A FOLLOW-UP EVALUATION OF THE EFFECTIVENESS OF A MEDIUM SECURITY STATE PRISON'S VOCATIONAL TRAINING PROGRAM ON PAROLEES

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CHAPTER I

INTRODUCTION

Generally, it seems that the public opinion in America does not view the correctional system as one that is rehabilitative in nature. Rather, the public notions are in terms of punishment for statutory offenders and safety and protection for the community at large. The American Institute of Public Opinion (Hindelang et al., 1974:203) in 1972 found that 83 percent of a national sample thought law enforcement agencies should be tougher in dealing with crime. Other national polls have found that people, regardless of sex, region, or community size, feel more uneasy and more concerned about their personal safety (Hindelang et al., 1974:173).

In an opinion poll in 1970, it was found that 37 percent of a nationwide sample felt that the main emphasis of imprisonment was to protect society, 27 percent believed the main emphasis was to punish, and 25 percent suggested that prisons actually rehabilitated the inmates (Hindelang et al., 1974:219). In the correctional field, professionals themselves have some ambivalence towards the positive consequences of incarceration and rehabilitation programs.

Those institutions which are non-custodial in philosophy strive toward long-term positive impact by attempting to reform the inmate. Reformation in this context includes institutional pushes towards changing work habits, occupational skills, education, attitudes, and interpersonal relationships (Hood and Sparks, 1970).

Some penologists and educators have again accepted the fruitfulness of inmates being provided types of vocational training. It is felt that one of the contributions to be made by an individual is made through his work or occupation. Work is important in a complex culture not only because it is necessary for a group's survival, but also because it aids in defining the individual. Today one's occupation is one of the most important of his characteristics. One who has no occupation is excluded from participating in some of the most important activities and roles within the social group. Sociologically speaking, a vocation permits the individual to feel that one "belongs"; that one has input into and rewards from the larger system.

Although it has been suggested that "the best things in life are free," income from an occupation satisfies many basic needs within a system solidified by mutual dependence. Work makes possible the satisfaction of the need of food, clothing, shelter, protection, and status in a specialized, industrial society.

Work can ease the feelings of rejection and lack of self-worth that are manufactured from the lack of employment. In a culture where work has so many social and personal values connoted to an individual, unemployment may destroy personal adjustment and personal fulfillment. For the unemployed, an impaired view of self and an alienated relationship from society are concomitant with the American values and philosophy developed through the years by demonology, Judeo-Christian dogmas, the Protestant ethic, and Darwinian determinism. It is generally felt that something is pathologically wrong with those who do not work.

Correctional officials are therefore faced with two major tasks regarding the rehabilitation of inmates. First, appropriate and adequate

programs of educational and vocational training must be provided so that the institutionalized person may alter poor work habits and gain required mental and vocational skills assumed to be contributing to his incarceration. Also, adequate psychological services must be provided to parallel changes occurring in the inmate during and after retraining (Vold, 1954: 48).

Purpose of the Study

The transition from the highly structured and regimented environment of the prison to life of participation in the free community poses many problems for the released offender. Society accepts the expense of clothing, guarding, feeding, and to some degree of treating the prisoner while incarcerated, but it does not imbolden providing him with finances to begin a new life upon release. He may obtain token "gate money" which does not ease the financial burden of returning to the community (Glasser, 1969:211).

The most immediate dilemma of former prisoners is survival in a society which emphasizes money, not only as a means of meeting basic needs, but also as a measure of personal worthiness. Assistance from relatives and from welfare agencies is not the best solution because to accept such charity further destroys the releasee's self-esteem. Relatives may not have the funds nor the desire to provide partial support. Also, the release of the offender may terminate public financial support given to the family while incarcerated.

Since resources available to the prisoner on release are sparse, employment becomes a key factor in success or failure. The offender faces other problems in seeking self-maintenance. When he seeks work,

the ex-inmate is likely to have more emotional problems than the average job applicant. Environmental alterations alone produce great anxiety due to prison's mortification of self (Goffman, 1961). A defeatist attitude is apt to devitalize his initiative. Most released prisoners fear that their records will become known by their employers and/or fellow workers.

The former prisoner frequently lacks qualities which would cause employers to be eager to hire him. Most releasees have an inferior work record before their confinement. Their vocational and technical skills are viewed at a low level. The ex-inmate is likely, for various reasons, to inadequately present himself to a prospective employer.

Prisons, in terms of successful reintegration, should prepare the inmate vocationally and attitudinally for success. Ideally, the releasee would have acquired during confinement those vocational skills in demand in the local job market. The work routine and productive procedures in prison training should have given him experience in the tempo, discipline, attitudes, and other circumstances of free employment.

The purpose of this study is to evaluate the impact of vocational-technical education on ex-inmates of Lexington Regional Treatment Center. This evaluation is a follow-up of released prisoners from two situations: those who have not participated in any vocational education and those who have successfully completed training in a trade at Lexington. Does vocational training aid the incarcerated individual in return to society? Are those trained more "successful" after release than those not trained? This research may assist administrators in policy formation by evaluating the program's adequacy in relation to inmates who do not participate in

such programs. Furthermore, information collected should have import for other such programs within the correctional system.

CHAPTER II

REVIEW OF THE LITERATURE

Theoretical Legacy

If penitentiaries, work farms, and treatment institutions are to exist, there must be some principles or belief systems underlying them. Otherwise, political and social arbitrariness directs without focus or content. An ideological base is necessary for the development of appropriate guidelines, pursuits, and goals. If improvement is desired in corrections, a theoretical or philosophical foundation should exist to guide its programs and purposes.

The earliest philosophers portrayed little in their writings related to corrections as a positive force of change. The early thinkers (Plato, Aristotle, Aquinas) did not ignore considerations of law and crime, but viewed them in terms of the ontological process. Their perspectives tended to be concerned with role and function in society and the negative consequences upon the social order. The notion of "correction" or "rehabilitation" was not part of their considerations. During the era of Rousseau and Kant, a philosophical base for corrections began to develop; yet it was only from the perspective of punishment.

The father of penitentiary science, Hipolyte Vilain, began the first meaningful program in 1771 to rehabilitate rather than to punish the prisoner. His design of penitentiaries became the major one used until World War II. It consisted of cells, back-to-back, in blocks radiating

from a central court. This structural design is suited to a philosophy of isolation, segregation, and contemplation as viewed by Vilain (Solomon, 1976).

No discussion of the philosophies forming a base for corrections would be adequate without mentioning John Howard, who proposed penitence for inmates. He believed that work, education, and religion were the ingredients of reformation and that inmates should be separated. The Penitentiary Act of 1779 provided that prisons: (1) have secure and sanitary structure; (2) have systematic inspections; (3) abolish fees against inmates; and (4) have a reformatory regime. Prior to this act, prisoners were assessed certain fees for their maintenance. In those cases where a prisoner was found innocent by the court, these fees had to be paid before he would be released.

During the late 1700s a new philosophy of social hedonism developed which was known as utilitarianism. This philosophy, as suggested by Jeremy Bentham (1948), holds that the greatest benefit for the greatest number is the ultimate goal of a developed society. Expanding further on this philosophy, Cesare Beccaria, the father of the classical school of classical criminology, believed that man governed his behavior by cognitively balancing the costs and rewards of his actions according to the hedonistic psychology as presented by Bentham (Beccaria, 1953). This was the total explanation of criminal behavior. Beccaria moved his considerations from cause to cure and notes the role of correctional institutions. The punishment must be severe enough to destroy pleasures involved in the action. Although this approach still persists today, it is considered to be psychologically invalid.

The Quakers in 1787 initiated a somewhat new approach which is now called the Pennsylvania system. Their approach was based on the belief that the most hardened criminal could be reformed. This philosophical base encouraged the prisoner's penitence, his education, and his labor. The needed environment for this reformation was solitude (Bacon, 1969: 132-138). In one Pennsylvania prison the prisoners were kept from even seeing one another. This form of incarceration was considered by many as a brutal torture, for it frequently broke the will to continue for many prisoners.

An alternative, but no less punitive, approach developed in New York shortly after the Pennsylvania system. It was called the Auburn system and its proponents believed, like the Quakers' philosophy, that prisoners should be separated and should not communicate with each other. The Auburn system was firmly oriented towards custody, security, and punishment rather than reform. It was an extreme system embracing the philosophy of regimentation and hard labor. Prisoners were separated at night and during the day they labored together in total silence at work provided from outside enterprise. This philosophy shows some characteristics of a retribution approach and definite indication of the deterrence concept. The idea of rehabilitation is not present.

An analytical approach followed the philosophy of social hedonism and is called the cartographic or geographic school. This approach regarded criminal behavior as a consequence of conditions in certain areas, social and geographic. Although this school was very scientific in terms of what, where, when, and how much, it accomplished little in answering why and how to treat.

Cesare Lombroso (Solomon, 1976) in the late 1800s originated a "kind of people" theory of criminality suggesting that certain persons had innate predispositions toward criminal behavior and could be recognized by certain physical characteristics. Extreme hair growth, large flattened noses, protrusion from the head, and others were characteristics of the criminal. While this view is still popular among laymen, it is in disrepute by most professionals in corrections. The import for corrections was its attack of penitence and reformation. Neither was possible since the cause of behavior was innate. Also, it changed the focus from society, spirits, government, etc. to the individual.

Another "typological" approach is found in the psychiatric school of thought. The Lombrosian framework concentrated on a physiological etiology where the psychiatric school embraced the idea that certain personality types were predisposed towards criminal behavior. This psychological predeterminism contended that personality types developed independently of social or cultural pressures. This approach is generally not accepted today but still has aspects carried over into contemporary frameworks. It has led to a means of classification of prisoners but has had little of value for correctional treatment.

Currently, the major correctional approach seems to be a complex one called sociological. It is based on the thesis that criminal behavior occurs out of the same dynamic and processual forces that cause other behavior. Such factors as culture conflicts, economics, mobility, religion, racial differentiation, power, or politics affect criminal behavior. The cause of such behavior is rooted in an interplay of individual and social factors. Although this seems to be the current philosophical base, it has not been fully applied to the correctional scene.

Before beginning a discussion of current research concomitant with this research project, a cursory look at the purpose of imprisonment is needed. Retribution, incapacitation, deterrence, and rehabilitation seem to be the four aspects of applied corrections (Kerper, 1972:61-69).

Retribution is the motive of punishment for punishment's sake. Retribution is the paying for or replacing of something that has been taken, destroyed, or damaged. If we are concerned with property crimes, retribution may be an alternative. Offenses against the person are not as easily evaluated. How does one pay for or replace a human life, use of an arm, or pain and suffering? Frequently, a symbolic replacing occurs when the offender is incarcerated.

The idea of incapacitation is to make the offender incapable of repeating a harmful act. The Bible speaks of this type of alternative: ". . . and if thy right eye offend thee, pluck it out, and cast it from thee; for it is profitable for thee that one of thy members should perish, and not that thy whole body should be cast into hell" (Mathew 5:29). The hand of the pick-pocket was cut off in earlier times. Today, the continually aggressive, pathological person receives pre-frontal lobotomies. The ultimate form of incapacitation is execution. The isolating design of the Pennsylvania and Auburn system and the management of many prisons incorporate the idea of incapacitation.

The motive of incapacitation has, of course, one serious flaw. It ignores the fact that only 5 percent of all persons confined will remain in confinement (Task Force Report to the President, 1967:179). Those 95 percent who, if not affected positively, will merely return to society unchanged or more pessimistic and hateful. This postponement of probable

repetition of criminal behavior suggests a degree of social irresponsibility.

The third basic purpose of correctional institutions is called deterrence. The notion that punishment directs the person away from possible future criminal behavior is controversial and most difficult to prove or to disprove. The philosophical notion, here, is oriented to Beccaria's idea of pleasure-pain motivating behavior. The implementation of monetary fines, public censor, and jails are thought to have some deterrent effect on persons. How it works or does not work on each individual and in what situations almost defies analysis.

Rehabilitation is the most recent thrust in corrections. The goal in this type of approach is to treat the prisoner in such a manner that his return to the community is followed by non-criminal behavior. A late 1960s national survey suggests that the public is generally accepting of this approach. It found that 72 percent feel that rehabilitation should be a primary goal, but less than half (48%) believe that corrections emphasizes rehabilitation (Joint Commission Report, 1968). The rehabilitation of inmates seems to be receiving support from laymen and correctional personnel. One area of rehabilitation that is gaining acceptance is that of vocational education.

Is it having the impact expected? Is the inmate being reintegrated into the larger community? Does vocational training alter the personality structure of the inmate in any way such that conforming behavior results? Is the released inmate finding jobs for which he has been trained and does this training decrease further criminal behavior?

Review of Research

Personality

Shelly (1961) evaluated the effectiveness of a program combining individual counseling and casework (focused in part upon vocational and personal adjustment) with group counseling in a Michigan prison camp for adult offenders. Those inmates counseled had a significant decrease in antisocial responses to the Thematic Apperception Test compared to those in the regular camp. It was concluded that change in antisocial perceptions were inversely correlated with recidivism.

In cooperation with the Minnesota Division of Vocational Rehabilitation, Ericson (1966) evaluated a year-long combined program of psychosocial individual counseling, group therapy, vocational counseling and placement, and supportive services. These were all provided with parole supervision and compared to routine parole supervision. Parolees were randomly assigned to the two types of programs after release from state prisons. Before and after psychological testing included the Porteus Maze Test, the Semantic Differential Test, and the MMPI.

No significant changes were found on the Porteus Maze Test or the Semantic Differential Test. These tests also failed to discriminate between those who failed or succeeded and those who failed on parole and in employment. The MMPI pretest for experimental and controls was similar as was the post-test except for the masculinity-femininity scale. Despite project efforts, no adjustment in personality by the releasees was found as measured by the MMPI. Although not suggested by the author, the reason for lack of significant change may be due to the scales of the MMPI. This test measures psychological disorders, not personality

characteristics. It is now generally believed that all prison inmates do not manifest extreme disorders.

One study (Prell, 1956) found that the degree of certain skill improvements and the degree of personality changes affect parole success. In a three-year follow-up of 273 adult felons, Prell found that persons who had minimal skill change (measured by indicators such as reading scores, clerical, and mechanical aptitude scores) and who also had obvious changes in personality traits (measured by MMPI) had the highest parole success rate, whereas maximal skill change in combination with minimal psychological change was associated with the highest failure rate.

Educational and Skill Development

Several studies have been conducted on the effects of skill development using an ex-post facto design similar to the one used in this research.

Alfred Schnur (1948) found a significant relationship between inmates who had been enrolled in day school classes and success after release. The experimentals, furthermore, experienced increased success as time in the program increased (beyond six months).

Male inmates who received academic education were also compared to a control group in a state prison in Washington (Coombs, 1965). The results of the study indicate that parole success slightly increased for those who received the academic program as compared to all those who did not participate in the program (64% as compared to 60%). A lower success rate was found when age was controlled (64% compared to 68.2%). The research also found that married parolees who participated in the academic

program had a lower percentage of parole success than married parolees who did not participate. Inmates who were incarcerated for crimes against persons were less likely to fail parole if they participated in the program than similar inmates who were not involved in the program.

In 1967, Gerhart measured the impact of vocational training in a three-year follow-up at the same institution as Coombs. The program consisted of training in auto mechanics, barbering, office machine repair, auto-body work, machinist work, carpentry, drafting, dry cleaning, shoe building, and electronics. The parole violation rate for those who had been through training (43%) did not differ significantly from those who did not have vocational training (39%). In comparing successes and failures on parole, it was found that the younger, unmarried parolees were less successful after training. Those trained experienced a higher rate of job turnover and unemployment than those not trained.

Kusuda (1964) compared the recidivism rate of men who had completed either an educational program or a work program with those who had not completed the same programs. He found a slightly lower but not significant difference in violation rates for those men completing the programs.

One study (Mandell and Sullivan, 1967) evaluated a vocational training program of a jail in New York. Certain inmates were randomly placed in an experimental group who were trained in IBM punchcard and data processing. These were compared to a control sample of inmates. After release and placement a higher percentage of trained persons were still with the original company after one year than controls. Also, 71 percent of those trained were working in companies using automated data processing, although only 28 percent were actually using the training. It appears that many were required to serve apprentice-type periods.

Experimentals were more likely to maintain employment and be less transitory, although the differences were not statistically significant.

Garay (1971) measured four groups of parolees 18 months after release in the state of Washington. The correctional facilities offer vocational training in auto mechanics, barbering, drafting, electronics, radio and television, office machine repair, body and fender work, meat cutting, data processing, welding, sheetmetal work, and other basic industrial skills. The four groups consisted of the following: Group I--88 cases, felons who completed vocational rehabilitation services successfully; Group II--88 cases, felons who failed to complete vocational rehabilitation services; Group III--112 cases, felons who completed only certain vocational rehabilitation services; Group IV--126 cases, felons who were perceived to need vocational rehabilitation but received no such services. The inmates tended to be white, single, first offenders, and offenses were against property. Those in Group I had a 76 percent success rate on parole. In the other groups, Group II had 32 percent who succeeded on parole; Group III had 58 percent who succeeded; and Group IV had 47 percent who were classified as successful on parole. Clearly, those who received full benefits of vocational services had better post-release success than those who failed the program or than those who should have participated.

