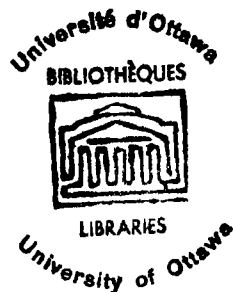


THE AFFECT OF JOB CHOICE ATTAINMENT AND
NON-ATTAINMENT ON THE BEHAVIOUR RATINGS
OF INMATES IN A CORRECTIONAL INSTITUTION

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CHAPTER I

INTRODUCTION

It has only been in relatively recent times as the philosophy of treatment for offenders developed, that non-punitive work has become considered part of a penitentiary training program. As Edwards (7) has pointed out, one assumption upon which this is based is that non-punitive labor will condition habits of industriousness in inmates so that upon release they would work at socially acceptable occupations and stay away from crime. This idea is not very much different from the notion that punishment or punitive labor will act as a negative conditioner and deter individuals from returning to crime.

Another conception concerning prison work is that prison labor offers the inmate occupational skills so that upon release he will be able to find employment, support his family and not find it necessary to return to crime for the source of his livelihood. It can readily be seen that both assumptions are based on the idea that what leads a man to crime is economic need and poor work habits rather than personality factors or social attitudes.

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Jones (11) is of the opinion that work will prevent and reduce delinquency since a vocation covers all the spheres and aspects of human life. According to him, work is one experience which is oriented towards reality.

A further assumption on the treatment value of prison work is pointed out by Sutherland and Cressey (13). Whereas an inmate may acquire various useful technical skills, it is not the acquisition of these skills per se which aid in resocialization. Rather, these skills contribute to his moral and psychological betterment and afford him increased social mobility so that he rises from the ranks of the unemployed or unskilled labourer to the status of a skilled craftsman or technician. As a consequence, he may change his social situation and associations which led to his criminal behaviour, and finally his attitude to criminality may change as well. A further benefit is that being occupied, the inmate will not only be idly 'doing time' and will be in a better psychological frame of mind upon discharge.

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The Canadian Corrections Association Committee (1) Report to the Solicitor General of Canada pointed out that graduates of prison training courses, a normal adult re-training course, and workers in general, show a high rate of occupational mobility, especially among the young. Evaluations of such programs by employers emphasize the importance of the motivational and personal characteristics that these men possessed after the training programmes. With inmates however, some of this occupational mobility may be a function of their instability.

Little (12) describes the positive aspects of the English Borstal System such as the indeterminate sentences, the periodic evaluations of each inmate, the psychological evaluations, and the programme of after-care. He points out however, that emphasis is not mainly on therapy as such, but rather on the training of an individual to produce a hard, and sometimes monotonous day's work. His study for the year 1954 shows that 42.7% of ex-Borstal inmates did not recidivate as compared to 40.5% of inmates from other correctional systems. Fox (8) is of the opinion that trades

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training in the English Borstals at Wakefield and Meadstone that he studied, were not based on vocational guidance. He mentions that inmates were not even consulted or asked for their choice before placed in the work situation.

Glaser (9) interviewed one hundred and forty men, 4 months after discharge from federal prisons in 4 major U.S. cities. Of 114 who had obtained employment, 33 reported having jobs which were related in some way to experience obtained in prison. Under another classification, the 114 men had held 184 different positions and of these, 47 jobs were related to prison experience. Among the 47, 24 were considered by the ex-inmates to be related to unskilled prison work and the remaining 8 jobs were related to white collar, clerical positions they had had in prison. However, of the total of 47, 25 were reported to have been jobs in which they had experience prior to being given the position in prison. Glaser thus concluded that:

In about one-tenth of inmate post-release jobs there are benefits from new learning acquired in prison work; in about three

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or four percent of these jobs there are benefits from the preservation of old skills through practise in prison; and in about five or six percent of the post release jobs the prison provided useful physical or psychological conditioning.¹

Relatively speaking, there have been great improvements in the treatment, training and recreational activities that take place in an average Canadian penitentiary today.

Some institutions have become specialized in the type of treatment and training they offer and in addition the professional qualifications of the staff have greatly improved. Yet it appears that the same men still return to prison. Statistics of 1967 (4) show that 82% of federal inmates have 'served time' before, of which 62% have already been in a penitentiary. Glaser's findings that the rate of recidivism is 33 - 40% among all inmates, is probably underestimated for the Dominion Bureau of Statistics (5) reported that of 575 parolees released in 1963, after five years 45.4% had recidivated.

1. Glaser, 1964, p. 252.

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An identical study of 623 parolees released in 1964 (6), showed that after five years, 46.7% had relapsed. A ten year study by Ciale and Inbar (3) of 246 inmates released from a medium security institution in the Quebec region, showed that after ten years, seventy percent will be reconvicted. Of these, 23% will return to prison, 37% to penitentiary, and 10% will be dealt with by probation and fines. The average number of subsequent court appearances was 3.38.

Glaser's findings appear somewhat charitable when compared to the Canadian studies. It is necessary to bear in mind however, that his follow-up period was only of two years duration. His criteria for recidivism was whether an inmate was returned to prison, convicted of a felony or wanted within two years of release for a felony. Misdemeanours were overlooked as were the consequent sanctions of probation, suspended sentences or fines. Taking into account also the different judicial and social factors may further help to explain the differences between his rates of recidivism and those found in Canada.

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How can we therefore attempt to improve these results? Individualized vocational training more attuned to the needs and interests of each inmate seems one likely avenue to be explored. Glaser found that while 31% of the subjects who failed within two years of release, were completely unemployed during the first three months after release, only 13% of the successes were completely unemployed during an equal length of time. On the other hand, we should bear in mind, that unemployment may not be a cause but rather a symptom of recidivism.

From another point of view, in a sample of two hundred and fifty post release successes gathered together by Glaser, 131 reported that they had actually given up on a life of crime during their latest prison term. Sixty-five credited a staff member as being influential in their change of attitude. Of these men, thirty-five that is 44%, credited a work supervisor while one other subject mentioned a vocational instructor. It appears that the work supervisor's influence arose from the personal relationship established

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with each inmate through close contact in work situations. Only 10% of the men mentioned the contribution as being either associated with the teaching of skills or vocational in some way.

The Canadian Correction Association Committee Report (1) stressed the importance of motivating inmates towards work. Employing Herzberg's theory (10) they suggest that motivation should be sought through emphasis upon individual growth factors, rather than on the lessening of 'dissatisfiers'. It should be pointed out that Herzberg's Two Factor Theory posits two classes of variables. Motivators or growth factors known as the 'satisfiers', include the job content, recognition, responsibility, achievement, and potential for growth and advancement. The hygiene factors known as the 'dissatisfiers' include such diverse variables as more pleasant working conditions, easier work, lesser hours of work and so on. In order for a individual to really be 'satisfied' with his job, most of the growth factors must be present. The presence of better working conditions however, will only decrease dissatisfaction

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but will not cause the individual to be 'satisfied' with his job.

The Confreres (2), a group of former inmates from Toronto, in their recommendation to the Canadian Corrections Association Committee state that "assignments are often made on the assumption that a worker is needed in a certain position". They recommend that "A greater assurance of inmate placement in training situations of his choice should be encouraged". If we incorporate Herzberg's theory for a moment, we note that the lack of responsibility and recognition, and the non-choosing of the job content itself will eliminate 3/5 of the 'satisfiers'.

With this latter recommendation in mind, we shall attempt to reveal the extent to which the inmates' subsequent on the job behaviour is related to his choice of a training position. In effect, what we wish to know is whether the fact that an inmate has his choice accepted or rejected has any bearing on his behaviour during his stay on that placement. Indirectly, we may throw some light on the question of whether inmates are

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made for institutions or whether institutions are established for inmates. If the latter is the primary goal of the Canadian Penitentiary Service, as it well should be, then what we should strive for is to satisfy the occupational needs and interests of the inmates. In other words, the institutional manpower needs should be most incidental to the inmate's choice of occupational or academic placement.

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CHAPTER II

THE PROBLEM OF VOCATIONAL CHOICE

The literature on vocational choice is widely dispersed however an attempt shall be made to discuss whatever work has been done in this area. A discussion will take place on the psychological and sociological determinants of vocational choice. This will be followed by an examination of post-decisional processes which form the bases of this thesis.

