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IMPROVING CORRECTIONAL CLASSIFICATION
THROUGH A STUDY OF THE PLACEMENT OF INMATES
IN ENVIRONMENTAL SETTINGS

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EXECUTIVE SUMMARY

The purpose of classification in prisons is to provide administrators and program personnel with information about the expected behavior of inmates that can be used in their efficient management. Classification has often been used to make initial placements to prisons and housing units and in evaluating transfers. This study was motivated by a belief that this information could be made more useful to administrators than it presently is. If we knew something about how different types of inmates react to different prison settings, then we would be one step further along in anticipating and hopefully preventing behavioral problems. Inmates could then be placed in those settings where their adjustment would be the most positive.

To achieve this goal, this project set out to do three things. It began by identifying the most popular forms of classification and comparing their ability to distinguish among inmates who will experience behavioral problems. Three systems were identified as representing the range of classification techniques. Risk assessment which ranks inmates according to their probabilities of posing security problems is possibly the most popular form of classification today. Megargee's MMPI typology categorizes inmates into one of ten personality types, each with its own traits and likelihood of causing problems. Finally, Toch's Prison Preference Inventory represents one of the better instruments to determine inmates' needs and concerns. In evaluating these classification systems as well as in conducting the remaining analyses, the assumption was made that prisons operate under the goals of maintaining security and minimizing the harm and deterioration an individual undergoes.

None of the three systems was found to be clearly superior over the others. One reason for this was that different systems more effectively distinguished inmates who experienced certain adjustment problems than others. Risk assessment discriminated among inmates who were cited for aggressive or assaultive disciplinary infractions or reported for sick call, while the Megargee and Toch systems predicted who would report they suffered adjustment problems. All three systems failed to meet perfectly the empirical requirements of a classification scheme, but each was found to possess its own strengths and weaknesses.

A second project activity was to explain who experiences adjustment problems in prisons as well as possible. Past research suggests that individual background characteristics, personality, preferences, and phase of sentence determine outcomes. Organizational factors including population size, crowding, security level, and environmental climate have also been found to be important. It has been hypothesized that fit between person and environmental situation plays an important role in whether an inmate will experience problems, yet this last factor had never been empirically tested. All of these factors were included in a model of adjustment and studied to see if they were related to who adjusts poorly to incarceration. Individual, organizational, and interaction effects were found to be important

determinants. Because person and environment fit was found to play a role, the ultimate goal of suggesting appropriate settings for the assignment of particular inmate types appeared to be potentially useful.

The final activity was to test this possibility: can adjustment problems be reduced by placing inmates in appropriate settings? After considering numerous possibilities, thirteen potentially useful two-way classification schemes were identified. Based upon assessments of these systems, it was projected that the incidence of aggressive and assaultive activity and personal distress and victimization could be reduced by more than 20 percent. These findings are extremely encouraging. They suggest that two-way classification strategies are potentially useful in achieving both the maximization of institutional security and control and the minimization of individual functional disability. By using information already collected by many prison systems to place individuals in specific settings, substantial reductions in the incidence of adjustment problems appears to be possible.

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Although this report was written primarily by one person, research of this scope is seldom the act of one individual. The idea for this research was born out of discussions which took place over two years ago between myself and Myra Albert, now of the Department of Correctional Services, about the possibility of examining the effect of person and environment fit on outcome. Out of that grew a very effective and congenial relationship between the Division of Program Planning, Evaluation, and Research of the Department of Correctional Services and the Center for Social Analysis at the State University of New York at Binghamton. We jointly submitted a proposal to the National Institute of Justice which was ultimately funded and which supported this research.

This project would not have been a success without the cooperation, support and hard work of many people at the Department. Frank Tracy, director of the Division, facilitated the implementation of this research by making the initial contacts with facility administrators and gaining their cooperation. Jody Grossman traveled with the research team to each facility, assisted us there in collecting data, and returned to the Central Office to provide additional information from the automated files. Charles Nygard coordinated activities between the Center and the Department after we returned from the field, and Donald MacDonald managed the fiscal side of the project. Data could never have been collected in the ten primary test sites nor the two pretest sites without the cooperation and assistance of numerous administrators and staff.

Several people from the Center for Social Analysis have also made significant contributions to the project. Four graduate students, Jean Marie Harris, Lou Albert, Adrienne Tokata, and Nancy Woika, have assisted in data collection, the analyses and report writing. David Gow and Ken Wilson provided invaluable assistance in computer processing and data analysis. Ben Surovy has managed the budget of the project, and Barbara Ayres has undertaken a considerable amount of the typing, particularly the laborsome tables in this report.

Finally, the project has progressed under the helpful guidance of Hans Toch and David Duffee who have both been more than willing to read and comment on the outputs of the research.

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CHAPTER ONE

Transactional Prison Classification

Classification in the criminal justice setting involves the assignment of individuals to groups which are differentiated in supposedly meaningful ways and which typically differ in their expected behavior. As such, classification is used to generate information that can guide policy and treatment decision making and serves criminal justice administrators as a management and predictive tool. It has been employed in various contexts. Classification techniques have been used to evaluate the probability of criminality among adolescents, to make decisions about who should be placed on probation and who should be incarcerated, to diagnose behavioral problems among incarcerated offenders so that appropriate treatments can be prescribed, and to determine parole eligibility. Classification is undertaken in order to make more informed decisions, to make decisions in a more efficient and consequently less expensive manner, and to make more equitable decisions regarding the assignment of individuals to settings with varying amounts of freedom.

Prison classification, upon which this research focuses, has been a management technique of particular interest to penologist and prison administrators for many years. During the heyday of rehabilitation, most of the attention was directed toward the development of effective diagnostic tools which would correctly assign prisoners to groups requiring particular treatments. It was assumed that criminality was a tremendously varied phenomenon precipitating from multiple causes. It was hypothesized that because of the complex etiology of crime, some

offenders would respond to certain treatments better than others. Various techniques were developed for differentiating offenders according to treatment needs. Most notable and widely used of these were Grant and Grant's I-Level classification (see Sullivan, Grant and Grant, 1957) and Quay's behavior categories (see Quay and Parson, 1970). Both systems used highly trained professionals to assign individuals to behavioral groups distinguished by their unique personality disorders.

Classification during this period, according to James Austin (1983: 562), often took place in reception and diagnostic centers where social scientists administered a battery of social, psychological and medical tests to determine program needs and appropriate security problems of newly arrived inmates. However, as rehabilitation fell in disfavor with the public, politicians, inmates and correctional experts, and prison populations began to soar as new sentencing policies were implemented, traditional classification techniques were no longer appropriate or practical. New, more efficient ways of assigning inmates to prison settings to ensure the safety of both staff and inmates were needed. Consequently, we have seen a shift in both the function and the structure of classification.

Although it would be naive to assert that security was not a central issue in traditional classification activities, today it, rather than treatment, is the predominant purpose of classification. Enhanced control of the prison population through the appropriate assignment of inmates to prison settings is essential if the burgeoning numbers of prisoners are to be handled efficiently and effectively. Because prison systems operate with limited fiscal resources, not all

inmates can, nor for that matter need to be, housed in settings with intense supervision and strict security. These settings are the most expensive to operate and must be reserved for inmates who must be so confined for their own safety or for that of others. Prison administrators need a method ^{which} that will allow them to identify those inmates who are likely to become victims and those inmates who are likely to become predatory or violent, so they can take action to prevent the management problems that are likely to ensue. This is the present challenge for penologists interested in developing and improving prisoner classification.

^{Also} As Austin (1983: 562-563) also points out, ^a this need for accurate and precise classification models, in addition to being pragmatic, has become a legal issue for correctional administrators. In numerous recent cases (Holt v. Sarver, 1971; Morris v. Trivisono, 1970; Pugh v. Lockes, 1976; Laman v. Helgemoe, 1977; Palmigano v. Garrahy, 1977; and Ramos v. Lamm, 1979), judicial decisions have held that classification methods cannot be "capricious, irrational, or discriminatory." Austin notes that, "the courts repeatedly found that traditional classification procedures and criteria were based on unfounded assumptions regarding inmate behavior and that criteria were not applied uniformly to all inmates." For a classification model to be "coherent" and thus acceptable, the court in Ramos v. Lamm outlined the following criteria: "placement and assignment must be clearly understandable, consistently applied and conceptually complete." The decision also mandated that procedures for validation of the model be implemented.

Criteria for "Good" Classification

To meet the four-fold criteria spelled out in Ramos, a classification system should be designed and tested according to sound psychometric methods. If proper procedures are followed the system should then conform to the seven standards of a "good" classification scheme outlined by Megargee (1977):

1. It should be sufficiently complete to allow for the classification of the vast majority of criminal offenders.
2. There should be clear definitions of categories so that offenders can be classified unambiguously.
3. The system must be reliable. That is, it must be precise enough to allow two or more classifiers to place an offender in the same category.
4. It must be valid. There should be a demonstration that individuals falling within certain categories by virtue of characteristics they possess actually have those characteristics.
5. The classification system should be dynamic, that is, it should allow for change. As the individual moves through the correctional program, the system should allow for changes in classification as his or her behavior warrants.
6. The classifications should carry with them implications for treatment. Differential treatment and classification are intimately related.
7. The classification system should be economical.

Attention to these seven requirements is essential if any classification system is to be "clearly understandable" to the scientist developing it, the official applying it, the inmate being classified by it, and the appellate judge evaluating its efficacy. These seven requirements are also indispensable in producing an instrument which is conceptually complete.

What is omitted from this list is the most important criterion of all for the contemporary prison administrator, that the system be related to an appropriate and desirable outcome. For example, the prisoners falling into different categories should have different probabilities of victimization, predatory behavior, or violent acts. It is the predictive utility of a classification system that makes it a useful management information tool. ^{Classification info for} This knowledge is the basis on which the administrator assigns inmates to appropriate settings to minimize problems as cost effectively as possible and to make policy decisions regarding the proper care and supervision of prisoners. This criterion is implied in Megargee's requirement #6; however, recent disenchantment with the desirability and success of offender change requires that we view "treatment" in a broader context by considering it to mean whatever is done to and with inmates rather than rehabilitation alone.

Types of Classification Systems

The search for classification systems that are significantly related to inmate behavioral outcomes and that meet the requirements of efficiency, understandability, conceptual completeness, reliability, and validity have led scientists in a number of different directions. As a result, several different and unique classification systems have been developed depending on the researchers' assumptions about prison adjustment and the particular theoretical and disciplinary focuses used in the design of the instruments.

Despite this variety, it appears that the different schemes can be grouped into three types. One group consists of those systems that

utilize psychological inventories to classify inmates into groups with particular pathological characteristics that are hypothesized to be the cause of their criminality and troubles within prison. These systems have a strong rehabilitation orientation and many were developed as diagnostic devices when offender change was a predominant correctional goal. Yet evidence that these groupings are somewhat stable, have meaningful characteristics to the people who work with inmates, and have been found to relate to in-prison behavior, led some prison officials to rely on these systems to make managerial assignments according to contemporary demands for security. Possibly the most widely used system falling into this category is that designed by Megargee which uses the Minnesota Multiphasic Personality Inventory (M.M.P.I.) to classify inmates into ten groups.

The second type of classification currently used in assigning inmates focuses on inmates' needs and concerns, rather than personality, as do the first group. The theory underlying these instruments is that different people require different environments. When there is congruence between their needs and what the environment provides, adjustment problems are less likely; yet, when there is incongruence functional deterioration, distress, frustration and violence are more likely to be evidenced. Toch's Prison Preference Inventory (P.P.I.), which classifies inmates according to their needs for activity, emotional feedback, freedom, privacy, safety, social stimulation, structure and support, is a good example of systems of this type.

The third type of classification system, and possibly the most popular at this time, is risk assessment. These predictive models,

using a variety of demographic, preincarceration, criminal, and past behavioral characteristics, distinguish inmates according to their risk of institutional misbehavior. An evaluation of individual characteristics are used to produce a score with known probability of institutional misconduct. Some of the better known risk models are those currently used in the federal and California prison systems and the one developed by the National Institute of Corrections. Yet the particularly stringent demands for validation of instruments of this type suggest that models are not generalizable without further testing (see Wright, Clear, and Dickson, 1984).

Because they are indicative of the classification systems of their type, their relative wide use, and their known utility, the three instruments just noted--Megargee's system, the Prison Preference Inventory, and risk assessment--were of particular interest in this study. Before preceding further, let us examine the particular characteristics of each.

The Megargee MMPI Typology for Prisoners

The Megargee typology consists of ten offender profile types which are considered to occur naturally within the prison population. Unlike earlier inmate typologies, which could only be constructed by extensive case histories or time-consuming interviews, the Megargee system uses the MMPI to identify offender groups. The instrument is a lengthy personality inventory which requires the respondent to answer true or false to questions such as "I am frequently angry." It can be administered in a group setting and scored by computer, thus making it an economical alternative to the one-on-one interview. This particular

inventory was selected because it has been extensively tested and norms are well established. Furthermore, the MMPI has been successfully used in various criminal justice settings and can be readministered. (A short description of the system is given by Lillyquist, 1980: 320-324. Megargee and Bohn (1979) outline how the system was developed and explain the different groups in their book, Classifying Criminal Offenders.)

In constructing the typology, Megargee (with the assistance of various colleagues) used an empirical approach developed by Veldman (1967) known as hierarchical profile analysis. This technique identifies naturally occurring groups within a data set whereby intragroup dissimilarity is minimized and intergroup disparity is maximized. Once these groups were identified the researchers wrote an extensive set of rules which could be used to assign individuals to the correct group. The rules can be applied clinically or by computer routine. The assignment procedure appears to be fairly reliable. Assessments conducted by Megargee and Bohn (1979) and Edinger (1979) report that the typology is valid and generalizable; however, a study conducted by Moss, Johnson and Hosford (1984) failed to establish the predictive validity of the typology. Megargee, in a study funded by the National Institute of Justice, is currently conducting an extensive evaluation of the validity of the system.

As noted above, each inmate is assigned to one of ten groups. In a limited number of cases, the inmate is so unique that an assignment is not possible or the individual possesses characteristics which suggest that she/he may fall into two or more groups. Rather than giving the groups descriptive names, Megargee labeled them Able, Baker,

Charlie, Delta, Easy, Foxtrot, George, How, Item, and Jupiter. This was done to avoid the tendency to allow the label to prematurely guide subsequent analyses and to allow descriptive data to accumulate about the groups Megargee believes to occur naturally within the prison population.

In the order from the most normal to the most deviant, the ten groups have been described as follows (see Megargee and Bohn 1979: 177-233; Lillyquist, 1980: 320-324; Edinger, 1979: 235):

1. Type Item inmates are the most well-adjusted of any of the groups and evidence few interpersonal or intrapsychic problems. They generally come from warm and stable middle-class families but appear to lack social responsibility. Identification with a deviant value system is not strong, rather as Megargee and Bohn (1979:174) indicate these individuals are "not deprived, not depraved, but simply people who steal other's property."
2. Type Easy also seems to be a well-adjusted group but is distinguished by higher than average intelligence. Like Item inmates, this group comes from a healthy home environment. They score high on measures of social maturity but are often underachievers. Their MMPI profiles are described as benign, and they are least violent of any of the ten groups. Although Megargee indicates the name was not selected intentionally, it appears to be descriptive of these individuals. They take the "easy" way through life which may incline them to criminality.
3. Type Baker possess essentially normal personality profiles but suffer from excessive anxiety. Consequently, these individuals seem depressed, withdrawn, and experience difficulty in relating

interpersonally. They are passive and submissive and adjust poorly to prison. It is speculated that some of these individuals commit crimes to satisfy their need to be punished.

4. Type Able are extrovert individuals who are outgoing, self-assured, and impulsive. They can be charming, dominating, and manipulative, but also may be characterized by high levels of hostility and alienation. This configuration of personality characteristics led Megargee and Bohn (1967:197) to describe Able as the "Artful Dodger, a clever, opportunistic, daring, and amoral person who will risk taking illegal shortcuts to gratify his wants."
5. Type George is comprised of some of the brightest and best educated inmates who are also highly adaptable and generally effective in their interpersonal relations. They function well in the authoritarian environment of the prison since they have few conflicts with authorities and are low in dominance. They tend not to be heavily involved in drug use but have high rates of drug offenses, indicating that they are involved in the "entrepreneurial" side of the crime.
6. Type Delta inmates possess clearly deviant personalities and are described as impulsive individuals who are unable to control their impulses and postpone gratification. They are charming and intelligent and able to manipulate others. They express little guilt about their crimes.
7. Type Jupiter inmates are extremely passive inmates who avoid conflict. The group is comprised of mostly black property offenders who appear to be doing their best to overcome social

and familial handicaps. Their adjustment to prison is generally better than might be expected.

8. Type Foxtrot inmates have been described as "obnoxious, 'streetwise,' abrasive individuals who engender much interpersonal conflict" (Edinger, 1979: 235). As one of the most deviant and antisocial groups, they possess a broad array of problems and difficulties including extremely low levels of commitment to conventional values and high levels of drug and alcohol abuse. They are one of the most violent groups.
9. Type Charlie inmates are cold and bitter individuals who will become hostile and violent when they perceive themselves to have been insulted. They have long histories of maladjustment related to their antagonistic attitude, poor sociability, distrust of others, and conflict with authority.
10. Type How is the most unstable and psychologically pathological group. Criminality is but one aspect of their inability to function on a social level. They are unable to get along with others. At times they are introverted and withdrawn, but at others they can be extremely aggressive. This group needs mental health services if they are to adjust to prison.

Along with each description, Megargee also prescribes appropriate treatments and control techniques to assist the inmates' adjustment to prison and subsequent reentry into the community. One report indicates that when the typology was used in making housing assignments in one facility, assaultive behavior was reduced by 46 percent (Lillyquist, 1980: 324).

The Prison Preference Inventory

This 56-item forced choice instrument was developed by Hans Toch (1977) to measure inmate concerns about eight environmental attributes: activity, emotional feedback, freedom, privacy, safety, social stimulation, structure, and support. These concerns were identified in a content analysis of over nine hundred interviews with inmates about the fears, pains, and distresses suffered upon their incarceration. Among the myriad of responses and descriptions, Toch sought to identify those environmental concerns which "cut across" individuals and appear to be commonalties associated with prison environments. According to Toch (1977: 16), his research allowed him to construct "portraits of what is valuable and noxious to inmates in prison settings." He described the dimensions as follows:

- | | |
|--------------------|--|
| PRIVACY | A concern about social and physical overstimulation; a preference for isolation, peace and quiet, absence of environmental irritants such as noise and crowding. |
| SAFETY | A concern about one's physical safety; a preference for social and physical settings that provide protection and that minimize the chances of being attacked. |
| STRUCTURE | A concern about environmental stability and predictability; a preference for consistency, clear-cut rules, orderly and scheduled events and impingements. |
| SUPPORT | A concern about reliable, tangible assistance from persons and settings, and about services that facilitate self-advancement and self-improvement. |
| EMOTIONAL FEEDBACK | A concern about being loved, appreciated and cared for; a desire for intimate relationships that provide emotional sustenance and empathy. |

SOCIAL STIMULATION

A concern with congeniality, and a preference for settings that provide an opportunity for social interaction, companionship, and gregariousness.

ACTIVITY

A concern about understimulation; a need for maximizing the opportunity to be occupied and to fill time; a need for distraction.

FREEDOM

A concern about circumscription of one's autonomy; a need for minimal restriction and for maximum opportunity to govern one's own conduct.

Toch (1977:284-288) suggests that the PPI classification system can be used as a decision making tool. Transactional assessments can be made in order that the assignment of inmates to prison settings and programs are made according to the "match" between individual needs and available resources. According to Toch, to do otherwise we risk allowing avoidable distress and adjustment problems to develop. To operationalize this system, classifiers must know about and understand the institutional settings to which inmates can be assigned. This will require a more interactive system between classifiers and custodial and program staff than presently exists in most facilities.

Toch (1977:293-297) advocates two classification functions of the PPI. At one level, it can be used as an "ancillary classification tool to help 'match' inmates with institutional programs, with staffing patterns, and client groupings". With the information provided by the PPI, both environments and people can be manipulated. Since Support refers to opportunities and Activity indicates having something to do, they are variables that can be addressed in programming. Through the proper and varied exercise of authority, different needs for Structure and Freedom can be fulfilled. Social Stimulation concerns can be

considered by attention to peer group relations, while Emotional Feedback can be addressed by the warmth expressed within the prison setting. According to Toch, for classification to be effective, not only must attention be given to proper assignment of inmates but to creating needed environmental conditions.

The second use of the PPI as a classification tool is to identify inmates with special needs. Some of these individuals are people already in trouble, who arrive at prison heavily distressed. They require swift and special attention to avoid the exacerbation of their problems by the added stress which accompanies incarceration. Other "special" prisoners are not necessarily experiencing acute distress but will not fit in socially. They, too, require special interventions so they will not become targets for exploitation and physical victimization.

Risk Analysis

Although its popularity and use is increasing, risk assessment as a form of correctional classification has a lengthy and varied past. The technique was pioneered by Hart (1923) and Burgess (1928) in an attempt to predict the likelihood of recidivism among groups of offenders being considered for parole. Since then, the use of computers and the ability to efficiently analyze large data sets has lead to further refinements and greater sophistication in the prediction classification models. Pressured by growing populations, fiscal constraints, and judicial demands for objectivity, risk assessment for many correctional administrators is an efficient and equitable method of assigning inmates to prison settings and programs.

Still, risk assessment is not without its critics and problems (Austin, 1983:561-563).

Wormith and Goldstone (1984:5-11) identify many of the issues surrounding the efficacy of risk assessment. There are technical questions concerning the appropriate outcome variables to use--all disciplinary reports or only those that are exploitive or violent, for example--and how these variables should be operationalized. Like reported crime, prison disciplinary reports are biased indicators of misbehavior, and thus their reliability and validity is of some question. Theoretical questions concerning the statistical models for predicting future prison problems also arise. The complexity of the approach increases with the sophistication of the statistical techniques, often obscuring what the model is doing from all but the most informed methodologists. Finally, there are philosophical questions asked about the utility of statistical versus experiential prediction and the ethics of basing assignments and programs on the expectation of future behavior.

The development of currently used risk assessment systems follows a fairly straightforward procedure. This process begins with the selection of a single or a series of outcome variables. These may include escape or attempted escape, predatory or violent behavior, or summary measure institutional misconduct. These variables may be measured in continuous form thus indicating the severity of the problem, or they may be dichotomized to indicate the presence or absence of a problem. The next step is to obtain a series of criterion variables thought to be related to the outcome variable(s). In some cases, there is a theoretical model of inmate adjustment that guides

this selection, but more often the determining factor in inclusion is whether information concerning the variable is available in the automated or manual files maintained about inmates. Initial bivariate tests are then conducted to identify the criterion variables that are related to outcome. A regression of the significant variables is then run to test the postdictive power of the model. If it is satisfactory and the model meets subjective levels of parsimony, then standardized coefficients are computed and used to set the weights of the categories of the criterion variables. The model is then validated on a different sample (see Gottfredson, Wilkins, and Hoffman, 1978:15-67).

The variables used in risk models fall into a number of different categories. Some address the inmates' past criminal record, others their current offense and sentence. There is usually at least one variable that taps past institutional experiences. Often social factors such as age, education, employment history, drug and alcohol use, and marital status are included. A risk score is usually obtained by summing scores that correspond to the categories the individual falls into on each variable contained in the model. If the model is useful, this score will predict the inmates' probability of an adverse adjustment to prison.

The Problem with Current Classification Systems

Each of the three systems just described has been or is being used to classify inmates in American prisons. All three have been developed in a manner that meets the minimum standards for "good" classification described above. They use objective methods and criteria for making assignments, and in my opinion are clearly

understandable and appear to be conceptually complete. However on this last point, none of the three have been adequately validated so we really know how well they explain adjustment. In using the PPI or risk assessment, all offenders are classified. We are also able to classify most inmates using the Megargee typology which indicates that the definitions given by Megargee for his ten types are probably unambiguous. The fact that Megargee and his colleagues have been able to computerize the system further substantiates this conclusion. The categories in risk assessment are somewhat less clear since two individuals can obtain the same score with very different profiles, but the idea of a dimension of risk is reasonable. Because of the high degree of variety created by the use of eight subscales, the PPI profiles may appear somewhat more ambiguous, but as we learn more about person and environment interaction through research the uncertainties should disappear. All three instruments have been demonstrated to be somewhat reliable, can account and accommodate changes over time, and are cost-effective to use.

This leaves two related requirements of a good classification in question: that of validity and of implications for correctional outcome. Validity is conceptualized in several ways, but a valid classification system ultimately must predict institutional behavior. For this reason, these two issues are actually the same: does classification tell us something about how the individual will adjust to prison? All three systems we have examined, purport to be valid. Some empirical validation has been conducted, but in all three cases the results are mixed.

Even if we assume that each is somewhat useful in predicting

adjustment problems, there remain several unanswered questions. To date no systematic evaluation and comparison of the three systems has been conducted. Consequently, we do not know if risk assessment predicts assaultive behavior better than Megargee types; nor do we know if one system predicts certain adjustment most effectively, while another may predict some other problem best. Therefore, the first goal of this research is to evaluate the usefulness of all three schemes in predicting certain prison outcomes.

The second aspect of this research project grew out of a concern about the ability of correctional administrators to use classification information in making management decisions. The information generated in classifying prisoners is used to make assignments to housing units, programs, and jobs, however little more is done with that information. If a superintendent and a block officer is told that Inmate X is a high risk for assaultive behavior or has a Type Charlie personality, they will be unable to use that information to any great extent. The reason is that we do not know how different treatments, interventions, or actions taken against or on behalf of high risks or Type Charlies will affect their behavior. If a superintendent and block officer are told that when high risk inmates are placed in highly unstructured settings, these inmates are substantially more likely to engage in assaultive behavior, then the administrators will have been provided with valuable information.

Research on prison adjustment has already shown that different types of inmates respond to prison settings differently. Some inmates thrive in institutional environments where others respond negatively, acting aggressively or emotionally or physically deteriorating to the

point where functional ability is impaired (see Bukstel and Kilman, 1980). In other settings, the response patterns of those same inmates may be quite different and more positive. Whether or not there is harmony between individual needs and environmental demands and opportunities depends on a complex interaction of factors. When harmony does not exist, inmates are more difficult to manage and are more likely to deteriorate socially, emotionally, and functionally.