"A Study of Vocational Training in the California Department of Corrections" (Dickover et al., 1971) found that 35 percent of 729 parolees who were trained in vocational skills while in prison utilized that skill after release. In terms of post-release use of skill training this study also concluded that persons with a greater number of hours in training were more likely to obtain employment. The most

significant factor restricting job procurement was an adequate staff oriented to placement of trained releasees.

During Project Challenge the staff organized VISTA workers and volunteers to procure jobs for releasees of Lorton Youth Center. These youthful offenders between 17 and 26 were trained in auto mechanics, food services, painting, welding, barbering, clerical and sales, and building maintenance. One hundred fifty jobs were found by the volunteers. Of the first 64 persons trained, 48 obtained jobs related to their skill training. The recidivism rate for the project was 26 percent and indicates that adequate job placement by staff is an important phase of implementing institutional vocational training.

Daniel Glaser (1964) has examined the effects of prison work experience and academic education on federal offenders' recidivism. Glaser found that the regularity of previous employment is more important for parole success than is the type of previous employment.

Prison vocational training was found to have no relation to recidivism for those whose first post-release job was related to their training. When that post-release job required training, 44 percent of parole violators and 58 percent of parole successes reported the use of prison training while on that job.

Glaser also looked at the effectiveness of academic programs on parole success. The findings would indicate that those enrolled in such programs have a higher failure rate than those no enrolled and the difference is significant for those completing ninth grade or higher programs. This relationship is also found between those enrolled and nonenrollees for those with two or more prior felony convictions, and for those from maximum-security institutions. For those released from

medium-security institutions, parolees who participated in academic programs had a significantly lower failure rate than those who did not participate.

One other study conducted on inmates between 1945 and 1949 (Saden, 1962) found that inmates who participated in institutional academic programs had better parole success rates than nonenrollees regardless of whether they were first offenders or had prior convictions.

John Torrence (1967) surveyed 285 state and federal penal institutions accounting for 225,000 of the 230,000 persons constituting the inmate population at the time. He then compared vocational training skills offered in the institutions with occupational positions available on a national scale. These comparisons revealed that only 20 out of 99 institutional training programs were related to unfilled jobs opening on the national level. The author also concludes that cooperation between other state agencies and penal institutions is quite limited. Thus the training programs were designed to meet the service and maintenance needs of correctional institutions and not the post-release needs of the inmate.

Another survey of correctional institutions concludes that vocational preparation in correctional institutions is generally inadequate (Levy, 1974). Information was obtained by mail-out questionnaires to correctional institutions with 70 percent returning the questionnaire. Only 57 percent of the vocational training programs have outside accreditation and only 14 percent have approved apprenticeship programs. Within the institution the authors determined that 50 percent of the program directors did not view job skill development as a major goal; yet 70 percent offered no off-the-job related instruction.

We find, in the limited research on vocational training programs in prisons, much contradictory and inconclusive information on the effectiveness of these programs for the inmate. Several research attempts sought out views of the inmates regarding vocational training. Nichols (1970) found that 89 percent of 100 Arkansas inmates desired occupational training. In Utah, Robertson (1968) found that staff and inmates both viewed rehabilitation services as positive and beneficial. However, he found that staff placed counseling and therapy as dominant factors whereas inmates thought educational vocational training were most important for later social adjustment. Although offenders hold positive views about the importance of vocational training, Lewis's (1974) findings indicate that many are enrolled in programs that are not related to their career plans and that no assistance is given to find post-release employment for the inmates.

Summary

From this literature review we find that few efforts have been attempted to assess the impact that specific skill training programs have for inmates after release. The results are inconclusive. Most studies find no statistically significant difference on recidivism for those who participate in vocational training and those who do not participate. Some studies find that those trained tend to have a lower percentage of recidivism, others find higher rates. In terms of job stability and unemployment, research indicates contradictory findings. In some cases those trained have higher job turnover after release than those not trained. In other research those trained appear more stable.

No clear indication is given that vocational training programs aid in changing the personality of the inmates.

It would appear that we cannot state that vocational training positively affects post-release recidivism. It cannot be said that it has negative effects either. One major problem is in the comparison of programs and research of different skill training efforts: some train in specific skills, some are vocational counseling, some are just skill training, some have adjunct therapy sessions, some incorporate educational learning, some use volunteers, etc. It is difficult to assess the research findings of the variety of programs and make comparisons. One reason is due to the paucity of research on this topic. More research is needed to determine the impact of training on different types of prisoners, the characteristics of those who succeed and do well, and the ancillary programs which aid vocational training efforts.

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

Data Sources

In order to evaluate the vocational training program, released inmates from Lexington Regional Community Treatment were sought out for interviews. The major source of data was from the releasees themselves. The second source of data was IBM cards containing scores on the Sixteen Factor Personality Inventory that were administered by the Department of Corrections at the time of last incarceration of the subjects. The third source of data was the counselor of the vocational training program. He provided the subjects' test scores on the Sixteen Factor Personality Inventory after they had completed the training program.

Sample Information

The Lexington facility is a medium-security prison which has within its confines a vocational training program. The potential research subjects were first selected by using an enumeration of all persons who had been released from the prison in the calendar year of 1976. From this list of all releasees, those persons who had been released on parole or probation were selected to comprise the actual research sample. The research thus began with 156 persons as potential subjects. It was at first anticipated that 50 to 60 persons would, for various reasons, not become part of the final sample of persons interviewed and a total of

100 persons would constitute the sample. The research ideal was to have 50 persons in a sample of persons who had participated in the vocational training program and another sample of 50 persons who had been released from the same prison but had not participated in the vocational training program.

Permission was granted from the Oklahoma Department of Corrections and the Department of Probation and Parole to utilize records to locate the released inamtes in particular areas. Then the district supervisor of each parole district was contacted and permission received to contact the parole officer who was supervising one of the releasees.

In order not to violate existing privacy laws, each parole officer was asked to make initial contact with the former inmate and seek his cooperation in the research project. A letter was composed by the researcher and the inmates who had offered suggestions and helped design the interview questions. This letter was given to each parole officer to give to his client to aid in eliciting support of the research (see Appendix A). If the former inmate agreed to the interview, the researcher then began to make arrangements for an interview. Names and information related to subjects were coded and kept separate from data obtained. All information thus became confidential.

Many factors contributed to the sample size of 50 interviews rather than the desired 100. Many of the original list moved from the state and at least four had died. In 12 cases the researcher could not locate the persons within the correctional bureacracy; they essentially were lost. In approximately 18 cases the releasees had absconded and their whereabouts were unknown. In several instances the individual parole officers were unwilling for some reason to cooperate. Some parole

officers never returned telephone calls or responded to letters. Most had to be contacted in person to obtain any form of cooperation.

In one instance, one parole district had four supervisors in the 16 months of this field research. Each time one supervisor left the new supervisor had to be informed and he had to go through channels to determine if the research had been authorized. One temporary supervisor ignored the research attempts and told all parole officers not to cooperate.

The other major factor for decreasing sample size was the actual interviewing and setting up arrangements for the interview. Although the releasees were willing to cooperate when asked by the parole officer (only three refused), most were quite difficult to locate. Most of the potential subjects had no telephones and none responded to letters. The researcher frequently had to travel to the subjects' homes hoping they would be there at a time designated by a letter sent earlier. Since these persons were scattered throughout the state, many hours were unprofitable.

Many of the subjects, especially those in the two largest urban areas, seemed not to want to be found. The persons, certainly, questioned the purposes of the interview. This researcher went to one person's home address 16 times and was always warmly evaded by the releasee's parents. It became quite apparent that the parolee did not live at the address given to the parole officer. Due to similar circumstances in many of the cases, many attempts at interviews were doomed.

The interviews were terminated when 50 had been completed due to expenditures of time and economic costs. The interviews collected consisted of 34 persons who had participated in the vocational program and

16 persons who had not participated in the program. Interviews were conducted at the subjects' homes, in gas stations, in restaurants, in bars, in prisons, and even in the researcher's car.

The subjects represent approximately one-third of all persons who had been released on parole in the one-year period. The subjects are essentially an availability sample of all persons released on parole from the prison. Therefore, without qualification, the data collected may not be representative of the parameters of vocational training's impact. First of all, as mentioned, it is not possible to determine how those subjects who were unable to be located might have affected the results. Second, the sampling represents only paroled subjects and not those released "flat-time" without continued supervision.

Data Organization and Procedures of Analysis

The principle source of information came during interviews with the subjects themselves. The total interview time was generally from one and one-half to two hours long. The first part of the interview period was oriented towards obtaining demographic information, work history, subjective impressions of vocational training, and any other information that could be elicited from the subjects. The interview guide was constructed to get at the antecedent, intervening, and dependent variables which would aid in determining the success of the vocational training program (see Appendix B). During the second part of the interview, subjects answered the Sixteen Factor Personality Questionnaire.

The scores on the Sixteen Factor Personality Questionnaire (16 PF) were also obtained from the Department of Corrections. These tests were administered at the time of classification when persons first are

incarcerated. The test scores were also obtained on the 16 PF from the counselor at the vocational training facility. These tests were administered only to those trained after completion of the program. This research, thus, has test scores obtained at three times for those trained. The scores indicate personality characteristics at the time of incarceration, at the time after completion of the program, and at a time after release and the persons had been returned to the community.

The results of this research are presented in four sections. The first section is descriptive and comparative. Since we have two samples, one of which participated in vocational skill training and guidance periods (group counseling) and another group to act as a control, we need to determine if the two samples are significantly different on demographic, antecedent variables. It was impossible to randomly assign persons to experimental or control groups. Therefore, the first section describes the two samples and compares them. The variables considered are age, marital status, race, amount of education, previous arrest, and previous probation and parole. The two samples are compared by using the chi-square test of significance and measures of association.

The second section presents and analyzes the independent variable, training, in terms of several dependent variables to assess whether vocational training is having a positive impact on its releasees in relation to the control sample. The independent variables discussed are job stability (i.e., number of jobs since release), salary on first job after release, and recidivism. The first two variables are analyzed by use of the chi-square statistic and measures of association. Recidivism is seen to be of pragmatic concern for rehabilitation and it is further analyzed by use of elaboration.

By the use of elaboration, third variables that may specify or explain the relationship of the independent variable, training, and the dependent variable, recidivism, are explored. The variables that are controlled through elaboration are amount of education, age at interview, race, previous probation or parole, previous arrest, actual time spent in prison, community treatment center participation, length of time in community, and number of jobs since release.

The third section is concerned with whether or not the vocational training program is having an impact on personality characteristics of those trained. As noted above, the trained subjects were administered the Sixteen Personality Factor Questionnaire on three occasions. The sample of not trained subjects were administered the test at two different times as seen below.

	Time 1	Time 2	Time 3
Trained	X	X	X
Not Trained	X		X

Because the sample of trained subjects contained 34 persons and the sample of not trained persons contained 16 persons, two procedures are utilized to analyze the results. First, the trained inmates' scores on each factor of the questionnaire are compared by analysis of variance. Using this procedure it is possible to determine if a significant difference exists on the three test scores. If a significant F value is computed, then by using the Tukey Test of Significance, we can determine if the significant change occurs between the score obtained at time of incarceration (Time 1) and the score obtained after completion of the program (Time 2). If this change in scores is positive, it can be suggested that vocational training has a beneficial impact on inmates. If

the positive change continues and is found upon return to the community (Time 3), then vocational training aids in the inmates' re-entry.

The sample scores of not trained inmates are also analyzed across time by use of anlaysis of variance. Theoretically, we should find significant changes in the test scores of those trained but not in the scores of those who have not participated in the vocational training program.

The second procedure is to analyze by difference of means the two sample test scores at Time 1 and, also, at Time 3. The Student's-t statistic is used at this point since the unequal cell sizes precludes using two-way analysis of variance. What we would theoretically expect to find is no significant difference between mean scores of the two samples at the time of incarceration; but since the trained sample has had benefits of the program a significant difference of mean scores would be expected at the time of the interview. By using these procedures we can determine if the training program is positively changing personality factors of inmates.

The last section of results concerns subjective evaluations of the vocational training program as perceived by the inmates themselves. This last section also presents further information regarding the effectiveness of vocational training as perceived and portrayed by the inmates during the interview.

CHAPTER IV

RESEARCH RESULTS

Descriptive Statistics and Comparison of the Two Samples

This section is concerned with analyzing differences between the sample of trained former inmates and the sample of former inmates who were not trained in terms of antecedent and demographic variables. We want not only to describe the two samples, but to determine if there are significant differences between the two samples on several variables that may influence success after release.

First, the trained group consisted of 34 persons or 68 percent of all interviews obtained. Sixteen persons or 32 percent of the total interviews were with persons who had not participated in vocational training. All subjects were released from the same prison during the same calendar year.

During the interview all subjects were asked about their current age. Table I shows that by chi-square there is no significant difference between the two samples compared by age. From the table presented we note, using Cramer's V as a measure of association, that only the slightest relationship exists between age of the subject and whether or not they have been trained in one of the vocations.

The majority (60%) of the two samples are under the age of 26 but each sample is similar. It should be remembered that the ages presented

here are after as much as two years of incarceration. The subjects' ages during imprisonment would be much younger, predominately 18, 19, and 20 years old.

TABLE I

COMPARISON OF TRAINED AND NOT TRAINED SAMPLES BY AGE

	Trained		Not Trained		
Age	No.	Percent	No.	Percent	Totals
20-22	12	35.3	4	25.0	16
23-25	10	29.4	4	25.0	14
26-30	6	17.6	3	18.8	9
31-35	3	8.8	3	18.8	6
36-39	3	8.8	1	6.2	4
40-50	0	---	1	6.2	1
Total	34	100	16	100	50

$X^2 = 3.55$, $p = .62$, Cramer's V = .267.

Table II describes the two samples' marital status. Those persons classified as divorced were subjects who related that they had been married but were now single and had not remarried. Those subjects who had remarried at any point were classified as married. Those married in the trained sample represented 44 percent and it was found that 50 percent of the not trained sample were married.

No significant difference appears to exist between the two groups' marital status as measured by chi-square. Cramer's V suggests that no association exists between marital status and being trained in the vocational program.

TABLE II

COMPARISON OF TRAINED AND NOT TRAINED SAMPLES
BY MARITAL STATUS

Marital Status	Trained		Not Trained		Total
	No.	Percent	No.	Percent	
Married	14	44.1	8	50.0	23
Single	14	41.1	6	37.5	20
Divorced	5	14.7	2	12.5	7
Total	33	99.9	16	100	50

$X^2 = .74$, $p = .86$, Cramer's V = .121.

In Table III we are concerned with any differences between the two samples based on race. The subjects were classified as either Caucasian or Negroid. One subject's ethnicity was American Indian and was put in the Caucasian category. From the table below we see that 44.1 percent of those trained were black and 37.5 percent were black in the not-trained sample. Again using chi-square, no significant difference between the two samples is found to exist based on the dichotomy of race. Phi is found to approach zero, further suggesting that no association exists between race and training.

During the interview each subject was asked about the extent of education he had received. Table IV presents the subjects' responses to this question. The trained inmate sample contained 55.9 percent of persons who had completed the 12th grade while the not-trained sample contained 25 percent who had completed the 12th grade. By statistical semantics ($p = .054$) the chi-square test of significance shows no statistical difference between two samples at alpha = .05. The strength of

TABLE III

COMPARISON OF TRAINED AND NOT TRAINED SAMPLES BY RACE

Race	Trained		Not Trained		Total
	No.	Percent	No.	Percent	
Black	15	44.1	6	37.5	21
White	19	55.9	10	62.5	29
Total	34	100	16	100	50

$X^2 = .02$, $p = .89$, Phi = .136.

TABLE IV

COMPARISON OF TRAINED AND NOT TRAINED SAMPLES BY EDUCATION

Education	Trained		Not Trained		Total
	No.	Percent	No.	Percent	
Eighth grade	0	0	3	18.8	3
Ninth grade	6	17.6	1	6.3	7
Tenth grade	5	14.7	4	25.0	9
Eleventh grade	4	11.8	4	25.0	8
Twelfth grade	14	41.2	4	25.0	18
One-Two years of college	4	11.8	0	0.0	4
College graduate	1	2.9	0	0.0	1
Total	34	100	16	100	50

$X^2 = 12.36$, df = 6, $p = .054$, Cramer's V = .497.

association, utilizing V = .497, would suggest a moderate association between level of education and likelihood of being trained. Logically, it appears that the better educated, in terms of level of grade in school completed, are more likely to be selected for the vocational training program.

The other variable which was considered was also related to the history of the subjects prior to incarceration. This variable concerned whether they had previously been on probation or parole. It should be noted that neither the number of arrests nor the number of times on probation or parole were considered in this research. From Table V we note that the incidence of probation and parole is quite similar for the two samples compared to the history of arrests in Table VII.

TABLE V

COMPARISON OF TRAINED AND NOT TRAINED SAMPLES BY PREVIOUS PROBATION OR PAROLE HISTORY

Previous Probation or Parole	Trained		Not Trained		Total
	No.	Percent	No.	Percent	
No	17	50.0	10	62.5	27
Yes	17	50.0	6	37.5	23
Total	34	100	16	100	50

X^2 = .012, df = 1, p = .92; Phi = .06.

There appears to be no significant difference between the two samples in terms of previous history of probation and parole based on the

the chi-square statistic. The strength of the relation (Phi = .06) also would suggest no relationship between training and prior probation and parole.