1. Psychological Determinants of Vocational Choice.

Ginzberg and his associates (16) made an early attempt to formulate a theory of occupational choice. They began by examining ninety-one students between the ages of 11 and 24, in a highly structured one hour interview. These students were interviewed at each of eight periods in the educational process, commencing with the sixth grade until advanced graduate study.

According to this theory, occupational choice is a developmental process taking place over a period of about ten years, and spans three 'periods' of choosing -

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the 'fantasy', 'tentative', and 'realistic' periods. The process is largely irreversible and ends in a compromise between the individual's capacities, opportunities, interests, and values. Ginzberg's main contribution lies in the fact that he postulates the successive dominance of interests, capacities, and values as determinants of choice even before reality begins to play a major role. Further, he may be credited with organizing work done previous to his into some semblance of a theory.

The occupational choice framework presented by Blau and his associates (2) is almost identical to Ginzberg's theory. Occupational choice is also seen as a compromise process wherein certain choices made during one's lifetime, influence the range of future possibilities.

In both theories there is no mention of the influence of the chooser's reference group nor any consideration of role theory. The psychological conditions which concern the nature, development, and prediction of interests is generally ignored. Defining choice as a 'preference' is open to question as it may

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for instance, have greatly different meanings for the teenager and the college senior. Vroom (47) carefully distinguished between choice and preference. He suggested that their points of difference lie in the fact that a 'preference' becomes a 'choice' when the chooser believes he has a realistic chance of obtaining the chosen occupation, and has taken some steps towards obtaining it.

Finally, Ginzberg and Blau failed to present a description of the decision-making process. While they conclude that it is a matter of compromise between interests, capacities, values, and opportunities, the process of compromise was not studied. It is probably not until Festinger (12) that this is adequately analysed.

Super (43) presents a more comprehensive formulation, pointing out that many factors must be considered as determinants of occupational behaviour. He did not however, offer an adequate organization of these factors. His theory consists of a series of ten propositions, the most relevant of which are paraphrased

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as follows:

- i) People differ in abilities, interests, and personalities.
- ii) Each occupation requires a certain pattern of characteristics but with enough latitude to each individual to allow for a variety of occupations and to each occupation a variety of individuals.
- iii) The environment that people live in changes with time and so does the self-concept, thus making choice and adjustment a continuous process.
- iv) The career pattern is determined by the parental socio-economic level, intelligence, personal characteristics, and opportunity.
- v) Vocational development is a compromise process leading to the self-concept as a product of the interaction of inherited characteristics and opportunities for role playing within certain approved limits.

While Super's theory is a great contribution as it encompasses a wider area, he too gave little emphasis to the decision-making process. In addition the only

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reference group situation referred to that might determine the career pattern, is the socio-economic level of the parents. Finally, occupational opportunity as a factor in vocational development is not given the emphasis and consideration it deserves.

It appears that the earliest authors to deal with the subject of occupational interests were Carter and Bordin. Carter (9) saw vocational attitudes developing in an attempt to make the practical adjustments to the conditions of the environment. The avenues open to the individual are limited by the realities of his family and social class, his own abilities, needs and motives. Eventually, he will identify with a reference group which will then lead to an interest in a particular vocation. Bordin (4) claimed that an individual sees himself in terms of an occupational stereotype which then determines his vocational goals and aspirations.

An intensive clinical study of adolescents at a vocational advisory service was performed by Small (40). He was mainly interested in comparing vocational choices made by adjusted and disturbed adolescent boys. The

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adjusted group came from normal schools while the disturbed boys came from psychiatric hospitals and clinics. Matching was done on age, religion, race, and economic status. Education and intelligence were not controlled. The average I.Q. of the disturbed boys was 102.2 while the adjusted group had a mean of 112.1. His technique consisted of an analysis of the reality and fantasy content of their choices.

Small found that adjusted boys were more realistic in their first vocational choices than disturbed boys but, the second vocational choice of adjusted boys was less realistic while the second choice of disturbed boys became more realistic. The vocational choices of the adjusted group comprised fantasies which emphasized involvement with the environment whereas the fantasies of the disturbed boys emphasized removal from the environment, self-depreciation, and impulses of acting-out.

This study showed that reality and fantasy in vocational choices operate simultaneously at all ages and thus opposes Ginzberg's contention that realism increases throughout maturation. Small feels that the

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ego strength must be taken into account and held constant before the relative importance of other factors can be accounted for.

Davis' (10) study using twelve year old school subjects, found that the choices of girls and subjects with average or higher I.Q.'s were relatively more realistic than those of boys and subjects with below average I.Q.'s. This was not related to the socio-economic area in which the schools were located.

Holland (22) has worked out a fairly encompassing typological theory of vocational choice. Briefly, a 'type' is a product of the interaction between a particular hereditary makeup and the environmental influences a person is subjected to. Holland stated that "people search for environments and vocations that will permit them to exercise their skills and abilities, to express their attitudes and values, to take on agreeable problems and roles, and to avoid disagreeable ones".¹ According to him, "a person's behaviour can be explained by the interaction of his personality pattern and his environment".¹

1. Holland, 1966, p. 11-12.

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Thus by knowing the personality type and the environmental pattern, we can in principle predict the outcomes of this combination as for example, his choice of training and vocation as well as his level of achievement, creativity, stability, sensitivity, and occupational mobility.

His theory has been tested on a large national sample of high school students, but these students were of superior academic aptitude and thus did not represent a normally diverse population. While studies of more 'average' college students still seem to support the data, the relevancy of the theory to the larger non-college population remains questionable. Further, Holland did not seem to appreciate the variability of the environmental and individual traits and their ability to be changed by the latter. Thus for instance, where an individual does not find a job suitable, he may not change jobs but may rather change the definition of his job. What is also lacking is an explanation of how individuals develop a type of orientation and why they look for an environment in which they can express their major personality orientation. There may be some suggestion of causal

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factors in the data concerning familial characteristics but few solid inferences can be drawn. In Holland's favor, we must state that the theory is comprehensive, covering all aspects of the individual's life style, some aspects are easily testable, and the nature of the theory at least makes it heuristic. For instance, studies can be done to test the lastingness (enduringness) of the personality orientations in later life.

Forer (14) saw the choice of an occupation as being impulsive and emotional rather than rational or logical and not necessarily subject to practical and reasonable considerations. "Interests and preferences have unconscious roots", and thus the individual is not really aware of the primary reasons for his choosing a specific occupation although he may rationalize about economic advantage.

Anne Roe's (36) theory of career choice postulates that every individual inherits the tendency to expend his energies in a particular manner. This tendency when combined with childhood experiences shapes the style the individual utilizes in satisfying his life's needs. Her

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theory is based to some extent on Maslow's (29) 'Need Theory'.

Roe describes several child-rearing techniques which she labels as the 'overprotecting', the 'neglecting', or 'rejecting', and the 'accepting' parents. She then developed a scheme which illustrates the relationship between the various parental practices, the eventual behaviour patterns in general and the particular vocational selection. The schema is based in terms of the degree to which an individual is, or is not oriented towards people. Thus for instance, people in service occupations probably come from a loving, overprotected environment as they are oriented towards people. On the other hand, scientists tend to be non-oriented towards people and originate from a relatively colder, rejecting, and avoiding home atmosphere.

Finally, she hypothesizes that while the home atmosphere will influence the type of vocation that is to be chosen, the occupational level the individual attains is influenced and limited by his genetic structure and the involuntary pattern of expenditure of psychic energy.

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After testing her theory, Switzer (45) concluded that only the interaction of the differences between the attitudes of both parents was predictive of occupational choice. Somewhat similarly, the research of Green and Parker (18) also lent partial support to the 'person' - 'non-person' aspect of Roe's theory. Boys were found to gravitate towards 'person' occupations when the relationship with either parent was perceived as warm, protecting, and rewarding.

Roe and Siegelman (37) performed a further study based on her original theory. They incorporated Green and Parker's dependent variable of recalled family atmosphere for both their male social workers and female engineers. They found that the influence of one parent may cancel out the effect of the other parent and further the interactions between parents and child is not constant. They conclude that 'person' - 'non-person' orientations will be only remotely related to vocational choice. Other variables such as socio-economic background, abilities, education, demands of the labor market and even pure chance may also have a great affect on the individual's

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vocational choice.

