects of Arrest for Domestic Assault." American Sociological Review 49:261-272.

Skinner, B. F. 1938. The Behavior of Organisms. New York: Appleton-Century.

_____. 1974. About Behaviorism. New York: Random House.

Solberg, Eric J. 1982. Intermediate Microeconomics. Plano, Texas: Business Publications.

Speckart, George, M. Douglas Anglin, and Elizabeth Piper Deschenes. 1989. "Modeling the Longitudinal Impact of Legal Sanctions, on Narcotics Use and Property Crime." Journal of Quantitative Criminology 5:33-56.

Tittle, Charles R. 1969. "Crime Rates and Legal Sanctions." Social Problems 16:409-423.

Tittle, Charles R and Charles H. Logan. 1973. "Sanctions and Deviance: Evidence and Remaining Questions." Law and Society Review 7:371-392.

Toby, Jackson. 1981. "Deterrence Without Punishment." Criminology 19:195-209.

Tolman, Edward C. 1938. "The Determiners of Behavior at a Choice Point." Psychological Review 45:1-41.

Waldo, Gordon P. and Theodore G. Chiricos. 1972. "Perceived Penal Sanction and Self-Reported Criminality: A Neglected Approach to Deterrence Research." Social Problems 19:522-540.

Williams, Kirk R. and Richard Hawkins. 1986. "Perceptual Research on General Deterrence: A Critical Review." Law and Society Review 20:545-571.

Wilson, James Q. 1990. "Drugs and Crime." Crime and Justice: An Annual Review of Research 13:521-545.

APPENDIX 1: BASELINE INTERVIEW SCHEDULE OF QUESTIONS

THESE QUESTIONS ARE ABOUT HOW YOU FEEL ABOUT SOME OF THE REQUIREMENTS IN ISP. THINK IN TERMS OF A SCALE FROM 0 TO 10 WITH 0 MEANING YOU HATE IT, 10 MEANING YOU LOVE IT, AND 5 MEANING YOU NEITHER LIKE IT NOR DISLIKE IT.

1. How do you feel about having to be at home by curfew every night?

10. I love it.
9.
8.
7.
6.
5. Neither like nor dislike it; in the middle.
4.
3.
2.
1.
0. I hate it.

2. How do you feel about being required to have a job?

10. I love it.
9.
8.
7.
6.
5. Neither like nor dislike it; in the middle.
4.
3.
2.
1.
0. I hate it.

3. How do you feel about having to do 16 hours of community service work every month?

10. I love it.
9.
8.
7.
6.
5. Neither like nor dislike it; in the middle.
4.
3.
2.
1.
0. I hate it.

4. How do you feel about having to get counselling for problems (for example, drug abuse)?

10. I love it.
9.
8.
7.
6.
5. Neither like nor dislike it; in the middle.
4.
3.
2.
1.
0. I hate it.
X. I don't have any counseling to go to.

5. On a scale of 0 to 10 which do you prefer, ISP or prison?

10. ISP is much better than prison.
9.
8.
7.
6.
5. I feel the same about both; in the middle.
4.
3.
2.
1.
0. ISP is much worse than prison.

5b. Suppose that for some reason you were revoked from ISP and returned to prison. How much prison time do you think you would actually serve before being released on parole?

About _____ months. __ I don't have any idea.

THESE QUESTIONS ARE ABOUT HOW YOU FEEL ABOUT YOURSELF AND VARIOUS THINGS IN LIFE. THINK IN TERMS OF A SCALE FROM 0 TO 10 WITH 0 MEANING THE STATEMENT IS COMPLETELY UNTRUE AND DESCRIBES YOU COMPLETELY INACCURATELY, 10 MEANING IT IS COMPLETELY TRUE AND ACCURATE, AND 5 MEANING IT IS HALF TRUE AND HALF FALSE.

6. I always look on the bright side of things.

10. Completely TRUE.
9.
8.
7.
6.
5. Half true and half false; in the middle.
4.
3.
2.
1.
0. Completely FALSE.

7. I need to have some kicks and excitement in my life.

10. Completely TRUE.
9.
8.
7.
6.
5. Half true and half false; in the middle.
4.
3.
2.
1.
0. Completely FALSE.

8. What happens to people in life is more a matter of luck than hard work.

10. Completely TRUE.
9.
8.
7.
6.
5. Half true and half false; in the middle.
4.
3.
2.
1.
0. Completely FALSE.

9. Sometimes I feel so tense and uptight that I need to be calmed down.

10. Completely TRUE.
9.
8.
7.
6.
5. Half true and half false; in the middle.
4.
3.
2.
1.
0. Completely FALSE.

10. Feeling high is one of the best pleasures in life.

10. Completely TRUE.
9.
8.
7.
6.
5. Half true and half false; in the middle.
4.
3.
2.
1.
0. Completely FALSE.

12. I am always willing to go out of my way to help other people.

10. Completely TRUE.
9.
8.
7.
6.
5. Half true and half false; in the middle.
4.
3.
2.
1.
0. Completely FALSE.

13. I have a lot more "street smarts" than most people.

10. Completely TRUE.
9.
8.
7.
6.
5. Half true and half false; in the middle.
4.
3.
2.
1.
0. Completely FALSE.

14. I like to try new things that I haven't tried before.

10. Completely TRUE.
9.
8.
7.
6.
5. Half true and half false; in the middle.
4.
3.
2.
1.
0. Completely FALSE.

15. Sometimes I think I am no good at all.

10. Completely TRUE.
9.
8.
7.
6.
5. Half true and half false; in the middle.
4.
3.
2.
1.
0. Completely FALSE.

17. I always know when someone is trying to con me.

10. Completely TRUE.
9.
8.
7.
6.
5. Half true and half false; in the middle.
4.
3.
2.
1.
0. Completely FALSE.

18. Often I just let go and do things on impulse.

10. Completely TRUE.
9.
8.
7.
6.
5. Half true and half false; in the middle.
4.
3.
2.
1.
0. Completely FALSE.

19. I like to take life as it comes, and don't worry what might happen.

10. Completely TRUE.
9.
8.
7.
6.
5. Half true and half false; in the middle.
4.
3.
2.
1.
0. Completely FALSE.

20. Sometimes, drugs or drinking can feel even better than sex.

10. Completely TRUE.
9.
8.
7.
6.
5. Half true and half false; in the middle.
4.
3.
2.
1.
0. Completely FALSE.

22. I prefer to take risks in life rather than play it safe.

10. Completely TRUE.
9.
8.
7.
6.
5. Half true and half false; in the middle.
4.
3.
2.
1.
0. Completely FALSE.

23. I would hate to have my friends make fun of something I did.

10. Completely TRUE.
9.
8.
7.
6.
5. Half true and half false; in the middle.
4.
3.
2.
1.
0. Completely FALSE.
X. I don't have any friends.