The subjects were questioned about the type of offense that they had committed which led to their incarceration. In some instances lesser charges were negotiated through plea-bargains. The following categories represent the offenses for which persons stated they were charged. Data given by the subjects were checked with information in the possession of parole officers. Only four cases seemed to have contradictory charges and these appeared to be technicalities of legal categorization.

Table VI is presented essentially for descriptive purposes. The table is not designed to present the types of offenses in any typology or ordinal rating. Since most of the crimes consisted of offenses against property (90%), it did not seem appropriate for this researcher to attempt to rate the offenses in terms of seriousness. The largest group of trained offenders (35.3%) were drug offenders and only 12.6 percent of not-trained persons were drug offenders. These two groups represented almost one-half of the two samples. The large number of property offenders and victimless offenders in this sample seems concomitant with the fact that the prison was a medium-security facility and those selected for imprisonment are generally persons whose offenses are seen as less predatory.

Next, we are interested in the prior history of arrest and incarceration for the two samples. Were persons in vocational training more or less likely than those not trained to have a history of involvement with control agencies? Would this have an effect on post-release behavior? In Table VII we note similar percentages of persons in each sample who had been previously arrested.

TABLE VI

TRAINED AND NOT TRAINED TYPE OF OFFENSES
LEADING TO INCARCERATION

Type of Offense	Trained		Not Trained		Total
	No.	Percent	No.	Percent	
Drug--Possession	1	2.9	1	6.3	2
Drug--Sale	11	32.4	1	6.3	12
Burglary	7	20.6	4	25.0	11
Manslaughter--Murder	1	2.9	2	12.5	3
Automobile Theft	2	5.9	2	12.5	4
Robbery	5	14.7	2	12.5	7
Arson	0	0.0	1	6.3	1
Receiving Stolen Property	4	11.8	1	6.3	5
Assault on Policeman	1	2.9	1	6.3	2
Forgery	2	5.9	0	0.0	2
Revoked	0	0.0	1	2.0	1
Total	34	100	16	100	50

TABLE VII

COMPARISON OF TRAINED AND NOT TRAINED SAMPLES
ON HISTORY OF PREVIOUS ARREST

Previous Arrest	Trained		Not Trained		Total
	No.	Percent	No.	Percent	
No	14	41.2	6	37.5	26
Yes	20	58.8	10	62.5	24
Total	34	100	16	100	50

$X^2 = 1.30$, df = 1, p = .27, Phi = .199.

There appears to be no significant difference between the two samples when compared by previous arrest record. The strength of the relationship is found to be low (.199), noting that 58.8 percent of the trained sample had a history of previous arrests and 62.5 percent of the not-trained sample had such a background. It could be suggested that those persons arrested were likely to be continued through the processing system without any filtering. This conclusion would have to be tenuous from this research. It is not known whether persons were arrested several times, but only continued through the system once or arrested only once and moved through the system.

Summary

In this section we have examined several variables that could be considered antecedent to participation or non-participation in the vocational training program. In creating the research design it seemed important to determine if there were significant differences between the two samples that might affect success or post-incarceration behavior.

In comparing the two samples on age, marital status, race, amount of education, previous arrest, and previous probation or parole, no significant differences were found to exist. On the variable education, a moderate relationship was found using Cramer's V as a measure of association. Those trained had a tendency to have completed a higher grade than those not trained. Otherwise, the two samples are not significantly different on the information obtained.

Analysis of Vocational Training Impact

This section is concerned with the evaluation of vocational training

program pertinent to comparisons of post-incarceration behavior of the samples of trained inmates and not trained inmates. Essentially, we are interested in comparing a control sample with an experimental sample on several variables that could be related to reintegration into the community after incarceration. Does vocational training hinder or enhance inmates' chances for re-entry and stability after release as compared to a sample of inmates who did not participate in vocational training?

During the interview each subject was asked to review his work history since release and his job held before incarceration. Table VIII portrays the number of jobs held by each subject since release from the prison. It was theoretically assumed that involvement in a vocational training program would decrease job turnovers upon release. Since those in training go to the training facility every day and are involved in an atmosphere more similar to the economic market place of employment, it was assumed that the trained inmates' adjustment would be easier than the non-trained former inmates.

From Table VIII we note that 64.7 percent of those trained had held only one or two jobs since release. This is similar to the percentage (56.3%) of those not trained. The null hypothesis of no difference between the two samples cannot be rejected at the .05 level of confidence. The strength of the relationship is found to be .34 using Cramer's V. From this data it cannot be concluded that vocational training enhances post-institutional stability regarding employment.

It was found that 26 percent of all the subjects returned to the same job after release that they had held before incarceration. No significant difference by chance was found to exist between the two groups on this variable and the strength of the relationship was phi = .20.

Of those trained, 26.5 percent returned to the same job after release and 26.6 percent of the not-trained sample returned to jobs held before last incarceration. It would thus appear that about one-fourth of the persons who obtained vocational training return to jobs held before incarceration and do not intend to use the skill training after release.

TABLE VIII

COMPARISON OF NUMBER OF JOBS AFTER RELEASE BETWEEN TRAINED AND NOT TRAINED INMATES

Number of Jobs	Trained		Not Trained		Total	Percent
	No.	Percent	No.	Percent		
No Employment	1	2.9	3	18.8	4	8.0
One Job	13	38.2	4	25.0	17	34.0
Two Jobs	9	26.5	5	31.3	14	28.0
Three Jobs	7	20.6	3	18.8	10	20.0
Four Jobs	1	2.9	0	0.0	1	2.0
Five Jobs	1	2.9	0	0.0	1	2.0
Six Jobs	0	0.0	0	0.0	0	0.0
Seven Jobs	1	2.9	0	0.0	1	2.0
Disabled	1	2.9	1	6.3	2	4.0
Total	34	100	16	100	50	100

$X^2 = 5.78$, df = 7, p = .57, Cramer's V = .339.

Daniel Glasser has suggested that prior work regularity is more closely related to post-release success or failure than type of work (Glasser, 1969:169). From the findings of this research it cannot be

said that persons who are trained are more likely to have more permanent employment positions after release than those subjects not trained in a vocational skill.

The second dependent variable we were concerned with in this analysis is salary on first job after release. It was assumed that since persons had participated in a vocational training program that, upon release, they would take employment which would have a higher income than persons who had been released without training in a skill.

In Table IX we find that for those persons who worked after release no significant difference by hourly salary exists between the two groups ($X^2 = 4.74$, $p = .58$). The strength of the association ($V = .33$) indicates only a slight association between training and hourly salary.

TABLE IX

COMPARISON OF SALARY ON FIRST JOB AFTER RELEASE BETWEEN TRAINED AND NOT TRAINED INMATES

Salary in Dollars	Trained		Not Trained			
	No.	Percent	No.	Percent	Total	Percent
2.00-2.49	5	16.7	2	13.3	7	15.6
2.50-3.00	5	16.7	5	33.3	10	22.2
3.01-3.49	11	36.7	4	26.7	15	33.3
3.50-4.00	3	10.0	1	6.7	4	8.9
4.01-4.49	5	16.7	1	6.7	6	13.3
4.50-5.00	0	0.0	1	6.7	1	2.2
5.01-	1	2.2	1	6.7	2	4.4
Total	30	100	15	100	45	100

$X^2 = 4.746$, df = 6, $p = .58$, Cramer's V = .325.

We have examined two variables in an attempt to evaluate whether vocational training is a successful endeavor for prisons in aiding former inmates' successful re-entry to the community. The last variable to be considered is whether or not vocational training decreases further criminal behavior. Does vocational training aid in reducing a former inmate's return to criminal behavior? For this research a return to criminal behavior is, essentially, a return to prison.

Before data collection began the design had included as a variable undetected or non-reported criminal behavior. After much discussion with current inmates at the prison, it was decided to omit inquiry into continued criminal patterns. It was felt that such inquiry at the time of the interview would lead the subjects to question the researcher's purposes. Fear of reprisal, fear of further incrimination, and consequences of information release was viewed by the current inmates to change, alter, and distort the information of released inmates. Therefore, the condition determined for success of vocational training in terms of post-release criminal behavior was recidivism. If a person had been incarcerated after release from the prison, he was classified as a failure. Those who had not been incarcerated after release were classified as a success. Thus, the ultimate criterion for post-release success was recidivism.

Since recidivism has serious pragmatic considerations for the correctional system as well as for the theoretical basis of rehabilitation, the design of the research suggests a more in-depth analysis.

Therefore, the rest of this section is devoted to an analysis of the independent variable, training, and the dependent variable, recidivism. In Table X the data are presented in a two-by-two table appropriate for the level of measurement.

TABLE X

COMPARISON OF RECIDIVISM BETWEEN TRAINED RELEASEES AND NOT TRAINED RELEASEES

Return to Prison	Trained		Not Trained		Total	Percent
	No.	Percent	No.	Percent		
Recidivist	13	38.2	4	25.0	17	34.0
Non-Recidivist	21	61.8	12	75.0	33	66.0
Total	34	100	16	100	50	100

$X^2 = .36$, df = 1, p = .55, Q = .30.

We find that those trained had a slightly larger percentage of persons who had been reincarcerated than those not trained. Statistically, utilizing a chi-square test of significance, we find no difference, at alpha = 0.5, between the two samples. The strength of the relationship is found to be Q = .30, suggesting that those trained are slightly more likely to be recidivist than those not trained.

In order to more fully understand the original relationship, the procedure of elaboration is used to determine if and how other variables are interacting with training. The use of elaboration is utilized since we are interested in two variables that are nominal and dichotomous. This procedure is valid to determine if other variables are interacting to produce the original relationship. Paul Lazarsfeld (1961) and Herbert Hyman (1958) have shown that two variable relationships may be explained, interpreted, specified, or replicated by introducing a third variable of the dichotomous type. Since the strength of the original relationship between training and recidivism is very small (Q = .30), we are trying

to determine if this relationship is spurious and/or if other variables contribute to this relationship.

The first third variable introduced is the antecedent variable, amount of education. The data were dichotomized placing those who did not have a high school education in one category and those with a high school education in another category. Table XI presents the results of this partialling by the test variable, race.

When the third variable, education, is introduced we find that the strength of the partial terms are essentially the same as the original relationship between the two primary variables. It cannot be said that educational level explains the relationship between training and recidivism. Although Q = .20 and Q = .24 are quite similar, a W^2 was computed. The W^2 is based on chi-square with one degree of freedom and determines if the two measures of association are significantly different at alpha = .05. A value of .08 was found when the two Q values of the partials were compared.

In the marginal relationships we find that both measures of association become negative with the relationship of education and recidivism approaching zero but the relationship of education and training becomes moderately inverse. Education level does not seem to be associated with recidivism, but those in the sample with a high school education are more likely to be trained. From the data presented earlier on the antecedent variables, we found a chi-square probability of .054 for education and training. It again appears in the marginal elaboration of the primary variables controlling for education. Education does not appear to aid in explaining the relationship between training and recidivism.

TABLE XI

PARTIAL AND MARGINAL RELATIONSHIPS OF TRAINING
AND RECIDIVISM INTRODUCING EDUCATION

	Non-High School			High School		
	Trained	Not Trained	Totals	Trained	Not Trained	Totals
Recidivist	5	3	8	8	1	9
Non-Recidivist	10/15	9/12	19/27	11/19	3/4	14/23
	Q = .20			Q = .24		

$W^{2*} = .08$ NS

	Non-High School	High School	Totals
Trained	15	19	34
Non-Trained	27/27	4/23	16/50
	Q = -.58		

	Non-High School	High School	Totals
Recidivist	8	9	17
Non-Recidivist	19/27	14/23	33/56
	Q = -.21		

$$*W^2 = \frac{(Q_1 - Q_2)^2}{S_1^2 + S_2^2}, \text{ where } S_1^2 = \frac{(1 - Q_1^2)(1/a + 1/b + 1/c + 1/d)}{4}$$

The second variable introduced in this research to the primary variables is age at interview. The variable, age, was dichotomized at age 22. Those below this age were placed in one category, and the rest were assigned to the second category.

From Table XII we see that the marginal strength of Q = .24 and Q = .30 remain approximately the same as the original relationship. We note that one partial term becomes negative (Q = -.16) and the other increases slightly in strength. Since the value of W^2 = .95 and is less than the value of 3.85 needed for significance, it is not possible to state that the two partial measures of association are statistically different. Logically, however, it appears that from the data of the two samples interaction may be present. That is, those who are under 22 years of age seem to have less recidivism after training than those over 21 years of age. Since we found a moderate positive relationship (Q = .30) in the primary variable, but a slight (zero for logical purposes) relationship (Q = -.16) for those under 22 and a stronger relationship (Q = .48) for those over 21, it could be suggested that in terms of recidivism younger inmates (under 22) benefit more than older inmates from vocational training. It should, of course, be recalled that those trained, in this research, were more likely to fail than those not trained.

When the variable, race, is controlled in the primary relationship new information is found. In Table XIII we note that one marginal relationship drops to zerp (Q = -.03) and the other suggests a slight inverse relationship (Q = -.24). In other words, white persons were a little more likely to be selected for training than were blacks. As we found in Table III this is not a significant relationship. It is also found that the strength of the relationship between race and recidivism

TABLE XII

PARTIAL AND MARGINAL RELATIONSHIPS OF TRAINING
AND RECIDIVISM INTRODUCING AGE AT INTERVIEW

	Under 22			Over 21		
	Trained	Not Trained	Totals	Trained	Not Trained	Totals
Recidivist	5	2	7	8	2	10
Non-Recidivist	7	2	9	14	10	24
	12	4	16	22	12	34

Q = -.16

W^2 = .95 NS

Q = .48

	Under 22	Over 21	Totals
Trained	12	22	34
Non-Trained	4	12	16
	16	34	50

Q = .24

	Under 22	Over 21	Totals
Recidivist	7	10	17
Non-Recidivist	9	24	33
	16	34	50

Q = .30

TABLE XIII

PARTIAL AND MARGINAL RELATIONSHIPS OF TRAINING
AND RECIDIVISM INTRODUCING RACE

	Black			White		
	Trained	Not Trained	Totals	Trained	Not Trained	Totals
Recidivist	4	3	7	8	2	10
Non-Recidivist	9	5	14	13	6	19
	13	8	21	21	8	29
	$Q = -.14$			$Q = .30$		
	$W^2 = .11$ NS					

	Black	White	Totals
Trained	13	21	34
Non-Trained	8	8	16
	21	29	50
	$Q = -.24$		

	Black	White	Totals
Recidivist	7	10	17
Non-Recidivist	14	19	33
	21	29	50
	$Q = -.03$		

approximates zero. Yet in the partial relationships it is found that the strength of the relationship for those who are white and trained is equal to the original relationship. By contrast, we find the partial relationship of black subjects, who were trained and then became recidivist, to decrease and become inverse. The original relationship in the sample is, in part, explained by race. White persons who are trained in a vocational skill are more likely to be recidivists when compared to non-trained inmates than are black persons who are trained when compared to non-trained inmates.

When the variable of previous parole or probation is analyzed and introduced to the primary relationship, we are further able to specify conditions under which the original relationship of training and recidivism occurs. In Table XIV we note that one marginal relationship, that of previous parole or probation and training, is Q = .25. Yet, we find a relationship of approximately zero (Q = -.03) between previous parole or probation and recidivism. The variable, previous probation and parole, like race, becomes a conditional variable. The strength of the original varies under different conditions of previous history of probation and parole of the subjects.

This conclusion is derived from the partial relationships. Although not statistically different, the partial relationship for those persons who had a previous history of correctional supervision, who were trained and who were recidivists, drops to approximately zero (Q = .04). Yet the strength of the other partial relationship, controlling for no history of correctional supervision, increases (Q = .48). It is logically possible to conclude that the higher incidence of recidivism for those trained, as compared to those not trained, occurs only for persons who

TABLE XIV

PARTIAL AND MARGINAL RELATIONSHIPS OF TRAINING AND RECIDIVISM
INTRODUCING PREVIOUS PROBATION OR PAROLE

	Yes			No		
	Trained	Not Trained	Totals	Trained	Not Trained	Totals
Recidivists	6	2	8	7	2	9
Non-Recidivists	11/17	4/6	15/23	10/17	8/10	18/27
	Q = .04			Q = .48		
	W^2 = .51 NS					

	Yes	No	Totals
Trained	17	17	34
Non-Trained	6/23	10/27	16/50
	Q = .25		

	Yes	No	Totals
Recidivist	8	9	17
Non-Recidivist	15/23	18/27	33/50
	Q = .03		

have not earlier been on probation or parole. Those who have such history are comparable to the control group. It is possible to conclude that persons who are more likely to recidivate (those persons with previous records) are the ones who receive the most benefit from the vocational training program.

During the interview the subjects were asked how long they had actually spent in prison as opposed to length of sentence. The next variable controlled for is an intervening variable, actual time spent in prison before last release. This information does not include amount of time spent in prison from former sentences or incarceration. These data include only amount of time spent in prison related to last sentence. The data were dichotomized such that half of the sample had spent less than 16 months in prison and the other half had spent over 15 months in prison.

From Table XV we find that time spent in prison is a replication variable. The marginal strengths of relationships both drop to approximately zero and both strengths of the partial relationship remain similar to the primary relationship. Under each condition of time spent in prison the strength and direction of the original relationship is replicated. No interaction is found between training and recidivism controlling for actual time spent in prison.