Much criticism can be laid to their research from a methodological point of view. The samples were small and contained very specific occupational groups which lead to highly questionable generalizations. Basing data on retrospection during interviews and questionnaires may not be very valid at all. Some of the studies did not use occupational attainment as a dependent variable, but rather the preferences of students which by themselves lack fact or finality. From the theoretical point of view, their study lacks in not dealing with the problem of parental inconsistencies in child rearing and its affect upon development and eventual occupational choice.

On the subject of an individual choosing a vocation in order to satisfy the needs of his specific personality, Mervin and DiVesta (30) found that their 'non-teaching' group had greater needs for achievement, dominance, and exhibition than the 'teaching' group. The teachers, on the other hand, projected a greater need for affiliation and perceived a teaching career to be more beneficial to the satisfaction of the four measured needs than did the

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other group.

2. Sociological Determinants.

Hollingshead's (23) study on Elmtown's Youth showed that the vocational choice pattern roughly corresponded with the actual job pattern of each class in the working world. He concludes that the youth's impressions of desirable jobs are reflections of their familial and cultural experiences. It would thus appear that lower class offspring have adjusted their aspirations downwards and have limited themselves within the class structure. Lipset and Bendix (28) suggested that boys from the lower social classes have another disadvantage in that they will know relatively less about the labour market.

Miller and Form (31) contend that rational occupational choosing is rare and that in most cases, "the accident of birth" will establish family and social class, race, nationality, and in turn educational and cultural opportunity. Carp's (8) results found that the greatest number of students chose and expected to obtain the occupation of their father and grandfather.

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While Caplow (7) also believed that error and accident play a large part in occupational choice, he discussed several selective factors as well. He stated that parents influence the occupations of their children by the direct inheritance of the father's occupation as for example, "all farmers come from farmers' sons". There is no systematic presentation of the extent to which this occurs in other vocations.

The impact of family on occupational choice can also be noted in a study of 350 university students performed by Dynes (11) from an interesting perspective. The results supported the hypothesis that high aspirational levels correlate with unsatisfactory interpersonal relationships in the family of orientation. However, Dynes did advise against wide generalizations because the subjects all came from an homogeneous, urban, Mid West, Protestant, middle class population and this may have restricted applicability.

Sewell's research (38) of more than 4000 high school seniors found that males and females from high social status families projected higher educational aspirations than those from low status families. Males also aspired

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to higher occupational roles, but there was no significant difference in occupational aspirations between females of high and low status families. It is concluded that individual aspirations are directed and bound by the impact of structural elements in the social organization when the effects of intelligence are controlled.

Stephenson (41) found that whereas most respondents reported high prestige occupations as their first choice, their expectations were more in line with reality. Through experience people come to realize that they should not expect too much. He warns that frustration and anomie will result if the disparity between aspirations and expectations becomes too great. Grunes (19) further pointed out that the wide gap between aspirations and expectations is more often found among boys than girls, and also among lower status groups.

After a study of 683 adolescents in grades nine to twelve, Pine (34) concludes that delinquent behavior correlates significantly with their low educational aspirations. He feels that the aspirations, aptitudes

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and educational plans of the young are dynamic factors in the development of their delinquent behavior. Morton (32) in his study of Children's Village, a residential treatment center in Westchester, New York, mentions the delinquents' lack of motivation, their lack of high aspirations and expectations, and their fear of failure.

A study by Fredericks and Molnar (15) examined the levels of occupational aspirations and anticipations of a group of seventeen year old delinquent and non-delinquent boys, in relation to their father's occupations. The two groups were controlled in respect to age, sex, race, and social class. The research measuring tool was a complex questionnaire.

Almost 75% of the non-delinquents anticipated higher occupations than those of their fathers but, only about 25% of the delinquents had the same expectations. In addition, about half of the delinquents expected to remain at their father's level, while almost one quarter expected to attain even lower occupational levels.

In contrast to white delinquents, the negro delinquents hoped to obtain occupations above the level of their fathers',

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but not significantly higher. On the other hand, both negro and white non-delinquents expected to attain occupations above their father's level.

While almost all non-delinquent aspired to higher occupational levels than those of their fathers', 36.1% of the delinquents did not so aspire. Finally, negro boys were the most motivated to rise above the occupational levels of their fathers' but, the lower class negroes reflected the least degree of confidence.

Wiener (50) in an article describing a programme for delinquents on probation, mentions that young delinquents do have much interest in the working world but are not aware of the requirements of work. Because they do not know their capacities, their occupational aspirations tend to be fantasy oriented. According to him, a vocational guidance programme should be directed to the needs and interests of the subjects. Its goal should be to help them upgrade their education and ameliorate their self-image. In his particular study, the subjects were thirteen to sixteen year old delinquents who had committed thefts, car thefts, and armed robberies. At the end of

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the six month programme, all were back attending school regularly.

Valentine (46), Hurlock and Jansing (24), Korner (25), Reynolds (35), Bluestone (3), and Slocum (39), in their respective studies of technical and manual workers, found that initial occupational choices appeared to be uninformed, inappropriate, and unrewarding. Workers were found to take the first available job that met their minimal criteria. Occupational information was usually obtained informally from friends or relatives, or by direct contact at places of work. Under optimal conditions information available for rational choosing was found to be insufficient, and thus during periods of unemployment rationality was even further reduced.

Levin (26) pointed out that inappropriate goals are likely to be chosen when anxiety over social status is a major determinant.

Beilin's (1) findings were in basic disagreement. In this study, it was concluded that reality factors were the most important determinants of choice for both college and non-college groups. It was felt that members of lower classes are aware of the many hardships involved in social

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and occupational mobility and thus quite rationally choose those vocations that are easier to attain. An early study by Stubbins (42) indicated that occupational choices become more realistic with increased education.

Orzack (33) pointed out the important affect of the subjects' participation in various subcultures or specialized segments of society which familiarized them with a limited number of specific occupations. He thus wondered whether Sutherland's (44) term of 'Differential Association' could not be utilized here since, the dispersion between aspirations and realities may be dependent upon differential association and subcultural impacts.

3. Post-Decisional Processes

Probably the earliest statements about what happens after a decision is taken as well as the relationship between pre- and post-decision process, were those of Lewin (27) who stated:

A process like a decision which takes only a few minutes, is able to affect conduct for many months to come. The decision links motivation to action

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and at the same time, seems to have a 'freezing' affect which is partly due to the individual's tendency to 'stick' to his decision.²

Lewin believed that the simple act of making a decision exerted a stabilizing affect on a situation.

Festinger's theory (12) expands and generalizes on this idea. According to his theory of Cognitive Dissonance, the amount of dissonance that will be left after a decision has been made will be a direct function of the number of things the person knows to be inconsistent with that particular decision. Cognitive Dissonance is generally defined as 'intra-individual imbalance'. In other words, if the person takes decision X but, acts in a manner that is more conducive to pattern Y, cognitive imbalance will be present.

The greater the conflict before the decision, that is, the more difficult it is to arrive at a decision, the greater is the potential for dissonance afterwards and so the greater will be the tendency to reduce this dissonance

2. Lewin, 1951, p. 233.

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by later justifying the decision. A decision is justified through the use of a post-decisional cognitive process which spreads the attractiveness of the alternatives apart. In effect, the chosen alternative is cognitively increased in value while the rejected alternative is decreased in attractiveness.

Studies by Brehm (5) and Brehm and Cohen (6) have shown that ratings after a decision has been made are relatively spread apart as compared to the pre-decision ratings. They have also shown like Festinger, that the more difficult the decision, the greater is the pre-decision conflict, post-decision dissonance and the dissonance reduction effect.

A later book by Festinger (13) dealt with the basic question of whether the pre-decision cognitive process is radically different from the post-decision cognitive process. This report is based on the results of ten original experiments conducted over a period of three years. Its orientation is provided by the Theory of Cognitive Dissonance.

The pre-decision process was found to be characterized by the objective, assembly and evaluation of information

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concerning the alternatives involved in the choice. Unlike the more subjective post-decision period, it is not characterized by a systematic process of spreading the attractiveness of the alternatives. As well, some time is consumed in considering even more attractive though unavailable alternatives. It also appears that the anticipation of post-decisional dissonance produces a certain increased reluctance to choose.

As soon as the individual takes a decision, his attention is focused on those perceptions that have become dissonant with the chosen course of action. By thinking about, considering and reconsidering, the dissonance-reduction process begins. Dissonant cognitions are reevaluated and reinterpretations are discovered or else invented. Normally there is a brief period between dissonance and dissonance reduction during which regret may be experienced, but generally, the taking of a decision leads to events which aid in the reduction of dissonance. Thus, should the individual choose one occupation over another, he then has the opportunity to work at the chosen job, make it as interesting for himself as possible, and

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not only have to depend upon cognitive manipulation to reduce dissonance. In addition, the people he works with will support his choice by saying it is a good one, since they must rationalize their own choice as well.