24. I always tell the truth no matter what the consequences.

10. Completely TRUE.
9.
8.
7.
6.
5. Half true and half false; in the middle.
4.
3.
2.
1.
0. Completely FALSE.

25. I find it hard to talk to people unless I'm a little high.

10. Completely TRUE.
9.
8.
7.
6.
5. Half true and half false; in the middle.
4.
3.
2.
1.
0. Completely FALSE.

26. I have more willpower or self-control than most people.

10. Completely TRUE.
9.
8.
7.
6.
5. Half true and half false; in the middle.
4.
3.
2.
1.
0. Completely FALSE.

THE NEXT ITEMS ARE ABOUT USE OF ALCOHOL SUCH AS BEER, WINE, AND LIQUOR SUCH AS WHISKY AND GIN.

27. Does anyone you know think that you have a drinking problem?

10. Yes.
5. I'm not sure
0. No.

28. Before you came into ISP, did you ever have counseling for alcohol abuse? For example, did you ever attend an Alcoholics Anonymous meeting or see a therapist or counselor or receive in-patient treatment for alcohol abuse? Anything like that?

10. Yes.
5. I'm not sure. [Skip to item 30.]
0. No. [Skip to item 30.]

29. If you have tried to quit drinking, what was the longest time you went without having a drink?

10 months or longer.
9 months.
8 months.
7 months.
6 months.
5 months.
4 months.
3 months.
2 months.
1 month.
0. Less than one month.

30. Did you drink any alcohol while you were in jail or prison this past time?

10. Yes.
5. I'm not sure.
0. No.

31. Did you get drunk or high on alcohol during the month before you went into jail or prison?

10. Yes.
5. I'm not sure. [Skip to item 33.]
0. No. [Skip to item 33.]

32. [If yes] In the month before you went into prison, on how many days did you have seven or more drinks per day?
    10. every day.
    9. nearly every day.
    8. about 6 days a week.
    7. about 5 days a week.
    6. about 4 days a week.
    5. about every other day.
    4. about 3 days a week.
    3. about 2 days a week.
    2. about 1 day a week.
    1. 1 or 2 days in the month.
    0. No days.

33. In the year before you went into prison, on the average how many days did you have seven or more drinks per day?
    10. every day.
    9. nearly every day.
    8. about 6 days a week.
    7. about 5 days a week.
    6. about 4 days a week.
    5. about every other day.
    4. about 3 days a week.
    3. about 2 days a week.
    2. about 1 day a week.
    1. 1 or 2 days in the month.
    0. No days.

34. In the year before you went into prison, did you ever get the shakes or feel sick because you needed a drink?

    10. Yes.
    5. I'm not sure.
    0. No.

THE NEXT ITEMS ARE ABOUT USE OF ILLEGAL DRUGS SUCH AS MARIJUANA, COCAINE, HEROIN, UPPERS, DOWNERS, AND SO FORTH.

35. Does anyone you know think that you have a drug problem?

    10. Yes.
    5. I'm not sure.
    0. No.

36. Before you came into ISP, did you ever have counseling for drug abuse? For example, did you ever attend a Narcotics Anonymous meeting or see a therapist or counselor or receive in-patient treatment for drug abuse? Anything like that?

10. Yes.
5. I'm not sure. [Skip to item 38.]
0. No. [Skip to item 38.]

37. [If yes] What was the longest time you went without using drugs?

10 weeks or longer.
9 weeks.
8 weeks (two months).
7 weeks.
6 weeks.
5 weeks.
4 weeks (one month).
3 weeks.
2 weeks.
1 week.
0. Less than one week.

38. Did you use any drugs while you were in jail or prison this past time?

10. Yes.
5. I'm not sure.
0. No.

39. Did you use any drugs during the month before you went into jail or prison?

10. Yes.
5. I'm not sure. [Skip to item 41.]
0. No. [Skip to item 41.]

40. [If yes] In the <u>month</u> before you went into prison, on how many days did you use drugs?
10. every day.
9. nearly every day.
8. about 6 days a week.
7. about 5 days a week.
6. about 4 days a week.
5. about every other day.
4. about 3 days a week.
3. about 2 days a week.
2. about 1 day a week.
1. 1 or 2 days in the month.
0. No days.

41. In the year before you went into prison, on the average how many days did you use drugs?

10. every day.
9. nearly every day.
8. about 6 days a week.
7. about 5 days a week.
6. about 4 days a week.
5. about every other day.
4. about 3 days a week.
3. about 2 days a week.
2. about 1 day a week.
1. 1 or 2 days in the month.
0. No days.

42. In the year before you went into prison, what drug or drugs did you use? Circle as many as you used.

10. Marijuana.
9. Cocaine (coke)
9b. Crack
8. PCP (angel dust).
7. LSD (acid).
6. Heroin (smack).
5. Downers (barbiturates, sedatives, tranquilizers).
4. Uppers (speed, methedrine, amphetamines, crank).
3. Other (what? _____).
0. No drugs.

42b. If drugs were completely legal and permitted in ISP, how often would you use any of the drugs you listed?

10. every day.
9. nearly every day.
8. about 6 days a week.
7. about 5 days a week.
6. about 4 days a week.
5. about every other day.
4. about 3 days a week.
3. about 2 days a week.
2. about 1 day a week.
1. 1 or 2 days in the month.
0. No days.

43. In the year before you went into prison, did you ever get the shakes or feel sick because you needed to use a drug?

10. Yes.
5. I'm not sure.
0. No.

44. You know that you are forbidden to use marijuana or other drugs. How easy or hard will it be for you to go completely without any drugs for at least a year and a half?

10. Extremely hard.
9.
8.
7.
6.
5. moderately difficult
4.
3.
2.
1.
0. Very easy, no problem at all.

[If choice is 1 through 10] What things are you doing that should help you stay off drugs? [List answers]

[If choice is 1 through 10] Which of these things you just listed (if any) did you learn as a result of counseling since you were released from prison?

45. I won't ask for any details or any names, but what percentage of the friends you have now, do a lot of drinking?

10. 100% (all of them do a lot of drinking)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (about half of them do a lot of drinking)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (none of them do a lot of drinking)

46. I won't ask for any details or any names, but what percentage of the friends you have now, use marijuana or other illegal drugs?