In setting up the research design it seemed important to examine how one other aspect of the correctional system was affecting the reintegration of trained inmates. Each subject was asked if he had gone to a community treatment center (C.T.C.) after leaving the prison and before actual release from incarceration. These regional community centers are essentially work-release programs set up in five areas of Oklahoma which

TABLE XV

PARTIAL AND MARGINAL RELATIONSHIPS OF TRAINING AND RECIDIVISM
INTRODUCING ACTUAL TIME SPENT IN PRISON

	Less Than 16 Months			More Than 15 Months		
	Trained	Not Trained	Totals	Trained	Not Trained	Totals
Recidivist	7	2	9	6	2	8
Non-Recidivist	10	6	16	11	6	17
	17	8	25	17	8	25
	Q = .35			Q = .24		
	W^2 = .03 NS					

	Less Than 16 Months	More Than 15 Months	Totals		Less Than 16 Months	More Than 15 Months	Totals
Trained	17	17	34	Recidivist	9	8	17
Non-Trained	8	8	16	Non-Recidivist	16	17	33
	25	25	50		25	25	50
	Q = .00				Q = .09		

are separate from the actual prison but the inmates are a part of the correctional system. Inmates are taken to a place of work each day by trustees and returned to the center. A percentage of these inmates' earnings are used for room and board by the state.

Table XVI is concerned with the effect of these regional-based community programs on inmates' recidivism who were trained in comparison to those who were not trained. Theoretically, the trained inmates should be employed in a skill while at the center appropriate to the skill learned in the vocational program at the prison. After training the person may obtain a new job or he may use and maintain his present job from the C.T.C. after release. Thus, the transition from prison life to participation in the community is supervised, gradual, and beneficial.

In Table XVI we find that the marginal relationship of going to a C.T.C. and recidivism approximates zero ($Q \neq .04$). There is no association between going to a regional center and recidivism for all inmates. The strength of the other marginal relationship is $Q = .69$. Those persons who were trained were more likely than those not trained to go to a regional facility for re-entry. Yet, in the partials we find a statistically significant difference in the strength of the two relationships. The critical value needed for significance as noted earlier is 3.84. Those persons who were sent to a C.T.C. and were trained had a higher incidence of recidivism ($Q = 1.0$) than those who were not sent to a C.T.C. and were trained ($Q = .19$), when compared to non-trained releasees. The statistical significance between the two partials is in part due to a zero in one cell. However, the data do suggest a logical difference since six persons were found in the other cell. The measure of association for those who were not trained and were recidivist drops slightly

TABLE XVI

PARTIAL AND MARGINAL RELATIONSHIPS OF TRAINING AND RECIDIVISM INTRODUCING PARTICIPATION IN COMMUNITY TREATMENT CENTER PROGRAMS

	Yes--C.T.C.			No--C.T.C.		
	Trained	Not Trained	Totals	Trained	Not Trained	Totals
Recidivist	6	0	6	7	4	11
Non-Recidivist	9	2	11	12	10	22
	15	2	17	19	14	33

Q = 1.0

W^2 = 4.82*

Q = .19

	Yes--C.T.C.	No--C.T.C.	Totals
Trained	15	19	34
Non-Trained	2	14	16
	17	33	50

Q = .69

	Yes--C.T.C.	No--C.T.C.	Totals
Recidivist	6	11	17
Non-Recidivist	11	22	33
	17	33	50

Q = .04

*Significant at .05.

while the other measure of association increases significantly. Thus it can be stated, in terms of this research, that the correctional system does not seem to provide the reintegration suggested by theory. Persons trained and sent to community-based facilities do worse in terms of recidivism than those trained and not sent to regional work-release-type programs. When we recall that those persons trained do worse in terms of recidivism than persons not trained, the entire theoretical model of reintegration through the correctional agencies supporting vocational training is called into serious question.

In the next section, information collected during the interviews pertaining just to the sample of trained inmates is presented. However, it seems relevant at this point in the analysis to discuss other findings related to community treatment centers and vocational training. Each subject who was trained was asked whether he had attended a community treatment center. They were also asked whether they had applied the skill at the C.T.C. which they had just learned in the vocational program at the prison facility.

Each inmate who was trained was also asked whether he had used his training after release. This need not have been professional use of the skill, but merely if they had worked at a job in which their training was seen to be an aid. For example, one releasee was "pumping gas" at his father's gas station. He said he usually "only sold gas but occasionally would do a tune-up or change fan belts." Another releasee who was working in a salvage yard had auto mechanics as a skill in the vocational program. He felt that having the job was based on his having had vocational training. In the data directly below, the number of subjects who have used the skill is inflated in terms of persons who are

using the skill as a "skilled" or professional worker. In actuality, only seven persons (20%) of those trained could be considered to be working in a skilled trade related to their training in the vocational program. Therefore, after these data are presented, all later discussions of utilization of skill in skilled employment will be based on 20 percent or seven trained inmates.

From Table XVII we find that 10 persons had worked in the skill for which they were trained after release. This constitutes 29.4 percent of the 34 persons who were trained in the vocational program.

In this table we find that of the 34 persons trained, 15 or 44.1 percent went to a community treatment center. Of those who went to a C.T.C., 5 or 33.3 percent obtained jobs at the C.T.C. relevant to the skill in which they were trained. Of those persons who ever worked in a skill after release, 4 or 40 percent applied the skill while at the C.T.C. In other words, of the 10 persons who used the skill after release only 4 (40% of those who used the skill) used the skill during the work release program. Using chi-square a significant difference (X^2 = 8.06) at alpha = .05 exists between ever using the skill and attending and using the skill at a C.T.C. A significant majority of those attending a C.T.C. do not utilize their skill.

The data for those who attended the C.T.C. were further elaborated for use of the skill and recidivism. In Table XVIII those 15 persons who had attended the C.T.C. were dichotomized by whether they had used the skill at the facility and also if they had returned to prison. A moderate strength was found in the association between use of skill and recidivism. Thus, the persons who used the skill at the C.T.C. were more likely to be recidivist than those who did not use the skill at the C.T.C.

TABLE XVII

COMPARISON OF COMMUNITY TREATMENT APPLICATION OF SKILL AND USE AFTER RELEASE

Community Treatment Center Application	Had Person Ever Used Skill After Release?					
	Yes	Percent	No	Percent	Totals	Percent
Did Not Attend C.T.C.	5	14.7	14	41.2	19	55.9
Attended C.T.C. and Used Skill	4	11.8	1	2.9	5	14.7
Attended C.T.C. and Did Not Use Skill	1	2.9	9	26.5	10	29.4
Totals	10	29.4	24	20.6	34	100

$X^2 = 8.06$, df = 2, p = .017, Cramer's V = .487.

TABLE XVIII

FURTHER ELABORATION OF THOSE WHO ATTENDED A C.T.C. AND ARE RECIDIVIST CONTROLLING FOR THE USE OF SKILL WHILE AT A C.T.C.

	C.T.C.		
	Used Skill	Not Used Skill	Total
Recidivist	4	5	9
Non-Recidivist	1/5	5/10	6/15

Q = .60

From this research vocational training does not decrease recidivism. Furthermore, the C.T.C. is not used adequately for those trained to reintegrate them into the community. Although more persons trained entered the C.T.C., most do not use the skill. In addition, those who are trained and use the skill at the C.T.C. are more likely to recidivate than those trained, attend the C.T.C., but do not get jobs in the skill while at the C.T.C.

Thus it can be said that those persons who supposedly receive greater benefits of auxiliary correctional sub-systems, i.e., vocational training and then gradual re-entry through a C.T.C., are more likely to be failures (in terms of recidivism) than those who receive no sub-system benefits.

Daniel Glasser's research on federal offenders has suggested that "prison work is able to provide a more regular employment experience than most prisoners will previously have had" and "prior work regularity is more closely related to post-release success or failure than type of work" (Glasser, 1969:169). In order to relate these conclusions, those

trained were compared by two other variables: number of months in the community after release and number of jobs since release.

Information on how long the subjects had been out of prison was also recorded during the interviews. Theoretically, it was assumed that those who participated in the vocational training programs would not only be less likely to return to prison, but if they did recidivate, it would be after a longer period in the community.

In Table XIX the data regarding length of time in the community were dichotomized for elaboration into two periods. If the inmate had been in the community for less than eight months he was classified in one group. All others were classified as having been in the community for more than seven months. Those persons who had returned to prison were classified, not by length of time since release, but by amount of time they were in the community before they were arrested for current imprisonment.

In this table the marginal relationship of training to number of months in the community drops to $Q = .15$ and the relationship between number of months and recidivism increases dramatically to $Q = .83$. There is little association between number of months and training, but the marginal relationship suggests that of those who recidivate most do so within less than eight months after release.

In the partial relationships we find a strong and logical, but not statistically significant, difference between recidivism and training when length of time in community is controlled. We find that for those who were in the community for more than seven months the strength of the association for those trained and who recidivated is $Q = -.14$. This partial term is inverse and lower compared to the original relationship. Yet the partial relationship for those in the community less than eight

TABLE XIX

PARTIAL AND MARGINAL RELATIONSHIPS OF TRAINING AND RECIDIVISM
INTRODUCING NUMBER OF MONTHS IN THE COMMUNITY

	Less Than Eight Months			More Than Seven Months		
	Trained	Not Trained	Totals	Trained	Not Trained	Totals
Recidivist	10	2	12	3	2	5
Non-Recidivist	3	3	6	18	9	27
	13	5	18	21	11	32
	Q = .80			Q = -.14		
	W^2 = 3.16 NS					

	Less Than Eight Months	More Than Seven Months	Totals		Less Than Eight Months	More Than Seven Months	Totals
Trained	13	21	34	Recidivist	12	5	17
Non-Trained	5	11	16	Non-Recidivist	6	27	33
	18	32	50		18	32	50
	Q = .15				Q = .83		

months when viewing training and recidivism increases to Q = .80. Through elaboration we have specified that the original relationship is conditional and directional. The conditional aspect suggests that not only do those who recidivate do so in the first eight months, but also that those trained are much more likely to fail in the first eight months as compared to those not trained. It is directional by the fact that the relationship becomes inverse after the eighth month.

It becomes obvious that when those trained are compared to those not trained in terms of recidivism, those trained are more likely than those not trained to recidivate in the first seven months. After that period the difference between the two groups decreases. Considering the previous data the theoretical assumptions of vocational training and then gradual re-entry by community-based programs are clearly questioned and found, in fact, to be detrimental in comparison to inmates who do not participate in the training programs.

On the other hand, it must be remembered that recidivism is not necessarily a measure of criminal behavior. Perhaps certain other factors, such as previous record, police bias, parole officer handling, and basic instability, are causing this relationship to occur rather than vocational training.

Finally, a comparison is made to determine if persons who are trained have more post-release stability in terms of job turnover, and if this affects recidivism. Earlier we found no significant difference between the number of jobs held after release comparing those trained and those not trained. Using number of jobs now as a third variable we wish to determine if interaction is present for the original relationship of training and recidivism.

In Table XX it is found that number of jobs is a replication variable. We find that both marginal relationships approximate zero and the partial terms are similar to the original relationship. For those persons who had more than two jobs, as well as for those having less than three jobs, the relationship between training and recidivism approximates the original relationship between training and recidivism (Q = .30). No new information is provided to explain or specify the original relationship. Number of jobs does not change the association of recidivism for those trained or not trained.

Analysis of Personality Factors

The following section focuses on data obtained of the releasee's scores on personality measures from the Sixteen Personality Factor Questionnaire (16 PF). Prell (1956) found that inmates with maximal skill change in combination with minimal psychological change were most likely to fail on parole. The study by Erickson (1966) found no difference on the MMPI between failure rates after counseling (individual, group, and vocational) and supportive service for former inmates.

For this study we were interested in measuring the impact of vocational training on inmates' personality characteristics (see Appendix C). The 16 PF was utilized for two reasons. First, the Department of Corrections gives this test to all new inmates at the time of classification. The test is also given by the vocational training program's counselor at completion of the program. Thus, the research design could conform to the already existing data and could add information by giving the 16 PF at the time of the interview with the subjects. For those persons trained we would have three temporal points at which they had been given

TABLE XX

PARTIAL AND MARGINAL RELATIONSHIPS OF TRAINING AND RECIDIVISM
INTRODUCING NUMBER OF JOBS SINCE RELEASE

	Less Than Three Jobs			More Than Two Jobs		
	Trained	Not Trained	Totals	Trained	Not Trained	Totals
Recidivist	8	2	10	4	1	5
Non-Recidivist	14	7	21	7	3	10
	22	9	31	11	4	15

Q = .35

W^2 = .10 NS

Q = .26

	Less Than Three Jobs	More Than Two Jobs	Totals
Trained	22	11	33
Non-Trained	9	4	13
	31	15	46

Q = -.06

	Less Than Three Jobs	More Than Two Jobs	Totals
Recidivist	10	5	15
Non-Recidivist	21	10	21
	31	15	46

Q = -.02

the test battery: Time 1, at the time of incarceration; Time 2, at the time of completion of vocational training; and Time 3, at a time after the former inmate had been released and had been back in the community. Those persons who had not participated in the program were measured at two temporal points: Time 1, at the time of incarceration, and Time 3, after release back into the community.

In order to determine if vocational training had any impact on inmates, the data were analyzed with two statistical procedures. First, the data for those trained and those not trained were analyzed by differences in variances. Thus, we have a one-way analysis of variance for each group. We can determine if a significant difference exists between group test scores over time. For those persons trained we have three test scores, and for those not trained we are analyzing two test scores to see if significant changes occur in personality factors.

Second, for each personality factor, the 16 PF test scores are compared between the two groups by using a difference of means test. It is thus possible to determine if there is a significant difference between the mean scores of the two samples at the time of incarceration and at the time of the interview. These procedures are used in this manner for two reasons. First, there are not an equal number of temporal points at which the tests were given. Second, the unequal cell sizes of the two samples preclude performing the ideal two-way analysis of variance.

Theoretically, what we should find if the vocational training program is having an effect on inmates is a positive change in personality scores at Time 2. We should, ideally, also see a continued positive change, at least no negative change, at the time after return to the community. Thus, we should find a significant F value for those persons

trained. By using the Tukey HDS Test of Significance we can determine if the change in the three scores occurs immediately after training. No significant change should occur in the sample of non-trained former inmates on the test scores.

In relation to the difference of means test, we should find no significant difference at Time 1 but could find a significant difference at Time 3. In other words, theoretically there should be no important differences between the samples at first incarceration. A significant difference should be found between scores after release. Since one group had the benefit of vocational training and a parallel guidance program, differences should appear in measures of personality characteristics. Each personality factor is briefly discussed followed by the above mentioned analysis.

Factor A is dichotomized in professional terms by sizothymia on the low end of the continuum and affectothymia on the other. In lay terms, the lower pole would be characterized by a temperamental inclination to be cautious in emotional expression, uncompromising and critical in outlook, and awkwardly aloof in manner. The features of affectothymia would include easygoingness, accessible emotions, interest in people, and predominance of affect.

Table XXI presents the results of the analysis. For those persons trained we find an F value of 1.287 which is not significant at the .05 level of confidence. In other words, there is no significant difference on Factor A of the 16 PF for persons trained in the vocational program from the time they were first incarcerated to completion of the training program, to a period after release and return to the community.

TABLE XXI

ONE-WAY ANALYSIS OF VARIANCE AND DIFFERENCE OF MEANS OF TRAINED AND NON-TRAINED SUBJECTS ON FACTORS OF THE 16 PF

Sample	Mean Scores Time 1	Time 2	Time 3	N	F-Value	Prob.
			Factor A			
Trained	8.72	9.21	8.33	33	1.280	.28
Non-Trained	9.50		9.64	14	.014	.96
Student's-t	t = .76		t = 1.51			
	p = .44		p = .25			
			Factor B			
Trained	7.42	6.72	7.84	33	1.420	.25
Non-Trained	6.21		6.35	14	.117	.74
Student's-t	t = 1.53		t = 1.21			
	p = .13		p = .23			
			Factor C			
Trained	14.82	15.52	15.76	33	1.340	.27
Non-Trained	13.36		13.43	14	.006	.94
Student's-t	t = 1.21		t = 1.90			
	p = .23		p = .06			
			Factor E			
Trained	12.79	13.70	13.15	33	1.328	.27
Non-Trained	10.00		10.43	14	.317	.58
Student's-t	t = 2.69		t = 2.73			
	p = .01		p = .009			
			Factor F			
Trained	14.00	13.67	14.18	33	.440	.64
Non-Trained	11.86		12.14	14	.150	.70
Student's-t	t = 1.86		t = 1.68			
	p = .07		p = .09			
			Factor G			
Trained	12.27	12.09	13.30	33	2.440	.09
Non-Trained	12.36		12.71	14	.135	.72
Student's-t	t = .09		t = .23			
	p = .93		p = .81			

TABLE XXI (Continued)

Sample	Mean Scores Time 1	Time 2	Time 3	N	F-Value	Prob.
			Factor H			
Trained	13.76	14.42	13.45	33	.975	.38
Non-Trained	10.29		12.43	14	2.489	.14
Student's-t	t = 2.49		t = .93			
	p = .01		p = .36			
			Factor I			
Trained	9.06	10.39	10.12	33	2.099	.13
Non-Trained	9.79		10.07	14	.179	.68
Student's-t	t = .69		t = .08			
	p = .49		p = .94			
			Factor L			
Trained	7.33	7.97	7.46	33	1.735	.33
Non-Trained	8.50		9.14	14	.743	.40
Student's-t	t = .96		t = 1.47			
	p = .34		p = .15			
			Factor M			
Trained	10.67	12.15	9.70	33	5.448	.01
Non-Trained	10.43		9.29	14	1.452	.25
Student's-t	t = .40		t = .46			
	p = .69		p = .65			
			Factor N			
Trained	10.21	9.03	9.85	33	2.760	.07
Non-Trained	10.57		9.79	14	1.270	.28
Student's-t	t = .49		t = .005			
	p = .63		p = .99			
			Factor O			
Trained	10.30	10.27	10.33	33	.003	.99
Non-Trained	11.50		13.36	14	1.790	.20
Student's-t	t = .96		t = 2.45			
	p = .34		p = .02			

TABLE XXI (Continued)

Sample	Mean Scores Time 1	Time 2	Time 3	N	F-Value	Prob.
			Factor Q1			
Trained	9.61	10.52	9.58	33	1.672	.20
Non-Trained	8.36		9.79	14	2.590	.13
Student's-t	t = 1.36		t = .24			
	p = .18		p = .81			
			Factor Q2			
Trained	10.69	11.48	10.00	33	1.964	.15
Non-Trained	11.21		10.71	14	.380	.55
Student's-t	t = .46		t = .67			
	p = .65		p = .51			
			Factor Q3			
Trained	13.97	13.88	14.12	33	.135	.87
Non-Trained	13.00		13.24	14	.115	.74
Student's-t	t = 1.10		t = .91			
	p = .28		p = .37			
			Factor Q4			
Trained	11.36	12.79	11.76	33	2.320	.11
Non-Trained	12.14		14.14	14	6.618	.02
Student's-t	t = .71		t = 1.50			
	p = .48		p = .14			

For those not trained an F value of .0146 was computed with a probability of .90. There is no significant change found on Factor A from time of incarceration to release into the community.