Hilton (21) was probably the earliest writer to view career decision making in terms of cognitive dissonance. He found that the need to make a career decision may be precipitated by any number of stimuli such as a new job offer, greater potential for occupational remuneration or a different locale. If the stimulus is desirable, dissonance is introduced. If in turn, this dissonance is above the individual's level of tolerance, he may reexamine his self-image and his views about his job and consequently change employment. He will continue in the new direction until the adjustments he makes actually reduce the dissonance. However, the potential number of factors introducing dissonance is very large and it is equally possible that a change in occupation or identification with a new vocational group may eventually result in even more problems and greater dissonance. Consequently, the services of vocational guidance are most

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helpful. At times, it may even be necessary to introduce counter-dissonance agents in order that the individual does not make an uninformed occupational change which may cause further maladjustments.

Hershenson and Roth (20) utilized the concept of cognitive dissonance in a different manner. They pointed out that a given vocational decision tends to reduce the range of future available career alternatives. Even if the situation is uncomfortable for the individual, he may be functioning fairly well and is too far committed on a given course of action to perceive alternatives or be able to change. Consequently, the keener the individual is on a given vocational goal, the greater is the probability that he will interpret both favourable and unfavourable events as being consistent with his vocational plans in order to avoid cognitive dissonance.

Vroom (48) found that perceptions of a new employer's potency for goal attainment, as well as the mean attractiveness of that employer increased after the decision was taken to join that company. On the other hand, the same features of a rejected employer decreased after the decision.

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Probably the study most similar to ours in terms of the population used was done by Walster (49). The research was based on two hundred soldiers in an army reception center who were asked for the choice of jobs they would like to have over the next two years. She found that shortly after making a decision, the subjects experienced short periods during which the chosen alternatives seemed less attractive and the rejected alternatives more attractive than they were prior to the decision. This period of 'regret' lasted about four minutes after the decision. Fifteen minutes later however, the usual dissonance reduction process took place and the alternatives were spread apart in attractiveness. Thus the chosen occupation became much more valued than the rejected occupations.

In summary, we have tried to survey most of the pertinent work done on occupational choice. The purpose of this exercise has been to throw some light on the determinants and motivators of occupational choice. We have attempted to show that only relatively recently with the theory of cognitive-dissonance has the question been

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asked as to what happens cognitively during and after a decision is taken.

It may be argued that the vocational interests of inmates and ordinary members of society are not the same. Glaser (17) however found that "learning a trade or in other ways preparing for a better job opportunity outside of prison was the first interest of most inmates at every prison studied".³ It could thus be concluded that most prison inmates do maintain strong non-criminal interests, including legitimate vocational aspirations. We will later on discuss some other possible alternatives which may be less conventional but possibly more indigenous, pragmatic, and poignant reasons for making a certain choice.

No research has been uncovered which studied the matter of choice of occupation during incarceration within a penitentiary, not to speak of this within the cognitive-dissonance framework. The Walster (49) study is somewhat analagous and probably as close as could be found. Consequently, the purpose of the following research is to

3. Glaser, 1964, p. 113.

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close a very definite gap in the literature on occupational choice and cognitive dissonance, as well as to enlighten an important and practical problem in penology.

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CHAPTER III

HISTORY AND DESCRIPTION OF THE VOCATIONAL TRAINING INSTITUTION

The Vocational Training Institution (V.T.I.) is a federal medium security penitentiary whose program consists primarily of vocational training. As early as 1930 preliminary excavation work was being done for the Institution as recorded in the Archambault Report (3). Until 1949 however, construction was abandoned. The Gibson Report (5) of 1947 made certain recommendations concerning the treatment of young offenders and pointed out some of the difficulties, especially in Quebec, due to federal-provincial relations. They noted that St. Vincent de Paul was filled up to a capacity of eleven hundred men and included 165 young inmates of less than 21 years of age.

The then Commissioner of Penitentiaries, General R.B. Gibson, recommended the construction of a medium security institution which would be built on the Borstal plan and treat the young offenders. This institution would thus be totally separated from the maximum security St. Vincent de Paul Penitentiary which would continue to

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house the older recidivists. Commenting upon the use of the Borstal System as a method of treatment of young offenders between the ages of 16-21, Gibson was:

convinced that the principles of that System offer the best known opportunity for the reformation and rehabilitation of youth who have not yet become hardened criminals, and consider that any new institutions to be established by the Government of Canada should be of a type to permit the adoption of those principles thereby enabling youths of the reformable type to be withdrawn from the penitentiaries for adults.¹

The Commissioner very wisely pointed out that:

It cannot be too strongly emphasized however, that the success of the Borstal System depends primarily on the trained personnel it attracts to its service. It has been said that the foundations of the Borstal System are first the recruitment of the right men, then their proper training, and finally their full cooperation with one another in an atmosphere of freedom and mutual understanding.¹

Following the continual increase of the maximum security penitentiary population, towards the end of 1949 a gradual number of inmates were sent to the new Vocational Training Institution (V.T.I.). By 1951, one hundred inmates were housed at the Institution however,

1. Gibson Report, 1947, p. 15.

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these were not necessarily young first time offenders. It was not until April 1, 1952 that 140 young inmates were sent there. These were all between the ages of 15 and 25 years. Four main criteria were utilized in the selection process. The inmates had to be:

- a) Serving first penitentiary sentences;
- b) Not serving a sentence longer than five years;
- c) Having a maximum age of 27 years;
- d) Possessing some treatment potential;

By March 1953, the institution held 288 inmates.

The goals of the institution were set out in the Commissioner of Penitentiaries' Report (1) of 1953 and in addition the Officer's Manual (8) distributed in 1954 defined the goals as such: "Le traitement, ce sont toutes les activites qui servent a influencer les attitudes morales et sociales du detenu", (Treatment consists of all activities which influence the moral and social attitudes of the inmates).

It was thus necessary to separate young offenders between the ages of fifteen and twenty-five from the older inmates and to treat the inmates by offering them

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an adequate apprenticeship so as to prepare them to take their rightful place in society. The purpose according to the founders of the day was not simply to give them a trade which they could follow outside but rather, to instill in them good working habits.

By the time the Institution was opened in 1952 there were already ten workshops present. These were to teach brick laying, masonry, plastering, carpentry, plumbing and heating, machine work, electricity, sheet metal work, cabinet making and industrial drawing. During the fiscal year 1952-53, four hundred and thirty-five inmates were transferred to the institution, 188 were placed in the apprenticeship program and 51 inmates received their graduation certificates in various six-month apprenticeships.

The institution appeared to be progressing rapidly until disaster struck with the riot of 1954. As pointed out by Ciale (4), the reasons given as probable causes were sympathy with a major riot in an Ontario maximum security institution, excitement caused by the attempted escape of a group of inmates, the cancelling of a

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scheduled film for that evening, and complaints about insufficient food. While the riot may have slowed down progress for the time being, impetus was eventually given to greater staff development.

When the first group of inmates were chosen for the Institution, the officers were not really trained to handle such work. The Director of the Institution pointed out in the 1957 Annual Report (2) that only a small number of the officers had the qualifications, aptitude and knowledge necessary to take part in a treatment program. He deplored this lack of aptitudes and attempted to ameliorate the problem by offering upgrading and training courses to the officers.

By 1963 a pre-release officer was appointed whose functions included accompanying inmates about to be released to potential employers. The present executive staff comprises a warden, deputy warden, two assistant deputy wardens, one in charge of custody and the other in charge of the treatment and training staff. The treatment staff of sixty-one men consists of a full time psychologist, a supervisor of classification, two other classification

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officers, four guidance and counselling officers, orientation, pre-release, socio-cultural and recreational officers.

In addition each shop has at least one instructor and often two. The instructors are all graduated tradesmen with usually quite a bit of experience. Finally we have the custodial staff of roughly one hundred and thirty-five guards and various medical and support staff.

Whereas the 1957 report showed that the mean educational grade attained by the inmates in vocational training courses was 5.5 and only 59 of 111 inmates in shops graduated with apprenticeship certificates, by 1959, 91 out of 168 inmates in 14 training courses received their certificates and the average scolarity attained was 6.4 grades.