Hans Toch was clearly aware of the importance of person-environment fit when he developed the PPI and proposed its use as a classification system. Yet to date, no research has evaluated the effect of person-environment interaction on the success of classification. Probabilities of adjustment problems are generated generally and are not setting or context specific. The problem with this approach is easily illustrated by example. Let us say that we have a system that allows us to classify inmates as low, medium, and high risks based upon their background and personal characteristics. Two inmates, processed into the prison system, are properly classified as low risks. The first inmate is assigned to an institutional unit in which there is a congruent fit. This individual would not be likely to be involved in disruptive activities and the classification would be accurate. The second inmate might be assigned to a setting which is not appropriate for his personality or needs. Consequently, he might be involved in several disruptive events. In this case, the classification would be in error. Had the context been considered, both patterns of adjustment may have been properly anticipated. Therefore, the second goal of this research is to move beyond the aggregate level of analysis and to evaluate the ability of each of the

three classification systems to distinguish the patterns of adjustment among inmates placed in different settings.

CHAPTER TWO

The Theoretical and Operational Design

The possibility of placing inmates in appropriate prison environments through classification is consistent with what is known about the psychological effects of confinement. Bukstel and Kilmann (1980: 469), in a review of 90 experimental studies, consider that: "Results suggested that imprisonment is not harmful to all individuals: some persons deteriorated in response to confinement, other persons improved their functioning, and still others showed no appreciable change. A complex interaction of factors including individual difference variables, institutional orientations, degree of crowding, phase of sentence, and peer group affiliation seems to influence an individual's response to confinement." By incorporating our knowledge of this interaction into the classification process, correctional administrators should be able to exert greater control over the process whereby inmates respond to confinement and the resulting effects of that experience.

This research is an attempt to expand existing knowledge about classification and prison adjustment by exploring the interactive effects of the institutional context on this process. To do this, classification methods that have been shown to be somewhat useful in differentiating inmates, that is, the three systems described in Chapter 1, were used. This research problem could have been approached by simply selecting or developing a method to typologize correctional environments and then cross-validating the three classification systems in those settings. However, we have attempted to enhance the value of

the research by selecting both individual and environmental variables in accordance with some ordered and coherent image of prison adjustment rather than simply selecting variables because they have been used in the past. Drawing upon research that examined the determinants of prison adjustment, a theoretical model which includes an individual, a contextual, and a transactional dimension is specified. The advantage of this theoretical specification is that it ascribes greater breadth and completeness in the description of individuals and prison settings for our testing of classification strategies and provides a theoretical specification of the interrelationships that exist among the variables of interest. As an end product from this research, we will be able to say something about prison adaptation as well as something about classification.

It should be noted that this approach is exploratory. To achieve breadth, we sacrificed specificity. The advantage of studying the problem in this way is that we will be able to identify the important person-environment relations that can then be used to begin to develop new ways of assigning inmates to prison settings. The next task will be to refine these methods and further establish their validity by using them and testing their effects.

Prison Outcome: The Effects of Imprisonment

This study is interested in maximizing positive prison adjustment. It is held that the emotional stress and physical harm that inmates may suffer upon incarceration should be maintained at the lowest possible level. There are three primary reasons that underlie this goal. First, such a strategy will enhance administrative ability

to maintain effective control of inmates, and thereby reduce violence, escapes and other breaches of security. Secondly, it will minimize individual deterioration of life-functioning ability. Third, this goal embodies the humanitarian belief that criminal punishment involves nothing more than the loss of freedom. We realize that this goal and each of the three explanations, particularly the third, are value-laden. Not everyone will endorse them. But since they guide this research, it is important that they be explicitly identified.

In considering what is meant by positive adjustment to incarceration, several types of undesirable behavior, which we would like to avoid and reduce as much as possible, can be identified. They include misconduct, victimization by other inmates, self-injury, and other forms of social or psychological deterioration which lead to a reduction in the ability to cope and survive in prison and the freeworld. Each of these variables has been used in various forms as an indicator of adjustment and institutional control in past research. A well-managed prison is considered to be one in which these behaviors are kept at a minimum.

Prison misconduct is a catch-all term referring to a variety of different undesirable and prohibited behaviors. It can involve such extreme acts as rioting and murder, but in general misconduct implies some form of rule breaking which can lead to disciplinary action. Assault of the staff or another inmate is a commonly found example of prison misconduct. Other examples of misconduct include insubordination, refusal to obey orders, theft or destruction of prison property, and possession of contraband.

The most widely used measure of misconduct is the official

infraction report. The number of reports as well as the severity of the offenses are generally considered to provide an indication of adjustment problems. Unfortunately, institutional records often do not meet rigorous standards of reliability and validity desired in research. O'Leary and Glaser (1972: 159-160) argue that inmates who find prison particularly distasteful and are committed to never returning, may have more problems adjusting to prison than individuals who have become integrated into the prison culture. This first type of individual may be the best risk for safe release into the community but completely unable to conform to staff expectations. Is this person well-adjusted or maladjusted? Prison records would indicate that the person is experiencing problems. Consequently, there is a problem of interpretation. A record of fighting in prison may show aggressiveness, emotional instability, social ineptness, or defensive efforts of a prisoner to avoid subordination to more aggressive inmates. (For further discussion, see Flanagan, 1980.)

Earlier studies conducted by Zink (1958) reported that infraction rates of life-term inmates were lower than those of prisoners serving shorter sentences. Whether there is an inverse relationship between length of sentence or age and rule-breaking, there seems to be a general agreement that definitions of rule-breaking and the imposition of disciplinary sanctions vary greatly from facility to facility. Discretion is a common practice. Poole and Regoli (1980: 932) observe that guards must search for proper cues to guide their decision-making, and that they not only interpret the rules but also make them. Unfortunately, there is evidence that the social background and ethnicity of inmates affects decisions about who will be punished. The

New York Commission on Attica (1972) cites racial distinctions as a explicit factor in disciplinary decisions. Johnson (1966) has described regulations which are highly subjective as "waste-basket categories" in which guards can define a wide variety of behaviors and attitudes as rule violations. Furthermore, factors such as custody level and administrative style may also contribute to differential infraction rates (Brown and Spevacek, 1971 and Malbi, et. al., 1979).

Victimization by other inmates is typically one of two types: sexual or economic exploitation. It is an area in which there is considerable confusion. Some estimates of the frequency and extensiveness of victimization are extremely high, approximately one in four for sexual assault; while other estimates are relatively low, one to three percent (Gibbs, 1981). The primary reason for this difficulty is the reluctance of inmates to report such incidents because of the stigma associated with being victimized. The problem is particularly true of sexual exploitation. However, the level of victimization and the perceived threat of violence will directly determine the extent to which inmates must live in fear with precipitant psychological problems (Johnson, 1976). Research has documented that "fear is a major component of prison breakdowns" (Gibbs, 1981: 117).

What is meant by self-injury is self-explanatory, and refers to acts that range from self-mutilation to suicide. Research indicates that self-injury is extensive in the inmate population and often accompanies some type of inmate crisis. Fear for safety has been found to be the most significant factor in producing self-inflicted injuries (Johnson, 1976).

The fourth negative prison outcome of interest in this study,

psychological and social deterioration, is more abstract than the three previously discussed. It refers to any loss of life-functioning ability which occurs as a result of the prison experience. The consequences of this effect are increased probabilities of psychological and emotional distress during incarceration and of recidivism and unsuccessful adaptation to productive community life upon release. The American Friends (1971:) outlined the potential deteriorative aspects of incarceration and prison life in Struggle for Justice: "It denies autonomy, degrades dignity, impairs or destroys self-reliance, inculcates authoritarian values, minimizes the likelihood of beneficial interaction with one's peers, fractures family ties, destroys the family's economic stability, and prejudices the prisoner's future prospects for any improvement in his economic and social status."

Because of the diversity of the deteriorative concept, numerous indicators have been used in past studies. Clinical assessment of distress, self-reporting of severe anxiety and related emotional psychological problems, attitude change, and recidivism have all been used as measures of the effects of deterioration. Among the significant research in this area is that which addressed the effect of prisonization. Clemmer (1958), in describing the acculturation process, noted "Prisons work immeasurable harm on the men held in them..." However, recent research, as reviewed by Hawkins (1976), fails to support the universality and consistency of this effect upon the prison population. Rather, the degree of prisonization and the extent to which the stress of incarceration causes the individual to reject conventional values varies with the proportion of the sentence

served, the organizational context, and the broader cultural trends within and outside the prison.

Since these four variables directly relate to the quality of life within prison, each has implications for institutional control and subsequent post-prison outcome. They identify particularly noxious and traumatic aspects of prison life which, if minimized, would contribute greatly to institutional control and would reduce individual distress.

An Operational Model of the Criterion Variables

Based on a review of the correctional literature as it relates to the effects of imprisonment on the individual, three primary dimensions have been identified as contributing to prison adjustment. An individual's social and cultural background, experiences, and personality are related to the level and nature of the prisoner's adaptation. This proposition is based upon our knowledge that some people cope in almost any situation, while others adjust poorly to many settings. We know that certain types of people respond to specific situations and problems in a desirable and healthy manner, while others are unable to cope and react in aggressive, hostile or pathological ways.

In reviewing the characteristics of the individual which are related to adjustment as suggested by previous research (see Bukstel and Kilmann, 1980), four important factors emerge: preincarceration background characteristics, personality, environmental concerns and preferences, and phase of sentence. It seems logical, and is supported by past research, to posit that the latter three variables directly determine outcome; while preincarceration background characteristics

affect personality, prison preference, and outcome directly.

Three of these four factors can be operationalized by the three classification systems discussed in Chapter 1. Risk assessment schemes are comprised of categorized background variables that are known to be related to outcome. Megargee's systems uses the MMPI, a well-known and normed personality inventory, to assign inmates into the ten groups discussed previously. Toch's PPI is an inventory which taps environmental concerns and needs of inmates.

The second important dimension that determines an inmate's response to incarceration is the physical and social milieu of the prison. These factors define the setting to which inmates must adjust. The significance of the prison setting on individual behavior is clearly articulated in the Handbook on Correctional Classification (1978: 7):

During the past two decades there has been increased recognition of the importance of the environment to the outcomes of treatment. Such matters as the physical arrangement of the prison, its conditions for maintaining custody, the attitudes of the staff, and policies and procedures used in the institution have come under close scrutiny in order to determine their impact on therapeutic goals.

Despite the recognized importance of contextual factors, as Bukstel and Kilmann (1980: 487) note in their review, "Little attention was paid to the description of the institutional milieu, especially with regard to orientation and security level. This made it difficult to evaluate the type of person-environment interactions that may exist." Bohn's (1979) research, which indicates that classifications based on the MMPI reduce assaults, points to the effects of the person/environment fit but fail to take the additional step of specifying the nature of the environmental effect.

Given the importance of environmental factors, a primary objective of this study is the identification of contextual characteristics which might affect individual adjustment. There is some evidence that two factors which play a role in this process are the degree of crowding and the security level of the facility. A recent study conducted by researchers for the University of Texas at Arlington (McCain, Cox, and Paulus, 1980) and funded by the National Institute of Justice indicates that overcrowding increases physical, emotional, and behavioral problems in prison. Tension and stress, which are accentuated by space and privacy limitations, were found to produce higher rates of self-injury and assault and increased illness complaints. Since security level designates the routinization of prison practices, the degree of control of activities, and type of housing, it too affects the type and quality of life in prison. Beyond these two factors, exactly what else about the environment of the prison that influences behavior is less clear.

One possible guide is found in the work of Rudolf Moos. Moos became interested in organizational environments in his early work with psychiatric treatment programs and educational settings (Moos, 1974) and subsequently examined prison settings (Moos, 1975). He argues that the social environment "within which an individual functions may have an important impact on his attitudes and moods, his behavior, his health and overall sense of well-being, and his social, personal, and intellectual development" (Moos, 1975: 8). For a prisoner, Moos (1968: 177) views the organizational setting as defining "what he must cope with and clarifies for him the direction his behavior must take if he is to find satisfaction and reward within the dominant culture of the

(institution)."

Drawing upon this theoretical perspective, Moos suggests that every organization including prisons have unique "social climates" that influence the behavior of their members and are analogous to individual personalities in that they have particular and measurable characteristics. Such environmental attributes are hypothesized to "press" the individual toward certain behaviors. Nine categories of environmental press--involvement, expressiveness, autonomy, practical orientation, personal problem orientation, order and organization, clarity, and staff control--were identified by Moos as important in depicting institutional pressures which are exerted on inmates. The Correctional Institutions Environment Scale (CIES), a 90-item questionnaire, was developed to measure the press categories.

As an instrument that distinguishes among correctional environments, the CIES would seem to be a useful conceptual scheme for this research. However, I have noted in an earlier study (Wright and Boudoris, 1982) there is no evidence that the nine dimensions identified by Moos have any significance or relation to what goes on in prisons. Furthermore, the questionnaire fails to meet many fundamental psychometric requirements of a good measurement device.

The research of Hans Toch appears to offer the best guide for conceptualizing prison settings. He argues that because perception of environment is not objective, people define social and physical qualities in terms of their own needs and values. A given setting can, therefore, be evaluated in very different ways by two individuals with significantly different concerns. According to Toch, transactions between a person and his environment may be either congruent (the

milieu attributes correspond to the individual's needs) or incongruent (where attributes are in conflict with individual concerns).

As discussed above, Toch conducted a content analysis of interviews with inmates to identify those aspects of the prison environment which are most significant for them. Eight primary concerns--freedom, emotional feedback, support, safety, privacy, activity, social stimulation, and structure--emerged from these analyses. An instrument to measure the extent to which these factors are present within the correctional environment will serve the conceptual and research needs of this project. So far we have hypothesized that two factors determine prison adjustment. Past research suggests that individuals differ in their ability to adjust to prison. Some people are more resilient than others. Their past experiences and personality have prepared them for the emotional and physical stress that accompanies confinement. Also some prison settings are more desirable than others. Some situations are less stressful and provide greater opportunities for emotional comfort. Some prison settings may be more supportive; they may be safer or less autocratic. Some situations contribute to individual deterioration, while others may encourage growth and self-fulfillment. Some prison settings may cause individuals to be angry and to strike back at the institution, while others may promote complacency.

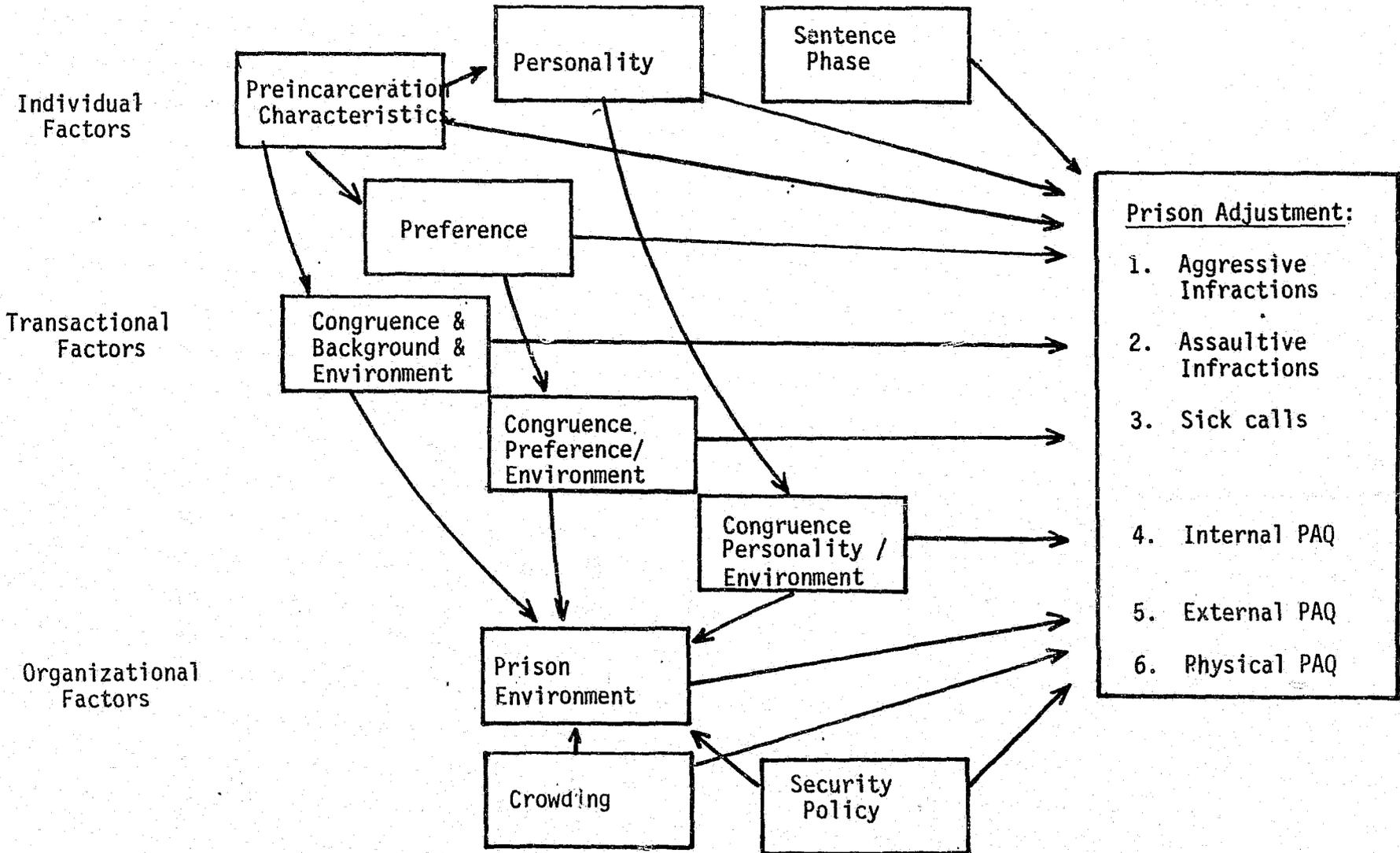
A third dimension arises out of the possibility that there is an interaction between individual and environmental factors. That is, some individuals adjust better to certain environments, than do others. This is the issue of fit or congruence between person and environment. Individual and environmental congruence is often

discussed in the literature as playing an important role in determining prison adjustment, but to date has not been studied empirically. In this study, we examine the various interactions among individual measures and environmental measures to determine which ones play a role in determining adjustment. Specifically, the interaction between risk and environment, between needs and environment, and between personality and environment are examined. Since there are multiple measures of several of these factors, the number of combinations is quite large. However, not all will be useful.

These three primary dimensions and ten factors can be organized into the model shown in Figure 2.1. All ten factors are considered to directly affect prison adjustment. Three of the seven factors comprising the individual and organizational dimensions--personality, prison preference, and institutional environment--are endogenous in that they are dependent on at least one other variable. The remaining four factors, of course, are considered to be exogenous in the model. The three factors in the transactional dimension are rather unique. They are not directly measured but are generated by comparing an individual variable with an organizational one to obtain a measure of congruence. They are disparity measures that can be used to evaluate the interaction effect between person and environment.

By operationalizing the model and studying the interrelationships among the variables, we obtain a much better understanding of the interaction among the factors that contribute to prison adjustment. Based on these analyses we can specify the types of inmates that adjust best to particular environments. It is from these specifications that new schemes for classifying inmates are developed. The ability of each

Figure 2.1 An Model of Prison Adjustment



of the three existing classification strategies—risk assessment, the Megargee MMPI typology, and the PPI typology—to distinguish adaptation patterns in different settings is then tested.

Research Design

There were several designs, each with certain advantages and disadvantages, that could have been employed to study the research problem outlined above. The ex post facto design selected meets the demands of the research task and is more economical to operationalize than designs requiring measurements at multiple time periods.

A sample with sufficient variety for both organizational and individual levels of analysis was generated. To ensure that the effects of environmental contexts on adjustment could be evaluated ten prisons were selected as study sites. Since our goal is to study how different types of inmates react to different institutional settings, within organization samples had to be sufficiently large to assure most if not all types of inmates would be included. Once the samples were selected, information about the four adjustment indicators and the seven independent variables was collected for each subject. Some information was obtained from official records; others directly from the inmates during site visits.

Once the data were obtained and organized in a machine-readable form, we initially examined the relationship between person and environment fit and prison adjustment in order to provide the necessary basis for formulating a new classifying procedure. The first step in this process was to evaluate the model presented in the previous section using (OLS) multiple regression. We examined the extent to

which the overall model could explain outcome and then preceded to evaluate the utility of individual variables. Particularly important to this analysis was the role of transactional variables, independent of the individual or organizational effects, in explaining adjustment. This indicates whether the central hypothesis of this study--that different types of people react to different prison settings in different ways--is correct.

Along with the analysis of the model, a comparative evaluation of the three systems of classification--risk, Megargee's typology, and Toch's PPI--was undertaken to determine their usefulness in predicting inmates who would ultimately experience problems in adjusting to prison. We employed both objective and subjective criteria in this assessment. Using the various outcome measures selected by this study, we evaluated the postdictive power of each scheme. We then examined whether the different categories or levels differed as predicted.

A third and final aspect of the research project was the development of a new classification system through a careful empirical study of interaction effects. These efforts were guided by what we learned about the transactional variables in the overall explanation of adjustment.

Since classification methods identify groups or categories that are meaningfully tied to some outcome variable, continuous variables were categorized and subjected to two-way analysis of variance. In this way, we evaluated the main effects to see if groups of inmates classified by individual or organizational attributes differed, and to assess the interaction effect of the two dimensions. For those pairs of variables for which significant interactions were found, two-way

tables were produced so the nature of the interactive effects could be examined. What was specifically sought were monotonically increasing or decreasing interactions. For in these situations, it would then be possible to develop classification schemes that place type 1 inmates in setting A, type 2 inmates in setting B, and so forth.

Various two-way classification schemes may be evaluated by comparing the expected failure rate for the sample had all type 1 inmates been placed in setting A, all type 2 inmates been placed in setting B, and so forth with the actual failure rate. By subtracting the expected failure rate from the actual rate and dividing that number by the actual rate, we obtain PRE (proportional reduction in error) statistical indicators that can be compared.

This approach is noteworthy for several reasons. It takes an exploratory approach to studying adjustment. As noted previously, we know something of the individual and organizational factors that are related to prison behavior, but our knowledge is incomplete. We know virtually nothing of the interactive effects. So this study took a very broad approach to studying adjustment and included numerous variables which were thought to be related to outcome. But with such breadth, specificity is lost. For example, the measure of privacy used was generated from the inmates' answers to eight questions. For those variables in which we find significant relationships there will be a need for more indepth study, which will lead to even more precise classifications.

The ex post facto design of this study examines the postdictive rather than predictive power of the model and its variables. This allows us to examine the relationships among variables for this

particular sample, but restricts us in making a strong argument for the predictive validity of the model. We do not know how stable the observed relationships will be across samples. The way this is generally dealt with is by splitting the initial sample in half, developing and testing the classification scheme from that half-sample, then replicating the classification scheme on the second half. The problem with that approach here is the need for extremely large samples. When conducting research with two dimensions the number of cells becomes quite large with just a few categories on each dimension. A large sample is need just to assure proper representation in each cell. For this reason, it was not possible to split the sample.

Another aspect of this study that limits its generalizability is its use of prisons within one state system. To the extent that New York facilities and inmates are different from those found in other states, the findings of this study will not be applicable. Certainly, this is a question that should be tested before the schemes developed here are used elsewhere.

For an initial study, the approach taken in this study is appropriate and adequate. But it should be realized that it is a pilot study. Additional study will be required and particular attention must be paid to the generalizability and validity of the model.

CHAPTER THREE

Data Collection and the Sample

In order to test the model described in the previous chapter and to examine new ways of classifying and assigning inmates to prison settings, this research was undertaken as a joint effort between researchers from the Center for Social Analysis at the State University of New York State at Binghamton and the New York Department of Correctional Services. The researchers from the University took primary responsibility for collecting the data and conducting the analyses, while the Department of Correctional Services provided support, coordination, and the setting for conducting the research.

As the design for this research was developed, it became clear that a large sample drawn from several facilities would be needed. It was decided earlier that minimum security facilities would be excluded. This decision was made because the population in these prisons is so transitory, and it is expected that environmental characteristics are so unstable that classification to particular settings within these facilities would be extremely problematic. The elimination of this strata of the prison population made the research task more manageable. It was also decided that the study would be conducted at ten facilities, five maximum security and five medium security prisons. This number was chosen arbitrarily but was expected to provide sufficient between facility and within facility variation to make the study possible.

In order to operationalize the theoretical model of prison adjustment, a single or multiple measures of each of the seven

independent variables--pre-incarceration characteristics, prison preferences, personality, sentence phase, crowding, prison environment, and security policy--and the dependent variable, adjustment, were needed for each subject. The transactional variables, as noted above, were created from these variables. When possible, existing data already collected by the Department of Correctional Services were used. This information was used not only because it could be readily obtained but more importantly so that the classification systems that were developed would not greatly increase the data production demands for the correctional practitioners. Also when possible, existing methods of data collection with proven records of reliability and validity were used. When this was not possible, new instruments were developed in ways that would assure that they met the demands of good measurement.

The data for this project were collected during the summer and early fall of 1983. Site visits were made to each of the ten facilities to obtain information directly from the inmate research subjects during July, August, and September of that year. Most visits required three weekdays at each prison to complete the data collection. To coincide with this collection period, information from the computerized records of the Department was taken for August 15, 1983.

The purpose of this chapter is to discuss how the data were obtained. The methods used to measure each variable are described. We will examine the reliability and validity of the attributes of interest. We will also discuss how the ten prisons and sample of inmates studied in this research were selected. The representativeness of the sample to the population from which it was drawn is analyzed.

Measurement

Indicators of five variables were obtained from Department of Correctional Services' records. Pre-incarceration characteristics are demographic and social attributes of individuals. They allow us to differentiate and describe different types of inmates and were used in constructing the risk assessment classification scheme. These data were obtained from the computerized files of the Central Office of the Department and provided to the research team on a computer tape. This information is collected, coded, and recorded for all inmates at the time of their reception into the New York prison system. Some of the variables included are date of birth, ethnic group, religion, educational background, occupational history, offense history, use of drugs and alcohol, and current offense and sentence.

Since most of these variables characterize individual attributes, their validity rest upon face validation. For example, measured to the nearest year, age or age upon reception are rather straightforward and as such their validity does not come into question. Although not empirically verified, the reliability of this data set also appears to be very high. These are the working records of the Department, they are constantly used, and when mistakes are found, they are corrected. These are the data the Department uses when analyzing the characteristics of their population.

Our measure of sentence phase was also produced from the information contained in these computerized files. It was derived as a proportion of the sentenced served by subtracting the date of reception from the date of the study, August 15, 1983, and then dividing by the individual's minimum sentence. As such, our measure indicates the

proportion of the minimum that has been served. The minimum sentence (as opposed to the maximum, for instance) was selected because in New York, all inmates must serve their minimum, at which time they are then eligible for parole. The value for this measure could vary from a fraction approaching 0.00 for inmates just beginning their sentence to a number greater than 1.00 for inmates who have already served their minimum but, so far, have been denied parole.