10. 100% (all of them use drugs)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (about half of them use drugs)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (none of them use drugs)

46b. Before you went to prison what percentage of your friends used marijuana or other illegal drugs?

10. 100% (all of them used drugs)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (about half of them used drugs)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (none of them used drugs)

47. Suppose an average person who is in ISP used drugs just once. What would you guess are his chances of getting caught by ISP? (If you want to list a range of numbers, that's fine.)

10. 100% (certain to be caught)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance of getting caught)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance of getting caught)

[If less than 50% chance] Why do you think the person probably would not get caught?

47b. Suppose an average person who is in ISP used drugs just once. What would you guess are his chances of not only getting caught but also getting <u>revoked to prison</u> because he used drugs that one time?

10. 100% (certain to be caught and revoked to prison)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance to be caught & revoked)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance to be caught and revoked)

48. Suppose a really street-smart person who is in ISP used drugs just once. What would you guess are his chances of getting caught by ISP?

10. 100% (certain to be caught)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance of getting caught)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance of getting caught)

[If less than 50% chance] Why do you think the person probably would not get caught?

48b. Suppose a really street-smart person who is in ISP used drugs just once. What would you guess are his chances of not only getting caught but also getting revoked to prison because he used drugs that one time?

10. 100% (certain to be caught and revoked to prison)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance to be caught & revoked)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance to be caught and revoked)

49. How strict do you think ISP is when a participant tests positive for drug use? Do you think an ISP participant is most likely to be returned to prison...

6. after the 6th positive urine test or perhaps not at all.
5. after the 5th positive urine test.
4. after the 4th positive urine test.
3. after the 3rd positive urine test.
2. after the 2nd positive urine test.
1. after the 1st positive urine test.
X. I don't have any idea about this.

49b. What are the chances of being revoked to prison because of <u>just one positive urine test</u>?

10. 100% (certain to be revoked to prison)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance to be revoked)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance to be revoked to prison)

49c. For each of the following choices, check which one you would choose: ISP or prison. Would you rather do...

				[Office Use Only]
__	2 months in ISP	OR	__ 6 months in prison	[0 1]
__	5 months in ISP	OR	__ 6 months in prison	[1 2]
__	8 months in ISP	OR	__ 6 months in prison	[2 3]
__	11 months in ISP	OR	__ 6 months in prison	[3 4]
__	14 months in ISP	OR	__ 6 months in prison	[4 5]
__	17 months in ISP	OR	__ 6 months in prison	[5 6]
__	20 months in ISP	OR	__ 6 months in prison	[6 7]
__	23 months in ISP	OR	__ 6 months in prison	[7 8]
__	26 months in ISP	OR	__ 6 months in prison	[8 9]
__	29 months in ISP	OR	__ 6 months in prison	[9 10]
__	32 months in ISP	OR	__ 6 months in prison	[10]

50. ISP is not pleasant, and prison is not pleasant. How many months on ISP would it take to be as unpleasant as 6 months in prison?

10. 30 months in ISP is about the same as 6 months in prison.
9. 27 months in ISP is about the same as 6 months in prison.
8. 24 months in ISP is about the same as 6 months in prison.
7. 21 months in ISP is about the same as 6 months in prison.
6. 18 months in ISP is about the same as 6 months in prison.
5. 15 months in ISP is about the same as 6 months in prison.
4. 12 months in ISP is about the same as 6 months in prison.
3. 9 months in ISP is about the same as 6 months in prison.
2. 6 months in ISP is about the same as 6 months in prison.
1. 3 months in ISP is about the same as 6 months in prison.
0. 1 month in ISP is about the same as 6 months in prison.

APPENDIX 2: DRUG-USE FOLLOW-UP INTERVIEW SCHEDULE OF QUESTIONS

THESE QUESTIONS ARE ABOUT HOW YOU FEEL ABOUT SOME OF THE REQUIREMENTS IN ISP. THINK IN TERMS OF A SCALE FROM 0 TO 10 WITH 0 MEANING YOU HATE IT, 10 MEANING YOU LOVE IT, AND 5 MEANING YOU NEITHER LIKE IT NOR DISLIKE IT.

1. How do you feel about having to be at home by curfew every night?

10. I love it.
9.
8.
7.
6.
5. Neither like nor dislike it; in the middle.
4.
3.
2.
1.
0. I hate it.

2. How do you feel about being required to have a job?

10. I love it.
9.
8.
7.
6.
5. Neither like nor dislike it; in the middle.
4.
3.
2.
1.
0. I hate it.

3. How do you feel about having to do 16 hours of community service work every month?

10. I love it.
9.
8.
7.
6.
5. Neither like nor dislike it; in the middle.
4.
3.
2.
1.
0. I hate it.

4. How do you feel about having to get counselling for problems (for example, drug abuse)?

10. I love it.
9.
8.
7.
6.
5. Neither like nor dislike it; in the middle.
4.
3.
2.
1.
0. I hate it.
X. I don't have any counseling to go to.

HERE IS A QUESTION BASED ON WHAT YOU KNOW OF PRISON AND WHAT YOU KNOW ABOUT ISP SO FAR. ON A SCALE OF 0 TO 10 ....

5. Which do you prefer, ISP or prison?

10. ISP is much better than prison.
9.
8.
7.
6.
5. I feel the same about both; in the middle.
4.
3.
2.
1.
0. ISP is much worse than prison.

44. You know that you are forbidden to use marijuana or other drugs. How easy or hard will it be for you to go completely without any drugs for at least a year and a half?

10. Extremely hard.
9.
8.
7.
6.
5. Moderately difficult
4.
3.
2.
1.
0. Very easy, no problem at all.
X. No longer in ISP.

47. Suppose an average person who is in ISP used drugs just once. What would you guess are his chances of getting caught by ISP? (If you want to list a range of numbers, that's fine.)

10. 100% (certain to be caught)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance of getting caught)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance of getting caught)

[If less than 50% chance] Why do you think the person probably would not get caught?

47b. Suppose an average person who is in ISP used drugs just once. What would you guess are his chances of not only getting caught but also getting revoked to prison because he used drugs that one time?

10. 100% (certain to be caught and revoked to prison)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance to be caught & revoked)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance to be caught and revoked)

48. Suppose a really street-smart person who is in ISP used drugs just once. What would you guess are his chances of getting caught by ISP?

10. 100% (certain to be caught)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance of getting caught)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance of getting caught)

[If less than 50% chance] Why do you think the person probably would not get caught?

48b. Suppose a really street-smart person who is in ISP used drugs just once. What would you guess are his chances of not only getting caught but also getting revoked to prison because he used drugs that one time?