Special arrangements were made in 1965 with the Department of Education for inmates to be given adult reeducation courses from grade 7 to 9. This has now been increased to grade 11. Of the first group of graduates in 1967, 20/21 inmates completed grade seven.

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Unfortunately however, due to various administrative problems, not all inmates can be placed in school. Further, as inmates are usually admitted in groups every three weeks, it is impossible for them to actually start officially in a course in mid-stream. Courses begin in September and in June and thus inmates entering during the session may go to school but will not be registered with the Regional School Board until the commencement of the following course, and cannot take the exams. At times, the situation can be ameliorated by having the inmate work at a trade and take correspondence courses on his own.

Other changes have taken place in the Institution over the past six years. During 1968, the institution began accepting some inmates older than twenty-five years of age. These were however, first offenders and often inmates who sought "protection", and were accorded protective custody. The older inmates were automatically placed in the kitchen without any choice. In other words, when an older inmate at the maximum security institution asked to come to the Institution, he knew that if he was

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considered to be a good case for rehabilitation, he could be transferred to the kitchen at the Vocational Training Institution. By the end of 1969, this was modified so that, second or even at times third offenders could be transferred to the Institution.

As the system operates, all arrivals from court are sent to the Regional Reception Center. During their time there, which may range from four to eight weeks, they are interviewed by the Reception staff and a report is prepared for the Regional Classification Board. Inmates arriving from the Reception Center to the Institution usually arrive every three weeks or so in groups of 10-25.

On admission, they are housed in the Institution's Orientation Center and begin what is referred to as the 'Newcomer's Course'. In effect they are interviewed by the officer in charge, by a classification officer and the psychologist. In addition, they are seen by the vocational training supervisor and the educational supervisor during which time vocational aspirations are discussed and the inmate's stated choices are noted on Form A-7 (Appendix 1). They are also given various

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aptitude and intelligence tests. Lectures are given by the deputy warden and assistant deputy wardens to acquaint them with the Institution's rules, regulations, priveleges and facilities.

After four weeks they are assigned individual cells in one of the four buildings. Originally, the Institution contained four dormitories. After the riot of 1954, one cell block was built as a preventive device. Since then for various reasons, the dormitories have been rebuilt so that the institution contains only separate housing units containing individual cells. If a place does not exist in a chosen or assigned work shop or school, they will be placed on one of five work gangs to await a vacancy.

At the time of the study the Institution contained the following shops: auto mechanics, auto body repairs, brick laying, carpentry, electricity, electronics, masonry, painting, tile laying, plumbing, welding, and a machine shop. In addition a computer programming course was offered. There are also two classrooms in the school, teaching grades 8 and 9, 10 and 11. The total institutional population as of April 30/70 was 280 inmates.

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Vocational training today lasts on the average nine months after which if they complete all the projects, they earn a certificate showing the number of hours put in on the trade. They can then take the trade exams given by the various unions and parity committees. If they pass, they will obtain an apprenticeship card. When they are released upon parole or expiration of their sentences, they can have a trade in which to seek employment. It seems somewhat unfortunate though that a study by Ligonde (7) showed that only 13% of released graduates actually worked in the trade they obtained in the institution. After a one year follow-up, only 9% were still working on that trade. In fact though, these results are not that much different from those of Glaser ² (6).

We have thus tried to draw a brief sketch of the Institution in order to familiarize the reader with its history, programme and structure. We shall now turn to describing the population indigenous to this Institution.

2. Glaser, 1964, p. 252.

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CHAPTER IV

EXPERIMENTAL DESIGN

The problem to be studied was whether the factor of an inmate's attaining or not attaining the job assignment of his choice, has any effect on his subsequent on the job behaviour. That is to say, if the individual does not attain that which he desires, will he still be interested in doing the job which he did not ask for.

This is conceptualized in terms of Festinger's (1) Theory of Cognitive Dissonance. According to this theory, the amount of dissonance, or "cognitive imbalance" that exists after a decision has been made is a direct function of the number of things the person knows to be inconsistent with that particular decision. Decisions are justified by increasing the attractiveness of the chosen alternative and decreasing the attractiveness of the rejected alternative. Since conflict is unpleasant, one expects a post-decisional cognitive process to occur that accomplishes this spreading apart of the attractiveness of the alternatives.

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Applying this theory to our situation, we may hypothesize that if an inmate does attain the job of his choice, he should work that much harder in order to maintain consonance. That is, he will say to himself, (not overtly), "I wanted this, I got into it, and now I must get along in it; it is not a bad shop, in fact it is a very good place to work." On the other hand, when an inmate does not have his preference fulfilled, dissonance should take place. The inmate will tell himself that he actually did not want to be in that shop, and therefore why should he extend himself in his work. In fact, he may purposely be annoying in order to be transferred to another shop, eventually hoping to achieve his wish. He may thus be a nuisance at work, his work will be lackadaisical and this will be noted by the work instructor who will mark his behaviour as being 'poor'.

1. Pilot Study at the Vocational Training Institution

Before the problem could be researched it was necessary to ascertain whether the study was viable at all. In effect, two factors had to be present -

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a) there had to be variance in the preferences so that not everyone chose the same shop, and b) there had to be variance in job attainment, for if everyone received the assignment they asked for, or if no one attained the desired placement, then there are really no groups to compare nor any problem to be studied. Finally, the accuracy of the inmate's actual job preference had to be verified. As eventually only the inmates files would be used as a source of information on their choices, the validity of the information on these files had to be established.

Thus in March 1970, forty-one inmates or about one-sixth of the V.P.I. population at the time, were interviewed. During the course of an informal interview, each inmate was asked the following two questions in either language:

a) What shop are you in now?

Dans quel atelier êtes-vous présentement?

b) What was your latest job choice?

Quel est le dernier atelier où vous avez demandé à aller?

The answer to question b) was then verified

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with the information on file to determine whether this latest job choice had been noted on the file.

The findings were as follows:

- 1) There was variance in job choices as eighteen different trades were chosen by the 41 inmates, with no significant 'piling on' for any one trade.
- 2) Out of the forty-one inmates, 23 had attained the job of their choice (56.1%), while 18 (43.9%) had not.
- 3) Finally and most important, it was found that a discrepancy between what the inmate said his latest job choice was, and that which was noted in his file, occurred only among three inmates (7.4%). Even here, there is no proof that the source of error was necessarily due to the file. Because of the fact that any request for a job or a job change has to be made in writing on a specific form, it is difficult for errors to creep in. It was thus just as possible that the inmate had forgotten or for some reason was not telling the truth in order to deceive us or himself.

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It was consequently felt that the inmate's files were a sufficiently valid source of data for the purpose of this research and the study was continued in earnest in April 1970.

2. Descriptive Characteristics of the Sample:

The sample consisted of 139 French and English male inmates in a federal medium security vocational training penitentiary in Quebec. They were divided among eighteen workshops or work-gangs. All the inmates had been at their assignments for a minimum period of one month. This time factor was necessary in order for the instructors to become acquainted with their style of work, production, behaviour, or whatever other factors each individual instructor felt was necessary in order to properly rate his men. Seventeen of the groups had at least 5 inmates there-in. The exception was the tile shop with only four inmates. It was considered necessary to include this shop nonetheless for research purposes as this one was one of the least popular assignments.

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a) Age:

In terms of age the subjects were born between the years 1935 and 1954 so that at the time of testing they ranged in age from 16 to 34 years. The mean age was 21.4 years with the modal age being 22. Table 1 illustrates the distribution.

b) I.Q.:

The test used to measure the intelligence quotient was the Revised Beta given in either French or English. I.Q. scores were not available for 18 subjects. I.Q. scores were distributed over a range from 61 to 129 with the mean I.Q. at 103.8 while the modal I.Q. occurred in the 100 to 104 group. Table II illustrates the distribution.

c) Education:

The educational levels of six subjects were not available. Based on the remaining 133 individuals, the mean school grade attained was 8.2 years with the distribution

Table I

Distribution of Inmates According to Age

<u>Age - on April 30/70</u>	<u>Frequency</u>
16	2
17	10
18	10
19	22
20	22
21	17
22	23
23	7
24	7
25	3
26	4
27	1
28	4
29	2
30	0
31	3
32	0
33	0
34	<u>2</u>
Total:	139
Mean Age:	21.4 years

Table II

Distribution of Inmates According to I.Q.