The measure of crowding used in this study is neither as sophisticated nor as precise as desired. We obtained an exact population count and a number which was considered to be the "designed" capacity for each facility from the Department of Correctional Services. The capacity estimate is based upon the number of inmates the facility was intended to house as it was designed. If modifications were made since the facility was originally built, this number was adjusted accordingly. Our measure of crowding was generated by dividing the population by the designed capacity. If the resulting proportion was greater than 1.0 then the facility exceeds its intended capacity by that proportion. If the proportion was less than 1.0, the facility was operating below capacity.

There are two problems with this measure. Crowding has been linked to adjustment problems when it has been conceptualized as density of the population and as the amount of actual living space. While proportion of designed capacity is probably correlated with these other measures, we are not sure how similar the measures are. Secondly, our measure is at the institutional level. We can say nothing about individual variations nor even about differences among living units. Thus, the single value for each facility is assigned to

all inmates residing within that prison; the measure when analyzed statistically becomes a proxy for a variety of facility characteristics. For this reason, if a relationship is detected between crowding and adjustment we cannot be sure what it is about the facilities that is related to outcome.

Two sets of data which were used to produce measures of the dependent variable, adjustment, were also taken from official records. Disciplinary reports are maintained for every inmate at each facility on a form referred to in New York as the Warden's Card. Every rule infraction reported by the staff, both major and minor, the action taken (e.g. dismissal, formal hearing, etc.), and the sanction administered (e.g. loss of privileges, keep-lock, special housing, etc.) are recorded on these cards. The card of every subject who participated in the study was photocopied during the site visits. Upon returning to Binghamton, the research team coded the information about offenses, actions taken, and punishments that were recorded on each subject's card for the three years prior to the research, from August 15, 1980 to August 15, 1983. This data set then consisted of a variable record of infractions for each subject. Some inmates in the sample had no history of disciplinary problems, while the records of others were lengthy.

In all, sixteen fairly distinct rule infractions were identified: inmate altercations, assaults on staff, assaults on inmates, possession of contraband, destruction of property, disruptive behavior, escape, attempted escape, arson, self-inflicted injury, sex acts, refusal to follow rules, illegal enterprise, attempted suicide, theft, and incitement of mass demonstrations. To reduce the variety of this array

of infractions and to construct meaningful and useful groupings of infractions, we turned to the literature for guidance. Edinger (1979: p. 236) classified offenses into five categories: (1) verbally aggressive incidents (including threatening or insolent behavior, refusal to obey an order, disruptive behavior, and use of abusive language), (2) group defiant infractions (including participation in mass demonstrations, inciting to riot, and assisting in rule infractions), (3) evasive incidents (including lying and being in an unauthorized area), (4) pilfering (including both stealing and the possession of contraband), and (5) total infractions. To this list, we added a sixth category, assaultive acts (including attacks on staff and other inmates). When the offense records of the inmates were classified into the six groups, some categories proved to be more useful than others. The percentage of the sample having at least one group defiant or evasive infraction was extremely small, less than five percent. Also the percent of the sample who had been charged with pilfering was fairly low. For this reason, these three categories were eliminated. Also the correlation between verbally aggressive incidents and the total number of infractions were extremely high, ($r=.98$), so there was little need for including both distinctions and the latter was eliminated. This left us with two indicators of disciplinary problems, verbally aggressive incidents and assaultive acts. There was considerable variation in the frequency of problems among subjects for these two variables, and surprisingly they were not correlated ($r=.01$).

The second source of adjustment information found in the official records of the Department was the computerized sick-call information. Since illness complaints are known to indicate stress and anxiety, this

data set appeared to be a useful secondary source of information about inmates experiencing coping difficulties. The data were provided by the Department to the research team on a computer tape that contained a variable record of the sick call history for each inmate for the same period used for disciplinary history, August 15, 1980 to August 15, 1983. Each time an inmate reported for sick call, the date and diagnosis--as categorized by the International Classification of Health Care Problems in Primary Care (1983)--were recorded. However, the Department indicated that the reliability of these data was not as high as would be desired. Some facilities were very good in providing current and complete information, but others were not. The information that was supplied to the Central Office was not carefully scrutinized for accuracy.

In exploring ways to categorize this information, we examined the five different groupings, but moderately high to high coefficients were obtained when the frequency counts in the five categories were correlated, from $r=.60$ to $.97$, so it was decided that any of the indicators would do just about as well as any other, and the total number of sick calls was selected as our indicator.

There is also a question concerning the validity of this indicator. It does not directly measure emotional and psychological distress. Some illness complaints occur because of physical pathologies. Others result from injuries. We do not know the correlation of this secondary indicator, and the primary one of distress. Indicators of the four remaining variables for which data collection was required--personality, preference, environment, and self-perceptions of adjustment--were obtained directly from research

subjects through the administration of questionnaires during site visits to each of the ten prisons selected for study. For the first two variables, personality and preference, existing questionnaires were available and used to collect the needed information. For the other two variables, environment and adjustment, existing methods were inadequate and part of the data collection effort involved the development of new questionnaires.

During the site visits, inmates were brought together in groups of 30 to 40, the project was explained to them, and the four instruments were administered by the research team. Typically, the entire survey session required two, two-hour periods for the subjects to complete all four questionnaires. In some facilities, the inmates were brought together for a morning session which was then followed by an afternoon one. In other prisons, the two sessions took place either in the mornings, afternoons, or evenings of consecutive days. The preference, environment and adjustment questionnaires were completed in the first session, and the lengthy personality inventory in the second. The inmates were not financially compensated for their participation but were told a letter of appreciation would be sent to the institution to be placed in their files. Questionnaires were administered in three ways. Inmates could read the questions in English and mark their answers on a form. If they preferred, taped versions of the questionnaires were available in English and Spanish. The choice of method was left up to the inmates.

Personality was measured by the Minnesota Multiphasic Personality Inventory (MMPI). As discussed in Chapter 1, this is a lengthy questionnaire consisting of 566 true and false items. It was developed

in the early 1940s as a quantitative tool to assist in psychiatric evaluations of personality and emotional stability. Since then the instrument has been used extensively and norms for it have been standardized. There are fourteen scales that are commonly scored from the responses to it, but over 100 other scales are available. Of particular interest to this research was Megargee's typology of inmate personality types that was described earlier. The classifications appear to provide us with a measure of personality that is appropriate for the population with which we are studying and one which is generally recognized within this field of study.

To obtain the Megargee classification of each inmate in the sample, the MMPI was administered using Bohn machine-readable answer sheets that were designed for this purpose. The completed answer sheets were mailed to Megargee at Criminal Justice Assessment Services in Tallahassee, Florida, where they were scored by computer. A tape containing the Megargee classification and K-corrected scores on 100 additional scales was mailed back to the project staff.

A problem was encountered in this particular aspect of the data collection effort. Many inmates, after completing the first session, tired of the research, had other commitments, or had their curiosity satiated, and failed to return for the second session in which the MMPI was administered. Other inmates even though they began the questionnaire were unwilling to complete it. For these reasons, only 55 percent of the total sample completed the inventory.

Some differences in the proportional distribution of types for this sample and those observed in past studies are noted in Table 3.1. The percentages of this sample most closely parallel those of

Table 3.1

Percentage of Each of the 10 Profile
Types for Three Previous and Current Samples

Sample	Type										Total
	A	B	C	D	E	F	G	H	I	J	
Peterburg Fed. Correctional Inst. (Edinger, 1979:23)	6	3	6	1	15	8	7	17	37	1	2063
Alabama Score (Edinger, 1979:23)	8	3	6	2	16	8	8	13	35	2	1291
Megargee (Megargee & Bohn 1979:101)	17	4	9	10	7	8	7	13	19	3	1164*
This Study	19	2	12	6	2	15	7	13	18	7	339

* Sum of Megargee percentages do not total 100% since 4 percent were listed as not classified. Not classifieds were deleted from all order samples.

Megargee's original sample (Megargee and Bohn, 1979:101) and differ from those found by Edinger (1979:23) in his validation study.

Inmate preferences, or environmental concerns, were measured using Toch's Prison Preference Inventory (PPI). As described in Chapter 1, this 58-item, forced-choice questionnaire determines inmate concerns about eight environmental dimensions--activity, emotional feedback, freedom, privacy, safety, social stimulation, structure and support. Each dimension is compared to the other seven in questions such as "I'd prefer guards who are consistent, or housing that keeps out noise." From the responses, a score for each dimension is obtained that reflects the relative importance of that dimension to the individual. The responses of the subjects to the questionnaire were coded in machine readable form and scored by a computer routine written by the project staff.

As seen in Table 3.2, the concerns of the inmates in our sample are similar to those found by Toch (1977:243) in earlier research. In all three samples, the greatest concern is support and the least concern is freedom. Emotional feedback and activity are also strong needs of the inmates in all three samples. The major difference between our sample and Toch's appears to be that structure is of much greater concern to our sample and social stimulation is less important.

The idea that organizations have contextual properties that significantly affect individuals within them is a central theoretical proposition of this research. As discussed in Chapter 2, there is some evidence to support this position, but a broad conceptualization that guides the measurement of significant contextual variables has not been

Table 3.2

Average Score and Ranking of Prison
Preference Inventory Scales
For This Toch's Original Samples (1977:243)

Variable	Toch's New York's Sample Ave. n=299		Toch's Combined Sample Ave. n=1653		This Sample n=915 Ave.	
	Score	Rank	Score	Rank	Score	Rank
Privacy	5.8	7	5.4	7	5.7	6
Safety	7.4	4	7.3	4	6.8	5
Structure	6.1	6	6.3	6	7.1	4
Support	10.2	1	9.9	1	10.1	1
Emotional Feedback	7.8	3	8.3	2	8.0	2
Social Stimulation	6.5	5	6.8	5	5.5	7
Activity	8.7	2	7.8	3	7.4	3
Freedom	3.7	8	4.5	8	5.5	8

developed. A scheme that was considered but rejected for both theoretical and methodological reasons was Moos' Correctional Institution Environment Scale. Despite the inadequacy of his questionnaire, Moos (1975) was correct in seeking to describe those attributes of the social milieu which "press" upon the individuals and influence their behavior. In failing to identify the CIES attributes empirically or in some way validating them, Moos was unsuccessful in his attempt to develop a useful indicator. However, Hans Toch has identified those contextual factors that are of greatest concern to inmates and as a consequence has probably identified those attributes that are most likely to influence their behavior.

Toch (1977: p. 10) sought to identify those "shared environmental concerns . . . that 'cut across' persons and that are differentially satisfied in different environments." To do this, he and his research team conducted nine hundred interviews in which inmates were asked about their crises and problems, how these events occurred, and how they perceived them and coped with them. According to Toch (1977: p. 16), these interviews provided "portraits of what is valuable and noxious to inmates in prison settings." A content analysis of this information identified the eight central environmental concerns listed earlier. Toch used the eight dimensions to measure individual needs, but they seem entirely appropriate for our task. The eight dimensions represent what it is in the prison environment that is commonly recognized as important by inmates. They are the most significant attributes in a description of what it is like to live in prison. Also, by using the same dimensions for classifying individual concerns and organizational attributes, we will have comparable dimensions for

considering the transactional effect of person and environmental fit.

Construction of an instrument to measure these dimensions of the prison environment began with the writing of an initial battery of questions. An effort was made to phrase each item so that it was very specific, tapped only one dimension, and had a pragmatic focus. The initial questionnaire consisted of 121 items, each associated with one of the eight contextual dimensions. This instrument was pretested by administering it to randomly selected samples of inmates at two New York state, medium security correctional facilities. Inmates were asked to complete the instrument and then comment on it. These comments along with information gained from item analyses were used to revise the instrument (an earlier project report, "Developing the Prison Environment Inventory," describes this process in greater detail). The result was the 80-item instrument, the Prison Environment Inventory, (shown in Appendix A) used in the primary data collection.

The responses of all subjects in the overall sample of this study were then rigorously tested to assure internal validity of the instrument. Item-to-scale correlations were used as an initial test of dimensionality. The results indicated that most items were interrelated as theoretically posited. Exploratory factor analyses were then undertaken to determine if the items form eight independent dimensions. The results generally supported the conceptualized structure. Seven of the eight dimensions (Activity was not represented in the resulting factor pattern) were indicated empirically by the items associated with given factors and the size of the factor loadings. The success of an orthogonal rotation in identifying the underlying structure suggested that the dimensions were independent.

When the sample was split in half and the analyses were rerun, the structure was also found to be relatively stable.

Based on the results of the factor analyses, a final, shorter, 48-item version of the Prison Environment Inventory was formed. By using factor loadings to identify the best items,, six were selected for each dimension. These final dimensions should be close to the lowest common denominator of the organizational experience and should not possess their own subdimensions. The item-to-scale correlations were in an acceptable range, as were the estimates of internal consistency indicated by coefficient alpha. Scale intercorrelations were found to be moderate to low. These results led us to conclude that the final version of the PEI was a valid and reliable measure of eight significant contextual attributes that were clearly articulated in the questionnaire. It was this form of the instrument that was used in exploring the effect of prison environments on adjustment.

The scores on the PEI are used in two ways. The individual scores on each dimension are considered to be indicators of individual perceptions of environmental conditions. As such, they are used to see how individuals' attitudes about their contextual settings affect their behavior. Scores are also averaged for all individuals in each facility or each living unit of each facility, and the averages are used as indicators of the actual conditions found there. This method of aggregation is appropriate if particularly negative raters or particularly positive raters are present in some settings and not others. The measure is used to study the organizational effect on behavior.

The second instrument developed by this project was the Prison

Adjustment Questionnaire (PAQ), which was designed to measure self-perceptions of adjustment among the inmates sampled. Other instruments were available, but none met the specific needs of this study. For example, the questionnaire developed by Poole and Regoli (1980) to study discretionary decision making in prison measures institutional rule breaking does not include other types of adjustment problems needed in this research. The interview schedule used by Johnson (1976) in his research concerning psychological breakdowns and prison survival would be helpful in obtaining information about the circumstances in which inmates deteriorate and experience extreme emotional distress, but it also lacks the needed breadth for this research and could not be administered in a group setting, a logistical requirement of this study. A relatively short questionnaire that could be used in a group setting and that measures a variety of adjustment problems was needed.

The Prison Adjustment Questionnaire consists of 20 questions that deal with nine problems that inmates could experience during their incarceration. These include the uncomfortableness they feel around others in prison; the anger, fear, illness and injury they experience; the trouble sleeping they have, the physical fights and arguments they get into, and the times they are taken advantage of by other inmates.

In designing the instrument, it soon became apparent that two problems had to be resolved if meaningful indicators of adjustment were to be obtained. Obviously, many of the people who end up in prison have problems coping. They have long histories of adjustment problems in school, in their families, and with the law. Since this study is, in particular, interested in the adverse effects of the prison on

adjustment, we wanted to control for this type of person. We want to identify those problems that had been exacerbated or created by incarceration. To do this, the first question about a particular problem asked the respondent, was whether the problem was worse in prison than in the freeworld. Secondly, we saw a need to anchor responses to some common sense of frequency. For example, what does that mean if an inmate reports that he is often angry? That he is angry all the time or once a day? To solve this problem, five very specific response categories were used: (a). most of the time (you are angry several times a day), (b). at least once a day, (c). occasionally (every few days), (d). seldom, and (e). never. The PAQ was scored by first looking at the prison/freeworld comparison. If an inmate indicated that his problems were no worse in prison, he received a 0. However, if he indicated that things were worse, we looked to the second question which indicated the frequency with which the problem occurred. A "never" response was also assigned a score of 0. The other four responses were given a 1, 2, 3, or 4 in ascending order according to frequency. In this way, we obtained a score for 0 to 4 for each of the 11 problems (two of the nine basic problems had two categories: discomfort with staff and inmates and arguments with guards and inmates).

To determine the psychometric properties of the scale and the subscales found within it, several tests similar to those performed on the PEI were conducted. Exploratory factor analysis of the items was undertaken to determine the underlying structure of the instrument. Squared multiple correlation coefficients were used as estimates of commonalties and an orthogonal (Varimax) rotation of three factors was

performed. The resulting factor pattern is shown in Table 3.3. Three interpretable dimensions were found. The first includes items which indicate that the person is experiencing problems relating to other people about him. This dimension was labeled "External." The second dimension includes problems that the individual personally experiences in coping with incarceration. We labeled this factor "Internal" because the distress occurs within the individual. The third dimension includes very real and tangible physical problems that the individual may experience.

The factor loadings shown in Table 3.3 indicate that the dimensionality of the questionnaire is fairly good. Many of the loadings are quite high, and few items load highly on two dimensions. The item-to-subscale correlations shown in Table 3.4 support this conclusion. The correlations between the items and their associated dimensions range from moderate to high while their correlations with other dimensions tend to be relatively low. As would be expected, the subscales are slightly correlated (for the external and internal dimensions $r=.28$, for external and physical $r=.38$, and for internal and physical $r=.39$). The internal consistency of the instrument varies from adequate to good. Coefficient alpha for the physical dimension equals .50, for the internal dimension it is .67, and for external it is .74. Since there are few items comprising each dimension these levels are more than acceptable. The remaining three variables for which indicators were needed are those that form the transactional factor in our model of prison adjustment. As discussed in Chapter 2, both individual and organizational factors may influence adjustment, but the interaction between the two factors is a third element that may

Table 3.3

Rotated Factor Pattern
Prison Adjustment Questionnaire

Dimension	Item	Factor 1	Factor 2	Factor 3
External	9. Argues with Guards	.76	.08	.20
	8. Argues with Inmates	.75	.13	.17
	7. Fight	.45	.02	.32
Internal	1. Uncomfortable with Guards	.01	.72	.15
	2. Uncomfortable with Inmates	.08	.71	.06
	5. Trouble Sleeping	.10	.35	.35
	3. Angry	.28	.35	.26
Physical	10. Injured	.25	.01	.44
	4. Ill	.13	.05	.42
	6. Afraid	.16	.26	.41
	11. Taken Advantage	.08	.18	.35
Eigen Value	2.56	1.04	.39	
Proportion of Total	.78	.32	.12	
Proportion of Rotated	.38	.35	.27	

Table 3.4

Item-to-Subscale Correlations
Prison Adjustment Questionnaire

Dimension	Item	External	Internal	Physical
External	9. Argues with Guards	.90	.24	.32
	8. Argues with Inmates	.89	.26	.31
	7. Fight	.63	.17	.33
Internal	1. Uncomfortable w/Guards	.11	.75	.27
	2. Uncomfortable w/Inmates	.16	.77	.19
	5. Trouble Sleeping	.19	.68	.34
	3. Angry	.34	.66	.30
Physical	10. Injured	.33	.17	.58
	4. Ill	.21	.21	.64
	6. Afraid	.27	.35	.74
	11. Taken Advantage	.18	.23	.57

be important in determining how prisoners cope. In this, we are posing the question of whether fit or congruence between person and environment are empirically tied to adjustment. Do different types of inmates adjust better to different environments?

As our model was specified, it was possible to study three types of congruence. We examined the interaction between individuals from different backgrounds in different environments to see if some settings were more appropriate for certain types of inmates than for others. We also analyzed whether inmates with different sets of concerns adapted better to environments which met those concerns. Finally, we determined whether inmates with different personalities coped better in specific settings.

To study these transactional effects, we developed an indicator of fit or congruence. As noted above, it was possible to construct these measures from the information already described. We began by converting all indicators to a common unit of measurement. Background (defined by a composite score indicating risk that will be discussed in Chapter 5), preference, and environment scores were standardized by subtracting the sample mean from each score and dividing by the standard deviation. Since personality is indicated by categories, its conversion was somewhat more complex. Recall from Chapter 1, that the ten personality types can be ranked from most normal to most deviant. We assigned a number from 1 to 10 to represent this ranking and then standardized the array of scores. Once all scores were standardized, measures of congruence were obtained by subtracting the standardized scores for a particular environment variable from the standardized scores for a particular individual variable. To rid the scale of its

bipolarity, all scores were squared. A resulting congruence score approaching zero represents high congruence, whereas a high score represents incongruence. Since there was a background risk score for each type of adjustment problem, eight preference variables, eight environmental perception and eight aggregated environmental indicators, and a personality ranking the number of possible pairings was fairly large. However, it was not necessary to consider all pairs and many of those examined did not prove that useful, so the final number was reasonable.

Sampling Procedures

Sampling was conducted on two levels: organizational and individual. The ten facilities used were selected by randomly selecting five from all medium-security facilities and five from all maximum-security facilities (special function units were excluded). Once the facilities were identified, individual level sampling was conducted proportionally by facility.

The total sample that was thought to be needed to conduct this research was estimated to be between 800 and 1200 subjects. As a rough target, we sought a maximum sample size of 10 percent of the population at the large facilities and 20 percent at the smaller facilities. Over-sampling at the smaller prisons was necessary to ensure the samples were large enough for within-unit analyses.

Approximately two weeks before the scheduled site visits, the Department of Correctional Services' research analyst who worked with the research staff on the project, randomly generated and mailed to the facility a list of potential subjects which was approximately two

one half times larger than the desired sample size. Prison officials were instructed to begin with the first name on the list and form groups to be called out to participate in the project. They were to skip inmates who were confined for disciplinary reasons, were hospitalized or furloughed, or had visits scheduled, or some other administrative problem that precluded their participation. The project staff gave each facility a number which was approximately 50 percent greater than the upper limit sample size for the facility and asked them to form initial call-outs equal to that number.

Inmates were notified that they had been randomly selected and given a brief description of the project and data collection effort by the facility staff. In some prisons, the call-out to the study was mandatory but participation was voluntary. In other prisons, both the call-out and participation were voluntary. In one facility, the staff first determined if the inmates were willing to participate and then placed them on the call-out. When the inmates were brought to the research team, the project was described, the consent forms were distributed, and signed agreements to participate were obtained before the questionnaires were administered. Those who participated formed the final sample.¹

There are three important groups of inmates which this sampling technique may have missed. To the extent that chronic troublemakers are over-represented in the group that was confined for disciplinary reasons, they will be under-represented in the sample. Also absent from the sample are those inmates who are confined in protective custody. Finally, since participation in the study was voluntary our sample excludes those individuals who were unwilling to participate.

If non-participants are evenly distributed across different inmate groups then the sample would not be biased. More likely, however, non-participants have distinct characteristics. They may be the particularly recalcitrant or the illiterate. We really do not know. To an extent, the representativeness of the sample can be evaluated by comparing the characteristics of the sample with those of the population. However, it is unlikely that this will detect some of the minor biases which are present. Such is the nature of conducting applied research in the unique setting of a prison.

Information about the sampling frame is shown in Table 3.5. The number of subjects desired, which we gave each facility for their call-out, was never met. From the time the lists were formed to the actual time for the survey sessions to begin, inmates would be confined for disciplinary reasons, received visits, or became ill and reported for sick-call. Fallout also occurred because of scheduling confusion and misinformation about the research. Some inmates simply avoided reporting for the survey. Of those that showed up, almost all participated. The actual sample for each facility was about 50 percent of the call-out requested. At the large maximum-security facilities, participation fell slightly below 50 percent; at the smaller, medium-security prisons it tended to be slightly higher.

The final sample of 942 subjects selected for this study represents almost eight percent of the total population of the ten facilities. The populations of the smaller medium-security prisons are over-represented, about 11 percent of their population was sampled; whereas the larger maximum-security prisons are under-represented with 6 percent of their totals.

Table 3.5
Sampling Frame

Facility	Population	Initial List	Call-Out Requested	Actual Sample	Percentage Of Call-Out	Percentage Population
Fishkill	1616	360	240	97	40.4%	6.0%
Mt. McGregor	442	200	120	56	46.7	12.7
Ogdensburg	234	125	75	42	56.0	17.9
Auburn	1637	360	240	144	60.0	8.8
Mid-Orange	736	330	220	124	56.4	16.8
Green Haven	2044	360	240	90	37.4	4.4
Elmira	1198	375	225	88	39.1	7.3
Attica	2051	--- ^a	--- ^a	109	----	5.3
Great Meadow	1468	360	240	97	40.4	6.6
Albion	337	150	110	65	59.1	19.3
TOTAL	11,763		1,710	913 ^b	53.9%	7.8%

^a Attica first determined if the subjects were willing to participate before placing them on the call-out. Because of this procedure, two data collection periods were required.

^b Information about facility of current residence was obtained from the computerized files of the Department and was not part of the information recorded during the surveys. The final sample consisted of 942 subjects but the facility was not provided in the Departmental records for 29 of these individuals.

In Table 3.6, the results of an analysis of the representativeness of the sample are presented. Comparisons of the total sample and facility subsamples and their respective populations are made on eight individual attributes: ethnic background, histories of alcohol or drug abuse, region of commitment, prior adult criminal record, crime, age and minimum sentence. As can be noted in the first 12 rows of findings, the samples appear to be representative of their immediate parent population. Only four of the 120 tests are significant at a significance level of .05 which is fewer than the number expected by chance alone, so we can be fairly confident of the representativeness of the sample. When the sample is compared to populations of all mediums and maximums, not just the ten facilities of this study, some bias is noted. However, the sample appears to be adequate for the research task specified.

Table 3.6
Sample Analyses

Comparisons		Ethnic back- ground	Chi Square Value				Prior Record Crime	T-Value	
Sample	Pop.		Alcohol Use	Drug Use	Commit- ment Region	Age		Mini- mum Sentence	
Ogdensburg (n=42)	(n=195)	1.57	.95	.03	.24	.08	.61	-.63	-.47
Attica (n=82)	(n=1725)	7.51	.86	.07	2.34	.01	.04	-.63	-.03
Auburn (n=119)	(n=1309)	6.06	2.83	.03	.57	.91	.002	-.20	.39
Great Meadow (n=90)	(n=1259)	3.96	.98	.13	2.03	1.56	7.03*	.70	-.96
Green Haven (n=69)	(n=1640)	3.10	2.50	.73	1.90	.56	.51	.43	-.78
Elmira (n=85)	(n=942)	4.68	2.45	2.44	1.81	.02	.06	.84	-.16
Fishkill (n=92)	(n=1389)	.67	.11	.94	1.49	.96	.04	.49	-2.21*
Mid-Orange (n=119)	(n=654)	1.53	3.32	.13	3.32	.01	.58	-2.12*	-1.16
Albion (n=64)	(n=293)	.16	.56	.09	.06	.15	.04	.75	-.50
Mt. McGregor (n=53)	(n=287)	3.24	4.23	.76	3.00	.23	1.56	.94	-.89
Sampled Mediums (n=370)	(n=2818)	1.50	5.54	.36	20.77*	.03	.72	-1.30	-1.48
Sampled Maximums (n=445)	(n=6875)	1.52	2.57	2.63	2.64	.90	3.04	1.87	-.02
Sampled Med. Sampled Max (n=370)	(n=7949)	3.30	5.78	.08	51.15*	1.22	2.92	1.34	1.03
Sampled Max All Max (n=445)	(n=10,460)	1.04	3.32	2.10	11.53*	.36	4.69*	.94	-1.89
All Sampled (n=815)	(n=9693)	1.12	8.12*	1.64	12.66*	1.55	1.66	1.20	2.90*
All Sampled All Med-Max (n=815)	(n=22,322)	1.19	9.17*	1.11	43.52*	.19	3.67	1.24	-2.53*

* significance at $\leq .05$

Notes

1. The protection of the research subjects' anonymity was of special concern throughout the data collection process. Two problems were faced. We wanted to ensure that the responses were kept in complete confidence and that no one from the Department of Correctional Services would have access to them. Secondly, we wanted to avoid recording any identifying information that could later tie responses to individuals or that would in any way infringe on the subjects' right to privacy.