10. 100% (certain to be caught and revoked to prison)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance to be caught & revoked)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance to be caught and revoked)

49. How strict do you think ISP is when a participant tests positive for drug use? Do you think an ISP participant is most likely to be returned to prison ...

6. after the 6th positive urine test or perhaps not at all.
5. after the 5th positive urine test.
4. after the 4th positive urine test.
3. after the 3rd positive urine test.
2. after the 2nd positive urine test.
1. after the 1st positive urine test.
X. I don't have any idea about this.

49b. What are the chances of being revoked to prison because of just one positive urine test?

10. 100% (certain to be caught and revoked to prison)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance to be caught & revoked)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance to be caught and revoked)

49c. For each of the following choices, check which one you would choose: ISP or prison. Would you rather do...

				[Office Use Only]
__	2 months in ISP	OR	__ 6 months in prison	[0 1]
__	5 months in ISP	OR	__ 6 months in prison	[1 2]
__	8 months in ISP	OR	__ 6 months in prison	[2 3]
__	11 months in ISP	OR	__ 6 months in prison	[3 4]
__	14 months in ISP	OR	__ 6 months in prison	[4 5]
__	17 months in ISP	OR	__ 6 months in prison	[5 6]
__	20 months in ISP	OR	__ 6 months in prison	[6 7]
__	23 months in ISP	OR	__ 6 months in prison	[7 8]
__	26 months in ISP	OR	__ 6 months in prison	[8 9]
__	29 months in ISP	OR	__ 6 months in prison	[9 10]
__	32 months in ISP	OR	__ 6 months in prison	[10]

50. ISP is not pleasant, and prison is not pleasant. How many months on ISP would it take to be as unpleasant as 6 months in prison?

10. 30 months in ISP is about the same as 6 months in prison.
9. 27 months in ISP is about the same as 6 months in prison.
8. 24 months in ISP is about the same as 6 months in prison.
7. 21 months in ISP is about the same as 6 months in prison.
6. 18 months in ISP is about the same as 6 months in prison.
5. 15 months in ISP is about the same as 6 months in prison.
4. 12 months in ISP is about the same as 6 months in prison.
3. 9 months in ISP is about the same as 6 months in prison.
2. 6 months in ISP is about the same as 6 months in prison.
1. 3 months in ISP is about the same as 6 months in prison.
0. 1 month in ISP is about the same as 6 months in prison.

51. Before or during your time in ISP did you hear about any people who had been in ISP but were revoked and returned to prison?

10. Yes.
5. I'm not sure.
0. No.

[If "No" or "not sure," go directly to 52.]
[If "Yes"]

Whom did you hear it from? [For example, did you hear it from an ISP officer, a participant or someone else?]

Where did you hear it?

Did you believe it or not?

10. Yes.
5. I'm not sure.
0. No.

[If yes] Did that make you think it would be risky to break any ISP rules?

10. Yes.
5. I'm not sure.
0. No.

52. We researchers at Rutgers University wanted to interview participants who have had some difficulty with ISP. ISP has given us a list of people that they have written a drug incident report on, and your name was on the list. Please think back to the time you used the drug in ISP. Why did you use the drug?

[If the drug incident is denied] Did you ever use marijuana or any illegal drug while in ISP?

[If no drug use at all in ISP, go directly to item 72.] Were there any other reasons?

53. Did you take the drug on the spur-of-the-moment OR did you take time to decide whether you should take the drug or not?

10. Spur-of-the-moment, I didn't take time to think.
9.
8.
7.
6.
5. In the middle.
4.
3.
2.
1.
0. I thought about whether or not I should take it.

[If the answer was 6 through 10] Go directly to item 55.]

54. When you were thinking about using the drug, what things made you decide to go ahead and use it?

55. Did you think about the chances of getting caught?

10. Yes.
5. I'm not sure. [skip to item 55d.]
0. No. [skip to item 55d.]

55b. Before you used the drug, when you were thinking about the chances of getting caught, what did you think the chances were that you might get caught?

10. 100% (certain to be caught)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance to be caught)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance to be caught)

55c. Before you used the drug, when you were thinking about the chances of getting caught, what did you think the chances were that you might not only get caught but also get revoked to prison if you used the drug?

10. 100% (certain to be caught and revoked to prison)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance to be caught & revoked)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance to be caught and revoked)
X. I didn't think about getting revoked.

55d. When you thought about using the drug, how strong was the urge?

10. I loved the idea of using the drug.
9.
8.
7.
6.
5. I neither liked nor disliked it; in the middle.
4.
3.
2.
1.
0. I hated the idea of using the drug.

56. When you were thinking about using the drug, did you think about the trouble you could get into?

10. Yes.
5. I'm not sure.
0. No.

57. When you were thinking about using the drug, did you think about the unpleasantness of prison?

10. Yes.
5. I'm not sure. [Skip to item 58.]
0. No. [Skip to item 58.]

58. When you were thinking about using the drug, did you think about the unpleasantness of ISP?

10. Yes.
5. I'm not sure. [Skip to item 59.]
0. No. [Skip to item 59.]

58b. When you were thinking about using the drug, which did you prefer, ISP or prison?

10. ISP seemed much better than prison.
9.
8.
7.
6.
5. I felt the same about both; in the middle.
4.
3.
2.
1.
0. ISP seemed much worse than prison.
X. I didn't think about it this way.

59. When you were thinking about using the drug, did you think about any other unpleasant things that might happen? Circle as many as you thought of.

5. I'm not sure.
4. Disapproval from family.
3. Disapproval from friends.
2. Loss of my job.
1. Other (what? _____).
0. No, I didn't think of any other unpleasant things.

59b. Overall, how bad did you think all of the consequences would be if you got caught?

10. I thought I'd hate what would happen to me.
9.
8.
7.
6.
5.
4.
3.
2.
1.
0. I thought nothing bad would actually happen.
X. I didn't think about it this way.

60. Just before you used the drug, were you feeling angry about something?

10. Yes.
5. I'm not sure.
0. No.

[If yes] what?

60b. Just before you used the drug, were you feeling bored?

10. Yes.
5. I'm not sure.
0. No.

61. Just before you used the drug, were you feeling sad or unhappy?

10. Yes.
5. I'm not sure.
0. No.

61b. [If yes] Did you use the drug to forget being sad or unhappy?

10. Yes.
5. I'm not sure.
0. No.

62. Did you feel that you had been trying hard to stick to the rules in ISP and you decided to let yourself have a good time for once?