<u>I.Q. Intervals</u>	<u>Frequency</u>
61-89 (below average)	18
90-94 (average)	10
95-99 (average)	15
100-104 (average)	21
105-109 (average)	20
110-114 (above average)	15
115-119 (above average)	13
120-129 (superior)	<u>9</u>
Total:	121
Mean I.Q.:	103.8

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ranging from grades 3 to 12. The mode was at grade 9. Table III illustrates this distribution.

d) Types of Offences and Lengths of Sentences:

This being a federal penitentiary, by law each inmate was serving a minimum term of two years. Length of sentences ranged from two years to life, while by far the greatest number, the mode, were serving two to five year sentences. Table IV illustrates this.

The greatest number of inmates (71) were serving sentences for various types of thefts such as car theft, theft of money and burglaries ("Breaking and Entering"). There were however, nine individuals serving sentences for causing deaths and attempted murder. As circumstances may have varied, the murderers were not necessarily serving life sentences. In fact only four inmates were convicted of murder and serving life sentences. One was serving a sentence for an attempted murder (10 years). The other four were convicted of involuntary homicide and served sentences ranging from 4 to 12 years with a mean of 8.5 years.

Table III

Distribution of Inmates According to Education

<u>Highest Grade Completed</u>	<u>Frequency</u>
3	1
4	0
5	4
6	15
7	21
8	26
9	34
10	20
11	8
12	<u>4</u>

Total: 133

Mean Educational Grade: 8.3

Table IV

Distribution of Inmates According to Lengths of
Sentences Being Served

<u>Sentence Length Interval</u> <u>In Number of Years</u>	<u>Frequency</u>
2 - 5	116
6 - 9	12
10 - life	<u>11</u>
Total:	139

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The second greatest number (44) were serving sentences for various violent crimes such as armed robbery with or without violence, and assault.

After the murderers and involuntary homicide group, the fourth largest group (7) consisted of 'fraudmen' and counterfeiters. Six individuals were convicted of various sex offences including rape. Finally the sample contained two drug traffickers.

3. Experimental Method:

a) Behaviour Ratings (BR):

Instructors in each of the eighteen shops were asked to rate their inmates according to Grygier's (2) Forced Distribution Procrustean Table. This is a five point forced normal distribution ranging from one to five (Appendix 2). In effect, only a limited and specific number in each group can merit each score. Each inmate is assigned a score from 1 to 5. Ratings of 4 and 5 will be considered as indicative of 'good' behaviour while ratings of 1 and 2 will demonstrate 'poor' behaviour.

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Appendix 3 illustrates the instructors' assignments. While the scores are termed 'Behaviour Ratings', this is defined broadly and individually. Each instructor is asked to rate his inmates according to whatever criteria he sees fit. The technique for this system of rating is based on a method developed by Grygier.¹

b) Job Choices:

During the inmates' orientation programme in the institution, they are advised of the possible trades available at the Vocational Training Institution. Each individual is then interviewed and asked what job he would like to have. His answer is noted on form A-7 - (Appendix 1). At the completion of the orientation programme, each inmate is again interviewed by the Vocational Training Supervisor, asked for his final job choice and if there is any change this is again noted on Form A-7. If there is any later change in job choice, this is done in writing and placed on file.

1. Grygier, 1966, p. 6.

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c) Hypotheses:

For the purpose of this study we will relate each individual's Behaviour Rating score with the factor of his attaining or not attaining his latest Job Choice.

- a) We hypothesize that there will be a significant relationship between the Behaviour Ratings and the attainment of Job Choice by inmates;
- b) That there will be a significantly higher proportion of 'good' Behaviour Ratings among inmates whose Job Choice is attained;
- c) That there will be a significantly higher proportion of 'poor' Behaviour Ratings among inmates whose Job Choice is not attained;

The Null Hypothesis to be tested will be that:
There is no significant relationship between the Behaviour Ratings and the attainment of Job Choice by inmates.

In addition, other factors such as age, intelligence, education, length of sentence, type of offence and marital status will be explored. The relationship between the

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inmates' Behaviour Ratings and their age, intelligence, education, length of sentence and type of criminal offence will be examined. We postulate that the older, more intelligent and better educated inmates with longer sentences to serve, will be more motivated and better behaved in their shops. Everything else being equal, they should thus receive relatively higher Behaviour Ratings. Their relationship will however be secondary to the affect of Job Choice attainment on Behaviour Ratings.

Further, the association between Job Choice attainers and non-attainers, and their respective ages, intelligence, education, length of sentence and type of criminal offence will be studied. Here we postulate and expect to find that the more intelligent and better educated individuals will have more potential for vocational training and thus should more often have their Job Choices attained. The older inmates and those serving longer sentences should also attain their Job Choices relatively more often as they will be seen as more stable and determined, and their Job Choices will be more

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realistic. From another point of view, they will be more familiar with what they can or cannot obtain and their choices will be made accordingly.

The .05 level of significance will determine the acceptance or rejection of the Null Hypothesis.

REFERENCES - CHAPTER IV

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CHAPTER V

PRESENTATION OF RESULTS

1. Behaviour Ratings and Job Choice:

Among the 139 subjects, it was found that 87 (62.59%) had their various Job Choices fulfilled. Fifty-two however, or 37.41% did not attain the jobs of their choice. Table V a) illustrates the distribution of Job Choice Attainment according to the inmates' Behaviour Ratings.

The factor Behaviour Rating is a continuous variable which is normally distributed over a range from 1 to 5. This of course, is due to the experimental design and the concept of the Forced Distribution Procrustean Table (Appendix 2). Job Choice Attainment on the other hand, is a dichotomous attribute as the individual either attains or does not attain his choice of assignments. Thus in order to measure the relationship between the dichotomous attribute and the continuous variable, Point Biserial Correlation (1) is used.

Table V (a)

Distribution of Job Choice Attainment According

To Behaviour Ratings

<u>Behaviour Rating</u>	<u>Frequency</u>	
	<u>Attainers</u>	<u>Non-Attainers</u>
1	2	16
2	8	19
3	34	15
4	26	1
5	<u>17</u>	<u>1</u>
Totals:	87	52
Total Subjects:	139	
Percentage of Attainment:	62.59%	
Percentage of Non-Attainment:	37.41%	

$$r_{pb1} = .60$$

$$P \leq .001$$

Table V (b)

Distribution of Job Choice Attainment According

To Grouped Behaviour Ratings

<u>Behaviour Rating</u>	<u>Frequency</u>	
	<u>Attainers</u>	<u>Non-Attainers</u>
1 & 2 ('poor' rating)	10	35
3 ('average' rating)	34	15
4 & 5 ('good' rating)	<u>43</u>	<u>2</u>
Total:	87	52
Total Subjects:	139	

$$r_{pb1} = .60$$

$$P \leq .001$$

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The formula utilized was as such:¹

$$r_{pbi} = \frac{\bar{X}_p - \bar{X}_q}{S_t} \sqrt{pq}$$

where p = the proportion of individuals in the sample
attaining their Job Choice = .6259.

q = the proportion of individuals in the sample
not attaining their Job Choice = .3741.

$\bar{X}_p$ = the mean Behaviour Rating score of attainers
= 3.55.

$\bar{X}_q$ = the mean Behaviour Rating score of non-attainers
= 2.08.

S_t = the standard deviation of all scores on the
continuous variable found by the formula:²

$$S_t = \sqrt{E(\bar{X} - X)^2 / N} = 1.187$$

The Point-Biserial Correlation Coefficient (r_{pbi})
equals 0.60.

1. Ferguson, 1966, p. 239-242.

2. Ferguson, 1966, p. 242.

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In order to test the significance of this value of r_{pb1} from zero, the following two tailed t test is used:

$$t = r_{pb1} \left(\sqrt{\frac{N-2}{1 - (r_{pb1})^2}} \right)$$

When the degrees of freedom equal $n - 2$ (137), this t ($t = 8.778$) score was found to be significant at the .001 level.

The Null Hypothesis that there is no significant difference in Behaviour Ratings among inmates whose Job Choice is, or is not attained must consequently be rejected, and therefore the general hypothesis appears to be verified. The results thus show that there is a significant relationship between Behaviour Ratings and the attainment of Job Choice by inmates.

Because of the moderately high and positive value of r_{pb1} (.60), it can be accepted with confidence that the Hypotheses 1 and 2 are verified as well. This is further shown by Table V b) which combines the data in Table V a) under three classes of Behaviour Ratings:

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'poor' ratings = 1 and 2

' average' rating = 3

' good' ratings= 4 and 5

Figures 1 and 2 afford another visual illustration of this.