It is necessary to compare the means of the two samples by the Student's-t statistic to determine if the two samples had similar means at time of incarceration and/or at the time of the interview. The Student's-t variances were found to be equal by the F ratio except at Time 1, on factor Q4. All other t-statistics are therefore based on a pooled estimate rather than separate estimate of variance. All t-statistics are based on 44 degrees of freedom.

For Factor A at Time 1 (time of incarceration) a t value of .76 ($p = .44$) was determined. At Time 3 (time of interview) t was found to be 1.51 ($p = .25$). No significant difference is found to exist between mean scores of those trained and those not trained at time of incarceration or after release to the community. And, as mentioned above, no significant change occurs for either group over time.

Factor B is a general abilities measure. A low score on this factor suggests low intelligence and its polar opposite represents high intelligence. In clinical terms, this factor should be interpreted in conjunction with other factors and not singled out as a speeded intelligence test.

In Table XXI we find that no significant difference exists on test scores of Factor B, as measured by one-way analysis of variance, at the different times for either group of subjects. For those persons trained, the F value obtained was 1.425 ($p = .25$). For those not trained, the F value obtained was .1171 ($p = .74$). We also find that at time of incarceration no significant difference exists between the two sample mean

scores of Factor B as measured by t = 1.53 (p = .13). Also, comparing the mean scores at the time of the interview, it was found that t = 1.21 (p = .23). No significant difference exists between the two sample scores after being released for a period of time.

A low score on Factor C represents ego weakness and a higher score represents ego strength. The low C individuals can be thought of as emotionally less stable, easily upset, and changeable. They are more easily annoyed by events in the world, the restrictions of life, and they tend to feel unable to cope with situations. High C persons tend to be more emotionally stable, more mature, calmer, and more reality oriented.

For this research, using one-way analysis of variance, no significant differences were found to occur after vocational training or after return to the community in relation to score at incarceration on Factor C for those persons trained. The F value was found to be 1.347 (p = .27). For those not trained, again no significant difference was found to exist from Time 1 to Time 3. The F value obtained was .006 (p = .94). The mean scores between the two samples at Time 1 were not found to be significantly different. Also, at Time 3 no significant difference between mean scores of the two samples is found. Since no differences are found across time on Factor C for those trained and since the means of the two samples are similar at time of incarceration, it cannot be suggested that vocational training enhances a movement towards ego strength as compared to those who were not trained.

The next factor score, Factor E, is related to the submission-dominance continuum. The lower score indicates submissiveness and the higher scores indicate dominance. Those persons scoring low tend to be

obedient, mild, easily led, and docile. Those persons on the opposite pole tend to be assertive, aggressive, competitive, and stubborn.

In Table XXI we note that the factor scores for Factor E show no significant difference for either sample at the various times when compared by analysis of variance. The F value of the trained sample is 1.328 ($p = .27$). The F value for the non-trained sample is .3171 ($p = .58$). When the two sample means are compared at time of incarceration, we find that a significant difference is indicated by $t = 2.69$ ($p = .01$). It is also found that a significant difference occurs between means of the two samples after the subjects had been released and returned to the community for a period of time ($t = 2.73$, $p = .009$). It seems that no significant changes on Factor E occur over time for either group, but that those trained tend to be more dominant at each time period measured than those not trained. It is plausible to assume that those who are trained are more aggressive and therefore are more likely to find programs which not only ease incarceration but also aid in early release.

The next score is Factor F, which is professionally called desurgency-surgency. This factor is an important aspect of extroversion. The high surgent individual tends to be enthusiastic, heedless, and more easygoing. The low scoring, desurgent individual tends to be sober, cautious, and serious.

In this research we find no significant differences across time intervals of test-taking for either sample. The F value for analysis of the variances at the three time points for those trained is 2.44 ($p = .09$). For those not trained at the two temporal intervals the F value is .1356 ($p = .72$). There also is no significant difference between the

mean scores of the two samples at the time of incarceration nor at the time of the interview.

Factor G is one of the factors that this research was most concerned with in noting the impact of vocational training on personality characteristics. The low score on this factor indicates low superego strength or lack of acceptance of group moral standards. Conversely, a high G individual tends to have strong superego strength and to be conscientious, persistent, and moralistic. The high G person tends towards self-controlled behavior rather than impulsive, emotional behavior. Cattell suggests that this factor,

> correlated negatively with delinquency, sociopathic behavior, homosexuality, etc., and positively with school and general achievements. . . . It tends to be particularly low in psychopaths, criminals and other groups who are characterized by low regard for conventional moral standards (Cattell et al., 1970:90).

For this research, theoretically, it seemed that those inmates who participated in the vocational learning aspects, as well as the required guidance sessions, would improve on Factor G after the program. This improvement could possibly be detected by finding a significant change in their score on Factor G. For those persons trained no significant difference is found on the test scores at the three time intervals. The computed F value of 2.44 ($p = .09$) suggests no difference in scores on Factor G. Those persons not trained had no significant difference in mean scores on Factor G in this research ($F = .135$, $p = .72$). At incarceration no significant difference between mean scores is found for the two samples ($t = .09$, $p = .93$). No significant difference is found between mean scores for the two samples at the time of the interview ($t = .83$, $p = .21$). Thus, we find no difference between samples at incarceration or after being back in the community. No significant changes occur

after vocational training or release for those trained or not trained. From this research the vocational training program has no impact on the superego characteristics of those trained, nor are the scores significantly different from those not trained.

The Factor H represents the clinically named characteristics of threctia and parmia. The characteristics of the low scoring threctic persons are shyness, timidity, feelings of inferiority, and a sensitiveness to threat. The persons on the opposite pole are adventurous, thick-skinned, and socially bold.

In Table XXI the findings related to Factor H for this research are presented. Utilizing one-way analysis of variance, no significant difference is found at the three different time intervals on Factor H for those trained ($F = .975$, $p = .38$). No significant difference is found at the two times for those not trained in the vocational program ($F = 2.489$, $p = .14$). In comparing the mean scores of the two samples we find a significant difference between group means at the time of incarceration ($t = 2.49$, $p = .01$). The difference at this time point between the two samples appears to be congruent with the significant difference between scores found on Factor E at this time. Factor E indicated that those trained were less submissive than those not trained. At the time of incarceration, assuredly a traumatic occurrence, those persons not trained appear as more sensitive to threat, submissive, shy, and timid than those who were later to participate in vocational training.

When the scores on Factor H are compared after release and persons have been returned to the community, for at least some period, no significant difference ($t = .92$, $p = .36$) is found between mean scores of the two samples. Those not trained tend to decrease on shyness, timidity,

and sensitiveness to threat and become more similar to those trained after release. Based on the data it seems plausible that those persons who are more bold, adventurous, and aggressive are able to work within the institutional setting and get into a vocational training program which is seen by inmates to be advantageous in terms of "passing time" and obtaining consideration for early release.

A low score on the next factor, Factor I, indicates the professionally named aspects of harria. This profile "represents some sort of tough, masculine, practical, mature, group-generating and realistic temperamental dimension" (Cattell, 1970:93). The opposite profile is termed premsia and indicates the characteristics of a sensitive, tender-minded, dependent, and overprotected person. The high H person reveals himself to be somewhat unrealistic, imaginative, and aesthetic-minded.

The data for this research suggest that no significant difference exists on the test scores over the three time intervals for those trained ($F = 2.099$, $p = .13$). Also, no significant difference exists for those not trained on the factor score from time of incarceration and time after release. No significant difference is found to exist at Time 1 ($t = .69$, $p = .49$) between the trained and non-trained inmates. Similarly, no significant difference exists at Time 3 on the mean scores of those trained and those not trained ($t = .08$, $p = .94$). Vocational training cannot be said to have an impact on the personality factors of premsia and harria as suggested by the data from this research.

Factor L signifies protension. The high L score indicates suspiciousness, irritability, jealousy, and dogmatism. The low-scoring individual tends to be trusting, friendly, relaxed, and, possibly, low in ambition and striving.

For this research we found no significant difference on scores for those trained at the three time periods ($F = 1.735$, $p = .33$). Also, no significant difference was found at the two time periods for those not trained ($F = .743$, $p = .40$). No significant difference was found between mean scores of those trained and those not trained at Time 1 ($t = .96$, $p = .34$) and at Time 3 ($t = 1.47$, $p = .15$). From these data vocational training does not seem to have an impact on the personality characteristic of protension.

Factor M is said by Cattell (1970) to be a subtle pattern which requires a more complex description of the characteristics. The low scoring praxernic individual is believed to be practical and have "down to earth" concerns. The person is conventional, alert to practical needs, concerned with immediate interests, guided by objective realities, and dependable in practical judgments.

The high scoring characteristic of autia indicates one who is imaginative, Bohemian, and absent-minded. This profile indicates that the person is unconventional, interested in art and theory, fanciful, easily seduced from practical judgments, and generally enthusiastic with occasional swings of "giving up." The high M person

> has an intense subjectivity and inner mental life. Although carried forward on inner tides of confidence, and definitely inclined to be disregardful of practical matters, he actually has higher internal, spasmodic anxiety and conflict tensions than the praxernic person (Cattell, 1970:98).

On Factor M in this research a significant difference ($F = 5.448$, $p = .01$) was found to exist across the three time intervals for those trained. A Tukey HSD test of significance was computed to determine where the significant difference between the mean scores occur. For

repeated measures the amount of difference needed between mean scores is computed by the formula:

$$C.V. \times \frac{MS_{res}}{n}$$

where

MS_{res} = within variance; and

C.V. = critical value of significance for the Tukey test, based on number of categories and residual variance degrees of freedom (Runyon, 1976:396, and Winer, 1962:114).

Using 3 categories and 64 degrees of freedom the critical value from the multiple range table (Runyon, 1976:400) is 3.38. The residual variance was computed and found to be 9.257. Substituting this information into the formula the required amount of difference needed for significance between the mean scores of those trained is 1.79. We find that a significant difference exists between the mean scores of the subjects after training and after release into the community. No significant difference occurs between scores obtained at time of incarceration and after training. On Factor M at Time 1 we note a mean score of 10.67. After completion of the vocational training program (Time 2) the score increases, but not significantly, to 12.15. At the time of the research interview the mean score of those trained decreases significantly to 9.70. There is no significant difference in mean scores of Time 1 and Time 3.

For those not trained no significant difference ($F = 1.452$, $p = .25$) is found on factor scores at Time 1 and Time 3. When the two sample means are compared at Time 1, no significant difference is determined by Student's-t ($t = .40$, $p = .69$). Similarly, no significant difference exists between mean scores of the two samples at Time 3 ($t = .46$, $p = .65$).

The results seem to indicate that inmates after training tend, but not significantly, to become more unconventional, more absorbed in abstract ideas, easily seduced from practical judgments, subjective, and to dissociate ideational systems and memories. After release, when confronted with returning to the community a statistically significant change occurs on Factor M as compared to the score obtained at completion of the vocational training program. The score suggests that the group tends to become more practical, conventional, and guided by objective realities.

It could be suggested that vocational training leads inmates to an impractical confidence that is broken down upon return to the community. If this is, in fact, the case, the inmates may become frustrated upon return to the economic market place. This could account for the tendency for those trained to be slightly more likely to recidivate.

On the other hand, the scores may also be significantly different between Time 2 and Time 3 because at Time 2 the inmates are close to being released from prison. The inmates may be experiencing anxiety and numerous conflict tensions at this point which are indicative of higher scores. After release the scores drop and are lower than the group scores at time of incarceration.

Clinically, this researcher would suggest that no difference exists on the factor scores, although a statistical difference is found. A difference larger than 1.79 may be statistically significant, but is not much of a difference on a personality factor inventory with such a subtle profile in the first place.

The polarities of naivete (low score) and shrewdness (high score) are measured by Factor N. High shrewdness scores indicate criteria such

as astute, worldly, ingenious, flexible in viewpoint, alert to social obligations, and alert to social reactions of others. The low score criteria include being forthright, unpretentious, lacking in self-insight, spontaneous, and natural.

From the data collected in this research no significant difference occurs across the three time periods on Factor N for those trained ($F = 2.76$, $p = .07$). No significant difference exists on the factor scores for those not trained ($F = 1.27$, $p = .28$). No significant difference exists between the two sample mean scores either at Time 1 ($t = .49$, $p = .63$) or at Time 3 ($t = .005$, $p = .99$). From this information it cannot be suggested that vocational training has any impact on inmates' personality characteristics of Factor N.

The low score profile on Factor O indicates what has been called untroubled adequacy, while the high score profile indicates guilt proneness. The low score suggests that one is self-assured, placid, and complacent. The low O seems to indicate persons who act out their maladjustments rather than suffer internal conflicts due to low ego strength.

The high score profile is indicative of one who is apprehensive, self-reproaching, insecure, and troubled. The high O individual reports that he is unstable, seems to be overfatigued in unusual circumstances, fails to sleep due to troubled aspects in daily life, and is easily downhearted and remorseful.

For this study no significant difference exists on the factor score of guilt proneness at the three different times for those trained ($F = .003$, $p = .99$). When the scores are compared for those not trained, again no significant difference is found to exist ($F = 1.795$, $p = .20$). At the time of incarceration no significant difference ($t = .96$, $p = .34$)

is found to exist between mean scores of the two samples. However, a significant difference ($t = 2.45$, $p = .02$) is found between the mean scores of those trained and of those not trained after being released.

The profile of low scoring persons on Factor O indicates untroubled adequacy. The lower score suggests an individual who is self-assured, placid, and complacent. It may indicate persons who act out their maladjustments rather than suffer internal conflicts due to low ego strength.

The trained inmates' mean scores are relatively consistent at each time the 16 PF was administered. The inmates who were not trained have higher scores at the time of incarceration than those trained, but the mean scores are not significantly higher. At the time of the interview the non-trained inmates' scores had increased enough to make the means significantly different.

These data, at first, seem confusing. But when interpreted further, a major empirical conclusion can be made regarding vocational training programs in correctional settings. Cattell states:

> Research needs to consider the possibility that O has some state component, and is not a source trait. There are indications that a broken down state occurs sporadically with this pattern as a reaction to situations of repeated failure, transgression, and inadequacy (Cattell, 1970:102).

It seems that this personality indicator is operationalizing the sociological concept of "total institutions." Cattell further asserts that Factor O

> . . . may be considered an emotionally deeper sense of general unworthiness, occasioning a more sensitive reaction to superego infringements (and perhaps other types of personal inadequacy and conflict too), though not a greater development and strength of the superego itself--which is a matter of C (Cattell, 1970:102).

The psychoanalytical view of superego could be equated, albeit quite distinctly, with the sociological concept of self. Sociologically,

the self is always changing and is dynamic, not static. The self emerges in a social context through interaction with others (Mead, 1937). Cattell implicitly suggests that the personality pattern of Factor O may be a situational response to ongoing social interaction, i.e., transgression and inadequacy.

Goffman's (1961) concept of the "total institution" suggests that the role engulfment occurring in the prison environment leads to a "death" of the self. The prison is a "Procrustean Bed" for the self of the inmate. His attitudes, roles, values, and behavior are shaped by the institution. Former conceptions of self are dispossessed and new images of self are forced upon the inmates by the retributive, custodial nature of the prison.