The consent form (contained in Appendix A) was designed to maintain anonymity as well as assure that all research subjects had given their informed consent to participate. The form contains a written description of the project and the questionnaires, a release statement, a signature line, and a space for the respondent to print his name, Department of Correctional Services Identification number, facility and living unit. This form and the answer sheets for the questionnaires were attached and a unique research subject identifier number was stamped on each page. Once the subject signed the consent form, he tore it off the answer sheets and handed it to the Department liaison person who was employed to work with the project staff. The research team retained the questionnaire answer sheets but had no identifying information. All additional information was supplied by the Department (background information, warden's cards, sickcall information, etc.) with only the research subject identifier number by which information could be matched for each subject.

CHAPTER FOUR

Prison Outcome and the Existing Classification Systems

As a first step toward developing new ways of classifying inmates in prison settings, we sought to explore the three systems of classification described in the introductory chapters--risk assessment, Toch's Prison Preference Inventory, and Megargee's MMPI typology. As a part of the research, we wished to evaluate the ability of the schemes to do what they were designed to do: distinguish individuals according to their patterns of adjustment. In doing this, we analyzed how effective the systems are in identifying distinctive groups with different probabilities of undesirable prison behavior. We wanted to know how well each scheme predicts adjustment.

These assessments provide us with the necessary information to compare the three systems. As pointed out in Chapter 1, no comparative evaluation has been conducted. In constructing the systems, their designers have, to varying degrees, attempted to assess the validity and particularly the predictive validity of their schemes, but, to date, no one has determined which method can best identify those inmates who will experience problems. It is not known if Megargee's typology or risk assessment will best identify those inmates who have high probabilities of attacking correctional officers some day. Nor do we know if Toch's inventory or Megargee's typology will tell us which inmates are most likely to suffer severe forms of emotional distress during their incarceration. It was for this reason that the first goal of this project was to evaluate the usefulness of these three schemes in predicting certain prison outcomes.

Prison Adjustment

Before beginning comparative evaluation, attention should be given to the dependent variables. As can be recalled from earlier chapters, adjustment was operationalized in several ways. On one hand, we were concerned about security and prison control. In this context, well-adjusted inmates are not a threat to the safety of other inmates nor correctional personnel, they do not attempt to escape, and do obey prison rules. A second way adjustment was conceptualized was in terms of significant emotional and psychological distress that inmates might undergo which would limit their functional ability. It was recognized that incarceration is painful for most people, but past research has shown that it is not harmful to all inmates. Some prisoners change very little while confined, while others suffer significant deterioration. Using this definition, a well-adjusted inmate does not suffer psychological trauma, is not ill, and is not taken advantage of by others.

As discussed in the preceding chapter, several ways of measuring adjustment were explored. In the end, six definitions were found to be particularly useful, three of which are associated with the first conceptualization and three with the latter. From the disciplinary records of each prison, we obtained indicators of aggressiveness and assaultive behavior. Since these records have been found to be somewhat biased, we also sought an additional indicator of aggressiveness directly from the inmates using the External dimension of the PAQ. Also from the records of the Department, we obtained sickcall information that we used as a secondary indicator of emotional distress. We also asked inmates if they were experiencing any

distress--trouble sleeping, discomfort with the people about them, fear, or anger--using the Internal dimension of the PAQ. Finally, the Physical dimension of the PAQ was used to identify those individuals who experience physical traumas in the forms of injury, sickness, or being taken advantage of as a result of their incarceration.

As can be seen in Table 4.1, the six measures are not highly intercorrelated and appear to be independent indicators of different aspects of adjustment. Surprisingly, aggressive and assaultive infractions are not correlated. Evidently, the inmates who resist authority, confront correctional personnel directly, and disobey orders are not necessarily more likely to go beyond that point and use violence to solve their problems. It can also be noted that the three measures obtained from official records are not correlated with the three questionnaire measured variables. The only correlated variables from the two sources is the External dimension of the PAQ and the rate of assaultive infractions. This was expected, since the External dimension asks inmates if they often fight or argue with guards or other inmates. Along the same lines, one might also expect that the rate of aggressive infractions might also be related to External problems, but this was not found.

If the number of sickcalls is a valid indicator of emotional distress, one would expect it to be related to the subjects' self-reports of Internal problems. Since this relation is not found in the data, either sickcalls are not a good measure of distress or the two dimensions are tapping unrelated aspects of adjustment. For instance, those who score high on the Internal dimension of the PAQ may withdraw and hold their feelings in, while those who experience

Table 4.1
Correlation Matrix
For Adjustment Variables (N=913)

Variable	1.	2.	3.	4.	5.
1. Aggressive Disciplinary Infractions					
2. Assaultive Disciplinary Infractions	.01				
3. Sick-Calls	.25*	-.04			
4. Internal PAQ	.0001	.05	.01		
5. External PAQ	-.004	.11*	.0001	.29*	
6. Physical PAQ	.06	.03	.008	.39*	.38*

* Significant at Alpha \leq .05

distress and develop psychosomatic symptoms may be expressing their problems outwardly even though they are not consciously aware of them. A slight but statistically significant relationship can be noted for sickcalls and reports of aggressive behavior. One might speculate that aggressive inmates are more likely to be injured and therefore require medical attention with greater frequency than non-aggressive inmates. While this explanation may play some role in this finding, the likelihood that defiant inmates would also attempt to avoid work or other assignments by reporting for sickcall appears to be a more plausible explanation for this relationship.

A final observation that should be made concerns the interrelatedness of the three PAQ measured variables. Low to moderate correlations are found among the three factors. This means that some of the inmates who experience one problem also experience at least one other problem. Alternatively, these relationships may be spurious and occur because they are measured using the same instrument.

In Tables 4.2 and 4.3, various characteristics of the variables are reported. The frequencies of infraction and sick call rates are presented in the first table. Most inmates are charged with at least one aggressive disciplinary infraction each year. Only about twenty percent have no citations. The majority of all inmates in the sample receive between one and three reports, but one out of every 12 have more than ten. Assaultive behavior is cited much less frequently. Eighty percent of the sample had not been charged with aggressive acts. Of those who had, most committed only one act. Four infractions per year are the most with which an inmate was charged. Sick calls occur with similar frequency as aggressive infractions. Most inmates

Table 4.2

Frequency Distribution of the
Rate of Aggressive and Assaultive
Disciplinary Infractions and Sick Calls
(N=913)

Variable	Rate										
	0	1	2	3	4	5	6	7	8	9	10
Aggressive Disciplinary Infractions	160/ 18%	211/ 23%	133/ 15%	112/ 12%	68/ 7%	61/ 7%	32/ 4%	27/ 3%	20/ 2%	12/ 1%	77/ 8%
Assaultive Disciplinary Infractions	733/ 80%	148/ 16%	26/ 3%	3/ .3%	3/ .3%						
Sick Calls	232/ 25%	146/ 10%	99/ 11%	78/ 9%	60/ 7%	43/ 5%	34/ 4%	30/ 3%	30/ 3%	16/ 2%	145/ 16%

Table 4.3

Frequency Distribution of the
Internal, External, and Physical Problem
Scores for the Prison Adjustment Questionnaire
(N=923)

Variable	Score								
	0	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16
Internal	152/ 16%	76/ 8%	158/ 17%	152/ 16%	111/ 12%	111/ 12%	94/ 10%	44/ 5%	25/ 3%
External	520/ 67%	103/ 11%	105/ 11%	65/ 7%	21/ 2%	6/ .6%	3/ .3%		
Physical	464/ 50%	255/ 28%	114/ 12%	55/ 6%	20/ 2%	11/ 1%	3/ .3%		1/ .1%

have at least one per year; every sixth inmate has ten or more.

The distribution of scores for the Internal, External, and Physical dimensions of the Prison Adjustment Questionnaire are shown in Table 4.3. Most inmates, 84 percent of the sample, suffer some Internal problems during their incarceration. They have more problems sleeping, are angry more often, and feel less comfortable with the people in prison than in the freeworld. External and Physical problems occur much less frequently. Only one out of every three inmates fights and gets into arguments, while one out of every two suffers some physical problem in prison.

The Predictive Validity of the Three Classification Systems

Several factors can be considered in evaluating the predictive validity of classification schemes. On one hand, a relatively high correlation between the scores on the classification scale and the outcome variables is desirable. This means that the classification scores are higher for those subjects with higher problem rates and provides objective and empirical justification of the predictive validity of the instrument. However, a high correlation alone is not sufficiently adequate for evaluating a classification system valid and useful. One must examine the distribution of problem occurrences (frequencies or rates) as they spread along a scale or among categories. For example, if we have a risk scale that varies from zero to ten, we should look at the failure or problem rate of the individuals receiving each score. What is desired is a monotonically increasing rate. Also desirable are distinctive jumps in the rates along the scale. This allows for further categorization of groups,

such as high risks and low risks. Under these circumstances the correlation between the classification and outcome variables may not be as high as in a more continuous form.

Risk Analysis

To obtain risk indicators of inmate adjustment difficulties in prison, this study could have selected an existing scheme (such as the one used in New York or by the Federal Bureau of Prisons) and applied it to our sample. There are several reasons this was not done. First, the New York risk scores were not readily available to this project because they are not contained in the computerized information system of the Department. We could not reproduce the scores, nor the Bureau of Prisons scores, because they contain a subjective evaluation that must be made by a person trained in the classification system and who has direct contact with the inmate. Secondly, risk assessment schemes have been found to be somewhat unstable from population to population and must be cross-validated (see Wright, Clear, and Dickson, 1984). Thirdly, all existing schemes indicate the probability an inmate will engage in a severe rule infraction. They do not predict whether the inmate will suffer some significant emotional trauma. So existing schemes would be appropriate for only one-half of the dependent variables. For these reasons, new risk assessment systems were developed for each of the adjustment variables.

The technique used to produce the new systems was similar to that outlined by Gottfredson, Wilkins and Hoffman (1978). Each of the nineteen background variables contained in the computerized files of the Department was cross-tabulated (in its categorical form) with the

outcome variables and the strength of the relationship was assessed by chi-square. A listing of the variables and the results of these analyses are presented in Table 4.4. The cross-tabulations of those variables whose categories were significantly different at or near the .05 level were examined to see if problem rates increased or decreased monotonically. Those variables for which this type of relationship was found were then selected for inclusion in the risk assessment models. Unit weights were assigned to the categories and risk scores were produced by summing the points associated with the particular categories representing each subject. Since the number of variables included in the models differed for each outcome variable, from two variables for sick-calls to eleven for aggressive infractions, the range of risk scores also varied.

To evaluate the models, three assessments were made. First, correlations and regressions of the risk scores and the outcomes were run to see how well the models predicted who would experience adjustment problems. Chi-square tests were used to determine if the different problem rates observed for groups receiving different risk scores were significantly different. Finally, the distribution of cases experiencing problems by risk score were examined to see if the desired monotonically increasing or decreasing rates were evidenced and whether significant jumps in rates are found within the array. The results of these analyses for the six outcome variables are shown in Table 4.5.

Note that the correlations and R^2 s are low, but several of the risk systems still make reasonable assignments. Look first at the scheme for aggressive infractions. The differences in problem rates

Table 4.4
Chi Square Values for Background
And Adjustment Variables

Background Variable	Agg.Dis Inf	Ass.Dis Inf	Outcome A			PHY PAQ
			Sick Calls	Int PAQ	Ext PAQ	
1. Age	66.24*!	22.1*!	9.3!	26.9*!	49.3*!	8.5
2. Ethnicity	31.1*!	1.5	3.3	10.8	4.8	12.3*!
3. Religion	9.1	7.1	11.1	7.8	3.2	3.8
4. Occupation	29.6*!	18.4*!	4.0	6.0	27.8*!	7.1*!
5. Military Svc.	25.9*!	2.7	7.4*!	0.6	0.4	1.4
6. Drug Use	10.9*!	0.3	2.1	9.3*!	5.4	2.8
7. Alcohol Use	6.0	1.2	3.5	0.8	5.0	6.7
8. Marital Status	24.8*!	18.8*!	5.2	18.4*!	31.1	5.4
9. Prior Record	2.5	0.2	2.6	4.6	2.6	5.8!
10. Adult Contacts	6.3	1.3	5.1	7.9	8.2	6.3
11. Conviction County	26.7	3.3!	2.8	9.2*!	3.9	9.0
12. Crime	41.7*	14.4	23.1	27.4	35.6*	21.2
13. Crime Class	30.7*!	4.0	12.1	14.8	15.6	10.5
14. Counts	14.6	4.7	14.3	8.1	13.4	21.7*
15. Minimum Sentence ^a	33.2*!	4.5	20.7	25.5*	10.3	4.1
16. 2nd Time Felony	20.4*!	8.8*!	4.2	9.8	19.5*!	4.0
17. Age In	58.0*!	19.1*!	2.5*!	29.5*!	66.8*!	16.7*!
18. Education	16.8*!	9.7*	5.1	1.7	6.6	15.5*!
19. Violence	8.8*!	4.9*!	2.9	3.5	8.4*!	3.5
R ²	.03	.05	.02	.05	.08	.03

* Significant at alpha \leq .05

! Selected for inclusion in risk scale

^a Outcome variables were categorized as follows:

Aggressive Infractions	A = 0	B = 1-9	C = 10 or more
Assaultive Infractions	A = 0	B = 1 or more	
Sick Calls	A = 0	B = 1-9	C = 10 or more
Internal - PAQ	A = 0	B = 1-4	C = 12 or more
External - PAQ	A = 0	B = 1-4	C = 5 or more
Physical - PAQ	A = 0	B = 1-3	C = 4 or more

Table 4.5

Risk Salient Factor Scores
Outcome Distribution

Outcome Variable	Salient Factor Score															Statistics				
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	r	R2	X2	Sign	N
Aggressive Infractions ^a	0%	56%	67%	49%	67%	70%	80%	83%	84%	90%	90%	92%	90%	98%	100%	.14	.02	104.8	.0001	913
n	1	9	9	39	66	86	107	93	97	100	93	77	69	52	15					
Assaultive Infractions ^a	10%	5%	7%	17%	16%	16%	26%	28%	36%	27%	20%					.17	.03	42.2	.0001	913
n	10	56	84	125	131	132	78	105	90	77	25									
Sick Calls ^a	64%	69%	70%	78%	80%											.10	.01	17.6	.02	913
n	114	325	222	196	56															
Internal PAQ ^b	83%	82%	79%	80%	79%	86%	89%	88%	98%							.06	.003	23.0	.11	923
n	23	77	110	157	171	127	114	94	50											
External PAQ ^b	6%	21%	18%	28%	30%	39%	43%	44%	42%	54%						.24	.06	58.3	.0001	923
n	16	85	136	147	133	106	83	108	83	26										
Physical PAQ ^b	39%	52%	47%	54%	45%	59%	54%									.06	.003	13.9	.31	923
n	38	130	346	223	109	64	13													

^a Percentage reflects proportion of the group receiving that score that had at least one infraction.

^b Percentage reflects proportion of the group receiving that score that had some problems.

among the groups along the scale are statistically significant as indicated by chi square and increase in a fairly strict monotonic fashion. We also see significant jumps in rates along the scale. This model, therefore, appears to be useful. Even though their ranges are more restricted, similar patterns and statistical results are also noted for the schemes for sick calls and the External dimension of the PAQ. Now turning to the scheme for assaultive infractions, the differences in problem rates are significant but they do not increase as we might desire but rather vary in a curvilinear fashion. For this reason, this system does not effectively predict who will experience problems. The differences in problem rates for the Internal and Physical dimensions of the PAQ are not statistically significant thus limiting their utility. We can conclude that three of the risk assessment models provide useful information and three are not.

Toch's Prison Preference Inventory

In using the PPI as a classification tool, it was not necessary to perform any special manipulations of the results or to create new scales from them. Each dimension was considered as a separate classification scheme which could range from zero to fourteen. In this way, we may determine if particular individual needs are related to adjustment. This is exactly the same question that we asked about risk, only now we are interested in whether needs predict outcome. Chi-square, correlation, and an evaluation of the distribution of scores were used to evaluate the dimensions.

The results of these evaluations of the eight dimensions are shown in Tables 4.6 through 4.13. Turning to the negative findings, we note

Table 4.6

Prison Preference Inventory
Activity Dimension Scores
Outcome Distribution

Outcome Variable	PPI Score															Statistics			
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	r	x ²	sign	N
Aggressive Infractions ^a	-	64%	72%	61%	81%	83%	85%	80%	91%	84%	77%	82%	74%	100%	100%	.002	56.2	.0005	905
Assaultive Infractions ^a	-	13%	11%	15%	26%	25%	19%	17%	23%	20%	22%	15%	17%	0%	0%	-.02	8.0	.84	905
Sick Call ^a	-	75%	72%	76%	76%	78%	79%	68%	79%	75%	73%	77%	70%	40%	100%	.005	33.9	.14	905
Internal PAQ ^b	-	87%	79%	85%	95%	81%	88%	86%	82%	82%	84%	85%	74%	80%	100%	-.09	20.5	.77	905
External PAQ ^b	-	38%	58%	30%	38%	41%	35%	29%	34%	28%	36%	24%	35%	20%	0%	-.0005	31.0	.23	905
Physical PAQ ^b	-	50%	53%	39%	69%	52%	57%	48%	50%	46%	41%	51%	48%	80%	0%	-.09	34.0	.14	905
n	0	8	18	33	42	64	122	168	169	139	73	40	23	5	1				

^a Percentage reflects proportion of the group receiving that score that had at least one infraction.

^b Percentage reflects proportion of the group receiving that score that had some problems.

Table 4.7

Prison Preference Inventory
Emotional Feedback Dimension Scores
Outcome Distribution

Outcome Variable	PPI Score														Statistics				
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	r	χ^2	Sign	N
Aggressive Infractions ^a	-	0%	79%	83%	92%	81%	90%	84%	87%	75%	75%	91%	76%	83%	67%	-.05	41.9	.03	905
Assaultive Infractions ^a	-	0%	36%	22%	30%	12%	22%	18%	27%	13%	18%	19%	20%	22%	100%	-.03	17.6	.18	905
Sick Call ^a	-	100%	64%	74%	74%	78%	73%	74%	81%	68%	77%	78%	66%	78%	100%	-.04	24.4	.39	905
Internal PAQ ^b	-	100%	79%	87%	80%	82%	85%	82%	88%	87%	79%	86%	92%	74%	100%	.04	23.8	.59	905
External PAQ ^b	-	100%	43%	26%	46%	31%	35%	33%	34%	29%	27%	36%	34%	35%	33%	-.001	32.6	.18	905
Physical PAQ ^b	-	100%	29%	61%	44%	46%	55%	49%	52%	50%	47%	51%	52%	57%	66%	.05	28.5	.34	905
n	0	1	14	23	53	67	86	144	127	126	114	74	50	23	3				

^a Percentage reflects proportion of the group receiving that score that had at least one infraction

^b Percentage reflects proportion of the group receiving that score that had some problems

Table 4.8

Prison Preference Inventory
Freedom Dimension Scores
Outcome Distribution

Outcome Variable	<u>PPI Score</u>															<u>Statistics</u>			
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	r	χ^2	sign	N
Aggressive Infractions ^a	83%	76%	80%	77%	80%	83%	84%	84%	84%	96%	94%	83%	78%	100%	50%	.01	33.4	.22	905
Assaultive Infractions ^a	33%	22%	10%	17%	17%	19%	17%	18%	32%	24%	24%	17%	11%	100%	0%	.09	29.1	.01	905
Sick Call ^a	67%	69%	82%	78%	73%	75%	77%	69%	73%	80%	73%	65%	89%	67%	50%	-.04	28.0	.46	905
Internal PAQ ^b	75%	80%	72%	92%	80%	71%	88%	92%	86%	92%	91%	92%	89%	100%	50%	.14	59.7	.0004	915
External PAQ ^b	8%	26%	28%	38%	24%	26%	38%	32%	37%	41%	42%	54%	67%	67%	0%	.14	48.3	.01	915
Physical PAQ ^b	50%	65%	45%	56%	49%	39%	44%	57%	55%	49%	45%	58%	33%	67%	100%	.0008	38.6	.09	915
n	12	45	60	106	132	117	112	109	92	50	33	239	3	2					

^a Percentage reflects proportion of the group receiving that score that had at least one infraction.

^b Percentage reflects proportion of the group receiving that score that had some problems.

Table 4.9
Prison Preference Inventory
Privacy Dimension Scores
Outcome Distribution

Outcome Variable	PPI Score															Statistics			
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	r	χ^2	sign	N
Aggressive Infractions ^a	100%	67%	82%	84%	81%	83%	82%	91%	83%	81%	73%	84%	67%	100%	100%	.04	35.1	.17	905
Assaultive Infractions ^a	0%	21%	17%	16%	19%	20%	24%	20%	17%	26%	19%	11%	11%	0%	0%	.01	7.1	.93	905
Sick Calls ^a	100%	75%	73%	76%	77%	74%	75%	78%	73%	68%	81%	63%	89%	0%	100%	.02	26.5	.54	905
Internal PAQ ^b	100%	79%	84%	75%	85%	89%	81%	87%	84%	88%	90%	89%	67%	100%	100%	.09	29.9	.37	915
External PAQ ^b	0%	29%	32%	23%	34%	35%	37%	35%	30%	37%	34%	32%	33%	0%	0%	.007	28.8	.52	915
Physical PAQ ^b	100%	46%	37%	45%	49%	53%	45%	56%	58%	66%	41%	74%	33%	100%	100%	.09	40.9	.05	915
n	1	24	66	100	115	133	143	122	88	57	26	19	9	1	1				

^a Percentage reflects proportion of the group receiving that score that had at least one infraction.

^b Percentage reflects proportion of the group receiving that score that had some problems.

Table 4.10

Prison Preference Inventory
Safety Dimension Scores
Outcome Distribution

Outcome Variable	PPI Score															Statistics			
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	r	χ^2	Sign	N
Aggressive Infractions	86%	94%	78%	88%	81%	84%	82%	87%	81%	73%	85%	86%	87%	75%	100%	.03	24.0	.68	905
Assaultive Infractions ^a	14%	35%	11%	24%	18%	20%	21%	21%	17%	20%	19%	24%	17%	0%	50%	.01	9.8	.78	905
Sick Call ^a	86%	76%	64%	82%	59%	75%	79%	74%	84%	70%	81%	78%	83%	50%	0%	.03	46.5	.02	905
Internal PAQ ^b	100%	83%	86%	76%	89%	86%	86%	78%	84%	88%	79%	84%	87%	87%	100%	-.01	25.3	.61	915
External PAQ ^b	29%	67%	28%	21%	37%	32%	25%	27%	35%	43%	30%	41%	48%	0%	0%	-.03	46.6	.02	915
Physical PAQ ^b	29%	44%	33%	27%	47%	45%	50%	49%	56%	57%	49%	63%	78%	75%	100%	.15	66.4	.0001	915
n	7	17	36	51	79	112	100	136	103	113	67	51	23	8	2				

^a Percentage reflects proportion of the group receiving that score that had at least one infraction.

^b Percentage reflects proportion of the group receiving that score that had some problems.

Table 4.11

Prison Preference Inventory
Social Stimulation Dimension Scores
Outcome Distributions

Outcome Variable	PPI Score															Statistics			
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	r	χ^2	sign	N
Aggressive Infractions	-	79%	86%	81%	82%	82%	88%	79%	72%	73%	75%	83%	100%	-	-	.04	24.6	.32	905
Assaultive Infractions ^a	-	14%	18%	14%	23%	23%	18%	16%	11%	31%	20%	33%	0%	-	-	.005	10.5	.48	905
Sick Calls ^a	-	57%	73%	73%	78%	72%	72%	80%	72%	83%	85%	83%	0%	-	--	-.02	25.8	.26	905
Internal PAQ ^b	-	93%	89%	87%	83%	87%	78%	86%	82%	85%	85%	86%	100%	-	-	-.08	18.8	.66	915
External PAQ ^b	-	36%	40%	39%	30%	31%	34%	28%	36%	35%	30%	45%	0%	-	-	-.02	13.1	.93	915
Physical PAQ ^b	-	79%	69%	52%	52%	45%	47%	53%	39%	48%	55%	43%	100%	-	-	-.08	30.8	.10	915
n	0	14	51	78	159	153	160	116	99	48	20	6	1						

^a Percentage reflects proportion of the group receiving that score that had at least one infraction.

^b Percentage reflects proportion of the group receiving that score that had some problems.

Table 4.12

Prison Preference Inventory
Structure Dimension Scores
Outcome Distribution

Outcome Variable	PPI Score															Statistics			
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	r	χ^2	sign	N
Aggressive Infractions ^a	-	100%	88%	85%	91%	85%	84%	82%	80%	84%	74%	80%	82%	100%	-	-.07	20.3	.68	905
Assaultive Infractions ^a	-	0%	25%	30%	21%	25%	21%	14%	20%	21%	12%	27%	24%	0%	-	-.10	13.8	.32	905
Sick Call ^a	-	50%	62%	73%	70%	73%	79%	76%	82%	70%	68%	77%	76%	40%	-	-.01	28.7	.23	905
Internal PAQ ^b	-	100%	100%	94%	93%	87%	84%	82%	85%	78%	79%	81%	77%	80%	-	-.11	29.1	.21	915
External PAQ ^b	-	67%	50%	48%	22%	42%	37%	25%	42%	27%	27%	28%	0%	20%	-	-.10	49.9	.001	915
Physical PAQ ^b	-	67%	12%	76%	53%	58%	52%	52%	54%	46%	34%	31%	35%	40%	-	-.11	38.6	.03	915
n	-	0	6	8	33	56	107	166	147	141	116	73	30	17	5				

^a Percentage reflects proportion of the group receiving that score that had at least one infraction.

^b Percentage reflects proportion of the group receiving that score that had some problems.