Among the attainers, only ten subjects had 'poor' ratings while 43 had 'good' ratings. On the other hand, thirty-five non-attainers had 'poor' scores and only two scored 'good' ratings.

Combined with the fairly high and significant value of the r_{pbi} it can be said that:

- 1) There is a significantly higher proportion of 'good' Behaviour Ratings among inmates whose Job Choice is attained, and
- 2) There is a significantly higher proportion of 'poor' Behaviour Ratings among inmates whose Job Choice is not attained.

In effect, there is a moderately high positive, linear relationship between Behaviour Ratings and the probability of Job Choice attainment, so that the higher the

Figure I

Curve of Grouped Behaviour Rating vs Job Choice Attainment

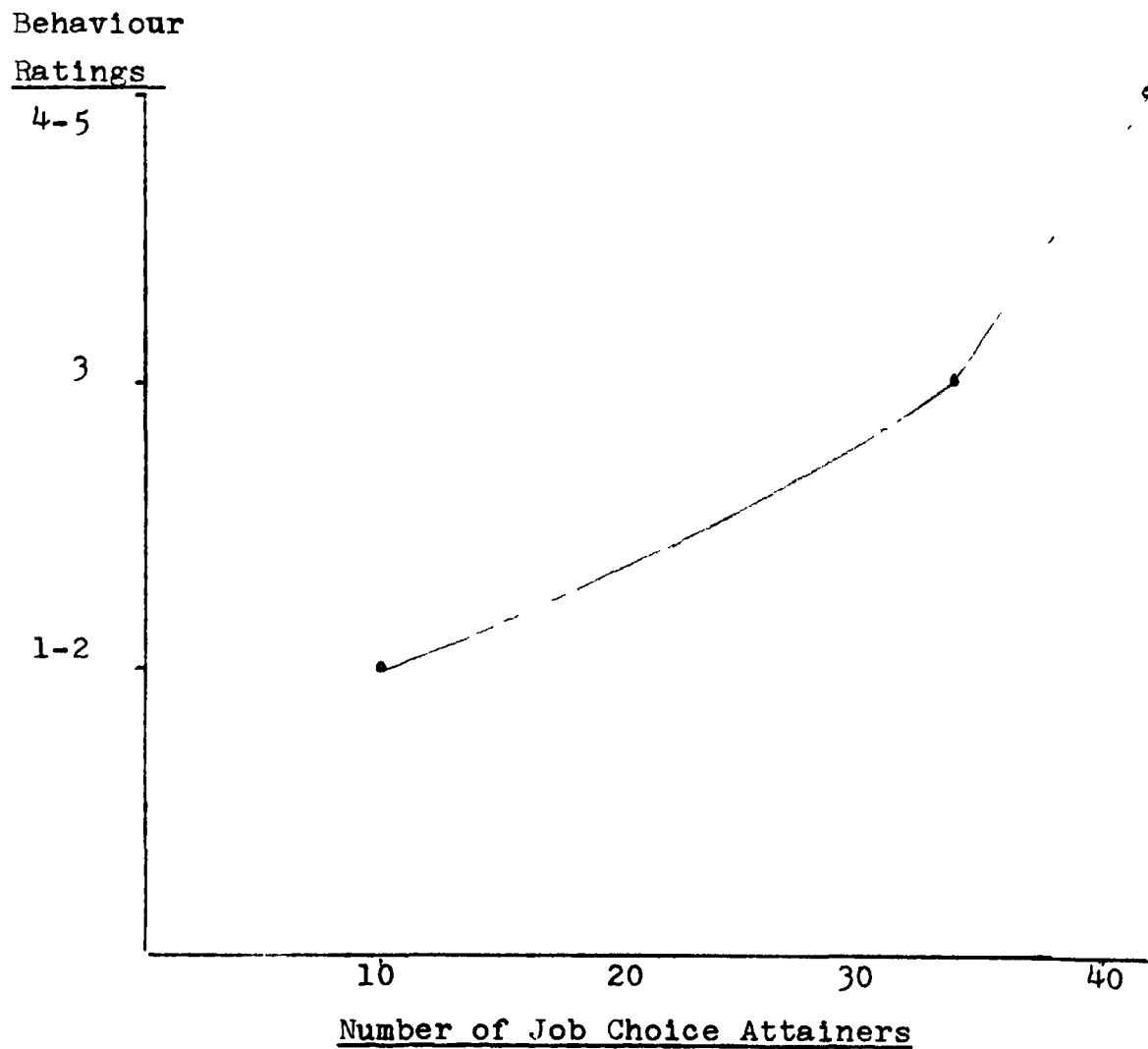
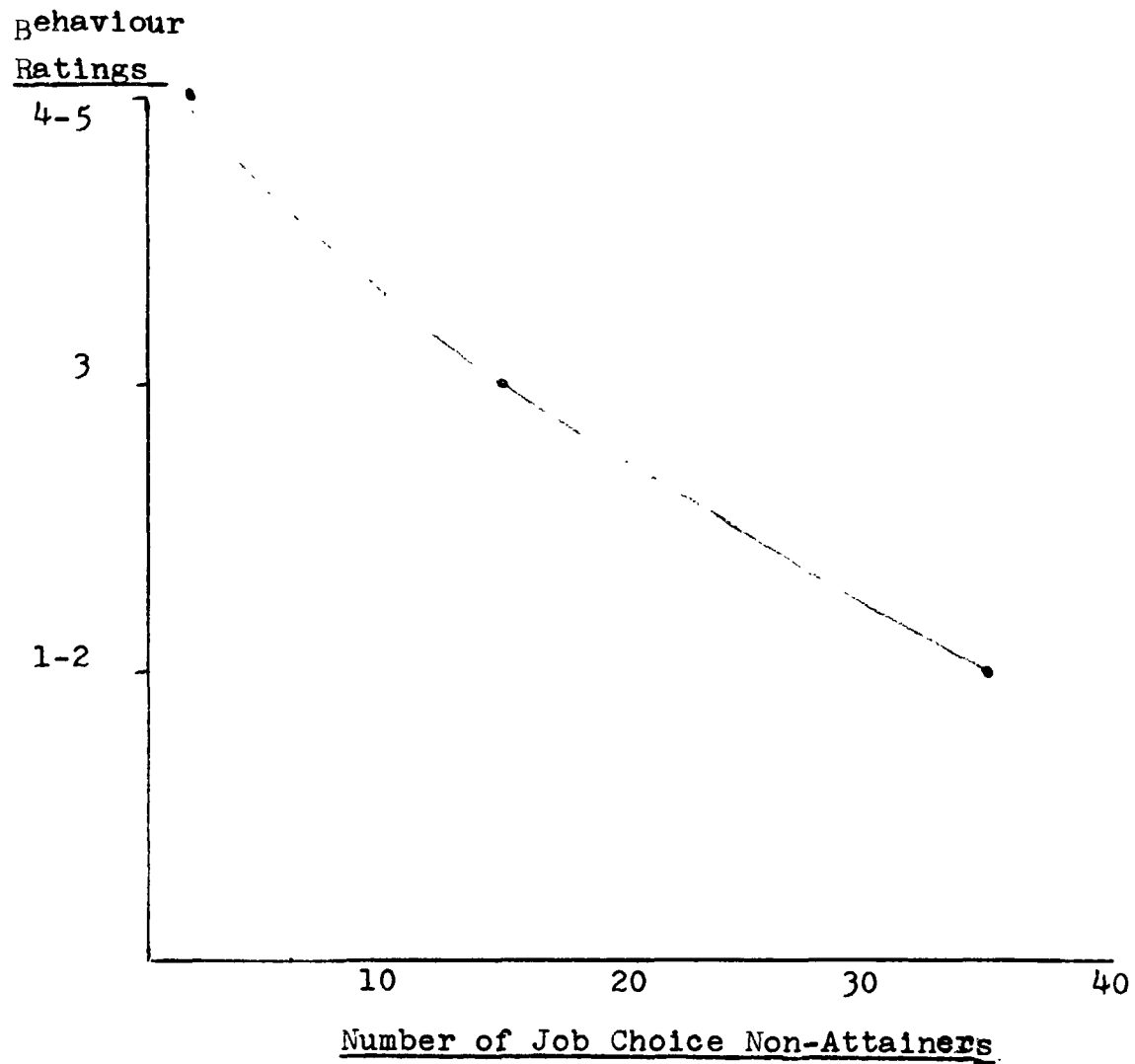


Figure II

Curve of Grouped Behaviour Rating vs Job Choice Non-Attainment



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Behaviour Rating, the greater the probability that Job Choice was attained.