This writer's interpretation of the data is that vocational training aids in alleviating the mortification of self occurring within the total environment of the prison. It decreases the pains of imprisonment by making the prison "less than a total institution." The training program offers alternatives for self actualization not possible in the highly structured prison. The situationally determined transgression of self is negated in part by allowing inmates to interact with instructors, staff, and counselors of the vocational program and not entirely with guards and correctional officers. The skill training aids to maintain positive views of self. In the next chapter we will expand on the concept of total institutions and relate the quantitative findings presented here with concomitant qualitative data.

The next factor, Factor Q1, has the polar characteristics of conservatism of temperament and radicalism. The low scoring person is conservative, respecting of established ideas, and tolerant of traditional

difficulties. Neurotics tend to score low on Q1. The high scoring person tends to be experimental, liberal, analytical, free-thinking, less inclined to moralize, and likely to experiment with solutions to problems.

In this study no significant differences are found to exist on Factor Q1 by analysis of variance over the time periods for either the trained sample ($F = 1.672$, $p = .20$) or the non-trained sample ($F = 2.59$, $p = .13$). At Time 1 no significant difference ($t = .24$, $p = .81$). The vocational training program appears to have no affect on characteristics measured by Factor Q1.

Factor Q2 purports to measure self-sufficiency. The high Q2 person is resourceful, prefers to make own decisions, and seems to be dissatisfied with group cohesion. The low scoring individual appears as a follower, one who is group dependent, dependent on social approval, and conventional.

On Factor Q2 the subjects in this research show no significant difference ($F = 1.964$, $p = .87$) on test scores over the three time intervals for those subjects who participated in vocational training. For those subjects who were not trained no significant difference ($F = .38$, $p = .55$) exists between test scores at the two different times the test was administered. No significant difference ($t = .46$, $p = .65$) was found between the two sample means at the time of incarceration. No significant difference ($t = .67$, $p = .51$) occurs between sample means of the two groups at the time of the interview. The vocational training program does not seem to have an affect on the personality characteristics measured by Factor Q2.

At the initiation of this research, Factor Q3 was seen to be an important variable for determining if vocational training was having a

positive impact on its trainees. Factor Q3 measures, by a low score, low self-sentiment. A high score measures high strength of self-sentiment. The high scoring individual is controlled, has exacting will power, and is socially precise. This type of individual is thoughtful of others, conscientious, self-controlled, exhibits socially approved responses and has a regard for social reputation. The low scoring individual tends to be lax, uncontrolled, and careless of social rules.

In this research we find no significant difference ($F = .1356$, $p = .87$) between the administered tests on Factor Q3 for those trained. For those not trained no significant difference ($F = .38$, $p = .55$) is found at the two times the test was administered. At Time 1 no significant difference ($t = 1.10$, $p = .28$) is found between the mean scores of the two groups. At Time 3 no significant difference ($t = .91$, $p = .37$) is found between mean scores of the two samples. Vocational training does not appear to have an impact on self-sentiment of the inmates as measured in this research.

The sixteenth and last factor presented in this research is concerned with ergic tension. A high score indicates a person who is overwrought, frustrated, driven, and tense. This factor can be viewed as an aspect of depression that is associated with a general level of frustration. The low scoring person usually is relaxed, tranquil, composed, and lacking in frustration.

Those persons who were trained showed no significant difference ($F = 2.32$, $p = .11$) in test scores at the three times of testing. For those persons who were not trained a significant difference ($F = 6.618$, $p = .02$) is found between scores obtained at Time 1 and Time 3. The

scores indicate that those persons who were not trained appear more tense and frustrated after release than at the time of incarceration.

At Time 1 a t-test was computed to determine if a significant difference occurs between means of the two samples. For this computation the F ratio of 3.70 indicated that at alpha .05 the two samples had unequal variances. The Student's-t was not based on common variances as was the case for all other computations of the Student's-t.

No significant difference ($t = .71$, $p = .48$) was found to exist at Time 1 between the mean scores of the two samples. At Time 3 no significant difference ($t = 1.50$, $p = .14$) was found to exist between the mean scores of the two samples.

From this information it could be suggested that although no significant change occurs on ergic tension for those trained, it does increase after release for those not trained. It could be argued that the vocational training program helps prepare the inmate to handle the frustration of returning to the community. Although no direct affect occurs from participation in the program, scores on this factor do not increase significantly from Time 1 to Time 3 for those trained as they do for those not trained. This conclusion is made cautiously since no significant difference is found between the two samples when administered the test after release from the vocational training prison. Also, these results, although statistically significant, are not clinically disparate.

Other Findings and Qualitative Data

Skill Implementation

This section presents further information given by the trained inmates during the interview to assess the effectiveness of the vocational

training program. We have determined that only 20 percent of the trained subjects actually worked in a "skilled" trade using their skill as a full-time occupation. We also have determined that approximately one-fourth of those trained returned to employment which they had held before incarceration. During the interview the subjects were asked why they had taken the vocational program, whether they had intended to use the skill, and if they had sought a job in the skill after release. It was hoped that these answers could give further information regarding the impact of vocational training.

When asked the reason they had taken the vocational training while in prison, 11 persons or 32.4 percent gave a response suggesting that they wanted "to learn a trade" or "something to do when released." The response was given by 26.4 percent that they took the training "just to obtain a parole." One person stated bluntly that "the parole board told me to apply for vocational school" as a requisite for obtaining parole. At least one-fourth of the subjects participated in the program because of overt or covert coercion. This research determined that 7 persons or 20.6 percent took vocational training "just for something to do." These persons suggest that they use the program to relieve boredom and occupy themselves while in prison. The remaining 20.6 percent of the trained subjects either could give no specific reason for taking the training or stated that they took the training "to be able to fix the family car" or "to make more money." As one inmate stated, "If you take vocational school you get $15 a week. Otherwise, it's $2 a week." Initial motivations are mixed, and do not seem to subscribe fully to the objectives of vo-tech programs in the correctional institutions.

During the interview subjects were asked if they had sought out or applied for a job which was related to the skill training they had received. Of the 34 trained inmates, 22 or 64.7 percent stated that they had applied for jobs related to their skill training. This appears to suggest that the vocational training program inspires, creates a desire, or at least directs one to attempt to utilize the skill training. Approximately one-third of the inmates take the training to learn a trade, yet approximately two-thirds attempt to find jobs in the skill. When we recall that one-fourth of those trained return to jobs held before incarceration, we conclude: all but about 11 percent of those who do not already have jobs through former employers attempt to utilize their skill after release. Vocational training does appear to direct persons to seek out skilled employment and utilize their training. Obviously vocational training has an impact on the type of work sought out by the inmates and would seem to give some support in terms of direction. That is, persons are given direction in the employment search after release rather than "wondering what to do."

On the negative side of the coin, we find that only approximately 20 percent of the trained inmates actually utilize their skill after release. Also as noted earlier, those who use their skill are just as likely to be recidivist as those who do not use the skill after release. Why are persons not obtaining employment in the skill in which they were trained? Why do we find that 64 percent attempt to get jobs but only 20 percent utilize the skill?

During the interview persons were asked what suggestions they had for improving vocational training. By looking at their responses to this question we can, in part, answer why more than 40 percent of the

persons are not utilizing their skill. One major suggestion given by 24 percent of the subjects was that the time period of training should be lengthened to give both more instructional time and more opportunity to practice what had been learned. Some inmates, especially those in welding, related a feeling of incompetence about working in the skill. Some stated they knew the welds but did not really feel they had practiced enough. One inmate in welding stated it like this:

> I think 20 weeks is kinda cramming it in there pretty tight. I knew some welding like nig and tig. There were others that had completed it and even out into blue-print and those people had prior knowledge, either in high school, or trade school, or someplace. But I had never picked up a welding apparatus, so I was really going from scratch.

A releasee trained in auto mechanics stated, "Some of those boys didn't know anything about cars when they started. They were always behind. If you didn't know anything, it was real hard to learn it all in 20 weeks."

Another suggestion was given by 20 percent of the former inmates. They suggested that more instructors were needed. Most seem to feel that more instructors would provide a better understanding of specific techniques for the inmates' training. Five of those trained in auto mechanics stated they could not get jobs because they were required to have their own tools. Since tools cost several hundred dollars, possibly a means should be designed where inmates could borrow money from a vo-tech fund and repay the money as they work.

The remainder of the suggestions were varied. Some suggested that more room was needed (since collection of these data, the program has moved to a newer and larger facility). Others suggested that other skills be offered. Eight percent suggested that many of the machines

needed to be updated. Twenty-four percent of the inmates had no suggestions. Many stated the only problem was not being able to find a job.

One of the main reasons given by those trained for not getting jobs after release was because "employers won't even take your application unless you have two years experience." Several of the inmates found that the only jobs in their skill were as helpers or apprentices at a low salary. When one subject was asked whether he had applied for a welding job he stated,

> Yes, the lady who interviewed me looked at my certificate from vo-tech, but I didn't have any experience. A guy called me about four days later and said the only thing he could do was put me in a training program. I needed money, not training. It was only about $2.00 to $2.25 an hour.

Three other subjects reported that they were to begin jobs in the skill in which they were trained (as a helper) when a higher paying job was found. Rather than pursue a job in a low paying skill job for which they were trained, subjects turned to unskilled, semi-skilled, or factory jobs that paid a higher wage.

There seems to be a lack of liaison between the vo-tech department and outside employers. The one is not in tune with the other. It was also determined that only three persons, other than those who went to community treatment centers, received any post-release job counseling. Follow-up and placement do not seem to be united with the training program's goals.

Subjectively, this researcher felt that many of the trained releasees were unhappy in their present jobs. Most of those who were not working in their skill seemed unsettled and frustrated. It is believed that this may be, in part, due to higher aspirations created during training. It has been noted that approximately 40 percent more persons

sought out jobs in the skill after release than had intended to use the skill when they first began the program.

When personality characteristics were analyzed in the last section, we found that the only significant difference in test scores over time for those trained occurred on Factor M. We found that between time of incarceration and after training the mean scores increased somewhat but not significantly. The significant difference in scores occurred when the scores decreased between the time the subjects had completed training and after they had been back into the community. High scoring persons tend to be carried forward on tides of confidence and disregardful of practical concerns. When confronted with community life we found a significant decrease in test scores for those trained. They tend to become more concerned with practical matters, immediate issues, and less fanciful and less easily seduced from practical judgments.

After release they are confronted with a community market which requires them, if they are to work in the skill, to be employed at low salaries serving apprenticeships. Most turn away from the skill to work at higher paying jobs. It would appear that aspirations are raised through vocational training, but that the economic realities quickly lead to disillusionment. This may account for the slight tendency of those trained to be recidivist as compared to those not trained. It should be remembered that no significant difference appeared between those trained and not trained on recidivism, but a slight association of $Q = .30$ was determined.

Total Institutions and Prisonization

One finding which emerged during the interviews with inmates was

not anticipated and seems to be one of the most beneficial aspects of the vocational training program. Although the conclusions drawn by this researcher cannot be quantified in this section, the information from the former inmates would suggest that participation in this prison's vocational training program aided in the removal of negative aspects of "total institutions."

Goffman (1961) has suggested that there are four basic aspects of total institutions. First, all spheres of living are conducted in the same place and under the same authority. Second, the aspects of daily life of each person are carried on in the immediate company of the others, all of whom are treated alike and required to do the same thing. Third, all periods of the day are regimented and controlled through explicit and formal rules imposed from outside. Finally, all singular activities are brought together under a rational plan to fulfill the official goals of the institution.

These, suggests Goffman, lead to mortification of self. This mortification occurs for several reasons. Role dispossession occurs when the inmate is restricted from outside contacts, becomes a number and "loses" his name, stripped of his clothes and possessions. Legally the inmate goes through "civil death": loss of rights to will money and write checks, to contest divorce or adoption proceedings, and to vote. Admission procedures "program" and "trim" the inmate to meet the needs of administration machinery. The self of the individual is engulfed in the role requirements of the prison.

The concomitant concept of prisonization is also important to recognize in relation to this discussion of vocational training and "total institutions." The "prisonization" concept emphasizes the effect of the

prison culture on its inmates. In essence, "prisonization" is the process of assimilating and socializing persons to the inmate social code, i.e., attitudes, values, and behavior patterns of the prison culture.

Clemmer (1958:301) has suggested that long sentences, a dearth of positive relations on the outside of prison, and readiness for integration into prison groups are a few of the factors which maximize prisonization. Wheeler (1958) found that length of time served tended to vary inmates' attitudes and value reactions to particular situations.

The concepts of "total institutions" and "prisonization" were not considered in this research until the interviews had begun. No questions were asked of the inmates regarding these issues, but some inmates seemed to indicate that vocational training may have a positive affect by easing the "pains of imprisonment."

One inmate told this researcher that on one occasion the prison guards had gone into the counselor's office who worked for the vocational training program. These guards had turned over files, broken a picture, and had left the office in disorder. The inmate stated that the guards were angry at the counselor because of changes he was making and because he was standing up for the rights of some of the inmates.

This type of conflict seems imminent in an administrative structure with two substructures, custody and treatment which bifurcate roles and normative structure. The above statement seems to indicate that because of the vocational program, the prison is less than a total institution. The vocational treatment aspects of the prison are in conflict with the requirement of security and custody. Thus, the vocational training program seems to allow inmates alternatives to prison determinism of self,

roles, attitudes, and behavior. Two other inmates stated the issues here quite succinctly:

> Well, I don't think more could have been done at the school. It was just the conditions you had to work under. The prison system, you know. It was like night and day. You go to school and you're in a nice atmosphere to learn. Back in the gates it was like dying. Going back in the gates hurt what was done in the day. You couldn't study or anything. You have to have two attitudes (italics mine).

> It would be a lot better off if it [vo-tech] wasn't connected with the penitentiary. Off by itself, like the C.T.C. [community treatment center]. A guy has to go over there by day and then back across the fence with the guards. It just doesn't work. It tears a person's morale down. They [guards] are different from those instructors who build you up.

The view typified by the last two statements made by inmates was suggested by four other inmates but not so cogently. These came as "extra" information because this researcher had not focused on this issue. Thus, it would seem that more statements like these would have been obtained had the interview been so oriented.

Also, it should be noted that of the 16 non-trained inmates, 13 stated that they had tried to get into the vocational training program. Obviously, the program offers something for the incarcerated person. It seems to offer a greater diversity of role prescription which would ease the burden of prisonization and the role engulfment of the "total institution."

Inmate Evaluation of the Vo-Tech Program

This concluding section presents information regarding the inmates' perception of the vocational training program. The material here represents attitudes the inmates had towards the specific vocational training

program from which the inmates exited. Thus, it should not be generalized to other such programs in other than a general manner.

The program consists of three types of skill training: welding, auto mechanics (front-end alignment or tune-up), and air conditioning and refrigeration. In this research 14 persons had been trained in welding, 16 in auto mechanics, and 4 in air conditioning.

During the interview each trained inmate was asked his opinion of the equipment used in the program. Of the 34 inmates questioned, 56 percent believed the equipment to be highly adequate, 36 percent thought the equipment was good, and 8 percent thought the equipment was less than adequate. One inmate talking about the welding equipment stated:

> I think they had an awful lot of good equipment. Since I've been out I haven't seen half the equipment they had there, trace cutters, tig, nig, and plasma. A lot of people down at the ship have never heard of plasma cutting. I got to play with a lot of things I haven't seen since I got out.

The subjects were asked if they received enough materials to practice on to gain experience. Fifty-three percent thought the materials were quite adequate, 44 percent thought them adequate, and 3 percent believed that not enough materials were available.

Fourteen percent of the former inmates believed that the instructors did not instill good work habits. On the contrary, 76 percent of the subjects thought that the instructors were good at creating a working atmosphere. Seventy-four percent of those who took training were highly complimentary of the instructor's knowledge and ability to teach. The remainder thought the instructors were good. There were no negative remarks about the instructor's knowledge of their skill.

The trained releasees were asked three questions regarding the counseling aspects of the vocational training program. Did you seek out

the counselor outside of the guidance periods and did he help? What is your opinion of the counselor? What is your opinion of the guidance periods?

In this study it was found that 50 percent of the subjects never sought out the counselor. Of the remaining one-half who did make use of the counselor, 82 percent stated that the counselor did help them with their problems.

It was somewhat difficult to code all the responses given by the subjects when asked about their opinion of the counselor. Statements seem to indicate that 17 percent liked the counselor a lot and 50 percent seemed to like him. One response by a subject seems to portray the positive opinion of 67 percent of the group: "That counselor is one great son-of-a-bitch. That ole boy, if you listen to him, he'll make you see your hang-ups. He's very intelligent. A couple of us would go up there sometimes and just talk with him." Approximately 18 percent disliked the counselor and 6 percent seemed to verbalize extreme dislike. One subject stated, "It was kind of fake. They send you to guidance every morning and listen to some turkey preach. The counseling was okay if a man wanted to go to it. You can't make a man listen." Seventy-four percent thought the guidance periods were worthwhile and 25 percent viewed the guidance periods as not very good or a waste of time.

It becomes evident from the interviews that a large majority of the former inmates view the counseling program as a valuable experience. They seem to indicate that the equipment, the instructors, the working atmosphere, and the counseling given are of high quality and make a positive impression on the trainees.

Summary

In this chapter we have examined the information given by the former inmates in terms of the impact of the vocational training program both during incarceration and after release. After release almost two-thirds of the sample attempt to find employment in the skill in which they were trained, yet we found earlier that 20 percent actually use the training in a "skilled job." The major factors given by the subjects for not using the skill are: (1) inability to find jobs; (2) lack of experience such that they must begin at low paying jobs, which most turn down; and (3) lack of tools to obtain positions.