Table 4.13
Prison Preference Inventory
Support Dimension Scores
Outcome Distribution

Outcome Variable	PPI Score															Statistics			
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	r	x ²	sign	N
Aggressive Infractions ^a	-	-	-	100%	83%	100%	84%	85%	78%	81%	84%	85%	81%	82%	79%	-.004	14.4	.89	905
Assaultive Infractions ^a	-	-	-	0%	33%	42%	16%	26%	20%	18%	25%	17%	17%	23%	26%	.01	9.5	.57	905
Sick Call ^a	-	-	-	0%	83%	75%	90%	75%	79%	73%	76%	71%	73%	77%	74%	.06	28.2	.17	905
Internal PAQ ^b	-	-	-	0%	83%	92%	77%	85%	90%	81%	84%	86%	84%	82%	84%	-.02	25.8	.26	915
External PAQ ^b	-	-	-	0%	17%	25%	22%	33%	37%	33%	31%	36%	38%	27%	32%	-.01	21.2	.51	915
Physical PAQ ^b	-	-	-	0%	50%	50%	44%	70%	48%	56%	47%	51%	49%	40%	47%	-.08	20.7	.54	915
n	0	0	0	1	6	12	31	53	90	129	171	178	125	90	19				

^a Percentage reflects proportion of the group receiving that score that had at least one infraction.

^b Percentage reflects proportion of the group receiving that score that had some problems.

that neither Social Stimulation (Table 4.11) nor Support (Table 4.13) are particularly useful in distinguishing among inmates who will experience different levels of any of the adjustment problems. The correlations between the criterion and outcome variables in all cases are extremely low. Furthermore, the groups that are distinguished by their preference scores are not significantly different. In Table 4.6, we see that the groups along the Activity dimension are significantly different in the number of aggressive infractions they commit, yet the problem rates do not increase monotonically as desired. This same problem is noted for Emotional Feedback in predicting aggressive infractions in Table 4.7, Freedom in predicting assaultive infractions in Table 4.8, and Safety in predicting both the number of sick calls and External problems in 4.10. With these qualifications, we see that the PPI dimensions are not helpful in distinguishing inmates according to their rate of aggressive infractions, assaultive infractions, and sick-calls.

Positive results are found for six PPI dimensions and the three PAQ measured indicators of adjustment problems. The Freedom dimension is useful in distinguishing inmates who experience Internal problems (Table 4.8), both Freedom and Structure (Table 4.12) distinguish inmates with External problems, and Privacy (Table 4.9), Safety (Table 4.10), and Structure distinguish inmates suffering Physical problems. In all six instances, the correlation coefficients are low but are substantially larger than those seen for other relationships. Also in all cases, the groups are statistically different. The final criterion used in evaluating the utility of the scales, whether risk varies monotonically with the scale score, these six relationships did not

fair as well. In all cases, there is a definite trend seen in the array but the problem rates dip and rise as they gradually drift upward or downward. This feature is undesirable for a classification scheme because it increases the number of false positive and negatives that would be made.

One special feature of these six relationships should be noted. The frequency of problems increases for subjects with higher scores on the Freedom, Privacy, and Safety scales. For example, inmates who indicate that safety is a high concern are the ones that also state that they have more physical problems. The direction of the relationship is reversed for Structure. The inmates who state that they have a high concern about structure are less likely to experience external or physical problems than those who are less concerned about this aspect of their environment.

Megargee's MMPI Typology

The Megargee typology, like Toch's inventory, was used as it was designed. No further manipulations or refinements were performed. The results of the evaluations of its ability to distinguish inmates with different frequencies of problems are presented in Table 4.14. The typology was not useful as a classification tool for aggressive or assaultive infractions nor sick-calls, however, the ten types of inmates do have different levels of Internal, External and Physical problems. When group memberships were entered into a regression model as dummy variables, the resulting R^2 s were higher for the PAQ variables than the other three. The percentage of the variance in physical problems explained by Megargee group membership was 15 percent.

Table 4.14
Megargee Typology
Outcome Distribution

Outcome Variables	Megargee Groups											Statistics			
	A	B	C	D	E	F	G	H	I	J	R ²	X ²	Sign	N	
Aggressive Infractions ^a	81% 64	66% 6	85% 40	80% 20	71% 7	86% 50	72% 25	80% 45	83% 60	90% 22	.03	14.7	.68	339	
Assaultive Infractions ^a	28%	17%	25%	25%	14%	18%	12%	16%	12%	18%	.02	7.7	.57	339	
Sick Calls ^a	70%	50%	81%	80%	86%	80%	68%	71%	75%	77%	.03	23.1	.19	339	
Internal PAQ ^b	81%	85%	90%	80%	10%	94%	88%	91%	83%	86%	.04	28.5	.05	339	
External PAQ ^b	30%	17%	57%	35%	29%	44%	32%	44%	24%	32%	.06	27.9	.06	339	
Physical PAQ ^b	33%	50%	60%	30%	71%	44%	66%	71%	46%	36%	.15	48.0	.0002	339	
n	65	6	40	20	7	50	25	45	60	22					

^aPercentage reflects proportion of the group that had at least one infraction.

^bPercentage reflects proportion of the group that had some problems.

One special aspect of these results should be noted. According to Megargee, the least deviant inmate is Type I, followed by E, B, A, G, D, J, F, and C to Type H which is the most deviant. Looking at External problems, the three most deviant groups have the three highest rates of problems and the four least deviant groups have the four lowest levels of problems. This covariation between deviancy and occurrence levels is also seen for Internal problems, except there two outliers: Type E has a higher problem frequency than would be expected and Type D has a lower rate. The correlation does not exist for Physical problems.

Conclusions

Having now evaluated each of the three types of classification systems individually, we can consider their relative worth in distinguishing inmates who will differentially experience adjustment problems. A first observation is that no system emerges as clearly superior to any of the others. One reason for this is that none of the three adequately predict all adjustment problems. Risk assessment appears to be useful in predicting the probability that inmates will be charged with aggressive or assaultive disciplinary infractions or will report for sick-call. Neither Toch's inventory nor Megargee's typology was useful in this regard. However, in predicting the probabilities of Internal, External, and Physical problems as indicated by self-reports of the inmates, risk was not successful, but the other two systems were. Thus each system works for some outcomes but not for others.

A second reason for concluding that no system was clearly superior is that for any single outcome, none of the acceptable schemes were

found to be particularly powerful. The models were statistically significant in predicting outcome but in every case the percentage of the variance explained by the classification scheme was small. Typically about 15 percent of the variance was explained and in no case did it exceed 20 percent. Of the three systems, Toch's inventory was the worst predictor of outcome. The best variable, Safety in predicting Physical problems, accounted for just over two percent of the variance.

A related weakness of the schemes was also noted in evaluating the problem distribution along the scales. For risk and concern, there is an explicit ranking. The larger the score is, the greater the risk or concern. The ordinality of the Megargee typology is less explicit. Monotonically increasing or decreasing rates of problem occurrence are desired along these scales if they are to be useful in classification. For those schemes that were noted to be adequate in the discussions above, this requirement was nominally met. However, in almost every case aberrations were noted where the problem rates rose above or fell below where they should have, had the scale perfectly met this requirement. The result of this fault is an increase in false positive and false negative decisions thus increasing the total number of errors that will be made in using the scale to classify.

Of the three scales, Toch's inventory, once again, is plagued by this problem more than the other two systems. While the monotonicity is evident, the problem rates vary considerably along the scales. This in combination with the low predictive validity of the dimensions leads one to conclude that inmate concerns and needs may not be as viable classification tools as perhaps are risk and personality. However,

there is a very important difference in the systems. Toch's dimensions include only one variable, privacy or social stimulation for example, but risk and personality classifications are produced from information derived from numerous variables. One should expect a composite system reflecting a larger amount of information about the individual to predict better. While this project did not undertake the task, we anticipate that a composite indicator of concern or need generated from the eight dimensions would be useful and would predict outcome better than the single dimensions.

CHAPTER FIVE

Explaining Prison Adjustment

The goal of this research is to develop new classification procedures that will assist administrators in placing inmates into specific prison settings. As discussed in the introductory chapters, this task could have been undertaken in several ways. One expedient approach would be to cross-validate several existing classification systems in different prison settings. This approach was rejected because it fails to use the research opportunity to its fullest extent. We argued that the project should be grounded in a theory of prison adjustment and that this perspective should guide the research and development of the new classification schemes. Then, not only would the knowledge gained from the research be richer, but the schemes that were developed would be solidly tied to that knowledge.

Based upon a review of the literature, the model of prison adjustment was developed containing three dimensions—an individual, an organizational, and a transactional level—with a total of ten factors thought to determine patterns of prison adjustment. The purpose of this chapter is to test that model to see which dimensions and which factors determine outcome. Past research which was used to identify the components of the model examined specific factors independently. This research allows us to explore a more encompassing perspective of adjustment. For the first time, we can test the interaction effect of the individual and organizational dimensions.

Individual Level Factors

To begin, we examined the explanatory power of individual variables and factors within each of the three levels. These results give us some idea of the importance of each variable, factor and level, as they stand alone in explaining adjustment. The findings for the individual level variables and composite factors are shown in Table 5.1. An overview of the results indicates that while many of the variables and factors are significantly related to the six adjustment measures, none explain large percentages of their variance. The regression models consisting of all background variables are statistically significant predictors of all six adjustment indicators and explain from 2 to 8 percent of the variance in the outcomes. The risk scores that are produced from some of background information, as expected, do not predict as well as the models that contain full information but, in most cases, do about as well. The risk scores associated with the Internal and Physical PAQ dimensions are an exception in that they are not significant predictors of those outcomes. The eight PPI dimensions account for proportions of the variation in the PAQ measured dimensions, while sentence phase significantly explains the institutional generated measures of adjustment. When membership in the Megargee typology groups was entered into regression models as a series of dummy variables, they accounted for significant proportions of the variation in the External and Physical dimensions of the PAQ.

As seen in the last two rows of Table 5.1, two individual level models were evaluated. The first consisted of the risk scores, the

Table 5.1

Regressions of Individual Level Variables
and Composite Factors on Outcome

Predictors	R ² and Significance of Model					
	Aggressive Infractions	Assaultive Infractions	Sick- Calls	Internal PAQ	External PAQ	Physical PAQ
All Background Variables n=912	R ² α .03 .04	.05 .0001	.02 .0006	.05 .0001	.08 .0001	.03 .0007
Risk Scores n=912	R ² α .02 .0001	.03 .0001	.01 .002	.003 .07	.06 .0001	.003 .12
All PPI Dimensions n=904	R ² α .01 .19	.02 .03	.008 .37	.05 .001	.03 .0009	.06 .0001
Megargee Typology n= 339	R ² α .03 .39	.02 .61	.03 .38	.04 .15	.06 .02	.15 .0001
Sentence Phase n=894	R ² α .01 .01	.01 .02	.03 .0001	.0009 .38	.0000 .83	.004 .05
Model #1 ^a n=888	R ² α .04 .0002	.05 .0001	.05 .0001	.05 .0001	.07 .0001	.06 .0001
Model #2 ^b n=328	R ² α .10 .009	.05 .62	.10 .01	.09 .03	.13 .0005	.19 .0001

^a Model composed of risk score, eight PPI dimensions, and sentence phase

^b Model composed of risk score, eight PPI dimensions, sentence phase, and Megargee typology

eight PPI dimensions, and sentence phase. All models were significant, and they explained from 4 to 7 percent of the variance in the outcome variables. The second model consisted of the same variables plus the Megargee typology. The reason for considering two models is that when the Megargee typology is included, there is a substantial loss of cases from 888 to 328 subjects due to missing data. Due to the loss of cases and the fact that the typology consists of categories, the missing data cannot be estimated. The R^2 s in the second model are considerably higher than in the first. The significant models explain from 9 to 19 percent of the variance. These findings suggest that the Megargee typology plays an important role in explaining which inmates will experience adjustment problems in prison.

These results are consistent with past research. The same individual variables and factors that in the past have been found to be related to adjustment were supported by the results of this study. However, their overall ability to explain who will experience problems is limited. In accounting for differences in Internal adjustment problems, individual variables could explain only 9 percent of the variance. They explained 10 percent of the variance in aggressive infractions and 19 percent of the Physical problems. So while individual level factors are important, they leave much variation to be explained.

Organizational Level Factors

The results of the regressions of organizational level factors on outcome are shown in Table 5.2. Once again, there are several significant variables and factors, but the amount of variance explained

Table 5.2

Regressions of Organizational Level Variables
And Composite Factors on Outcome

Predictors	R ² and Significance of Model					
	Aggressive Infraction	Assaultive Infraction	Sick- Cells	Internal PAQ	External PAQ	Physical PAQ
All PEI dimen- sions Indiv. n=	R ² .01 .26	.01 .35	.02 .01	-.08 .0001	.09 .0001	.13 .0001
All PEI dimen- sion Aggregate n=	R ² .03 .0002	.02 .03	.04 .0001	.01 .37	.06 .0001	.04 .0001
Crowding n=	R ² .0005 .51	.0007 .42	.0003 .63	.001 .35	.0001 .81	.006 .02
Population n=	R ² .01 .00003	.01 .008	.02 .0001	.001 .35	.0000 .85	.003 .09
Facility n=	R ² .08 .0001	.04 .0001	.07 .0001	.02 .02	.03 .0001	.04 .0001
Model #1 ^a n=903	R ² .03 .003	.02 .09	.04 .0001	.08 .0001	.09 .0001	.13 .0001
Model #2 ^b n=903	R ² .05 .001	.03 .07	.06 .0001	.08 .0001	.11 .0001	.14 .0001

^a Model comprised of eight aggregated PEI dimensions, population, and crowding.

^b Model comprised at eight aggregated and eight individual PEI dimensions, population and crowding.

remains fairly low. The first row reports that individual scores on the eight PEI dimensions significantly predict the PAQ measured adjustment variables and account for 8 to 13 percent of their variance. These results indicate that individuals' perceptions of their organizational setting influence how they experience that setting. When scores on the PEI dimensions are averaged for each living unit--a common way of estimating the overall environment of the units--and regressed on the outcome variables, we see in the second row of 5.2 that the aggregate variables account for low but significant portions of the variance in the adjustment variables produced from institutional records. This may mean that environment is a determinant of outcome, or, alternatively, that since all subjects from the same unit receive the same organizational score, it may serve as proxies for other attributes of living units.

Somewhat surprisingly, crowding and population were not found to be strong predictors of outcome. In all cases the percentage of the variance explained was low, and most of the models were not significant. This finding is not what would be expected from past research since both variables have been found to be important indicators of outcome. However, recall from the discussions of the measurement techniques in Chapter 4 that the indicators of crowding and population are not particularly valid. Statistics were available at the facility level only and had to be entered into the regression models as aggregate variables with only ten levels. These findings, therefore, are likely to be the result of inadequate measures rather than indicating the absence of a relationship.

When facility was entered into a regression as a dummy variable, a

significant relationship between it and all six outcomes were noted as seen in the fifth row of Table 5.2. This means that facility-to-facility differences in outcome are accounted for by the activities and process that go on in the facilities. For instance, the 8 percent of the variation in aggressive infractions that is accounted for by facility probably means that the prisons in our sample exercise different amounts of discretion in charging inmates with violations.

The last two rows of the table indicate that the organizational level of analysis accounts for similar amounts of variations in outcome as does the individual level. The models are significant for all outcomes except assaultive infractions and explain from 3 to 14 percent of the variance. From these results, we can conclude that the answer to the question of which level, individual or organizational, is most important in explaining adjustment is that they are of fairly equal value.

Transactional Level Factors

The third and final level of analysis is the one which has not been explored in past research. It examines the effects of congruence and incongruence of individual and organizational factors on outcome. As described in the methodology section, congruence variables were produced by standardizing the individual and organizational level variables, subtracting the latter from the former, and squaring the result to rid the score of its directionality. A high score indicates a large disparity between individual needs and organizational provisions and a low score approaching or reaching a value of zero indicates congruence. We analyzed three type of congruence: that

between risk and environment, preference and environment, and personality and environment. We also conceptualized environments in terms of individual perceptions and aggregated ratings. Consequently, we evaluated the six congruence models listed in Table 5.3.

These results suggest that congruence is significant in explaining all outcomes with the exceptions of sick calls and Internal problems. Congruence between risk and environment and preference and environment, as indicated by their R^2 s, is not strong. However, relative to the strength of individual and organizational levels in explaining outcome, personality and environmental congruence is quite important.

These findings lead to several conclusions. First and perhaps most importantly, our results support the claim often found in prison literature, that person/environment fit is significant in determining adjustment patterns. There is also evidence that at least one type of congruence is as important in determining outcome as either individual or organizational factors are. An interaction effect between risk and environmental settings generally has not been discussed in the literature, although it would seem appropriate to do so. Our results indicate that the relationship between this form of congruence and outcome is not strong. However, it has been hypothesized that concern and environment would strongly interact to determine outcome. For example, people who need and obtain privacy are expected to adapt better than people for whom the privacy need is unfulfilled. The hypothesis is supported by this research, but the relationship is not as important in accounting for outcome as one might expect. Instead, the interaction of personality and environment appears to be more important. Certain types of people adjust better to certain

Table 5.3

Regressions of Transactional Models
on Outcome

Model ^a	<u>R² and Significance of Model</u>						
		Aggressive Infractions	Assaultive Infractions	Sick- Calls	Internal PAQ	External PAQ	Physical PAQ
Congruence of Risk & PEI(ind) 8 Variables n=903	R ²	.02	.02	.01	.02	.02	.02
	α	.008	.07	.19	.04	.006	.02
Congruence of Risk & PEI(agg) 8 Variables n=912	R ²	.02	.01	.01	.01	.03	.02
	α	.06	.15	.40	.29	.0001	.01
Congruence of PPI & PEI(ind) 8 Variables n=902	R ²	.02	.005	.009	.02	.02	.03
	α	.02	.81	.39	.04	.008	.0001
Congruence of PPI & PEI(agg) 8 Variables n=904	R ²	.02	.005	.02	.01	.05	.04
	α	.05	.81	.09	.16	.0001	.0001
Congruence of Profile ^b & PEI(ind) 8 Variables n=334	R ²	.02	.03	.03	.02	.14	.17
	α	.52	.65	.31	.61	.0001	.0001
Congruence of Profile & PEI(agg) 8 Variables n=338	R ²	.06	.05	.02	.03	.09	.14
	α	.003	.02	.71	.38	.0001	.0001

^a Congruence variables were produced by standardizing the individual level variable and the organizational level variable, subtracting the latter from the former, and squaring the result.

^b Profile was created by assigning a ranking from 1 to 10 to the Megargee groups according to their level of abnormalcy.

environments.

Overall Models

The results of regressions including variables from all three levels--individual, organizational, and transactional--are shown in Tables 5.4 through 5.9. For each outcome variable, three models were tested. The first included risk scores, the PPI dimensions, sentence phase, individual scores on the eight PEI dimensions, crowding, population, and the congruence between preference and environmental settings. In addition to these variables, the second model entered aggregated PEI (i.e. organizational) scores into the regression. The third model included the Megargee typology and replaced the preference/environment congruence indicator with the personality/environment congruence indicator. After examining the results of a regression of all variables on the outcome, we then examined whether the size of the model could be reduced without losing substantial explanatory power by entering variables into the model in a stepwise fashion. Variables which would significantly contribute to the model ($F\text{-value} \geq .15$) were entered into the model. At each stage, variables were deleted if their contribution did not remain significant. Variables were entered until none remained that could be entered into the model and contribute significantly.

The regressions of the overall models on the number of aggressive infractions is shown in Table 5.4. The simplest model is statistically significant and explains 8 percent of the variance. By reducing the number of variables to six, the model still explains just about as much of the variation as before. The inclusion of the aggregate environment

Table 5.4

Regressions of Overall Models
On Aggressive Infractions

Model	Overall Model		Stepwise Model		Variables
	R ²	Significance	R ²	Significance	
#1 includes Risk, PPI, PEI ind, Sentence Phase, Population, Crowding, Congruence (PPI & PEI agg) n=886	.08	.0001	.07	.0001	Risk, Sentence phase, PEI(Ind):activity, Population, Crowding, PPI(PEI Congruence: Social Stimulation
#2 includes Risk PPI, Sentence Phase PEI (ind), Population, Crowding, PEI(agg), Congruence (PPI and PEI agg) n=886	.10	.0001	.08	.0001	Risk, Sentence phase, PEI ind: activity, Population, PEI agg: structure, support, PPI/PEI Congruence: emotional feedback, freedom, structure, support
#3 Includes Risk, PPI, Sentence Phase, PEI(ind) Population Crowding, PEI PEI(agg) Congruence (PPI & PEI(agg) Congruence Profile and PEI agg) Megargee type n=328	.25	.0018	.18	.0001	Risk, PPI, Freedom, Sentence Phase, PEI (ind): emotional feedback, Population Megargee: #, I, PEI(agg) social, support, PPI/ PEI Congruence, Privacy, support

measures in the second model adds slightly to explanatory power of the model. A substantial increase comes in including personality types. With the Megargee typology included, the overall model accounts for 25 percent of the variance and the abbreviated model for 18 percent.

In Table 5.5, the results of the regressions on assaultive infractions are shown. The results for the first two models closely parallel those for aggressive infractions. They are significant and explain just under 10 percent of the variance. The stepwise procedure suggests that the models can be reduced without greatly affecting the predictive power. The inability of the third model, which includes the Megargee typology, to explain a substantially greater proportion of the variance in assaults reflects the reduced significance of personality in determining who will be violent.

In neither case, for aggressive or assaultive behavior, is a large proportion of the variance explained. This is not unusual. These percentages are comparable to past research and are actually higher than most other models. An exception is Poole and Regoli's study of discretion (1980), where they explained over 40 percent of the variance in disciplinary infractions. But they included an indicator of past infraction history, which accounted for most of the explained variation. It was not possible to produce such a variable in this study.

The results of the regressions of the overall models on sick calls and Internal PAQ problems are shown in Tables 5.6 and 5.7. The findings are fairly consistent with those concerning infractions. Without the Megargee typology, approximately 10 percent of the variance is explained. With it, that proportion jumps to about 20 percent. The

Table 5.5

Regressions of Overall Models
On Assaultive Infractions

Model	Overall Model R ² Significance	Stepwise Model R ² Significance	Variables
#1 Includes Risk, PPI, PEI ind, Sentence Phase Population, Crowding Congruence (PPI & PEI agg) n=886	.07 .0001	.06 .0001	Risk, PPI:Structure, Sentence Phase, PEI(ind agg):Freedom, Population (PPI-PEI) Congruence: Structure
#2 Includes Risk, PPI Sentence Phase, PEI(ind) Population, Crowding, PEI (agg) Congruence PPI & PEI agg) n=886	.08 .0001	.07 .0001	Risk, PPI:structure, Sentence Phase, PEI ind: Freedom, support, PEI agg Social Structure, PPI/ PEI Congruence: Privacy
#3 Includes Risk, PPI, Sentence Phase, PEI(agg) Population Crowding, PEI(agg) Congruence (PPI & PEI agg) Congruence (Profile & PEI agg), Megargee type n=886	.15 .54	.09 .0001	Risk, PEI(ind): Structure, Megargee:C, PEI(agg):privacy, PPI/ PEI Congruence: Objec- tivity, privacy, Support

Table 5.6
 Regressions of Overall Models
 On Sick-Calls

Model	Overall Model		Stepwise Model		Variables
	R ²	Significance	R ²	Significance	
#1 Includes Risk, PPI, PEI(ind), Sentence Phase, Population, Crowding, Congruence(PPI & PEI agg) n=886	.09	.0001	.07	.0001	Risk, Sentence phase, PEI(ind/agg):structure, Population, Crowding, (PPI & PEI):Congruence Activity
#2 Includes Risk, PPI, Sentence Phase, PEI(ind)Population, Crowding PEI(agg) Congruence PPI & PEI agg) n=	.11	.0001	.09	.0001	Risk, Sentence Phase, PEI(ind):Safety, Population, PEI(agg):Structure, Support, PPI/PEI Congruence:Emotional Feedback, Safety, Support
#3 Includes Risk, PPI, Sentence Phase (PEIind) Population Crowding, PEI(agg), Congruence (PPI & PEIagg) Congruence (Profile & PEI agg) Megargee Type n=	.18	.15	.13	.0001	PPI, Freedom, Sentence Phase, PEI(ind):Freedom, Population, Megargee: A,G, PEI (agg):Support Profile PEI Congruence Social

Table 5.7.

Regressions of Overall Models
On Internal PAQ Problems

Model	Overall Model		Stepwise Model		Variables
	R ²	Significance	R ²	Significance	
#1 Includes Risk, PPI, PEI(ind), Sentence Phase, Population, Coding, Congruence(PPI & PEI agg) n=886	.12	.0001	.11	.0001	PPI:emotional feedback, freedom, privacy, safety, social support PPI/PEI congruence: activity, emotional feedback, privacy, support
#2 includes Risk, PPI, Sentence Phase, PEI (ind), Population, Crowding, PEI(agg), Congruence PPI and PEI agg) support, n=	.12	.0001	.11	.0001	PPI:emotional feedback, freedom, privacy, safety, structure, sentence phase, PEI(ind)privacy, safety, social, PEI(agg):privacy, PPI/PEI congruence: activity
#3 includes Risk, PPI, sentence phase, PEI (ind)Population Crowding, PEI(agg)Congruence(PPI & PEIagg) Congruence Profile & PEI agg)Megargee type n=	.22	.02	.15	.0001	PPI:activity, structure PEI(ind):privacy, support Megargee:A, PEI(agg) activity, PPI/PEI Congruence: emotional feedback

inclusion of the aggregate environmental variables adds little to the explanatory power of the models. In all cases, the models can be reduced to ten or less variables without substantial decreases in the amount of variance explained.

As indicated by the findings shown in Tables 5.8 and 5.9, we were able to account for greater proportions of the variation in External and Physical problems. The overall models including the Megargee typology explained 42 and 41 percent of the variance, respectively. Without the typology, approximately 20 percent of the variance is explained. Recall that these measures indicate inmates' self-reports of aggressiveness and physical distress and victimization. If we assume, and it is reasonable to do so, that discretion is exercised in charging inmates with disciplinary infractions and that not all undesirable behavior is observed, then certain amounts of random and nonrandom variation would be expected in those indicators for which it would be difficult to account. Perhaps this is the reason we were able to explain better the self-reported adjustment problems.

An important result to note is that for all six outcome variables, when the stepwise regressions were performed, variables from all three levels of analysis--individual, organizational, and transactional--entered into the final model. This suggests that all three dimensions are necessary to explain adjustment patterns adequately. Furthermore, the fact that transactional variables were significant demonstrates that the development of a classification scheme that takes into account the interaction of individuals in different organizational settings is a viable and useful idea.