10. Yes.
5. I'm not sure.
0. No.

63. Did any friends encourage you to use the drug?

10. Yes.
5. I'm not sure.
0. No.

[If yes] How did they encourage you to use the drug?

64. Are you the kind of person who usually has a lot of self control?

10. Yes.
5. I'm not sure.
0. No.

65. Did you use the drug because you wanted to or because you could not stop yourself? Was that just a time when you lost your self control?

10. I wanted to use the drug at that time.
9.
8.
7.
6.
5. In the middle.
4.
3.
2.
1.
0. I didn't want to, but I couldn't stop myself.

66. Were there any particular things you had been doing to try to maintain your self control and not use drugs?

10. Yes.
5. I'm not sure.
0. No.

[If yes] What things?

67. If you were told when you came into ISP that you would go back to prison if you had just one positive urine test, what are the chances that you would have used drugs at least once anyway?

10. 100% (I certainly would have used drugs anyway)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance I would have used drugs)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance I would have used drugs)

68. Have you been required to attend any counseling to avoid drug use --- things like Narcotics Anonymous or any other counseling about drugs?

10. Yes.
5. I'm not sure.
0. No.

[If No or Not sure, go directly to item 69.]
[If yes] What program?

Did it help you maintain self-control?

10. Yes.
5. I'm not sure.
0. No.

Would you explain your answer?

Why do you think you used the drug despite the counseling in that program?

68f. Since you were released from prison, has there been anyone you could call any day at any time who could give you good advice on how to resist an urge to use drugs?

10. Yes.
5. Not sure. [Skip to item 69.]
0. No. [Skip to item 69.]

[If yes] Circle whichever of the following whom you could call any day at any time and who could give you good advice on how to resist an urge to use drugs:

10. A sponsor or "old-timer" in Narcotics Anonymous.
9. A participant in Narcotics Anonymous (NA)
8. A sponsor or "old-timer" in AA.
7. A participant in Alcoholics Anonymous (AA)
6. A counselor in another drug program.
5. A participant in another drug program
4. My wife or husband or lover.
3. My parent or other relative.
2. My friend.
1. My ISP officer.
0. None of them would be really helpful about this.

69. I would like to be a completely straight person and never use any illegal drug again in my entire life.

10. Completely TRUE.
9.
8.
7.
6.
5. Half true and half false; in the middle.
4.
3.
2.
1.
0. Completely FALSE.

70. Quite a few people are revoked from ISP because they used drugs while in the program. Do you have any suggestions to make about this problem?

10. Yes.
5. I'm not sure.
0. No.

[If yes] What suggestions?

THIS LAST SECTION IS ONLY FOR PEOPLE WHO SAID THEY NEVER USED ANY DRUGS IN ISP.

72. Did you ever feel a desire to get and use marijuana or any other illegal drug while in ISP?

10. Yes.
5. I'm not sure.
0. No. [If No, end of survey.]

73. Did you decide <u>not</u> to get and use the drug on the <u>spur-of-the-moment</u> OR did you <u>take time to decide</u> whether you should take the drug or not?

10. Spur-of-the-moment, I didn't take time to think.
9.
8.
7.
6.
5. In the middle.
4.
3.
2.
1.
0. I thought about whether or not I should take it.

[If the answer was 6 through 10] Go directly to item 75.]

74. When you were thinking about using the drug, what things made you decide not to go ahead and use it?

75. Did you think about the chances of getting caught?

10. Yes.
5. I'm not sure. [Skip to item 75d.]
0. No. [Skip to item 75d.]

75b. When you were thinking about using a drug and the chances of getting caught, what did you think the chances were that you might get caught?

10. 100% (certain to be caught)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance to be caught)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance to be caught)

75c. When you were thinking about using a drug and the chances of getting caught, what did you think the chances were that you might not only get caught but also get revoked to prison if you used the drug?

10. 100% (certain to be caught and revoked to prison)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance to be caught & revoked)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance to be caught and revoked)
X. I didn't think about getting revoked.

75d. When you thought about using the drug, how strong was the urge?

10. I loved the idea of using the drug.
9.
8.
7.
6.
5. I neither liked nor disliked it; in the middle.
4.
3.
2.
1.
0. I hated the idea of using the drug.

76. When you were thinking about using the drug, did you think about the trouble you could get into?

10. Yes.
5. I'm not sure.
0. No.

77. Did you think about the unpleasantness of prison?

10. Yes.
5. I'm not sure.
0. No. [Skip to item 58.]

78. Did you think about the unpleasantness of ISP?

10. Yes.
5. I'm not sure. [Skip to item 79.]
0. No. [Skip to item 79.]

78b. When you were thinking about using the drug, which did you prefer, ISP or prison?

10. ISP seemed much better than prison.
9.
8.
7.
6.
5. I felt the same about both; in the middle.
4.
3.
2.
1.
0. ISP seemed much worse than prison.
X. I didn't think about it this way.

79. When you were thinking about using the drug, did you think about any other unpleasant things that might happen? Circle as many as you thought of.

5. I'm not sure.
4. Disapproval from family.
3. Disapproval from friends.
2. Loss of my job.
1. Other (what? _____).
0. No, I didn't think of any other unpleasant things.

79b. Overall, how bad did you think all of the consequences would be if you got caught?

10. I thought I'd hate what would happen to me.
9.
8.
7.
6.
5.
4.
3.
2.
1.
0. I thought nothing bad would actually happen.
X. I didn't think about it this way.

80. Just before you felt the desire to use the drug, were you feeling angry about something?

10. Yes.
5. I'm not sure.
0. No.

[If yes] what?

80b. Just before you felt the desire to use the drug, were you feeling bored?

10. Yes.
5. I'm not sure.
0. No.

81. Just before you felt the desire to use the drug, were you feeling sad or unhappy?

10. Yes.
5. I'm not sure.
0. No.

[If yes] Did you think that using the drug might help you to forget being sad or unhappy?

10. Yes.
5. I'm not sure.
0. No.

82. Did you feel that you had been trying hard to stick to the rules in ISP and you thought you might let yourself have a good time for once?

10. Yes.
5. I'm not sure.
0. No.

83. Did any friends encourage you to use the drug?

10. Yes.
5. I'm not sure.
0. No.

[If yes] How did they encourage you?

84. Are you the kind of person who usually has a lot of self control?

10. Yes.
5. I'm not sure.
0. No.

85. Did you not use the drug because you really did not want to or because you were able to stop yourself?

10. My desire to use the drug was not that strong.
9.
8.
7.
6.
5. In the middle.
4.
3.
2.
1.
0. I really wanted to, but I was able to stop myself.