In the second and third section this research concluded that although a large percentage never utilize the skill training, the program itself seems to have a positive impact on the former inmates. As a group the releasees in hindsight view the instructors, counselors, working atmosphere, and overall program with high regard. It seems that the nature of the program aids in removing the negative aspects of prisonization and hindering the role engulfment of the "total institution."

CHAPTER V

SUMMARY, CONCLUSIONS, AND LIMITATIONS

Introduction

This thesis has noted the fact that our society is moving toward rehabilitative goals in its treatment and handling of incarcerated persons rather than mere incapacitation and retribution. A variety of rehabilitative techniques have and are being utilized to "change" the inmate so that upon return to the community he becomes a law-abiding citizen. Various forms of rehabilitative techniques such as group therapy, psychotherapy, environmental management, behavior modification, educational programs, etc. are present in the rehabilitative wave of the new light. This research effort focuses on one such program, that of vocational training of incarcerated persons.

Data Sources, Sampling, and Analysis of Variables

Data for this research came from three sources. Scores for evaluating personality changes and differences between the "experimental" and "control" groups were obtained with the aid of the Oklahoma Department of Corrections and the vocational training programs' counselor at the prison at Lexington, Oklahoma. The Department of Corrections provided the personality scores on the Sixteen Factor Personality Questionnaire (16 PF) for all inmates who had taken the test battery upon classification. The counselor at Lexington provided the scores for the inmates

who had completed vocational training. The last set of scores was obtained at the time of the interview. All other information was obtained during one and one-half to two hour interviews with former inmates of the prison.

The research presented is based on interviews with 50 persons who had been released from the same prison during the same year. These 50 persons represent approximately one-third of the inmates released on parole during that year. The sampling is, in essence, an availability sample of 156 persons released on parole. All persons released on parole were potential subjects, but in 16 months only 50 could be interviewed due to deaths, absconding, the correctional bureaucratic maze, and an unwillingness to participate fully in the research by certain parole officers and the inmates themselves. Of those 50 persons interviewed, 34 participated in the vocational training program and constituted the "experimental" group. The remaining 16 persons represented the "control" sample of persons who did not obtain rehabilitative treatment.

The sampling procedures used in this research are based on praxis (theoretical as well as statistical) and therefore should not be generalized to an extreme. On the other hand, the results do offer parameters and guidelines for inquiry and pragmatic considerations of the impact of correctional-based vocational training programs.

The first part of the statistical analysis was concerned with determining the similarities of the two samples on particular demographic variables. Since it was impossible to match samples, it seems important to determine if the two groups (trained and not trained) are significantly different on several major variables.

The two groups were compared on age, marital status, race, amount of education, previous arrest, and previous probation or parole to determine if a difference greater than chance variation appeared. These variables were seen to be important in explaining post-release success or failure of the two groups. By the chi-square statistics no significant difference exists between the two groups at alpha = .05. On the variable amount of education, the computed probability was .054 with Cramer's V computed as .497. Thus, a moderate positive association exists between level of education and selection for being trained in the vocational program.

In the next section the research measured three post-release dependent variables in relation to the independent variable, participation in the training program. The first variable was based on how many jobs the releasees had held since release. The range was from no jobs to seven jobs. No significant difference was found to exist, using chi-square, between the two groups on number of jobs held since release. Vocational training does not appear to enhance job stability as compared to those not trained.

The second dependent variable was salary on first job after release. We were interested in determining whether vocational training had a positive impact by making its graduates more marketable and thus obtaining a higher salary than those not trained. The data were classified by hourly wage for uniformity and ranged from two dollars an hour to more than five dollars an hour. Statistically, chi-square indicated no significant difference between the two groups with a probability of .58.

The third dependent variable considered was recidivism. Utilizing chi-square no significant difference was found to exist between the two

samples on recidivism (X^2 = .36, p = .55). The procedure of elaboration was used to further analyze the data to determine what other variables may be affecting the recidivism rates for the two groups.

It was determined that no significant difference exists between the two groups on recidivism and using Yule's Q it was found that those trained had a slightly greater likelihood of being recidivist than those not trained. Third variables were introduced to determine if other variables were interacting with the original relationship of Q = .30. This procedure was also seen to have pragmatic usage for the correctional staff in terms of classifying persons who would be more likely to benefit from vocational training. Also, by portraying both partial and marginal relationships the marginal relationships become dependent and independent variables which give further information regarding the impact on those trained versus those not trained.

The third variable of amount of education indicated (as noted earlier) that those who had not completed high school were less likely to be trained (Q = -.58). It was found that those who had completed high school were slightly more likely to be recidivist (Q = -.21). In the partial terms we found that for those trained and those who had not completed high school the association to recidivism was Q = .20. For those who were and those who completed high school the association to recidivism was Q = .24. Thus, no statistical or logical difference occurs between the two relationships. The Q values are approximately equal to the original relationship of training and recidivism (Q = .30). Amount of education is spurious to the original relationship and does not aid in explaining the original relationship.

When the third variable, age, is introduced, some interesting results are obtained. The marginal measures of association indicate that there was a slight tendency for those under 22 to be trained (Q = .24) and that the association between age and recidivism (Q = .30) is the same as the original association of training and recidivism. Although no significant difference by chance (W^2 = .95) is found between the two partial relationships, we do find a logical alteration. It was found that those persons who are under 22 and who are trained are less likely to be recidivist than those over 21 and who are trained. In terms of recidivism vocational training seems to be more valuable for youthful offenders.

The next variable controlled for in the original relationship was race. In the marginal relationships we found that black persons were slightly less likely (Q = -.24) to be trained, but that there was no relationship between race and recidivism (Q = -.03). In the partial relationships on recidivism it was found that for those persons who were white and who were trained, the measure of association was the same as the original relationship (Q = .30). For those who were black and trained the measure of association changes direction slightly (Q = -.14), indicating that black persons who take vocational training are less likely than white persons to be recidivists.

Next, the original relationship of training and recidivism was elaborated using previous probation or parole as a control variable. We were further able to specify conditions under which the original relationship occurs. Only a slight association (Q = .25) was found in the marginal terms of training and previous probation or parole. The other marginal term (Q = .03) indicates that recidivism is not associated

with previous probation and parole for all subjects. In the elaboration of the partial relationships it was found that for those who had a history of probation or parole training was not associated with recidivism (Q = .04). In the other partial we find that for those with no prior history of correctional supervision, those trained were more likely to be recidivist (Q = .48). Although the two partial strengths of the relationships are not statistically significant (W^2 = .51), we can logically conclude that those persons trained and who have had prior supervision do better than those trained with no prior supervision when compared to non-trained inmates.

When the third variable, actual time spent in prison, was introduced, we find that it is a replication variable. In the marginal elaboration no association was found between time spent in prison and selection for training (Q = .00). It was also found that the strength of the association approximates zero (Q = .09) for time spent in prison and recidivism. The partial elaboration finds that the strengths of both partials are similar to the original relationships and are not statistically different from each other. Therefore, length of time actually spent in prison does not add new information; it replicates the original relationship between training and recidivism.

The affect of community treatment centers (C.T.C.) was also introduced as a control variable. Elaboration by marginals revealed that going to a C.T.C. was highly associated (Q = .69) with being trained in the vocational program. The strength of the association between going to a C.T.C. and recidivism was found to be Q = .04. In the elaboration of partials the first statistical difference between the strength of the two relationships appears. Those persons who went to a C.T.C. and were

trained were more likely to be recidivist than those who went to a C.T.C. and were not trained (Q = 1.0). The other partial term is less than the original relationship and significantly different from the former (W^2 = 4.82). For those who did not go to a C.T.C. a low strength of association is found (Q = .19). Thus, those trained and who go to a C.T.C. are significantly more likely to be recidivist than those not trained and those trained and who do not go to C.T.C.s. It was also determined that those who use their skill while at the C.T.C. are more likely to be recidivist than those who do not use their skill at the C.T.C. (Q = .60). It does not appear that the community treatment center benefits the vocational training program. Only 33.3 percent who have skill training apply that skill while at the center and even those who do apply skill training are more likely to recidivate.

The next variable introduced was length of time in the community since release. It was theoretically assumed that those with training would be more economically stable and less likely to recidivate. If recidivism did occur, it should be after a longer period in the community. The variable, length of time, was dichotomized at eight months. In the marginal terms the strength of the association between training and number of months is Q = .15, indicating that training is not related to number of months an inmate remains "successful." The other marginal relationship of Q = .83 indicates that those who do fail tend to do so within the first eight months after release.

In the partial relationships we find a strong and logical but not statistically significant difference. In the partial relationship of subjects who had been in the community less than eight months we found the strength of the association between training and recidivism to be

Q = .80. The other partial term is Q = .14, which is inverse and lower than the original relationship. This seems to suggest a conditional aspect of the variable concerning number of months in the community. As an entire group those who recidivate tend to fail within the first eight months, but those who are trained are more likely to do so in the first eight months as compared to those not trained. The data seem to indicate that vocational training does not aid the inmate in immediate adjustment after release, since persons who are trained are more likely to fail in the first eight months when compared to those not trained.

Since we have found that those trained are more likely to fail in the first eight months, we introduced another third variable to attempt to measure job stability. Earlier we noted no significant difference for number of jobs as a dependent variable and training as the independent variable. We are now using number of jobs to determine if this variable is in interaction with training and recidivism in the original relationship.

We find that both marginal relationships approximate zero. That is, there is no association between training and number of jobs held after release. Also, the other marginal relationship (Q = -.02) indicates no association between number of jobs held since release and recidivism. In the partial relationships we find that no significant difference exists between the two measures of association. The partials are quite similar to the original relationship between training and recividism. Number of jobs, by elaboration, is a replication variable and does not add new information.

Personality Factors

The Sixteen Factor Personality Questionnaire was given to the subjects at three different times. Personality scores were obtained on the trained subjects at time of incarceration (classification), at the completion of the training program, and after release and a period back into the community. For those trained we have three longitudinal scores to assess personality changes over time. If a significant F value was determined by one-way analysis of variance, we utilized the Tukey HDS Test of Significance to determine if the significant change occurs immediately after the vocational training program.

Two sets of personality scores were obtained for the subjects who did not participate in vocational training. This group did not obtain training and therefore did not have scores at the second temporal point. One-way analysis of variance was utilized to determine if those not trained had significant chances in factor scores from the time of incarceration to the time of the interview. Table XXII illustrates the arrangement of data.

TABLE XXII

TEST ADMINISTRATION

Subjects	Incarceration T 1	Vocational Training T 2	Return to Community T 3	Analysis
Trained	X	X	X	AOV
Not Trained	Y		Y	AOV
Analysis	Difference of Means		Difference of Means	

After the analysis of factor scores across time was measured, the two group means were compared by the Student's-t statistic to determine if there were significant differences on personality factors between groups at time of incarceration and after release for a period back in the community. This procedure was used rather than two-way analysis of variance since there were unequal cell sizes. If no significant difference between group scores was found at Time 1 but a significant difference was found at Time 3, we could suggest, if the changes were positive for those trained, that vocational training has an impact on personality adjustment of inmates.

In this research 16 different factors were analyzed as described above. No significant differences were found on any scores by analysis of variance or difference of means on Factors A, B, C, F, G, I, L, N, Q1, Q2, and Q3. Statistically significant differences were found on Factors E, H, M, O, and Q4.

On Factor E no significant F value was determined for either group by analysis of variance across the time intervals. The significant difference occurs on the mean scores both at Time 1 and Time 3. Factor E measures dominance and submissiveness. At both times the trained group had significantly higher means scores. It cannot be suggested that vocational training alters personality patterns since no change occurs across time. It can be said that at time of incarceration and at time of interview those trained were more dominant than those not trained. It is plausible to assume that those who are trained are more aggressive and therefore are more likely to find programs to benefit themselves, ease the period of incarceration, or aid in early release.

The next factor on which a statistically significant difference of scores appears is Factor H. Factor H indicates threctia and parmia. The low score indicates shyness, timidity, feelings of inferiority, and a sensitiveness to threat. Persons on the opposite pole are adventurous and socially bold. Utilizing one-way analysis, no significant difference appears across time intervals for either the trained or not trained sample. At the time of the interview no significant difference appears between mean scores. The significant difference on this factor occurs only at the time of incarceration with those persons trained scoring higher. The trained inmates seem to be more socially bold at the time of incarceration but not after release. The different mean scores at Time 1 is congruent with the significant difference found on Factor E at this time. Trained inmates appear to be more dominant and socially bold than non-trained inmates at time of incarceration. We do not find a significant difference on Factor H at the time of the interview, although one was found on Factor E. This may be explained, in part, by looking at the next important factor.

On Factor M a significant difference was found to exist across test scores for those trained. This occurs from Time 2 to Time 3. Factor M is suggested to measure praxernia and autia. The low scoring praxernic person is believed to be practical, conventional, concerned with immediate interests, guided by objective realities, and to have down-to-earth concerns. The higher scoring person tends to be unconventional, fanciful, and easily seduced from practical judgments. The data across time show the scores to become higher for those trained after vocational and then to decrease significantly after return to the community. No

significant difference is found when the mean scores are compared at Time 1 and Time 3.

This could account for the reason that Factor H shows no significant difference at Time 3. The trainees become more down-to-earth and practical, thus decreasing their likelihood to appear adventurous and socially bold. It could be suggested that vocational training leads inmates to an impractical confidence that is broken down upon return to the community. The change of mean scores indicates that after release the group as a whole tends to become more practical, conventional, and guided by objective realities. If, in fact, this is the case, the inmates may become frustrated upon return to the economic market place. This would perhaps account for a tendency for those trained to be slightly more likely to be recidivist, although there may be other factors involved as well.

On Factor O no significant difference is found to occur on personality scores by analysis of variance across the time intervals for the trained inmates or the inmates not trained. At the time of incarceration no significant difference occurs between means of the two samples. A statistically significant difference does occur between the mean scores when compared by the Student's-t at Time 3.

The profile of low scoring persons on Factor O indicates untroubled adequacy. The low score suggests an individual who is self-assured, placid, complacent. It may indicate persons who act out their maladjustments rather than suffer internal conflicts due to low ego strength. The high score indicates one who is apprehensive, self-reproaching, insecure, troubled, and guilt prone.

The data indicate that the trained inmates have consistent mean scores at each time the test was administered. The inmates who were not trained have higher scores at the time of incarceration than those trained, but the mean scores are not significantly higher. At the time of the interview the not-trained inmates' scores had increased enough to make the mean significantly different from the trained inmates' mean score.

At first glance the results on Factor O obtained in this research seems innocuous. But, in fact, the results on this factor imply a major finding in correctional research when considered with the other data. Cattell states:

> Research needs to consider the possibility that O has some state component, and is not a source trait (the stability coefficient in Table 5.2 is among the lower values). There are indications that a broken-down state occurs sporadically with this pattern as a reaction to situations of repeated failure, transgression, and inadequacy (italics mine) (Cattell et al., 1970:102).

In the opinion of this writer, when we fuse together the rhetoric of psychology and sociology we have operationalized Goffman's concept of the "total institution" and possibly Clemmer's concept of prisonization. Cattell suggests that Factor O

> . . . may be considered an emotionally deeper sense of general unworthiness, occasioning a more sensitive reaction to superego infringements (and perhaps other types of personal inadequacy and conflict too), though not a greater development and strength of the superego itself--which is a matter of C (Cattell et al., 1970:102).

Sociologically, the concept of self could be equated, albeit quite distinctly, with the psychoanalytical notion of superego. The self occurs through interaction with others to internalize identity. That is, self-hood arises through the dynamic process of interaction with others.

Cattell implicitly suggests that the personality pattern of Factor O may be a situational response to ongoing social interaction, i.e., transgression and inadequacy.

Goffman's concept of the "total institution" suggests that the role engulfment occurring in the prison environment leads to a "death" of the self. The prison is a "Procrustean Bed" for the self of the inmate. His attitudes, roles, values, and behavior are shaped by the institution. Previous conceptions of self are dispossessed by the retributive, custodial nature of the prison.

It is suggested by the data that persons who are incarcerated and do not participate in the vocational training program have no significant difference in mean scores on Factor O at the time of incarceration from those trained. After incarceration the mean scores of this group increase, becoming significantly different from the mean scores of those who participated in the vocational training program. The mean scores of those trained remains essentially the same across each period the test battery was administered.

If the equating of Factor O to the concept of mortification of self due to the total institution is not in error, quantitatively it is shown through Factor O that the vocational training program aids in decreasing the "pains of imprisonment." By allowing alternatives such as the vocational training program within the prison, the situationally determined transgressions of self are negated in part. This quantitative conclusion is supported by qualitative data obtained during the interviews and will be summarized after the next significant personality factor is presented.

On Factor Q4 we find a continuation of the pattern discussed in relation to Factor O. No significant difference appears statistically on Factor Q4 for the analysis of variance of those trained nor for either difference of mean at Time 1 or Time 3. By analysis of variance we find that the score obtained on Factor Q4 is significantly different for those not trained at Time 1 and Time 3.

Factor Q4 is concerned with ergic tension. A high score indicates one who is overwrought, frustrated, driven, and tense. The low score indicates a person who is relaxed, tranquil, composed, and lacking in frustration.