Table 5.8

Regressions of Overall Models
on External PAQ Problems

Model	<u>Overall Model</u> R ² Significance	<u>Stepwise Model</u> R ² Significance	Variables
#1 Includes Risk, PEI(ind), Sentence phase, Population, Crowding, Congruence (PPI & PEI agg) n=886	.14 .0001	.13 .0001	Risk, PPI: freedom, privacy PEI(ind): emotional feedback, safety, support, Crowding, PPI/PEI Congruence: emotional feedback, freedom, privacy
#2 Includes Risk, PPI, Sentence Phase, PEI(ind), Population, Crowding, PEI (agg), Congruence PPI and PEI agg) n=886	.18 .0001	.15 .0001	Risk, PEI(ind): safety, support, PEI(agg): emotional feedback, PPI/ PEI Congruence: activity, freedom, social, structure
#3 Includes Risk, PPI, Sentence phase, PEI(ind) Population, Crowding, PEI (agg) Congruence (profile and PEI agg), Megargee type n=328	.42 .0001	.36 .0001	Risk, PPI: freedom, safety, PEI(ind); activity, Megargee: C, F, I, PEI(agg): safety, PPI/PEI Congruence: social structure, Profile/PEI congruence: emotional feedback, privacy

Table 5.9

Regressions of Overall Models
On Physical PAQ Problems

Model	<u>Overall Model</u>		<u>Stepwise Model</u>		Variables
	R^2 Significance		R^2 Significance		
#1 Includes Risk, PPI, PEI(ind), Sentence phase, Population, Crowding, Congruence (PPI & PEI agg) n=886	.22	.0001	.22	.0001	Risk, PPI:freedom, privacy, safety, SENTENCE phase, PEI(ind):activity, safety, social, support, PPI/PEI Congruence: emotional feedback, freedom, privacy, safety, social stimulation
#2 Includes Risk, PPI, Sentence Phase, PEI (ind)Population, Crowding, PEI(agg), Congruence (PPI & PEI agg) n=886	.23	.0001	.21	.0001	PPI:emotional feedback, privacy, safety, sentence phase, PEI(ind):activity, safety, social, support PPI /PEI Congruence:freedom, privacy, social
#3 Includes Risk, PPI, Sentence Phase, PEI (ind), Population Crowding, PEI(agg) Congruence (PPI and PEIagg), Congruence (Profile & PEIagg), Megargee type n=328	.41	.0001	.37	.0001	Risk, PPI:emotional feedback, privacy, safety, Sentence phase, PEI(ind): activity, safety, social, support, Megargee:C,H PPI/PEI Congruence: privacy, Profile/PEI Congruence: activity, emotional feedback, social

Table 5.10

Significance of Single Congruence Variables
Regressed on Outcome Variables

<u>Adjustment Outcome</u>						
Type of Congruence	Aggressive Infractions	Assaultive Infractions	Sick-Calls	Internal PAQ	External PAQ	Physical PAQ
Risk/ PEI	Safety (.007)		Social (.03)	Emot. Feed. (.04)	Activity (.0001)	Activity (.0003)
	Support				EmotFeed. (.0009)	Freedom (.007)
					Freedom (.02)	Privacy (.0003)
					Privacy (.0001)	Safety (.03)
					Social (.0002)	Structure (.001)
PPI/ PEI	Structure (.03)		Safety (.006)	Activity (.03)	Activity (.04)	Activity (.03)
				Privacy (.04)	EmotFeed. (.001)	Freedom (.0001)
					Freedom (.0006)	Privacy (.0005)
					Privacy (.001)	Social (.009)
					Safety (.0005)	Structure (.003)
					Social (.0001)	
					Structure (.0004)	
Profile/ PEI	Safety (.02)	Privacy (.04)			Activity (.0001)	Activity (.0001)
	Support (.002)				EmotFeed. (.0007)	EmotFeed. (.002)
					Freedom (.0001)	Freedom (.0001)
					Privacy (.0001)	Privacy (.0001)
					Safety (.05)	Safety (.007)
					Social (.01)	Social (.0002)
					Struct. (.0001)	Struct. (.0001)
					Support (.04)	Support (.0001)

CHAPTER SIX

Developing Classification Schemes

The first goal of this project has been to determine if there is an interaction between individual characteristics and contextual settings that is related to prison outcome. If this hypothesis was supported, then the next step is to use what was learned about adaptation patterns to suggest new methods for placing inmates in prison settings. In the previous chapter, we found that congruence of certain individual characteristics and organizational factors was statistically related to outcome. We, therefore, have accomplished the first goal and are ready to consider the second. The purpose of this chapter is to present findings about the usefulness of person and environmental information in classification.

Person and Environment Interaction

With the information discussed in the previous chapter, we can see how transactional relationships might be used as a basis for classification. Before we begin to evaluate individual schemes, one additional set of analyses should be considered. In the regressions, individuals were classified into groups or categories—they were assigned to Megargee groups or given a score on a risk or need scale—however, environments have not been classified. Individual and environmental congruence variables were constructed from aggregate scores on environmental variables for each living unit which were left in continuous form. To see if different types of individuals distinguished by one of the three forms of classification adjust

differently in different types of environments, the diversity of the environment needed to be reduced to a few categories. Unfortunately there is no "appropriate" way to form such categories. One of several multivariate techniques could have been used to form groups with similar patterns of variation, but since we are dealing with aggregate variables, this may not be an appropriate method. To simplify matters, a decision was made to form five groups for each environmental measure with frequencies as similar as possible. We recognize that this decision does not optimize the formation of groups, but if useful patterns are found, it should be adequate.

Once the environmental categories were formed, matrices of groups with different individual characteristics living in different environments were formed. Two-way analysis of variance of the interaction effect for the different outcomes was performed to see if people adjusted differently to environments. The selection of interactions to be tested was guided by the results of the regressions of single congruence variables found to be significantly related to outcome. The findings are presented in 6.1. Significant interactions were found for aggressive infractions, External and Physical problems.

Evaluating Two-Way Classification Schemes

The analyses of the interaction effects show that certain types of individuals adjust better to certain prison environments than others. It should be possible to reduce the number of problems that inmates encounter or cause problems by placing them in appropriate settings. To evaluate this possibility, the two-way tables for each pair of variables that was found to significantly interact were evaluated to

Table 6.1
Significance of the Interaction Effect in a
Two-Way Analysis of Variance of Outcomes
Among Different Groups of Individuals in
Different Organizational Settings^a

Groups of Individuals	Adjustment Outcomes			
	Aggressive Infractions	Assaultive Infractions	External PAQ	Physical PAQ
Risk			emot.feed. (.0001) activity (.0002) privacy (.0001) freedom (.0006) support (.0001)	privacy (.03)
PPI	structure (.04) social (.01)		social (.0001) safety (.0001)	activity (.03) privacy (.007) safety (.0001) emot.feed. (.03)
Megargee	freedom (.0002)		privacy (.02) safety (.002) social (.0009) emot.feed. (.004) support (.054)	privacy (.0001) freedom (.0001) safety (.0001) social (.0001) structure (.0001) emot.feed. (.0001) activity (.0001) support (.0001)

a Environmental dimensions were categorized into five groups which have close to the same percentage in each as possible.

see if individual placements to specific settings would reduce the occurrence of problems.

An example of one of the two-way tables is shown in Table 6.2. This particular analysis looks at the success rates on the External adjustment dimension of the inmates comprising the sample. Success is defined as having no External problems. The percentages in the table indicate how many inmates, classified into one of the ten Megargee types and who were living in particular environmental settings as distinguished by the amount of social stimulation, experienced no External problems. As one looks down the columns, it is evident that certain environmental settings are more desirable than others. Some individuals appear to adjust better to settings where there is high social stimulation; others do better in setting with less interpersonal interaction. For instance, individuals with a personality type Able appear to adjust better to settings with more social interaction.

In the next to last row of Table 6.2, we note that the success rate for all inmates in the sample is 64 percent. If inmates were placed in settings where their adjustment would probably be improved, as indicated by the boldfaced boxes, then the success rate would be projected to increase to 71.9 percent. Eight percent fewer inmates would fail to adjust, which would constitute a 22 percent reduction in the number of failures.

It should be noted that in making assignments in this way, we have not optimized our decision criteria. Rather than assigning inmates to the single cell with the highest success rate, we have assigned inmates to high, low or medium categories. This practice was chosen as a conservative approach to placement. It was assumed that there is error

Table 6.2

Success Rates of Megargee Groups
In Social Environments
External-PAQ

Environmental Levels	Megargee Types											Totals
	A	B	C	D	E	F	G	H	I	J		
1	% n	40% 5	100% 1	33% 6	80% 5	100% 2	30% 10	60% 5	56% 9	33% 9	50% 4	48% 56
2	% n	73% 15	- 0	78% 9	83% 6	100% 2	44% 9	67% 6	47% 17	82% 22	60% 5	68% 91
3	% n	60% 15	- 0	0 4	60% 5	100% 1	63% 8	50% 4	80% 5	78% 9	75% 4	62% 55
4	% n	75% 24	80% 5	25% 12	50% 2	0% 2	81% 11	100% 3	60% 5	82% 17	67% 3	68% 84
5	% n	100% 5	- 0	56% 9	0% 2	- 0	58% 12	71% 7	56% 9	84% 13	83% 6	68% 63
Observed Success Rates	% n	70% 64	83% 6	43% 40	65% 20	71% 7	56% 50	68% 25	56% 45	76% 70	68% 22	63.9% 349
Projected Success Rates	%	79	83%	43%	82%	100%	70%	80%	56%	83%	78%	71.9%

in the table and in evaluating the patterns within columns we looked for trends that were reflected throughout the range. We also expect there to be some instability. The projected gains are, therefore, minimal estimates of the expected amount of improvement.

Two-way tables were produced and examined for all interactions that were found to be significant as indicated in Table 6.1. Not all tables produced useful configurations for the development of classification. The schemes that were successful are shown in Table 6.3. The two-way tables for these sets of variables are contained in Appendix D.

In looking at the first column of Table 6.3, one first notices that classification schemes which use the Megargee typology to classify individuals are the most useful. This was true for External and Physical problems and assaultive infractions. This finding was expected since the Megargee typology was found to be significant in explaining outcome in the regression analyses. The Safety dimension of the PPI was also helpful in distinguishing people who experience Physical problems in settings that have different levels of safety. Risk was somewhat useful in two-way classifications that would reduce assaults in prison. The variables were included under special circumstances that will be discussed below.

In looking at the first set of findings in 6.3, we see that the number of inmates who report that they experience External adjustment problems could be reduced by 7 to 8 percent by placing certain personality types in specific environments. This would produce approximately a twenty percent reduction in the number of failures. The findings in the second category, for Physical problems, suggest

Table 6.3
Reduction of Failures Through the Placement
Of Individual Types in Environmental Settings

Adjustment Problem Type of Classification	Actual Failure Rate	Projected Failure Rate	Absolute Reduction In Failures	Percentage Reduction In Failures
External-PAQ				
Megargee & Social	36.1%	28.1%	8.0%	22.2%
Megargee & Emot.Feed.	36.1	29.5	6.6	18.3
Average & Safety	36.1	28.1	8.0	22.2
Physical-PAQ				
Megargee & Safety	49.0%	38.4%	10.6%	21.6%
Megargee & Social	49.0	45.3	3.7	7.6
Megargee & Support	49.0	45.3	3.7	7.6
PPI-Safety & Safety	49.9	43.4	6.7	13.7
Assaultive Infractions				
Megargee & Support	18.9%	13.9%	5.0%	26.5%
Megargee & Structure	18.9	14.2	4.7	24.9
Megargee & Privacy	18.9	12.1	6.8	36.0
Risk & Activity	20.0	15.0	5.0	25.0
Risk & Structure	20.0	14.2	5.8	29.0
Risk & Support	20.0	16.5	3.5	17.5

that attention paid to placements in safe environments is important. By assigning certain personality types or people who express a high need for safety in safer settings, the amount of injury, victimization, and illness can be reduced substantially. The actual number of inmates who might not experience such problems is expected to decrease by as much as 11 percent, thus, resulting in a 15 to 22 percent reduction in problem incidence.

The inclusion of the last set of classification schemes in Table 6.3--those that use assaultive infractions as their outcome variable--requires elaboration. The pairs of variables that are shown in this table were not selected in the usual manner. The congruence variable regressions and the analyses of variance to test interaction effects provided few indications of possible pairs or variables that might form useful classification schemes, but since these incidents are so serious and are a significant concern for prison administrators, an attempt was made to find schemes that might work.

First regarding the Megargee/environment schemes, referring back to Table 6.1 one notes that none of these three interactions were significant. However, these three pairs were significant in the congruence regressions where all eight variables were selected for inclusion in the model. Neither the congruence regressions nor the analyses of variance indicated much of an interaction effect for risk and assaultive behavior; however, since this is a way interaction is perceived, tables were constructed for all eight risk and environment pairs. The three shown here appear to be somewhat useful in classification. For all six schemes, the absolute percentage reductions in failures tended to be somewhat smaller, from 4 to 7

percent, than for the variables included in other schemes already discussed. However, since the failure rate for assaultive infractions is so low the percentage reductions in failures is fairly large, ranging from approximately 20 to 35 percent.

The results shown in 6.3 are encouraging because they suggest that two-way classification holds some promise for reducing adjustment problems. However, an additional element needs to be considered about how placements are made. For the schemes that use the PPI and risk to classify individuals there is coherence in the placement strategies since all high need or high risk people are classified in the same way, all low need or low risk people are classified in the same way, and so forth. That is, in making placements we did not skip around by placing some low risk individuals in low-rated environments and other similar individuals in high-rated environments but maintained the monotonically changing pattern implied in the single dimension classification. The problem with this strategy arises with the Megargee typology. The continuum from a high rating to a low rating is not as clear-cut. To produce the projections shown in Table 6.3, placements were made for specific types irrespective of decisions about any other type, yet there is an underlying ranking associated with the typology which should be considered.

In Table 6.4, the type of placement (into high, low or moderate rated environments on the particular dimension) suggested for each personality type is shown for the types ranked along a scale from most to least normal. For some of the dimensions, there is a similar pattern of ordinality required for risk and needs schemes. The best is for structure in classifying assaultive infractions. The problem we

Table 6.4

Type of Placement for Megargee Groups
Ranked According to Normalcy

Type of Classification	Megargee Type									
	I	E	B	A	G	D	J	F	C	H
External-PAQ										
Social	+	-			+	-	+	+		"
Emot. Feed.	+		+			-	+	+		+
Safety	+			+	+	+		+	+	"
Physical-PAQ										
Safety		+		-	+	+	"	+	"	"
Social	"			+	-		-	-		+
Support	-			+	+	-			-	
Assaultive Infractions										
Support	+	-	+	-	+	-	-			
Structure	-		-	-	+		+		+	+
Privacy			+	-			+	-	-	

+ = classified to a high-rated environment
 - = classified to a low-rated environment
 " = classified to a moderate-rated environment

face is whether or not to force or require the schemes to conform to the ordinal pattern. The Megargee types differ according to some sense of normalcy, but this does not necessarily mean that their environmental needs correspond in a linear fashion to this ranking. For example, personality type Baker is described as more anxious and Jupiter is supposedly passive. It is not unreasonable to hypothesize that these two groups might adapt best in environments where there is more privacy. Some of the groups that fall between these two types on the normalcy scale are more gregarious and may not have a great need for privacy. The results shown in the last row of Table 6.4 generally confirm this supposition, which suggests that for classifications using the Megargee typology, the requirement of ordinality is not necessary.

Methodological Issues Concerning the Classification Schemes

In the previous section, results were presented that indicated that at least thirteen pairs of individual and organizational variables could potentially be used to place inmates in prison settings in a way that would reduce the incidence of adjustment problems. By considering the environmental context, security and deterioration can be controlled better than presently.

There are two major methodological issues that raise significant questions about the validity of these findings and their implications. These schemes were produced by examining the failure rates of inmates and working backwards to consider what might have been done differently to prevent these failures. In the literature, this is referred to as postdiction as opposed to prediction.

Another question is whether the posited scheme will effectively discriminate among other samples. The way the question is usually answered is by initially splitting the sample in half, creating the initial scheme using one half, then validating it on the other half. The reason this approach was not adopted in this research is that the size of the matrices necessitated large samples in order to fill all cells sufficiently so that reliable evaluations of their variations could be made. It was not possible, particularly for the analyses using the Megargee typology, to divide the sample and maintain the cell frequencies at acceptable levels.

The second methodological issue raising questions about the validity of the proposed schemes involves the implementation of the strategy. Failure rates within existing environments have been used to suggest alternative placements that are projected to reduce problem occurrence. However, we do not know what will happen to the environments as the mix of residents is changed. They may be altered so that substantial changes in the failure rates occur.

Let us consider several examples to explore this possibility. Safety was found to be important contextual variable in determining who experiences Physical problems in prison. In studying the interaction of people and environments, the Megargee types Easy, George, Delta, and Foxtrot were found to benefit if placed in safer settings. The first three personality types are all described as intelligent and non-violent. Types Easy and George are well-adjusted and fairly adaptable. Deltas are manipulative and impulsive. It is easy to imagine that these types of inmates incur greater problems in tougher environments in prison and can become the victims of stronger and more

violent prisoners. If kept out of those setting, their adaptation should be much less traumatic. The fourth type, Foxtrot inmates, who have considerable interpersonal conflicts and are among the most violent inmates in prison, experience Physical adjustment problems because of their friction with other people. If the four types of inmates are placed together in what is intended to be a more protected setting, the presence of type Foxtrot inmates may create sufficient disharmony that violence will be common and the environment will end up not being safer at all. On the other hand, it is possible that Foxtrots would be affronted less by the more passive and affable personality types and the environment be as safe as intended. The point is that we do not know how the environment would evolve.

Another person/environment relationship that was found to be important was the degree of environmental structure for different Megargee types in determining the incidence of assaultive infractions. Less deviant personalities, Item, Baker, and Able, were less likely to assault if they were housed in less structured settings, while the inmates with more deviant profiles adjusted better to structured conditions. Here the combination of inmate types may not alter the environment, since the staff control this facet of the prison setting. But the combination of certain inmates may lead to other problems. The housing of passive type Jupiter inmates with hostile and violent type Charlie inmates might create a setting that fosters exploitation. Once again, we do not know what to expect as we start to manipulate the mix of individuals within environment.

These questions about what sorts of changes will occur as placements to certain environments are made were not within the scope

of this research. This study was designed to begin to test the long standing proposition that different types of inmates adjust better to specific environments. This hypothesis has been supported. As we start to use this information, additional research will be required to determine how reconfigurations will modify the prison setting.

CHAPTER SEVEN

Conclusions

The purpose of classification is to group individuals in meaningful ways. In prisons, categories of inmates are identified with different expected probabilities of behavioral problems. This information is useful to prison administrators in making security and treatment decisions and in allocating scarce resources. With classification information, administrators have some idea of the type of people they are supervising and what to expect from them. In this study, it was suggested that the value of classification information could be increased if something was known about how different groups react to different environmental settings. If we knew what types of individuals would adjust best to what types of prison conditions, placements could be made that would reduce the incidence of various behavioral problems among the population.

To achieve this goal, this project set out to do three things. First, we wanted to compare different types of classification systems that are currently being used to see which ones best distinguish inmates who experience different types of adjustment problems. These findings would suggest which methods produce the most meaningful groupings. Secondly, we sought to determine what factors influence patterns of adjustment. Past research has identified several individual characteristics that are related to outcome. Other studies have found organizational variables that are related to how people adjust to prison. Thirdly, we wanted to determine if there is an interaction between these two dimensions, the individual and the

contextual, but this has not been tested. In this study, we conducted a global assessment of which factors in each of the three dimensions determine adjustment. These findings, and particularly those relating to the interaction of person and environment, served as the basis for developing new ways of classifying inmates to prison settings, which was the third activity of the project. In this final stage of the research, we attempted to determine if the incidence of problem occurrence could be reduced by placing inmates in appropriate settings.

Summary of Findings

This project successfully accomplished all three of these activities. In each case, the findings were significant and contributed to our understanding of prison adjustment, and therefore may be useful in the classification and placement of inmates in prison settings. In conducting these analyses, we assumed that prisons operate under the dual goals of maintaining security and minimizing individual functional deterioration. Six outcome measures were used to indicate these two goals.

Three classification schemes--risk assessment, Megargee's MMPI typology, and Toch's Prison Preference Inventory--were studied as examples of three of the more popular types of systems. Our findings indicated that none of the three schemes is clearly superior. Each possessed its own unique advantages and disadvantages. Interestingly, risk assessment was found to be helpful in distinguishing inmates who received institutional recognition as experiencing some problem. It distinguished inmates cited for aggressive or assaultive disciplinary

infractions and those who report to sick call. The Megargee and Toch systems were successful in distinguishing inmates who reported they experienced adjustment problems.

While all three schemes were found to be useful in discriminating among inmates who experience adjustment problems, none were found to be particularly powerful. In each case, though often significant, the amount of variance explained by the classification was relatively low. Also, few of the schemes perfectly conformed to the distribution requirement that failures increase or decrease along the scale monotonically. However, this requirement was nominally met in several cases. Of the three scales, Toch's inventory was consistently the weakest, but as pointed out previously, the eight scales, unlike the other two systems, are unidimensional and contain less information upon which to base a classification. It was conjectured that a composite preference scale, taking into consideration information from some or all of the scales, would probably be as powerful as risk or personality assessment.

In the second project activity, where the factors that influence prison adjustment were studied, all three dimensions identified above, individual, organizational and transactional levels, were found to be related to outcome. In looking at the dimensions individually, we found that small but statistically significant amounts of the variance were explained. A regression model containing a combination of the various individual level variables accounted for 5 to 19 percent of the variance in the dependent variable, depending on which of the six outcome variables was studied. A combination of organizational level variables explained from 5 to 14 percent of variance in the six

adjustment measures. On the transactional level of analysis, congruence variables between person and environment accounted for up to 17 percent of the variance. When variables from all three levels were combined in a regression, substantial improvements in explanatory power were observed. Depending on the dependent variable, from 15 to 42 percent of the variance could be explained. In each case, variables from all three levels were found to be important in accounting for behavioral outcomes.

These findings are important for several reasons. They confirm the expectation that the individual characteristics, attributes of the organizational setting, and the interaction of the two are important in determining patterns of adjustment to incarceration. Of particular significance is the empirical support for the hypothesis that the congruence of individual characteristics and needs and the environment is important in determining outcome. This is the first study to establish this observation, and it served as the basis for proceeding to the final stage of the project which evaluated the benefit of two-way classification.

After considering numerous possibilities, a total of thirteen two-way classification schemes were identified as potentially useful in reducing the number of adjustment problems inmates experience during their incarceration. These systems worked for assaultive infractions and the External and Physical PAQ measured dimensions but were not useful in distinguishing problem levels on the other outcome variables. The Megargee typology was found to be the the most useful scheme in differentiating individuals. Environments that were distinguished by their social stimulation, safety, support and

structure appeared to more important in the effective two-way schemes than some of the other contextual variables.

Based on the assessments of the schemes, it was projected that the External problem failure rate could be reduced by up to 8 percent, which would result in a 22 percent net reduction in the number of inmates experiencing these problems. For inmates who suffer Physical problems, we projected that the failure rate could be reduced by 11 percent resulting in a 22 percent reduction in the frequency of this problem. By employing a two-way classification strategy, the number of inmates charged with assaultive infractions could be decreased by up to 7 percent, which would reflect a 36 percent reduction in the frequency of problem occurrence.

These figures are indeed encouraging. They suggest that two-way classification strategies are potentially useful in attacking both problem areas identified in this study: the maximization of institutional security and control and the minimization of deterioration in individual functional ability. By using information that is already being collected in many prison systems to guide placements of individuals to very specific institutional settings, substantial reductions in the incidence of adjustment problems now seems possible. Thus, this research has provided an answer to the question of what to expect from different types of inmates in different prison settings.

Implications of the Research

In Chapter 6, two questions were raised about the validity of the two-way schemes. The first involves whether these particular findings

are generalizable to other samples or whether they are dependent upon the present sample. The stability of the schemes was checked but we still do not know if these particular configurations will hold for other samples. The second issue involves the changes in environments that may occur as the mix of people in them is manipulated. To what extent will these actions modify the environments in unexpected and undesirable ways? Answers to both of these questions were beyond the scope of this research and call for additional study. Until they have been assessed we cannot be sure that the projected reductions in adjustment problems will, in fact, be achieved.

Because this study breaks new ground, we did not know which variables, and in particular which pairs of individual and environmental variables, would be most strongly related to outcome. This aspect of the research necessitated breadth at the expense of detail. As a result, our indicators of environmental characteristics were generated from six questions about conditions in the facility regarding each contextual attribute. Because of this fact, our results should be considered to be tentative. There is now a need to take what we know about the variables that appear to determine outcome and conduct a thorough study of them.

What are the implications of this study? The research findings indicate that substantial reductions in adjustment problems can be realized if particular types of inmates are placed in particular settings, yet there are questions that arise about the validity and tentativeness of the findings. Both the encouraging results and the methodological issues, one good and one bad, point to the need for additional study. If the findings of this research are generalizable,

then they may prove to be useful management information tools and contribute to the administration of safer and more humane prisons. Before these conclusions can be reached the methodological issues must be addressed. This research accomplished what a pilot study should: it identified a potentially valuable direction for research and administration to pursue.

Implementation Study

To continue the research that has been discussed in this report, an implementation study now appears appropriate. This could be an experimental study in which both people and environments are manipulated to ascertain the effects of such variations on adjustment patterns. Based upon the findings of this study, the three environmental attributes which seem most reasonable to consider for further study are safety, support and structure. However, researchers and administrators may wish to include other factors that were identified as important in this study. It is suggested that the setting in which implementation take place be the living unit, i.e. the dormitory or cell block. Based upon the findings of this study, it is also suggested that both the Megargee typology and risk assessment be used to classify inmates.

One design for the study would be to select ten similar living units. They should be of the same security level, medium or maximum, and should have similar housing arrangements, single cells or dormitories. In two of the units, the staff would be trained in how to create safer environments; in two others, the focus would be on being more supportive; and in still two others, the training would be in

creating a more structured setting. Inmate types identified in this study as adjusting better in safe environments would be placed in one of the settings where safety is stressed. Placements to the other safe setting would be random. This procedure would be followed for the supportive and structured environments. In the next three living units, inmate types thought to benefit from a particular setting--safe, supportive, or structured--would be housed together, but no attempt would be made to manipulate the environment. In the remaining unit, neither the environment nor the inmate mix would be manipulated. (These placements are summarized in Figure 7.1.) In this way, the individual, the organizational, and the interaction effects would be controlled. Adjustment indicators similar to those used in this study could be monitored to determine the effects of the various factors and to evaluate the usefulness of two-way placement strategies. By monitoring how the various environments change, a better idea of how direct manipulation of the setting and the effect of particular mixes of inmates could be obtained. One might wish to conduct the study in a series of medium security and series of maximum security facilities to control for security level effect. A design such as this should allow us to consider the validity issues posed above and provide the opportunity to move the study beyond its present conclusions.