86. Were there any particular things you had been doing to try to maintain your self control and not use drugs?

10. Yes.
5. I'm not sure.
0. No.

[If yes] What things?

88. Have you been required to attend any counseling to avoid drug use --- things like Narcotics Anonymous or any other counseling about drugs?

10. Yes.
5. I'm not sure.
0. No.

[If No or Not sure, go directly to item 89.]
[If yes] What program?

Did it help you maintain self-control?

10. Yes.
5. I'm not sure.
0. No.

Would you explain your answer?

88f. Since you were released from prison, has there been anyone you could call any day at any time who could give you good advice on how to resist an urge to use drugs?

10. Yes.
5. Not sure. [Skip to item 69.]
0. No. [Skip to item 69.]

[If yes] Circle whichever of the following whom you could call any day at any time and who could give you good advice on how to resist an urge to use drugs:

10. A sponsor or "old-timer" in Narcotics Anonymous.
9. A participant in Narcotics Anonymous (NA)
8. A sponsor or "old-timer" in AA.
7. A participant in Alcoholics Anonymous (AA)
6. A counselor in another drug program.
5. A participant in another drug program
4. My wife or husband or lover.
3. My parent or other relative.
2. My friend.
1. My ISP officer.
0. None of them would be really helpful about this.

89. I would like to be a completely straight person and never use any illegal drug again in my entire life.

10. Completely TRUE.
9.
8.
7.
6.
5. Half true and half false; in the middle.
4.
3.
2.
1.
0. Completely FALSE.

90. Quite a few people are revoked from ISP because they used drugs while in the program. Do you have any suggestions to make about this problem?

10. Yes.
5. I'm not sure.
0. No.

[If yes] What suggestions?

[Note: A similar interview was conducted with ISP participants who received an alcohol-use incident report during their first year in ISP. The main difference was that the questions were concerned with alcohol use, rather than drug use.]

APPENDIX 3: SUCCESS FOLLOW-UP INTERVIEW SCHEDULE OF QUESTIONS

THESE QUESTIONS ARE ABOUT HOW YOU FEEL ABOUT SOME OF THE REQUIREMENTS IN ISP. THINK IN TERMS OF A SCALE FROM 0 TO 10 WITH 0 MEANING YOU HATE IT, 10 MEANING YOU LOVE IT, AND 5 MEANING YOU NEITHER LIKE IT NOR DISLIKE IT.

1. How do you feel about having to be at home by curfew every night?

10. I love it.
9.
8.
7.
6.
5. Neither like nor dislike it; in the middle.
4.
3.
2.
1.
0. I hate it.

2. How do you feel about being required to have a job?

10. I love it.
9.
8.
7.
6.
5. Neither like nor dislike it; in the middle.
4.
3.
2.
1.
0. I hate it.

3. How do you feel about having to do 16 hours of community service work every month?

10. I love it.
9.
8.
7.
6.
5. Neither like nor dislike it; in the middle.
4.
3.
2.
1.
0. I hate it.

4. How do you feel about having to get counselling for problems (for example, drug abuse)?

10. I love it.
9.
8.
7.
6.
5. Neither like nor dislike it; in the middle.
4.
3.
2.
1.
0. I hate it.
X. I don't have any counseling to go to.

HERE IS A QUESTION BASED ON WHAT YOU KNOW OF PRISON AND WHAT YOU KNOW ABOUT ISP SO FAR. ON A SCALE OF 0 TO 10 ....

5. Which do you prefer, ISP or prison?

10. ISP is much better than prison.
9.
8.
7.
6.
5. I feel the same about both; in the middle.
4.
3.
2.
1.
0. ISP is much worse than prison.

47. Suppose an average person who is in ISP used drugs just once. What would you guess are his chances of getting caught by ISP? (If you want to list a range of numbers, that's fine.)

10. 100% (certain to be caught)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance of getting caught)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance of getting caught)

[If less than 50% chance] Why do you think the person probably would not get caught?

47b. Suppose an average person who is in ISP used drugs just once. What would you guess are his chances of not only getting caught but also getting revoked to prison because he used drugs that one time?

10. 100% (certain to be caught and revoked to prison)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance to be caught & revoked)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance to be caught and revoked)

48. Suppose a really street-smart person who is in ISP used drugs just once. What would you guess are his chances of getting caught by ISP?

10. 100% (certain to be caught)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance of getting caught)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance of getting caught)

[If less than 50% chance] Why do you think the person probably would not get caught?

48b. Suppose a really street-smart person who is in ISP used drugs just once. What would you guess are his chances of not only getting caught but also getting revoked to prison because he used drugs that one time?

10. 100% (certain to be caught and revoked to prison)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance to be caught & revoked)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance to be caught and revoked)

49. How strict do you think ISP is when a participant tests positive for drug use? Do you think an ISP participant is most likely to be returned to prison ...

6. after the 6th positive urine test or perhaps not at all.
5. after the 5th positive urine test.
4. after the 4th positive urine test.
3. after the 3rd positive urine test.
2. after the 2nd positive urine test.
1. after the 1st positive urine test.
X. I don't have any idea about this.

49b. What are the chances of being revoked to prison because of just one positive urine test?

10. 100% (certain to be caught and revoked to prison)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance to be caught & revoked)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance to be caught and revoked)

49c. For each of the following choices, check which one you would choose: ISP or prison. Would you rather do...

				[Office Use Only]
__	2 months in ISP	OR	__ 6 months in prison	[0 1]
__	5 months in ISP	OR	__ 6 months in prison	[1 2]
__	8 months in ISP	OR	__ 6 months in prison	[2 3]
__	11 months in ISP	OR	__ 6 months in prison	[3 4]
__	14 months in ISP	OR	__ 6 months in prison	[4 5]
__	17 months in ISP	OR	__ 6 months in prison	[5 6]
__	20 months in ISP	OR	__ 6 months in prison	[6 7]
__	23 months in ISP	OR	__ 6 months in prison	[7 8]
__	26 months in ISP	OR	__ 6 months in prison	[8 9]
__	29 months in ISP	OR	__ 6 months in prison	[9 10]
__	32 months in ISP	OR	__ 6 months in prison	[10]

50. ISP is not pleasant, and prison is not pleasant. How many months on ISP would it take to be as unpleasant as 6 months in prison?