Those persons trained in the program have no significant changes on this factor, yet those not trained have higher and significant differences in mean scores from the time of incarceration to the time of interview. Those persons who participate in the vocational program do not become more tense, driven, and frustrated upon return to the community as do those who are not involved in the program.

If the sociological concept of self can be assumed in Factor O, it can be suggested that those who participate in vocational training are more relaxed, tranquil, and lacking in frustration because they had an alternative to the transgressions of self that those not trained did not have in the prison community. These data seem to be supported by the other findings and qualitative data summarized next.

Other Findings and Qualitative Data

We determined that 20 percent of those trained utilized their skill after finishing the vocational training program. One-fourth of the trained inmates took the program due to subtle coercion to "play the

game" and get out. Approximately one-third of those trained took the program to learn a trade and have something to do upon release. Twenty percent stated that they took the program to relieve boredom.

It was also discovered that approximately two-thirds of those trained attempted to find employment in the skill after release. One-fourth of the trained inmates returned to jobs after release that they had held before incarceration. The skill training program seems to give direction to many inmates upon release.

The inmate group suggested several reasons why they were not obtaining jobs in their skill. Twenty-four percent believed that the program training period should be lengthened so inmates could develop competence and confidence in the skill. Twenty percent believed that more instructors were needed. Five persons in auto mechanics stated they could not get jobs because they did not have the personal tools required by most employers. One of the major reasons for persons not being employed in their skill was purely economic. They would prefer to do factory or unskilled work which paid a higher salary, rather than work at apprentice-type positions with lower salaries.

One of the most important findings that occurred during the interview provides qualitative support for the results obtained in the personality section on Factors O and Q4. During the interviews seven trained releasees made specific comments about the differences they noted between the prison and the vocational training program's environment. These comments were not solicited by the researcher.

They pointed out that the prison guards are distinguishable in attitude from the vocational staff. They suggested that the prison "tears a person's morale down" whereas the vocational staff "builds you up."

Another inmate suggested that "going back across the fence hurt what was done during the day" at the training facility.

In the opinion of this writer the majority of trained releasees had a high regard for the vocational program. Ninety percent believed the equipment was good, 97 percent thought they had adequate materials to practice, and all of those trained thought the instructors were knowledgeable. One-half of the trained subjects sought out the counselor outside of regular hours and 82 percent of these persons stated that the counselor had helped them. Sixty-seven percent liked the counselor and 74 percent thought that the guidance programs were worthwhile. The inmates evaluated the program quite highly.

When this information is viewed in regard to the other data, it appears that the vocational training program has some positive impact on the inmates. The environment of the program seems to offer inmates alternatives to regimentation and self-dispossession of the prison. This conclusion is supported by both qualitative statements of the releasees and the quantitative results on the personality data of Factors O and Q4.

Conclusions

It is difficult to sort out all of the data obtained in this research and come to a single conclusion regarding the impact of vocational training on inmates after release. Vocational training does not make a significant difference on salary of first job, employment stability (in terms of number of jobs), or recidivism as compared to inmates who do not participate in training. In terms of training and recidivism it appears that the most youthful offenders, black persons, those with a

history of previous probation or parole, and inmates who do not go to community pre-release centers are more "successful" than those not trained and benefit the most from the program.

On the opposing side, we find that those persons who recidivate are most likely to do so in the first eight months after release. It was found that those trained were more likely to recidivate in the first eight months than those not trained. Vocational training does not seem to provide the immediate foundation needed for successful reintegration of the inmate. In relation to this conclusion we found on Factor M of the personality battery that after vocational training inmates' scores increased somewhat and then decreased significantly upon return to the community. It was suggested that vocational training has a tendency to remove objective realities, allows persons to be fanciful, and seduced from practical judgment. When confronted with return to the community, the trained inmates become significantly more concerned with immediate interests, more conventional, and more alert to practical needs. It was suggested that this may account for the slight tendency ($Q = .30$) of those trained to be recidivist. The difference, though, is not significant.

On Factor Q4 it was determined that persons trained were significantly less tense, more tranquil, and less frustrated upon return to the community than those not trained. The results on Factor O suggest that trained inmates do not move to a "broken-down state" due to a reaction to situations of repeated failures, transgression, and inadequacy as do those who do not participate in the vocational training program.

It is the conclusion of this author that the Factor O indicates superego infringement and is concomitant with Goffman's conceptualization

of total institutions and mortification of self. If this is a true indicator, both quantitative and qualitative data suggest that vocational training has a most positive impact by negating prison determinism of the self. Vocational training allows persons to maintain positive conceptions of identity and alternative roles which those who do not participate cannot maintain within the total institution.

Furthermore, the vocational training program seems to give direction to inmates upon release by providing a skill in which they can move towards utilizing in the job search. This research does not adequately answer whether aspirations are increased by vocational training and then destroyed when confronted with the communities' economic market place.

This research indicates that 20 percent of those trained make use of their skill in employment after release. It was also determined that 65 percent attempt to find jobs in their skill after release, but at the beginning of the program only 32 percent intended to use the skill after release. Only three persons received any help from job counselors to find employment. Two questions arise which this author cannot answer. Is 20 percent usage of skill a good indicator of success of the vocational training program or is 80 percent failure to use skill an indicator of poor success of the training program? Is it advantageous to motivate a large number of persons' aspirations only to have them confronted with a reality which does not allow them to fulfill the aspirations?

It is the conclusion of this researcher that the data obtained give no indication that vocational training has a negative impact on inmates. The positive benefits appear to be numerous. It is the suggestion of the author that the vocational training program should move towards a

better classification procedure so that inmates most likely to benefit from the program are admitted. This, of course, requires a continued commitment to research to indicate who is benefitting the most.

Second, vocational training should not be coercive, either overtly or covertly. This would eliminate persons from the program who are merely putting on a pseudo-face for the parole board. Those who have a desire to learn a trade would benefit most from the program and more space would be available for those who wanted to learn, since those who do not really desire the training are not coerced and would not apply.

Community work release programs do not seem to benefit the trained inmates' reintegration to society. It would appear that the vocational training program needs to design its own methods to reintegrate trainees. The program needs to expand community liaison programs and bring potential employers to the facility. Follow-up and placement appear to be non-existent. Possibly, the Department of Vocational Training could use volunteer groups and begin designing a procedure and position to aid in employment placement. Why does it appear that only three persons receive any benefit from ancillary areas to place these trained persons in jobs? Why are probation officers not referring these persons to VISTA, CETA, or the Council for Resocialization of Ex-Offenders? It would seem that the correctional staff are not aiding the training program. The philosophical idea of vocational training is called into question by the data presented here, but the data are inconclusive. It would seem plausible that if more trained inmates were using their skills different results would have been obtained. The first problem to be corrected is that of placement. Only then can comparisons be made between those receiving

skill training as a rehabilitative measure versus those who are not receiving "rehabilitation."

Limitations of Research

There are several limitations and criticisms involved in this research. First of all, this research has a small sample size which limits its ability to generalize to the population considered. It is also believed that a larger sample size would have led to more statistically significant results, especially in the elaboration of third variables related to training and recidivism.

Next, this researcher questions how representative the sample is of the population considered. It is quite possible that those subjects who could be found and interviewed are more stable or in some way, distinguishable, from those who were unable to be contacted. Also, the research was concerned only with those released on parole. If those who had served their time and been released without supervision had been interviewed, it is plausible to believe different results would have been obtained.

Finally, the results may not be applicable to other geographical areas of larger populations. Almost one-half of those interviewed were located in towns in Oklahoma of less than 25,000 people. The results obtained here may not be reflective of vocational training success in the megalopolis.

Recommendations for Further Research

First, there appears to be a paucity of follow-up research in evaluating vocational training programs where actual trade skills are taught.

Therefore, almost any research of this type would be valuable. We need to know more about the characteristics of successfully trained persons for purposes of classification and selection into the program. Who benefits most from vocational training?

Second, further research should be concerned not only with recidivism as a criteria for success, but with other variables as well. This research used salary, number of jobs after release, and personality changes as variables for considering post-release success. Possibly, other variables could be used, such as family stability, economic benefits, or length of time before recidivism.

This research does not consider the affect of being stigmatized as an ex-con. It is plausible that positive aspects of vocational training are being negated in the community due to employers' unwillingness to hire former inmates. One possible line of inquiry would be to measure and compare salary, employment stability, and skill usage of persons who attend similar vocational programs but who are not inmates with prison training. If those trained outside of prison are more successful in employment than those trained inside the prison, assuming other variables equal, it could be suggested that the prison vocational training has the same effectiveness but the label of ex-con negates success.

Finally, it is the belief of this writer that Factor O of the Sixteen Factor Personality Questionnaire is an indicator of the concept of "total institutions." Further research is needed to determine if this is an accurate conclusion. If so, research of various treatment situations could assess the impact the strategy has on the subject. For example, pre-release programs are theoretically supposed to ease the inmates' transition from the total institution of prison to the

community. The work-release program gives the inmate the opportunity to work, account for money earned, buy and wash his own clothes, account for leisure time, etc. In essence, the person is allowed to be more himself, to develop identity, and self-hood. Research could incorporate Factor O and longitudinally measure whether the broken-down state of self-adequacy is enhanced by pre-release programs.

Treatment programs cannot ride the rhetoric of theory without evaluation. The impact of treatment must be continually assessed. Social scientists must ask the question, how effective is the program? Treatment without a grounded foundation reeks of social irresponsibility. Although plagued with methodological problems, research evaluation of rehabilitative strategies should continue to assess the impact that strategy has on those it is intended to serve.

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APPENDIX A

LETTER OF INTRODUCTION

VOTECH
OKLAHOMA STATE DEPARTMENT OF VOCATIONAL AND TECHNICAL EDUCATION
FRANCIS TUTTLE, DIRECTOR • 1515 WEST SIXTH AVE., • STILLWATER, OKLAHOMA 74074 • A.C. (405) 377-2000

Hal Boyle
Department of Sociology
Oklahoma State University
Stillwater, Oklahoma 74074

Dear Sir,

This letter is to introduce you to Mr. Hal Boyle. Mr. Boyle has been working closely with Mr. Ward and Mr. Jacobs at the vo-tech school at Lexington. He is currently teaching at Oklahoma State University and finishing research work for his doctorate.

Mr. Boyle has been contracted to evaluate the Vocational Education program at Lexington. He is employed by the Department of Vocational and Technical Education and is receiving cooperation from the Department of Corrections in attempting research to improve vocational training.

In order for this research to be successful, persons released from Lexington are being asked to help by allowing themselves to be interviewed. We, the undersigned inmates at Lexington, have gone through, with Hal, the questions to be asked and believe them to be fair to the inmate and important to the success and continued growth of vo-tech schools for inmates throughout the state.

Hal will be calling you within the next few weeks to set up a time he can visit with you about your experiences from Lexington. All information given in this research will be strictly confidential. Your name will never be used nor in any way connected with the research findings.

Thank you for your cooperation.

Sincerely,

Floyd R. Jacobs

George Bryant
Lester Brandon
Robert E. Sheffield
Clyde E. Wright
Donald Lloyd Springer
Jerry Dean Austin
Bobby D. Bowles

APPENDIX B

INTERVIEW GUIDE

(1) Are you working now?

(2) What do you do?

(3) Who is your employer?

(4) How many hours a week do you work?

(5) Do you mind my asking, how much do you earn now?

(6) Are you satisfied at your present job?

(7) Is this the only job you have had since your release?

(8) If not, how many jobs have you had since your release?

(9) What did you do (kind of employment) for each of these jobs?

- (a) How much did you earn on each job?
- (b) How many hours per week on each job?
- (c) Why did you leave each job?

(10) How did you get your present job?

(11) How did you get your first job after release?

(12) When you first were released, did you go to a community treatment center for a work-release program?

(a) What type of employment were you involved in at this time?

(13) What did you do before you were arrested?

(a) How long did you work there?

(b) How much did you earn?

(14) What type of training (if any) did you receive in prison?

(15) If you could have any job you like, what would you like to do the most?

(1) How long have you been (or were you) out of prison?

(2) What was your length of sentence?

(3) How much time did you spend in prison?

(4) What was your age at the time of trial?

(5) Have you previously been on parole or probation?

(6) In what town are you currently living?

(7) What town were you living in prior to going to prison?

(8) With whom are you currently living?

(9) What activities do you enjoy?

(10) How many hours a week are you currently involved in these activities?

(11) Do you take part in these activities with family or friends?

(12) Do you belong to any clubs or groups? Which ones?

(13) Are you married, common law, separated, divorced, single?

(14) Do you have any children? Yes or No?

(15) Do you think your imprisonment affects your being able to get a job? Why?

(16) What was your last year of school that you completed?

(17) What types of other vocational training have you had?

(1) When you first became aware of vocational training possibilities, what were your impressions?

(2) How did you learn of the vocational training program?

(3) Why did you take vocational training at Lexington?

(4) What do you think could have been done to make what you did in training more successful?

(5) Since your release have you tried to get a job in the skill for which you were trained?

(a) Did you get the job?

(b) Why?

(6) Did a job counselor help you after release?

(7) What did you think of the equipment for vocational training at Lexington?

(8) Did you have plenty of materials to get practical experience in your skill?

(9) What was your impression of the building for vocational training?

(10) How many subjects were taught at Lexington? Did one suit your interests? Would you have preferred some other area of training?

(11) Did you think the assistance given by the instructors to develop good work habits was adequate?

(12) What was your impression of the instructor's knowledge of his skill area?

(13) What do you think of the staff's ability to develop positive attitudes?

(14) Did you do any prison work? What?

(15) Was this something new to you?

(16) Did you receive any assistance regarding the proper way to obtain a job and meet employers?

(17) Overall, what is your opinion of the training given?

(18) At the time of training, did you plan to work in the vocation in which you were being trained?

(19) Did you ever seek out the counselor at the training center? Did he help?

(20) What was your opinion of the Guidance periods? Were they helpful?

(21) What was your instructor's name?

(22) What further suggestions would benefit the vocational training at Lexington?

APPENDIX C

DESCRIPTION OF FACTORS OF 16 PF

Factor	Low Score Description	High Score Description
A	Reserved, detached, critical, aloof stiff Sizothymia	Outgoing, warmhearted, easygoing, participating Affectothymia
B	Dull Low intelligence (Crystallized, power measure)	Bright High intelligence (Crystallized, power measure)
C	Affected by feelings, emotionally less stable, easily upset, changeable Lower ego strength	Emotionally stable, mature, faces reality, calm Higher ego strength
E	Humble, mild, easily led, docile, accommodating Submissiveness	Assertive, aggressive, competitive, stubborn Dominance
F	Sober, taciturn, serious Desurgency	Happy-go-lucky, enthusiastic Surgency
G	Expedient, disregards rules Weaker superego strength	Conscientious, persistent, moralistic, staid Stronger superego strength
H	Shy, timid, threat-sensitive Threctia	Venturesome, uninhibited, socially bold Parmia
I	Tough-minded, self-reliant realistic Harria	Tender-minded, sensitive, clinging, overprotected Premsia

Factor	Low Score Description	High Score Description
L	Trusting, accepting conditions Alaxia	Suspicious, hard to fool Protension
M	Practical, "down-to-earth" concerns Praxernia	Imaginative, bohemian, absent-minded Autia
N	Forthright, unpretentious, genuine but socially clumsy Artlessness	Astute, polished, socially aware Shrewdness
O	Self-assured, placid, secure, complacent, serene Untroubled adequacy	Apprehensive, self-reproaching, insecure, worrying, troubled Guilt proneness
Q_1	Conservative, respecting traditional ideas Conservativism of temperament	Experimenting, liberal, free-thinking Radicalism
Q_2	Group dependent, a "joiner" and sound follower Group adherence	Self-sufficient, resourceful, prefers own decisions Self-sufficiency
Q_3	Undisciplined self-conflict, lax, follows own urges, careless of social rules Low self-sentiment integration	Controlled, exacting will power, socially precise, compulsive, following self-image High strength of self-sentiment
Q_4	Relaxed, tranquil, torpid, unfrustrated, composed Low ergic tension	Tense, frustrated, driven, overwrought High ergic tension

Source: R. B. Cattell, H. W. Eber, and M. M. Tatsuoka, Handbook for the Sixteen Personality Factor Questionnaire (16 PF) (1970).

VITA

Hal Boyle

Candidate for the Degree of

Doctor of Philosophy

Thesis: A FOLLOW-UP EVALUATION OF THE EFFECTIVENESS OF A MEDIUM SECURITY STATE PRISON'S VOCATIONAL TRAINING PROGRAM ON PAROLEES

Major Field: Sociology

Biographical:

Personal Data: Born in Perryton, Texas, November 24, 1949, the son of Donald and Eunice Boyle.

Education: Graduated from Wichita High School East, Wichita, Kansas, in May, 1967; received the Bachelor of Arts degree in Liberal Arts from Wichita State University, Wichita, Kansas, in May, 1972; received the Master of Arts degree in Sociology from Wichita State University, Wichita, Kansas, in August, 1974; completed requirements for the Doctor of Philosophy degree at Oklahoma State University, Stillwater, Oklahoma, in December, 1978.

Professional Experience: Graduate Associate, Oklahoma State University, September, 1974, to May, 1977; Instructor, Pan American University, January, 1978, to July, 1978.