Figure 7.1 Research Design for Implementation Study

S A F E T Y

Assignments according to typology
Staff trained to foster environment

Regular Assignments
Staff trained to foster environment

Assignments according to typology
Environment not manipulated

S T R U C T U R E

Assignments according to typology
Staff trained to foster environment

Regular Assignments
Staff trained to foster environment

Assignments according to typology
Environment not manipulated

Regular Assignments
Environment not manipulated

S U P P O R T

Assignments according to typology
Staff trained to foster environment

Regular Assignments
Staff trained to foster environment

Assignments according to typology
Environment not manipulated

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APPENDIX A
The Questionnaires

CONSENT STATEMENT

You are invited to be in a study of prison adjustment conducted by researchers from the State University of New York at Binghamton. We hope to learn more about what types of people adjust best to what types of prison settings. You were chosen as a possible participant in this study by random selection from a list of all persons currently confined in this facility.

If you decide to be in the study, you will be given four questionnaires: (1) one that asks what you like most and dislike most about prisons, (2) another that asks about conditions at this facility, (3) a short questionnaire about your own adjustment, and (4) a personality inventory. You will complete the first three questionnaires in this session which will take about two hours. Later, you will be asked to come back for another session of about two hours.

If you speak Spanish, you may listen to a tape which asks the questions in that language. If you speak English, you may either listen to a tape in English or complete a written questionnaire. The only advantage of one over the other is that the written form takes less time. However, many people find it more relaxing to listen to the tape recorded questions.

If you agree to participate and complete the questionnaires, the research team will request more information about you. Specifically, we will ask for background information contained in D.O.C.S. files a copy of your warden's card, and information about your sick calls.

Your answers to the questionnaires, as well as the other information about you, will be completely confidential. It will be impossible to associate the information with you as an individual. As you can see there is a space for you to sign your name at the bottom of this form and to write your name, DIN #, facility and living unit. If you sign the form, tear it off the questionnaire package, and a representative from the Division of Research and Planning, D.O.C.S. will collect them. That office will retain your consent form. The research team will receive only your completed questionnaire with the research subject number on it. No identifying information will be available to us. No one from the Department of Correctional Services will see your answers to the questions. Additional information supplied to the researchers by D.O.C.S. will not contain your name or any other identifying information.

We cannot promise that you will receive any benefits from this study. We hope that the information will be used to improve the prisons in this and other states. Your decision whether or not to be in the study will not affect your relations with the Department of Correctional Services or the Division of Parole. If you decide to be in the study, you are free to stop at any time.

If you have any questions, we expect you to ask us. If you have any questions later, Dr. Kevin Wright (Center for Social Analysis, State University of New York, Binghamton, New York 13901) will be happy to answer them.

You will be given a copy of this form to keep.

You are making a decision whether or not to be in this study. Your signature indicates that you have decided to be in this study having read the information provided above.

Date _____ AM
PM
Time _____

Signature _____

Name (print) _____

DIN # _____

Facility _____

Living Unit _____

PRISON ENVIRONMENT INVENTORY

What goes on in prison differs from one facility to another. The rules are different. Inmates have more freedom, privacy, and activities in some prisons than in others. There is less violence in some facilities. At some places the staff are more supportive.

We are interested in life in this facility. We want to know what goes on here, what it is like to live and work here.

We particularly want to know what it is like to live in your particular housing unit (cell block, tier or dormitory).

We give you a statement about something that might happen in your housing unit. You are to indicate if that event never happens, seldom happens, often happens, or always happens on your unit.

Here is an example:

The food here is tasty.

never seldom often always

On your answer sheet, circle the response that best describes how things are.

Some choices will be easy. Others will not. Even if you have a hard time deciding, let us know what best describes what goes on here. Don't skip any questions.

Remember to answer the questions about what it is like on your cell block, tier or dormitory.

1. Inmates know what will happen if they violate the rules. (Structure)
2. The guards tell inmates when they do well. (Emotional Feedback)
3. There is at least one movie each week. (Activity)
4. An inmate is sexually attacked on this unit. (Safety)
5. Inmates practice whatever religion they want. (Freedom)
6. Inmates spend several hours each day talking with friends. (Social)
7. The guards are more concerned about controlling inmates than protecting them. (Support)
8. Inmates fight with other inmates. (Safety)
9. Inmates respect one another's privacy. (Privacy)
10. The guards ask inmates about their personal feelings. (Emotional Feedback)
11. Inmates are with their friends at night. (Social)
12. If an inmate tries a new hobby or art, the guards will encourage him. (Support)
13. Someone is attacked in their cell at night. (Safety)
14. This unit is noisy. (Privacy)
15. Inmates know the rules. (Structure)
16. Inmates are with more than three friends at a time. (Social)
17. If an inmate wants a job in this facility, there is one for him. (Activity)
18. Someone's cell is robbed on this unit. (Safety)
19. This unit is quiet. (Privacy)
20. An inmate who fights with another inmate will be punished. (Structure)
21. Inmates feel free to go up and talk to other inmates even if they are strangers. (Social)
22. Inmates who go to school are ridiculed by the guards. (Support)
23. Inmates stay in their cells if they want. (Privacy)
24. Inmates receive visitors any time during the day. (Freedom)

25. New inmates quickly become part of some social group. (Social)
26. Prison officials help inmates with problems. (Support)
27. An inmate obtains training if he wants. (Activity)
28. Weaker inmates are sexually attacked. (Safety)
29. Inmates read without being disturbed. (Privacy)
30. The guards stick to the rules. (Structure)
31. Inmates care about one another. (Emotional Feedback)
32. Inmates see their close inmate friends when they want to. (Social)
33. A weaker inmate is physically attacked. (Safety)
34. Inmates can be alone without being disturbed. (Privacy)
35. Inmates do not have to work if they do not want to. (Freedom)
36. The rules are confusing. (Structure)
37. Inmates will torment a depressed inmate. (Emotional Feedback)
38. A person learns new skills here. (Support)
39. Inmates have something to do every night. (Activity)
40. Inmates lift weights when they want to. (Freedom)
41. Guards tease depressed inmates. (Emotional Feedback)
42. Inmates rap with the guards. (Social)
43. Inmates put down inmates who try to build a new life. (Support)
44. Each inmate can lift weights at least one hour each day. (Activity)
45. Inmates have to defend themselves on this unit. (Safety)
46. Inmates know what will get them written up by the guards.
(Support)
47. Inmates talk to one another about their feelings. (Emotional
Feedback)
48. Inmates are unfriendly. (Social)
49. Inmates give inmates with personal problems a hard time. (Support)
50. Inmates keep busy by participating in sports. (Activity)

51. An inmate's cell is robbed. (Safety)
52. If an inmate lets other people know he does not want to be bothered, they will not bother him. (Privacy)
53. Inmates choose their work assignments. (Freedom)
54. Inmates know when the gym is open. (Structure)
55. Inmates let their friends know they care about them. (Emotional Feedback)
56. Inmates care about one another's feelings. (Support)
57. An inmate can study if he wants. (Activity)
58. Inmates are allowed to read when they want. (Freedom)
59. Inmates know when they can take a shower. (Structure)
60. Inmates who do favors for their friends are liked. (Emotional Feedback)
61. Prison programs teach inmates new skills. (Support)
62. Inmates keep busy with their hobbies. (Activity)
63. If an inmate believes he will be attacked, the guards protect him. (Safety)
64. If two inmates are having a conversation, a guard will walk up and listen. (Privacy)
65. Inmates know when the commissary is open. (Structure)
66. Inmates who help out other inmates are taken advantage of. (Emotional Feedback)
67. Guards are unfriendly to inmates. (Social)
68. Prison programs help inmates make parole. (Support)
69. Inmates keep busy by watching TV. (Activity)
70. If two inmates are discussing something, another inmate will walk up and listen. (Privacy)
71. Inmates stay up as late as they want. (Freedom)
72. Inmates know when a movie will be shown. (Structure)

73. Inmates feel loved by other people in this facility. (Emotional Feedback)
74. Inmates are open enough to say what they are thinking. (Social)
75. Inmates are beaten by the guards. (Safety)
76. Inmates have at least one hour of uninterrupted time to themselves each night. (Privacy)
77. Inmates are treated like children here. (Freedom)
78. Inmates are bored. (Activity)
79. Inmates have a say about what goes on here. (Freedom)
80. Inmates listened to music when they want. (Freedom)

QUESTIONS ABOUT YOU

On your answer sheet, circle the number which best represents your feelings.

81. How do you feel today?
82. How would you classify your own view towards life?
83. Do you feel safe in prison?
84. How would you classify yourself socially?
85. How much time do you spend outside of your cell when you are allowed to leave?
86. In comparison to other prisons you have been in, how would you rate this facility? (Leave blank if you have never been incarcerated before.)

PRISON ADJUSTMENT QUESTIONNAIRE

People adjust to prison in different ways. Some people sleep better in prison than in the freeworld. Others get into fights in prison.

We are interested in how you are adjusting to this facility. You are asked to compare how you feel or act here to how you felt or acted in the freeworld. You are also asked how often you feel or act a certain way.

Please circle the response which best represents you. There are no right or wrong answers, only how you are handling prison.

Here is an example:

- Would you say the food is
- a) better in prison
 - b) better in the freeworld
 - c) about the same

For each question, circle the letter on the answer sheet which corresponds to the response which best describes what you think.

Even if the decision is hard, try to answer all questions. Circle the answer that best describes you.

1. In comparison to the freeworld, are you
 - a. more comfortable with the people in prison
 - b. more comfortable with the people in the freeworld
 - c. about as comfortable with the people in prison as with the people in the freeworld
2. How often do you feel uncomfortable around the other inmates here?
 - a. most of the time (you are uncomfortable several times a day)
 - b. at least once a day
 - c. occasionally (every few days)
 - d. seldom
 - e. never
3. How often do you feel uncomfortable around the staff?
 - a. most of the time (you are uncomfortable several times a day)
 - b. at least once a day
 - c. occasionally (every few days)
 - d. seldom
 - e. never
4. Would you say you are
 - a. more angry in prison
 - b. more angry in the freeworld
 - c. about as angry in prison as in the freeworld
 - d. very seldom angry either place
5. How often are you angry here?
 - a. most of the time (you are angry several times a day)
 - b. at least once a day
 - c. occasionally (every few days)
 - d. seldom
 - e. never
6. Are you sick
 - a. more frequently in prison
 - b. more frequently in the freeworld
 - c. about as frequently in prison as in the freeworld
 - d. very seldom sick either place
7. Since you have been in prison, how often have you been sick?
 - a. most of the time (you are sick several times a day)
 - b. at least once a day
 - c. occasionally (every few days)
 - d. seldom
 - e. never
8. Do you have
 - a. more trouble sleeping in prison
 - b. more trouble sleeping in the freeworld
 - c. about as much trouble sleeping in prison as in the freeworld
 - d. very seldom have trouble sleeping either place

9. How often do you have trouble sleeping here
 - a. at least once a day
 - b. occasionally (every few days)
 - c. seldom
 - d. never
10. In comparison to the freeworld, are you
 - a. more afraid of being attacked in prison
 - b. more afraid of being attacked in the freeworld
 - c. about as afraid of being attacked in prison as being attacked in the freeworld
 - d. not afraid of being attacked either place
11. How often are you afraid of being attacked here in prison?
 - a. most of the time (you are afraid several times each day)
 - b. at least once a day
 - c. occasionally (every few days)
 - d. seldom
 - e. never
12. Do you get into
 - a. more physical fights in prison
 - b. more physical fights in the freeworld
 - c. about as many physical fights in prison as in the freeworld
 - d. very seldom fight in either place
13. How often do you get into a fight here?
 - a. most of the time (you fight several times each day)
 - b. at least once a day
 - c. occasionally (every few days)
 - d. seldom
 - e. never
14. Do you get into
 - a. more heated arguments in prison
 - b. more heated arguments in the freeworld
 - c. about as many heated arguments in prison as in the freeworld
 - d. very seldom get into heated arguments either place
15. How often do you have a heated argument with another inmate?
 - a. most of the time (you argue several times each day)
 - b. at least once a day
 - c. occasionally (every few days)
 - d. seldom
 - e. never
16. How often do you argue with guards?
 - a. most of the time (you argue several times each day)
 - b. at least once a day
 - c. occasionally (every few days)
 - d. seldom
 - e. never

17. Are you injured or hurt
 - a. more often in prison
 - b. more often in the freeworld
 - c. about as often in prison as in the freeworld
 - d. very seldom injured either place
18. How often are you injured or hurt here?
 - a. most of the time (you are injured several times a day)
 - b. at least once a day
 - c. occasionally (every few days)
 - d. seldom
 - e. never
19. Are you taken advantage of
 - a. more often in prison
 - b. more often in the freeworld
 - c. about as often in prison as in the freeworld
 - d. very seldom taken advantage of either place
20. How often are you taken advantage of by other inmates?
 - a. most of the time (you are taken advantage of several times a day)
 - b. at least once a day
 - c. occasionally (every few days)
 - d. seldom
 - e. never
21. Do you feel that your cell is your home?
 - a. never
 - b. seldom
 - c. often
 - d. always
22. Do you get enough exercise?
 - a. never
 - b. seldom
 - c. often
 - d. always
23. Do you get enough sleep?
 - a. never
 - b. seldom
 - c. often
 - d. always
24. Do you get enough to eat?
 - a. never
 - b. seldom
 - c. often
 - d. always

25. Do you have enough to do?
 - a. never
 - b. seldom
 - c. often
 - d. always
26. Do you have enough privacy?
 - a. never
 - b. seldom
 - c. often
 - d. always
27. Do you understand the rules?
 - a. never
 - b. seldom
 - c. often
 - d. always
28. Do you have good friends here?
 - a. none
 - b. some
 - c. many
29. Do you believe this facility's program is providing you with the necessary training to better yourself in the job situation after release?
 - a. yes
 - b. no
30. Given your own special circumstances, what living quarters do you prefer?
 - a. open dorm
 - b. semi-enclosed dorm
 - c. individual cell
 - d. shared room
 - e. single room

APPENDIX B

The Inmates Sampled

by
Nancy Woika

The prison population sample can be generalized by the ages of those who participated in the research program. The average age of the total sample was twenty-nine years. When broken down by facility, we can find the following average ages:

CHART B1

AVERAGE AGES FOR MEDIUM AND MAXIMUM FACILITIES

MEDIUM SECURITY PRISONS

OGDENSBURG	30 YEARS
FISHKILL	27 YEARS
MID-ORANGE	29 YEARS
ALBION	29 YEARS
MT. MCGREGOR	30 YEARS

MAXIMUM SECURITY PRISONS

ATTICA	32 YEARS
AUBURN	32 YEARS
GREAT MEADOWS	30 YEARS
GREEN HAVEN	33 YEARS
ELMIRA	21 YEARS

It can be seen from these charts that, with the exception of Elmira, the maximum security prisons have an older population of inmates than do the medium security facilities. The average age for the medium facilities is 29, and, if Elmira is excluded, the average for the maximum group would be close to 30 years.

When calculating the average ages, extreme values on each end are invisible. Another way to examine the sample is to look at the range of ages in each institution. These are as follows:

CHART B2

RANGE OF AGES FOR MEDIUM AND MAXIMUM FACILITIES

MEDIUM SECURITY PRISONS:

OGDENSBURG	17-51 YEARS
FISHKILL	17-56 YEARS
MID-ORANGE	18-55 YEARS
ALBION	18-57 YEARS
MT. MCGREGOR	21-56 YEARS

MAXIMUM SECURITY PRISONS

ATTICA	16-61 YEARS
AUBURN	20-61 YEARS
GREAT MEADOWS	18-54 YEARS
GREEN HAVEN	18-63 YEARS
ELMIRA	17-30 YEARS

The overall range for the medium security facilities was from 17 to 57, in the maximum facilities from 17 to 63, and the overall range was from 17 to 63 years. Although the average ages given earlier showed a difference between the medium and the maximum facilities, the range of ages is similar between the two facility types.

Another way to examine the age patterns in the sample is to look at the mode, or that age which occurs most frequently. The following chart gives these values:

CHART B3

MODE OF AGES IN MEDIUM AND MAXIMUM SECURITY PRISONS

MEDIUM SECURITY FACILITIES

OGDENSBURG	24,28 YEARS	(5)
FISHKILL	21 YEARS	(12)
MID-ORANGE	23 YEARS	(10)
ALBION	25 YEARS	(6)

MT. MCGREGOR 22 YEARS (11)

MAXIMUM SECURITY PRISONS

ATTICA	24 YEARS	(10)
AUBURN	32 YEARS	(11)
GREAT MEADOWS	26 YEARS	(12)
GREEN HAVEN	29 YEARS	(8)
ELMIRA	20 YEARS	(19)

The mode of these two categories combined, or that age which occurs most frequently when all of the prisons are examined as one group, is 24 years, which included 60 of the participants. A close second is 22 years, held by 59 of those prisoners taking part. This means that 119 of the prisoners who took part in this research were either 22 or 24 years old.

Another way to describe the sample in this research is to examine the educational level of the prisoners as a group. the ranges of these levels is presented below.

CHART B4

*EDUCATIONAL LEVELS OF PRISONERS IN MEDIUM AND MAXIMUM
SECURITY PRISONS*

MEDIUM SECURITY PRISONS

OGDENSBURG	NO EDUCATION THROUGH TWELFTH GRADE ONE M.S. OR PH.D.
FISHKILL	FOURTH THROUGH TWELFTH GRADE 2 COLLEGE GRADUATES 1 TECHNICAL SCHOOL GRADUATE
MID-ORANGE	NO EDUCATION THROUGH TWELFTH GRADE 3 COLLEGE GRADUATES 1 TECHNICAL SCHOOL GRADUATE
ALBION	SEVENTH THROUGH TWELFTH GRADE 1 WITH SOME COLLEGE 2 COLLEGE GRADUATES
MT. MCGREGOR	FOURTH THROUGH ELEVENTH GRADE

MAXIMUM SECURITY PRISONS

ATTICA	THIRD THROUGH TWELFTH GRADE 1 COLLEGE GRADUATE
AUBURN	NO EDUCATION THROUGH TWELFTH GRADE 3 COLLEGE GRADUATES 1 TECHNICAL SCHOOL GRADUATE
GREAT MEADOWS	NO EDUCATION THROUGH TWELFTH GRADE 1 WITH SOME COLLEGE 1 COLLEGE GRADUATE
GREEN HAVEN	NO EDUCATION THROUGH TWELFTH GRADE 1 WITH SOME COLLEGE 1 TECHNICAL SCHOOL GRADUATE
ELMIRA	NO EDUCATION THROUGH TWELFTH GRADE 1 COLLEGE GRADUATE

There is a wide range of educational levels present, from those with no education to those who have completed high school or have achieved an equivalency diploma. There are four prisoners in the sample who have experienced college at some point before entering prison, whereas thirteen have completed a college degree, and one prisoner has completed work at the graduate level. There have also been four prisoners who have attended and graduated from technical school.

The sample can also be described by the ethnic background, or race, of the prisoners. These are categorized as either White, Black, Hispanic, or "other", which includes Oriental, American Indian, Chinese, or Japanese. The overall racial composition of those prisoners sampled included 226 Whites, 501 Blacks, 183 Hispanics, and 3 "others." When broken down by facility type, the following percentages occur:

CHART B5

RACIAL PERCENTAGES IN MEDIUM AND MAXIMUM SECURITY PRISONS

MEDIUM SECURITY PRISONS

OGDENSBURG	WHITE	80%
	BLACK	17%
	HISPANIC	4%
	OTHER	0%
FISHKILL	WHITE	16%
	BLACK	63%
	HISPANIC	21%
	OTHER	0%
MID-ORANGE	WHITE	15%
	BLACK	51%
	HISPANIC	34%
	OTHER	0%
ALBION	WHITE	40%
	BLACK	54%
	HISPANIC	5%
	OTHER	2%
MT. MCGREGOR	WHITE	28%
	BLACK	54%
	HISPANIC	18%
	OTHER	0%

MAXIMUM SECURITY PRISONS

ATTICA	WHITE	27%
	BLACK	61%
	HISPANIC	11%
	OTHER	2%
AUBURN	WHITE	37%
	BLACK	44%
	HISPANIC	19%
	OTHER	0%
GREAT MEADOWS	WHITE	14%
	BLACK	65%
	HISPANIC	21%
	OTHER	0%
GREEN HAVEN	WHITE	16%
	BLACK	58%
	HISPANIC	27%
	OTHER	0%
ELMIRA	WHITE	30%
	BLACK	48%
	HISPANIC	23%
	OTHER	0%

When the totals of these are calculated, there are, in the medium security facilities, 90 Whites, 214 Blacks, 80 Hispanics, and one "other", whereas in the maximum

facilities, there are 136 Whites, 287 Blacks, 103 Hispanics, and two "others."

The final way to describe this sample is through the use of a scale developed by megargee, in which ten personality types are identified and used to predict violent behavior. These ten types are briefly described below.

TYPE A

- Active, self-assured, charming, popular, manipulative
- Outgoing, dominant group
- Average use of drugs
- Not excessively aggressive; does little to avoid hostile interactions
- Good relations with authorities
- "Artful Dodger": will risk taking illegal shortcuts to gratify his wants as soon as possible

TYPE B

- One of the least deviant groups
- Below average interpersonal skills and adjustment
- Excessive use of alcohol and drugs
- Adapt poorly to environment; internalize their problems
- Lack of spontaneity, apathy, lack of drive
- One of the most troublesome groups in prison

TYPE C

- Bitter, hostile, sensitive to perceived insults, readily lashes out at others, frequent conflict with authority
- Most likely to have multiple drug use patterns

- Very socially withdrawn
- Hostile loners; see others as a threat
- Poor adjustment, deviant value system, lack of ego strength
- Preoccupied with own problems, no empathy for others' problems

TYPE D

- Difficulties in interpersonal relations and adjustment
- Few inhibitions against reacting with violence when provoked--do not seek out violence
- Energetic, assertive, ascendant
- Not willing to abide by conventional social mores; low work performance
- Do not form close positive relations with staff or fellow inmates
- Need to have their own way

TYPE E

- Best intellectual ability and highest academic achievement
- Good interpersonal relations and adjustment
- Below average use of liquor and drugs
- Least violent, good personality, gets along well with others, high maturity levels
- Optimistic toward prison stay

TYPE F

- One of the most violent and deviant groups
- High drug usage
- Antisocial and egocentric, dominant and assertive
- Little motivation to change maladaptive behaviors; dishonest, deceitful,

supremely self-centered

--Minimal concerns with opinions of others; engage in criminal behavior for kicks

--Second worst prison adjustment; poor work and classroom performance

TYPE G

--High drug use

--Best educated and brightest

--Average to better interpersonal relations and adjustment

--Fewest authority conflicts

--Above average dependability

--Remained rather uninvolved--keep out of trouble

TYPE H

--Low intellectual ability and educational achievement

--Greatest number of problems in school and employment

--Greatest number of problems in interpersonal relations

--High drug useage, especially LSD and narcotics

--One of the most aggressive groups, prone to conflicts with authority,

withdrawn, inverted, passive

--Likely to be avoided by other inmates

TYPE I

--Healthy and effective patterns of functioning

--Fewest problems in interpersonal relations and general adjustment

--Least likely to use hard drugs or alcohol

--Outgoing, friendly, non-aggressive

- Less assertive but not passive
- Lack of social maturity and socialization

TYPE J

- Least dominant and most passive, most likely to avoid hostile encounters
- Lowest in general aggressiveness
- Deny problems outwardly while inwardly experiencing turmoil
- Awkward in social interactions
- Little motivation for achievement
- Minimized their problems

The most frequent personality type occurring in the prisons overall is Type A, or the "Artful Dodger" type. This personality type is also the one that occurs most frequently in the medium security prisons. According to Megargee's typology, we would then expect the majority of prisoners to be energetic, cooperative, friendly, and helpful. Yet these inmates lack patience, and are very quick in reacting to hostile situations. Although they are popular and charming and are not likely to have many disciplinary infractions when in prison, it is important to note that they may not be able to be depended on when placed in a position of responsibility. Since this group acts whimsically and often takes illegal shortcuts to gratify their desires, they often find themselves back in prison.

The maximum security prisons had two personality types emerge as dominant, types A and I. We would expect the same behavior from the prisoners determined to be a "type A" in this situation as above. Those inmates categorized as personality type "I" are also friendly and outgoing, yet they lack maturity in social situations. They are less assertive than type A people, but not passive. Types A

and I are very similar, so it is not surprising that these would both occur as dominant. Both types of prisoner groups are outwardly friendly and mature, yet are inwardly immature and underdeveloped.

APPENDIX C

The Prisons Sampled

by

Jean Marie Harris

Three of the most striking environmental differences between New York State male maximum security and medium security facilities are their populations, the architectural styles of living units, and the average area of living space per inmate. The five maximum facilities had total populations ranging from 1,586 to 2,197 on August 15, 1983. These populations are much higher than four of the five medium facilities which had populations ranging from 236 to 716 on the same date. Fishkill, the fifth medium facility, had a total population of 1,664 on August 15, 1983. When we compare these total populations with each facility's total capacity, we note that all but two facilities are overcrowded. Temporary capacity has been added to six of the eight overcrowded facilities to try to alleviate some of the problem. Table C.1 gives the figures on total population, total capacity and temporary capacity.

TABLE C.1 Population and Capacity

Facility	Total Population	Total Capacity	Temporary Capacity
Maximum			
Attica	2,197	1,915	300
Auburn	1,636	1,669	0
Elmira	1,586	1,652	0
Great Meadow	1,753	1,701	39
Green Haven	2,086	2,076	0
Medium			
Albion	345	253	100
Fishkill	1,664	1,244	491
Mid-Orange	716	534	205
Mt. McGregor	455	381	63
Ogdensburg	236	230	0

The second important environmental difference between maximum and medium prisons is the architectural style of the living units.

All inmate subjects from the five maximum facilities were housed in single occupancy cells. In comparison, the medium facilities housed inmates in single, multiple and dorm style units. The living units within the medium facilities, whether they are single, multiple or dorm, are all of similar construction. They have solid cell fronts, solid doors with vision panels and are on closed tiers (floors). We do not see this uniformity in the single occupancy units of the maximum facilities. Most living units within the maximum facilities have bars as a cell front, as opposed to the solid front, and grill doors, as opposed to solid doors with vision panels. There is usually a mixture of closed tiers and open tiers in the maximum facilities. Medium security cell blocks which are dorm style have fewer total occupants than do single occupant cell blocks. To summarize, we can say that medium facilities have lower total populations than do maximum facilities, and less populated living units.