10. 30 months in ISP is about the same as 6 months in prison.
9. 27 months in ISP is about the same as 6 months in prison.
8. 24 months in ISP is about the same as 6 months in prison.
7. 21 months in ISP is about the same as 6 months in prison.
6. 18 months in ISP is about the same as 6 months in prison.
5. 15 months in ISP is about the same as 6 months in prison.
4. 12 months in ISP is about the same as 6 months in prison.
3. 9 months in ISP is about the same as 6 months in prison.
2. 6 months in ISP is about the same as 6 months in prison.
1. 3 months in ISP is about the same as 6 months in prison.
0. 1 month in ISP is about the same as 6 months in prison.

89. I would like to be a completely straight person and never use any illegal drug again in my entire life.

10. Completely TRUE.
9.
8.
7.
6.
5. Half true and half false; in the middle.
4.
3.
2.
1.
0. Completely FALSE.

51. Before or during your time in ISP did you hear about any people who had been in ISP but were revoked and returned to prison?

10. Yes.
5. I'm not sure.
0. No.

[If "No" or "not sure," go directly to 52.]
[If "Yes"]

Whom did you hear it from? [For example, did you hear it from an ISP officer, a participant or someone else?]

Where did you hear it?

Did you believe it or not?

10. Yes.
5. I'm not sure.
0. No.

[If yes] Did that make you think it would be risky to break any ISP rules?

10. Yes.
5. I'm not sure.
0. No.

52a. We researchers at Rutgers University wanted to interview participants who have successfully completed at least one full year in ISP without producing a positive urine test.

Did you ever have any of your urine samples test positive while in ISP?

10. Yes, I had at least one positive urine test.
5. I'm not sure.
0. No, none of my urines tested positive.

52b. Regardless of whether your urine samples ever tested positive, did you ever <u>use</u> any marijuana or other illegal drug at any time while you have been in ISP?

10. Yes.
5. I'm not sure.
0. No. [If no drug use at all in ISP, go directly to item 72.]

52c. Please think back to the time you used the drug in ISP. Why did you use the drug?

53. Did you take the drug on the spur-of-the-moment OR did you take time to decide whether you should take the drug or not?

10. Spur-of-the-moment, I didn't take time to think.
9.
8.
7.
6.
5. In the middle.
4.
3.
2.
1.
0. I thought about whether or not I should take it.

[If the answer was 6 through 10] Go directly to item 55.]

54. When you were thinking about using the drug, what things made you decide to go ahead and use it?

55. Did you think about the chances of getting caught?

10. Yes.
5. I'm not sure. [skip to item 55d.]
0. No. [skip to item 55d.]

55b. Before you used the drug, when you were thinking about the chances of getting caught, what did you think the chances were that you might get caught?

10. 100% (certain to be caught)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance to be caught)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance to be caught)

55c. Before you used the drug, when you were thinking about the chances of getting caught, what did you think the chances were that you might not only get caught but also get revoked to prison if you used the drug?

10. 100% (certain to be caught and revoked to prison)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance to be caught & revoked)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance to be caught and revoked)
X. I didn't think about getting revoked.

55d. When you thought about using the drug, how strong was the urge?

10. I loved the idea of using the drug.
9.
8.
7.
6.
5. I neither liked nor disliked it; in the middle.
4.
3.
2.
1.
0. I hated the idea of using the drug.

56. When you were thinking about using the drug, did you think about the trouble you could get into?

10. Yes.
5. I'm not sure.
0. No.

57. When you were thinking about using the drug, did you think about the unpleasantness of prison?

10. Yes.
5. I'm not sure. [Skip to item 58.]
0. No. [Skip to item 58.]

58. When you were thinking about using the drug, did you think about the unpleasantness of ISP?

10. Yes.
5. I'm not sure. [Skip to item 59.]
0. No. [Skip to item 59.]

58b. When you were thinking about using the drug, which did you prefer, ISP or prison?

10. ISP seemed much better than prison.
9.
8.
7.
6.
5. I felt the same about both; in the middle.
4.
3.
2.
1.
0. ISP seemed much worse than prison.
X. I didn't think about it this way.

59. When you were thinking about using the drug, did you think about any other unpleasant things that might happen? Circle as many as you thought of.

5. I'm not sure.
4. Disapproval from family.
3. Disapproval from friends.
2. Loss of my job.
1. Other (what? _____).
0. No, I didn't think of any other unpleasant things.

59b. Overall, how bad did you think all of the consequences would be if you got caught?

10. I thought I'd hate what would happen to me.
9.
8.
7.
6.
5.
4.
3.
2.
1.
0. I thought nothing bad would actually happen.
X. I didn't think about it this way.

60. Just before you used the drug, were you feeling angry about something?

10. Yes.
5. I'm not sure.
0. No.

[If yes] what?

60b. Just before you used the drug, were you feeling bored?

10. Yes.
5. I'm not sure.
0. No.

61. Just before you used the drug, were you feeling sad or unhappy?

10. Yes.
5. I'm not sure.
0. No.

61b. [If yes] Did you use the drug to forget being sad or unhappy?

10. Yes.
5. I'm not sure.
0. No.

62. Did you feel that you had been trying hard to stick to the rules in ISP and you decided to let yourself have a good time for once?

10. Yes.
5. I'm not sure.
0. No.

63. Did any friends encourage you to use the drug?

10. Yes.
5. I'm not sure.
0. No.

[If yes] How did they encourage you to use the drug?

64. Are you the kind of person who usually has a lot of self control?

10. Yes.
5. I'm not sure.
0. No.

65. Did you use the drug because you wanted to or because you could not stop yourself? Was that just a time when you lost your self control?

10. I wanted to use the drug at that time.
9.
8.
7.
6.
5. In the middle.
4.
3.
2.
1.
0. I didn't want to, but I couldn't stop myself.

66. Were there any particular things you had been doing to try to maintain your self control and not use drugs?

10. Yes.
5. I'm not sure.
0. No.

[If yes] What things?

67. If you were told when you came into ISP that you would go back to prison if you had just one positive urine test, what are the chances that you would have used drugs at least once anyway?

10. 100% (I certainly would have used drugs anyway)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance I would have used drugs)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance I would have used drugs)

68. Have you been required to attend any counseling to avoid drug use --- things like Narcotics Anonymous or any other counseling about drugs?

10. Yes.
5. I'm not sure.
0. No.

[If No or Not sure, go directly to item 69.]
[If yes] What program?

Did it help you maintain self-control?

10. Yes.
5. I'm not sure.
0. No.

Would you explain your answer?

Why do you think you used the drug despite the counseling in that program?

68f. Since you were released from prison, has there been anyone you could call any day at any time who could give you good advice on how to resist an urge to use drugs?