When comparing area per inmate, we note that the average space per inmate is greater in the medium facilities than in the maximum facilities. The medium facilities' area per inmate ranged from 56 square feet to 112 square with an average of 83 square feet. The area per inmate in the maximum facilities ranged from 44 square feet to 87 square feet with an average of 56 square feet.

What might these physical differences among facilities mean in terms of climates as perceived by the inmate? When we compare the inmate rankings of the eight environmental conditions identified in the Prison Environment Inventory, we observe only slight differences in the rank order of the dimensions between the

medium and maximum facilities. There are, however, some noticeable differences in the mean scores between the different security level facilities. Table C.2 indicates the rankings and mean scores on the eight dimensions for the average medium facility and the average maximum facility.

TABLE 2 Prison Environment Mean Scores

Average Medium	Average Maximum
19.7 Structure	19.3 Structure
17.8 Activity	17.8 Activity
16.3 Social Stimulation	16.7 Freedom
15.2 Freedom	15.4 Social Stimulation
14.6 Privacy	14.9 Privacy
14.4 Emotional Feedback	14.5 Emotional Feedback
13.5 Safety	14.3 Safety
12.8 Support	12.4 Support

The medium facilities' environments appear to have slightly more structure and support than the maximum environments, and substantially more social stimulation. The maximum facilities' environments appear to offer a substantially more freedom and safety than the medium environments. When comparing maximum facility climates, Elmira stands out. Safety is ranked higher as a condition and has a significantly higher mean score at Elmira compared to the other maximum facilities. When we compare the different living units at Elmira we see that the higher mean for the safety dimension is indicative of all, but one living unit. Elmira also has a lower ranking of, and mean score for, the emotional feedback dimension. This lower mean is indicative of all living units at Elmira from which our subjects came. At Auburn the privacy dimension ranks higher and has a greater mean than at any other maximum facility. This greater mean is

indicative of all but one cell block at Auburn.

Table C.3 gives the ranking of, and mean scores for, all eight dimensions within the five maximum security facilities. The rankings of, and mean scores for, the eight dimensions within the medium security facilities are displayed in Table C.4.

TABLE 3 Maximum Prisons: PEI Means

Elmira	Green Haven	Great Meadow
20.6 Structure	18.5 Structure	19.6 Structure
17.7 Activity	17.5 Activity	17.6 Activity
16.9 Freedom	16.4 Freedom	16.1 Freedom
15.6 Safety	15.5 Social Stimulation	15.9 Social Stimulation
14.9 Social Stimulation	15.0 Emotional Feedback	14.5 Emotional Feedback
14.1 Privacy	14.8 Privacy	14.3 Privacy
13.9 Emotional Feedback	13.8 Safety	13.9 Safety
13.1 Support	11.9 Support	11.8 Support
Auburn	Attica	
13.8 Structure	19.2 Structure	
17.8 Activity	17.9 Activity	
17.1 Freedom	17.0 Freedom	
15.6 Privacy	15.5 Social Stimulation	
15.3 Social Stimulation	15.4 Privacy	
14.5 Emotional Feedback	14.7 Emotional Feedback	
14.2 Safety	14.0 Safety	
12.5 Support	12.7 Support	

TABLE 4 Medium Prisons: PEI Means

Ogdensburg	Fishkill	Mid-Orange
20.1 Structure	19.4 Structure	20.0 Structure
17.1 Activity	18.4 Activity	17.4 Activity
17.0 Social Stimulation	16.0 Social Stimulation	16.8 Social Stimulation
15.0 Freedom	14.7 Freedom	15.8 Freedom
14.6 Privacy	14.6 Emotional Feedback	14.8 Privacy
14.1 Emotional Feedback	14.2 Privacy	14.5 Emotional Feedback
13.5 Safety	13.9 Safety	13.2 Safety
12.3 Support	13.3 Support	12.6 Support

Albion
 19.7 Structure
 18.1 Activity
 15.9 Social Stimulation
 15.2 Freedom
 14.6 Privacy
 14.3 Emotional Feedback
 13.9 Safety
 12.9 Support

Mt. McGregor
 19.4 Structure
 17.8 Activity
 15.5 Social Stimulation
 15.1 Freedom
 14.5 Privacy
 14.3 Emotional Feedback
 13.1 Safety
 12.3 Support

In Table C.4 we see that the eight dimensions are ranked in the same order for all medium institutions except for Fishkill. Fishkill's emotional feedback and privacy dimensions are in reverse order of all the other medium facilities. The mean scores for these dimensions do not differ significantly between Fishkill and the other facilities even though the rankings differ. At Fishkill, the support dimension has a mean score which is significantly greater than the mean score at any other medium facility. This greater mean score seems indicative of most living units within Fishkill regardless of unit style (single, multiple or dorm).

When comparing the climates of different living units within each facility we see variation among the units. For the most part this variation does not seem to be influenced by the different physical attributes of the living units. To compare the living units we have ranked the levels at which Toch's eight dimensions are offered in all ten facilities. This was done by categorizing each dimension into groups with approximately the same percentage of respondents. A ranking of 1 means the dimension is offered within the level of the lowest range throughout all ten facilities. The ranking of 5 means the dimension is offered within the level of the highest range throughout all ten

facilities. We will talk about dimensions being offered at the highest and lowest in-facility level, meaning in comparison with all living units in that facility. We will also discuss dimensions as being offered at the highest or lowest overall level, meaning scoring either a 5 or 1, respectively, when compared with all living units in all ten facilities.

At Elmira, all living units have single occupancy cells on open tiers. All cell blocks, except one, have bar fronts with grill doors. The one exception, cell block C, has solid cell fronts and solid doors with vision panels. For all of these cell blocks, structure was ranked as the top environmental condition with cell block H offering less structure than all other cell blocks. For all cell blocks, the next three ranked conditions were freedom, safety and activity, but not consistently in the same order. Cell blocks G and H offered the lowest level of activity in Elmira. These levels are among the lowest overall. Social stimulation, privacy and support varied in their rankings and mean scores. Cell block F offered more social stimulation than any other Elmira cell block. Privacy was offered at its lowest in-facility level and overall level in cell blocks G and I.

At Attica, where all living units have single occupancy cells on closed tiers, we again notice much variation among living units' climates. Two of the five living units at Attica have solid cell fronts and solid doors with vision panels, cell blocks C and E, while the remaining three units have bar fronts and grill doors. For all five units structure, freedom, privacy and activity are ranked as the top four conditions. The exact

ordering of these four dimensions differs for each living unit. Cell block A offers the highest level of structure within Attica. The levels of freedom, privacy and activity do not vary much among cell blocks. Emotional feedback and social stimulation flip flop between rankings five and six at Attica. Cell block C offers the greatest amount of emotional feedback at Attica, which is also within the highest level overall. Safety, which is consistently ranked number seven, is offered at the highest in-facility level in cell block C, and the lowest level in cell block E. Support is the eighth ranked condition in all of Attica's living units.

In Auburn, the living units are all of the same style: the same cell area (50 square feet, bar front, grill door, single occupancy and open tier. For all five cell blocks included in the study structure, activity and freedom were ranked one, two and three, respectively. Cell block D offers the least structure at Auburn, and this is among the lowest level offered overall. Privacy, social stimulation, safety and emotional feedback all varied in the rankings between four and seven within the different living units. For all Auburn living units support ranked eighth. Cell block B offered the highest level of support at Auburn. This level was among the highest overall.

Within Green Haven's nine living units from which our subjects came, there are both open and closed tiers. All but one living unit have bar fronts and grill doors. The remaining unit, cell block J, has solid fronts and solid doors with vision panels. Six units have structure as the number one condition, cellblocks A, B, D, E, F, G, and and three units have activity as number

one, cell blocks C, H, J. Privacy, freedom, emotional feedback and social stimulation were all ranked three or four in at least two of the living units. Support was ranked number eight in all living units except cell block A where it was ranked seventh and safety was eighth. The levels of each dimension offered within Green Haven's living units vary from the lowest level to the highest level overall for six of the eight dimensions. Only social stimulation and support never reach the highest overall level.

The four living units in which our Great Meadow subjects lived have bar fronts with grill doors. One of these units, cell block E, has open tiers while the rest have closed tiers. Three of the four units, cell blocks A, B, and E, had structure as number one and activity as number two. The fourth unit, cell block C, had activity as number one and structure as number two. Cell block E offers the highest level of activity for Great Meadow. This is also within the highest level overall. Cell block C offers the lowest level of structure, and this is within the lowest level overall. Freedom, social stimulation, privacy and emotional feedback are all ranked three through six for the living units, although not in any consistent order. Cell block E offers the least freedom and the most privacy at Great Meadow. Cell block B offers the most social stimulation and emotional feedback, and the level of emotional feedback is within the highest level overall. Safety is number seven and support number eight in all four living units.

All six living units studied at Mid-Orange have solid fronts,

solid doors with vision panels and are on closed tiers, Cell blocks A, B, C and D are made up of both single occupancy and dorm style units. Cell blocks H and I have single occupancy units. For all six units structure is the number one condition. Cell block D has offers the lowest level of structure in the facility. Cell blocks A, H, and I offer the highest level overall. Activity and social stimulation are the second and third ranked conditions in all units, not necessarily in that order. Cell block D offers the least amount of activity in the facility. The highest overall level of social stimulation is offered in cell blocks C, D, H, and I. Cell block I offers the highest level of safety in Mid-Orange, and this is within the highest level overall. While cell block B offers the lowest level of emotional feedback within the facility and overall, cell block I offers the highest level within the facility and overall. Cell blocks D, H, and I offer the highest overall level of support. Privacy is at its highest in-facility and overall level in cell block H.

There are both single occupancy and dorm style living units at Albion. All of these living units have solid cell fronts, solid doors with vision panels, and are located on closed tiers. Structure is the number one condition at Albion and cell block A offers it at the highest in-facility and overall level. Activity is the second ranked condition and social stimulation the third. Cell block A has the highest in-facility and overall level of activity and the same is true of cell block D's social stimulation level. Privacy in cell blocks A and B is at its highest in-facility and overall level. Safety is at the lowest overall level in cell blocks A, B, and F. Support and safety vie for the number

eight ranking in the different living units.

The multiple occupancy units at Mt. McGregor all have structure as the top condition and activity as the number two condition. All four units have the highest overall level of structure. Social stimulation is at its highest in-facility and overall level in cell blocks A and D. Cell block B offers the highest in-facility and overall level of emotional feedback. The highest in-facility level of safety is offered in cell block D. Support, the eighth condition at Mt. McGregor is at the lowest in-facility and overall level in three of its four units, cell blocks B, C, and D.

The two living units at Ogdensburg studied have some of the lowest levels of all overall levels. Activity, freedom, privacy and safety are all at the lowest overall level in both living units. Neither living unit offers the highest overall level on any dimension. Cell block A offers slightly more social stimulation and structure than does cell block B. Emotional Feedback is offered at a slightly higher level in cell block B compared to cell block A.

Fishkill, with 16 different living units studied, has a variety of single, multiple and dorm style living units. All living units have solid cell fronts, solid doors with vision panels, and are located on closed tiers. The ranking of eight dimensions differ greatly among living units here. For all eight dimensions the levels at which they are offered at Fishkill range from the lowest overall level to the highest overall level.

As we can see, the climates of the different living units

within each facility vary. They vary more in some facilities than others. These variations do not depend on the physical attributes of the living units or the facility. Some units offer more of a specific dimension than other units within the same facility.

APPENDIX D

Two-Way Classification Schemes

Table D.1
 Success Rates of Megargee Groups
 in Emotional Feedback Environments
 External -- PAQ

Environmental Levels		Megargee Types										Totals
		A	B	C	D	E	F	G	H	I	J	
1	%	57%	-	0	100%	67%	25%	-	40%	57%	33%	48%
	n	7	0	3	1	3	4	0	5	14	3	40
2	%	77%	50%	45%	67%	50%	67%	73%	71%	79%	100%	70%
	n	22	2	11	6	2	15	11	14	14	4	101
3	%	75%	100%	43%	75%	100%	50%	63%	38%	73%	60%	60%
	n	12	2	14	8	1	18	8	16	26	10	115
4	%	60%	100%	56%	33%	100%	56%	100%	60%	100%	75%	68%
	n	15	1	9	3	1	9	4	5	8	4	59
5	%	75%	100%	33%	50%	-	75%	0	80%	88%	100%	71%
	n	8	1	3	2	0	4	2	5	8	1	34
Observed Success Rates	%	70%	83%	43%	65%	71%	56%	68%	56%	76%	68%	63.9%
	n	64	6	40	20	7	50	25	45	70	22	349
Projected Success Rates	%	70%	100%	43%	71%	71%	62%	68%	70%	94%	80%	71.9%

Table D.2
 Success Rates of Megargee Groups
 In Safety Environments
 External--PAQ

Environmental Levels	Megargee Types											Totals
	A	B	C	D	E	F	G	H	I	J		
5	% 63%	67%	29%	80%	-	92%	83%	56%	90%	83%	68%	
	n 16	3	14	5	0	12	6	9	10	6	81	
4	% 93%	100%	89%	67%	67%	50%	75%	40%	77%	50%	68%	
	n 14	1	9	3	3	14	4	15	26	8	97	
3	% 75%	100%	43%	80%	-	67%	57%	100%	67%	80%	70%	
	n 12	1	7	5	0	12	7	7	15	5	71	
2	% 67%	100%	40%	33%	100%	17%	63%	50%	85%	100%	59%	
	n 15	1	5	6	1	6	8	8	13	1	64	
1	% 43%	-	0%	100%	67%	17%	-	50%	50%	50%	39%	
	n 7	0	5	1	3	6	0	6	6	2	36	
Observed Success Rates	% 70%	83%	43%	65%	71%	56%	68%	56%	76%	68%	63.9%	
	n 64	6	40	20	7	50	25	45	70	22	349	
Projected Success Rates	% 77%	83%	52%	43%	71%	69%	80%	57%	81%	68%	70.5%	

Table D.3

Success Rates of Megargee Groups
In Safety Environments
Physical--PAQ

Environmental Levels		Megargee Types										Totals
		A	B	C	D	E	F	G	H	I	J	
5	%	56%	33%	29%	80%	-	83%	83%	22%	30%	67%	59%
	n	16	3	14	5	0	12	6	9	10	6	81
4	%	71%	0%	56%	67%	67%	64%	25%	20%	65%	63%	56%
	n	14	1	9	3	3	14	4	15	26	8	97
3	%	67%	100%	57%	40%	-	25%	43%	57%	47%	60%	49%
	n	12	1	7	5	0	12	7	7	15	5	71
2	%	73%	100%	40%	33%	0%	50%	25%	50%	62%	100%	53%
	n	15	1	5	6	1	6	8	8	13	1	64
1	%	72%	-	20%	0%	0%	50%	-	0%	50%	50%	36%
	n	7	0	5	1	3	6	0	6	6	2	36
Observed	%	67%	50%	40%	50%	29%	56%	44%	29%	54%	64%	51.0%
Success	n	64	6	40	20	7	50	25	45	70	22	349
Rates												
Projected	%	73%	50%	52%	75%	67%	79%	60%	37%	54%	64%	61.6%
Success												
Rates												

Table D.4
 Success Rates of Megargee Groups
 in Social Environments
 Physical - PAQ

Environmental Levels		Megargee Types										Totals
		A	B	C	D	E	F	G	H	I	J	
1	%	60%	0%	33%	40%	0%	60%	40%	33%	44%	75%	45%
	n	5	1	6	5	2	10	5	9	9	4	56
2	%	73%	-	56%	33%	50%	78%	33%	18%	55%	60%	51%
	n	15	0	9	6	2	9	6	17	22	5	91
3	%	73%	-	25%	80%	0	38%	25%	20%	78%	59%	55%
	n	15	0	4	5	1	8	4	5	9	4	55
4	%	58%	60%	33%	100%	50%	72%	66%	40%	64%	100%	60%
	n	24	5	12	2	2	11	3	5	17	3	84
5	%	80%	-	44%	0	-	33%	57%	44%	31%	50%	43%
	n	5	0	9	2	0	12	7	9	13	6	63
Observed Success Rates	%	67%	50%	40%	50%	29%	56%	44%	29%	54%	64%	51%
	n	64	6	40	20	7	50	25	45	70	22	349
Projected Success Rates	n	62	50	40	50	29	68	36	43	63	62	54.7

Table D.5

Success Rates of Megargee Groups
in Support Environments
Physical-PAQ

Environmental Levels		Megargee Groups										Totals
		A	B	C	D	E	F	G	H	I	J	
1	%	43%	-	67%	25%	0%	75%	40%	17%	67%	33%	50%
	n	7	0	3	4	1	8	5	6	15	3	52
2	%	61%	50%	56%	72%	67%	38%	20%	60%	58%	100%	57%
	n	18	2	9	7	3	13	5	5	12	5	79
3	%	94%	50%	38%	50%	0	60%	33%	25%	57%	50%	53%
	n	18	2	8	4	1	10	6	20	21	4	94
4	%	47%	50%	31%	50%	0	67%	50%	36%	40%	75%	45%
	n	15	2	16	4	2	12	6	11	10	4	82
5	%	83%	-	25%	0	-	43%	100%	0	42%	50%	48%
	n	6	0	4	1	0	7	3	3	12	6	42
Observed Success Rates	%	67%	50%	40%	50%	29%	56%	44%	29%	54%	64%	51%
	n	64	6	40	20	7	50	25	45	70	22	349
Projected Success Rates	%	57%	50%	58%	55%	29%	56%	67%	29%	63%	64%	54.7%

Table D.6

Success Rates of Groups with Different
Concerns About Safety in Safety Environments
Physical-PAQ

Environmental Levels	Concern Levels																Total
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
1 %	-	50%	25%	67%	47%	64%	63%	66%	46%	48%	44%	25%	25%	50%	0%	51%	
n	0	6	4	9	17	14	24	29	24	21	18	8	8	2	1	185	
2 %	-	67%	80%	83%	73%	46%	45%	54%	61%	65%	73%	29%	0%	0%	-	55%	
n	0	3	10	12	15	35	22	35	28	23	11	17	6	2	0	219	
3 %	33%	33%	67%	78%	59%	64%	56%	50%	33%	38%	56%	50%	50%	50%	0%	52%	
n	3	3	6	9	17	28	25	26	21	26	16	14	4	2	1	201	
4 %	100%	50%	75%	60%	38%	58%	39%	42%	38%	41%	46%	57%	20%	0%	-	47%	
n	2	4	12	15	16	31	18	31	21	29	13	7	5	1	0	205	
5 %	100%	100%	50%	83%	47%	33%	36%	41%	30%	7%	33%	20%	-	0%	-	38%	
n	2	2	4	6	15	9	11	17	10	14	9	5	0	1	0	105	
Observed Success Rates	%	83%	56%	67%	73%	53%	55%	50%	51%	44%	42%	51%	37%	22%	25%	-	49.9%
n	6	18	36	51	80	117	100	138	104	113	67	51	23	8	2	915	
Projected Success Rates	%	100%	67%	69%	67%	59%	51%	54%	59%	54%	57%	55%	50%	50%	50%	0%	56.6%

Table D.7

Success Rates of Megargee Groups
in Support Environments
Assaultive Infractions

Environmental Levels		Megargee Groups										Totals
		A	B	C	D	E	F	G	H	I	J	
1	% n	100% 7	0% 0	100% 3	75% 4	100% 1	100% 8	60% 5	83% 6	100% 5	100% 3	90% 42
2	% n	72% 18	50% 2	44% 9	86% 7	100% 3	85% 13	80% 5	80% 5	83% 12	100% 5	77% 79
3	% n	67% 18	100% 2	88% 8	75% 4	100% 1	70% 10	100% 6	80% 20	86% 21	50% 4	78% 94
4	% n	67% 15	100% 2	88% 16	75% 4	50% 2	67% 12	100% 6	100% 11	90% 10	75% 4	82% 82
5	% n	67% 6	- 0	75% 4	0 1	- 0	100% 7	100% 3	67% 3	92% 12	83% 6	83% 42
Observed Success Rates	% n	72% 64	83% 6	78% 40	75% 20	86% 7	82% 50	88% 25	84% 45	88% 60	82% 22	81.1% 339
Projected Success Rate	%	80%	100%	78%	82%	100%	82%	100%	84%	91%	100%	86.1%

Table D.8

Success Rates of Megargee Groups
in Structure Environments
Assaultive Infractions

Environmental Levels		Megargee Grops										Totals
		A	B	C	D	E	F	G	H	I	J	
1	%	78%	100%	64%	83%	-	57%	67%	67%	90%	100%	75%
	n	9	1	11	6	0	7	6	6	10	3	59
2	%	78%	-	100%	-	100%	100%	100%	82%	91%	67%	88%
	n	9	0	3	0	2	5	4	11	11	3	48
3	%	67%	100%	60%	63%	100%	89%	83%	75%	88%	67%	75%
	n	18	1	5	8	1	9	6	8	17	6	79
4	%	79%	100%	86%	80%	100%	87%	100%	100%	86%	80%	87%
	n	19	1	7	5	3	15	6	11	14	5	86
5	%	67%	67%	86%	100%	9%	79%	100%	89%	88%	100%	82%
	n	9	3	14	1	1	14	3	9	8	7	67
Observed Success Rates	%	72%	83%	78%	75%	86%	82%	88%	84%	88%	82%	81.1%
	n	64	6	40	20	7	50	25	45	60	22	339
Projected Success Rates	%	78%	100%	86%	75%	86%	82%	100%	95%	90%	92%	85.8%

Table D.9

Success Rates of Megargee Groups
In Privacy Environments
Assaultive Infractions

Environmental Levels		Megargee Types										Totals
		A	B	C	D	E	F	G	H	I	J	
1	%	83%	-	100%	67%	100%	100%	100%	100%	100%	75	92%
	n	12	0	5	3	2	7	1	6	8	4	48
2	%	93%	0%	86%	0%	100%	86%	75%	67%	85%	88%	84%
	n	15	1	7	1	2	7	4	3	13	8	61
3	%	50%	100%	83%	100%	0%	92%	100%	100%	57%	-	78%
	n	10	1	6	2	1	12	4	6	7	0	49
4	%	64%	100%	82%	83%	100%	69%	75%	79%	89%	60%	78%
	n	11	1	11	6	1	13	4	19	18	5	89
5	%	63%	100%	55%	75%	100%	73%	92%	82%	100%	100%	79%
	n	16	3	11	8	1	11	12	11	14	5	92
Observed Success Rate	%	72%	83%	78%	75%	86%	82%	88%	84%	88%	82%	81.1%
	n	64	6	40	20	7	50	25	45	60	22	339
Projected Success Rate	%	89%	100%	92%	75%	86%	93%	88%	84%	88%	80%	87.9%

Table D.10

Success Rates of Risk Level Groups
In Activity Environments
Assaultive Infractions

Environmental Levels	Risk Levels												Totals
	0	1	2	3	4	5	6	7	8	9	10		
1 %	100%	91%	92%	94%	78%	94%	79%	59%	39%	72%	50%	75%	
1 n	1	11	13	16	27	18	19	27	18	18	6	174	
2 %	100%	100%	100%	80%	50%	76%	67%	91%	68%	73%	83%	77%	
2 n	1	13	19	35	20	37	18	11	25	15	6	200	
3 %	67%	85%	94%	75%	94%	85%	67%	81%	67%	67%	83%	81%	
3 n	3	13	16	12	31	27	15	26	15	15	6	179	
4 %	100%	100%	90%	88%	94%	89%	76%	73%	74%	70%	100%	85%	
4 n	2	10	31	40	36	38	21	30	23	23	5	259	
5 %	100%	100%	80%	77%	94%	75%	100%	64%	78%	100%	100%	84%	
5 n	3	9	5	22	17	12	5	11	9	6	2	101	
Observed Success Rates %	90%	95%	93%	83%	84%	84%	74%	72%	64%	73%	80%	80%	
Observed Success Rates n	10	56	84	125	131	132	78	105	90	77	35	913	
Projected Success Rates %	100%	96%	97%	84%	94%	85%	67%	81%	75%	76%	100%	85%	

Table D.11

Success Rates of Risk Level Groups
In Structure Environments

Environment Levels		0	1	2	Risk Levels			6	7	8	9	10	Totals
					3	4	5						
1	%	100%	100%	93%	88%	70%	88%	71%	60%	40%	40%	80%	75%
	n	1	10	14	17	23	16	14	20	10	5	5	135
2	%	100%	90%	100%	88%	83%	65%	67%	78%	62%	75%	67%	78%
	n	1	10	16	24	29	26	12	9	13	4	3	147
3	%	-	91%	90%	83%	84%	86%	82%	71%	54%	64%	57%	80%
	n	0	11	27	46	31	35	22	24	13	14	7	230
4	%	67%	100%	100%	88%	95%	92%	69%	74%	76%	83%	100%	85%
	n	3	13	14	16	21	24	16	27	33	35	6	208
5	%	100%	92%	85%	73%	89%	90%	79%	80%	67%	68%	100%	81%
	n	5	12	13	22	27	31	14	25	21	19	4	193
Observed Success Rates	%	90%	95%	93%	83%	84%	84%	74%	72%	64%	73%	80%	80%
	n	10	56	84	125	131	132	78	105	90	77	25	913
Projected Success Rates	%	100%	95%	97%	88%	92%	91%	73%	77%	72%	78%	100%	85.8%

Table D.12
 Success Rates of Risk Level Groups
 In Support Environments
 Assaultive Infractions

Environmental Levels	Risk Levels												Totals
	0	1	2	3	4	5	6	7	8	9	10		
1	% -	100%	94%	100%	95%	100%	91%	72%	71%	50%	100%	87%	
	n 0	2	16	13	20	19	11	18	14	10	5	128	
2	% 100%	100%	92%	85%	80%	79%	65%	67%	45%	92%	60%	77%	
	n 2	14	12	40	41	42	26	15	20	12	5	229	
3	% 50%	100%	95%	77%	80%	81%	79%	81%	63%	50%	100%	80%	
	n 2	20	37	30	35	37	14	21	16	20	1	233	
4	% 100%	88%	93%	85%	88%	85%	57%	72%	69%	86%	83%	80%	
	n 5	8	14	26	17	13	21	32	26	22	6	190	
5	% 100%	83%	80%	75%	83%	86%	100%	68%	79%	85%	75%	80%	
	n 1	12	5	16	18	21	6	19	14	13	8	133	
Observed Success Rates	% 90%	95%	93%	83%	84%	84%	74%	72%	64%	73%	80%	80%	
	n 10	56	84	125	131	132	78	105	90	77	25	913	
Projected Success Rates	% 100%	100%	93%	89%	84%	84%	74%	72%	73%	86%	79%	83.2%	