10. Yes.
5. Not sure. [Skip to item 69.]
0. No. [Skip to item 69.]

[If yes] Circle whichever of the following whom you could call any day at any time and who could give you good advice on how to resist an urge to use drugs:

10. A sponsor or "old-timer" in Narcotics Anonymous.
9. A participant in Narcotics Anonymous (NA)
8. A sponsor or "old-timer" in AA.
7. A participant in Alcoholics Anonymous (AA)
6. A counselor in another drug program.
5. A participant in another drug program
4. My wife or husband or lover.
3. My parent or other relative.
2. My friend.
1. My ISP officer.
0. None of them would be really helpful about this.

70. Quite a few people are revoked from ISP because they used drugs while in the program. Do you have any suggestions to make about this problem?

10. Yes.
5. I'm not sure.
0. No.

[If yes] What suggestions?

THIS LAST SECTION IS ONLY FOR PEOPLE WHO SAID THEY NEVER USED ANY DRUGS IN ISP.

72. Did you ever feel a desire to get and use marijuana or any other illegal drug while in ISP?

10. Yes.
5. I'm not sure.
0. No. [If No, end of survey.]

73. Did you decide <u>not</u> to get and use the drug on the <u>spur-of-the-moment</u> OR did you <u>take time to decide</u> whether you should take the drug or not?

10. Spur-of-the-moment, I didn't take time to think.
9.
8.
7.
6.
5. In the middle.
4.
3.
2.
1.
0. I thought about whether or not I should take it.

[If the answer was 6 through 10] Go directly to item 75.]

74. When you were thinking about using the drug, what things made you decide not to go ahead and use it?

75. Did you think about the chances of getting caught?

10. Yes.
5. I'm not sure. [Skip to item 75d.]
0. No. [Skip to item 75d.]

75b. When you were thinking about using a drug and the chances of getting caught, what did you think the chances were that you might get caught?

10. 100% (certain to be caught)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance to be caught)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance to be caught)

75c. When you were thinking about using a drug and the chances of getting caught, what did you think the chances were that you might not only get caught but also get revoked to prison if you used the drug?

10. 100% (certain to be caught and revoked to prison)
9. 90%
8. 80%
7. 70%
6. 60%
5. 50% (fifty-fifty chance to be caught & revoked)
4. 40%
3. 30%
2. 20%
1. 10%
0. 0% (no chance to be caught and revoked)
X. I didn't think about getting revoked.

75d. When you thought about using the drug, how strong was the urge?

10. I loved the idea of using the drug.
9.
8.
7.
6.
5. I neither liked nor disliked it; in the middle.
4.
3.
2.
1.
0. I hated the idea of using the drug.

76. When you were thinking about using the drug, did you think about the trouble you could get into?

10. Yes.
5. I'm not sure.
0. No.

77. Did you think about the unpleasantness of prison?

10. Yes.
5. I'm not sure.
0. No. [Skip to item 58.]

78. Did you think about the unpleasantness of ISP?

10. Yes.
5. I'm not sure. [Skip to item 79.]
0. No. [Skip to item 79.]

78b. When you were thinking about using the drug, which did you prefer, ISP or prison?

10. ISP seemed much better than prison.
9.
8.
7.
6.
5. I felt the same about both; in the middle.
4.
3.
2.
1.
0. ISP seemed much worse than prison.
X. I didn't think about it this way.

79. When you were thinking about using the drug, did you think about any other unpleasant things that might happen? Circle as many as you thought of.

5. I'm not sure.
4. Disapproval from family.
3. Disapproval from friends.
2. Loss of my job.
1. Other (what? _____).
0. No, I didn't think of any other unpleasant things.

79b. Overall, how bad did you think all of the consequences would be if you got caught?

10. I thought I'd hate what would happen to me.
9.
8.
7.
6.
5.
4.
3.
2.
1.
0. I thought nothing bad would actually happen.
X. I didn't think about it this way.

80. Just before you felt the desire to use the drug, were you feeling angry about something?

10. Yes.
5. I'm not sure.
0. No.

[If yes] what?

80b. Just before you felt the desire to use the drug, were you feeling bored?

10. Yes.
5. I'm not sure.
0. No.

81. Just before you felt the desire to use the drug, were you feeling sad or unhappy?

10. Yes.
5. I'm not sure.
0. No.

[If yes] Did you think that using the drug might help you to forget being sad or unhappy?

10. Yes.
5. I'm not sure.
0. No.

82. Did you feel that you had been trying hard to stick to the rules in ISP and you thought you might let yourself have a good time for once?

10. Yes.
5. I'm not sure.
0. No.

83. Did any friends encourage you to use the drug?

10. Yes.
5. I'm not sure.
0. No.

[If yes] How did they encourage you?

84. Are you the kind of person who usually has a lot of self control?

10. Yes.
5. I'm not sure.
0. No.

85. Did you not use the drug because you really did not want to or because you were able to stop yourself?

10. My desire to use the drug was not that strong.
9.
8.
7.
6.
5. In the middle.
4.
3.
2.
1.
0. I really wanted to, but I was able to stop myself.

86. Were there any particular things you had been doing to try to maintain your self control and not use drugs?

10. Yes.
5. I'm not sure.
0. No.

[If yes] What things?

88. Have you been required to attend any counseling to avoid drug use --- things like Narcotics Anonymous or any other counseling about drugs?

10. Yes.
5. I'm not sure.
0. No.

[If No or Not sure, go directly to item 89.]
[If yes] What program?

Did it help you maintain self-control?

10. Yes.
5. I'm not sure.
0. No.

Would you explain your answer?

88f. Since you were released from prison, has there been anyone you could call any day at any time who could give you good advice on how to resist an urge to use drugs?

10. Yes.
5. Not sure. [Skip to item 69.]
0. No. [Skip to item 69.]

[If yes] Circle whichever of the following whom you could call any day at any time and who could give you good advice on how to resist an urge to use drugs:

10. A sponsor or "old-timer" in Narcotics Anonymous.
9. A participant in Narcotics Anonymous (NA)
8. A sponsor or "old-timer" in AA.
7. A participant in Alcoholics Anonymous (AA)
6. A counselor in another drug program.
5. A participant in another drug program
4. My wife or husband or lover.
3. My parent or other relative.
2. My friend.
1. My ISP officer.
0. None of them would be really helpful about this.

90. Quite a few people are revoked from ISP because they used drugs while in the program. Do you have any suggestions to make about this problem?

10. Yes.
5. I'm not sure.
0. No.

[If yes] What suggestions?