While the hypotheses may be considered as verified it was thought to be in the interests of criminological research to test the relationship between Behaviour Ratings, Job Choice outcome, and the various personal characteristics of the subjects that could be obtained fairly simply and almost universally from the institutional inmate files. In addition, these secondary propositions as enunciated in the Experimental Design may help to explain the main hypotheses. The factors tested against the Behaviour Ratings and Job Attainment or Non-Attainment were age, I.Q., education, length of sentence and type of offence.

2. Behaviour Ratings and Age:

Table VI illustrates the distribution of Behaviour Ratings according to the age of the subjects. As both Behaviour Ratings and age were continuous variables, Pearson's Product Moment Correlation Coefficient was

Table VI

Distribution of Behaviour Ratings According to Age

<u>Age of Inmates in years</u>	<u>Behaviour Rating</u>					<u>Totals</u>
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	
16	0	0	2	0	0	2
17	1	5	3	1	0	10
18	0	2	3	4	1	10
19	4	6	6	4	2	22
20	3	5	7	2	5	22
21	6	1	7	3	0	17
22	3	5	9	4	2	23
23	0	2	3	1	1	7
24	0	1	4	0	2	7
25	0	0	0	1	2	3
26	0	0	2	0	2	4
27	0	0	1	0	0	1
28	1	0	0	2	1	4
29	0	0	2	0	0	2
30-34	<u>0</u>	<u>0</u>	<u>0</u>	<u>5</u>	<u>0</u>	<u>5</u>
Totals	18	27	49	27	18	139

$r = .24$

$P \leq .01$

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utilized to test the relationship.³

The formula is as follows:

$$r = \frac{E_{xy}}{\sqrt{E x^2 \quad E y^2}}$$

for which:

$\bar{X}$ = the overall mean Behaviour Rating = 3

$\bar{Y}$ = the overall mean age = 21.4

$E x^2$ = the sum of squares of deviation from the mean

$\bar{X} = 198$

$E y^2$ = the sum of squares of deviations from the mean

$\bar{Y} = 1666.7$

$E xy$ = the product of the sum of squares of deviations

from $\bar{X}$ and $\bar{Y} = 137.2$

The value of r given by this formula was found to be 0.24. In order to test the significance of this value

3. Ferguson, 1966, p. 110.

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of Pearson's r , the following two tailed t test is used.⁴

$$t = r \sqrt{\frac{N - 2}{1 - r^2}}$$

For an r of 0.24 with 137 degrees of freedom, t ($t = 2.90$) is significant at the .01 level. The findings thus appear to point out that the older the subjects, the higher (better) their Behaviour Ratings.

3. Behaviour Ratings and Intelligence:

Table VII illustrates the distribution of Behaviour Ratings according to the subjects' I.Q. scores.

The I.Q. scores were obtained by the institution through the universal use of the French and English versions of the Revised Beta I.Q. test. As the I.Q. scores were not available for eighteen subjects at the time of the study, our sample can only consist of 121 inmates for this test. It is not felt however, that the results would be

4. Ferguson, 1966, p. 187.

Table VII

Distribution of Behaviour Ratings According to I.Q.

<u>I.Q. in Revised Beta Scores</u>	<u>Behaviour Ratings</u>					<u>Totals</u>
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	
Below average 61-89	4	6	6	1	1	18
Average 90-94	2	5	0	1	2	10
Average 95-99	2	1	10	1	1	15
Average 100-104	1	4	11	3	2	21
Average 105-109	4	1	3	7	5	20
Above Average 110-114	3	4	2	5	1	15
Above Average 115-119	1	2	3	4	3	13
Superior 120-129	<u>1</u>	<u>2</u>	<u>5</u>	<u>1</u>	<u>0</u>	<u>9</u>
Totals	18	25	40	23	15	121

r = .201

P ≤ .05

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greatly affected by the loss of these eighteen subjects.

The Behaviour Ratings were continuously and normally distributed along a range of 1 to 5 with a mean of 3, through the use of the Forced Normal Distribution. Similarly, I.Q. test scores are normally and continuously distributed with a general mean of 100. In our sample, they ranged from 61 to 129. Consequently, it was felt advisable to utilize Pearson's Correlation Coefficient once again to test the relationship between the factors Behaviour Rating and I.Q.³

The formula used was as previously. The computations may be found in Appendix 5. The value of r obtained was equal to .201. With 119 degrees of freedom, this value is significant at the .05 level ($t = 2.25$). It would thus appear that according to these findings, the higher the inmate scored in the I.Q. test, the greater his Behaviour Rating.

3. Ferguson, 1966, p. 110.

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4. Behaviour Rating and Education:

Table VIII illustrates the distribution of the Behaviour Ratings according to the inmates' educational levels. The sample consists of 133 inmates in this case, as the educational level of six subjects was unknown.

Since the educational level of the subjects were distributed fairly widely and almost continually along a range from grade 3 to 12, and Behaviour Ratings as previously enunciated are continuously and normally distributed, it was felt that Pearson's Correlation Coefficient (r) could be used as a measure of the relationship between the two factors.³ The computations may be found in Appendix 5.

The value of r obtained was 0.043 which is non-significant ($t = 0.495$). There therefore appears to be no relationship between the Behaviour Ratings and the educational levels attained by the subjects.

3. Ferguson, 1966, p. 110.

Table VIII

Distribution of Behaviour Ratings According to

Educational Level

<u>Educational Level</u> <u>Last Completed Grade</u>	<u>Behaviour Rating</u>					<u>Total</u>
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	
3	0	1	0	0	0	1
5	0	1	2	1	0	4
6	2	3	6	1	3	15
7	5	7	3	2	4	21
8	1	5	11	6	3	26
9	4	6	10	9	5	34
10	3	2	9	5	1	20
11	3	1	2	2	0	8
12	<u>0</u>	<u>1</u>	<u>1</u>	<u>0</u>	<u>2</u>	<u>4</u>
Totals	<u>18</u>	<u>27</u>	<u>44</u>	<u>26</u>	<u>18</u>	<u>133</u>

r = .043

P > .05 non-significant

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5. Behaviour Ratings and Length of Sentence:

Table IX illustrates the distribution of Behaviour Ratings according to the grouped lengths of sentences.

In order to avoid too many small cell frequencies which could distort the results, Behaviour Ratings of 1 and 2, the previously defined 'poor' ratings, will be combined as will the 'good' ratings, 4 and 5.

As there is no real way to quantify a life sentence, in terms of years to be served, the sentences were grouped as follows:

- a) 2 - 5 years,
- b) 6 - 9 years,
- c) 10 years - life.

While this may be somewhat artificial, it does give us a certain range of length of sentences. In addition, by grouping the data in such a manner, we have categorized the Behaviour Ratings and length of sentences so that a 3 x 3 Contingency Table arises. In order to test the relationship, the Chi-Square technique was used.⁵

5. Ferguson, 1966, p. 192-211.

Table IX

Distribution of Behaviour Ratings According to
Length of Sentences Being Served

<u>Sentence in years</u>	<u>Behaviour Ratings</u>			<u>Totals</u>
	<u>1 & 2</u>	<u>3</u>	<u>4 & 5</u>	
2-5 years	39	42	35	116
6-9 years	5	1	6	12
10 - life	<u>1</u>	<u>6</u>	<u>4</u>	<u>11</u>
Totals	45	49	45	139

$$\chi^2 = 7.32$$

P > .05 non-significant

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The formula for Chi-Square was:

$$\chi^2 = \sum \frac{O^2}{E} - N$$

The value of Chi-Square obtained is equal to 7.32. With 4 degrees of freedom ((R - 1) (C - 1)), this value of χ^2 is not significant. There thus appears to be no relationship between the Behaviour Ratings and the length of the inmates' sentences.

6. Behaviour Ratings and Type of Criminal Offence:

In order to make use of the data on the types of criminal offences which brought the subjects to the institution, it was found necessary to group the offences into fairly distinct categories. The following principles were followed in coding the offences:

- i) The offence to be considered for scoring will be the one for which the inmate received the longest sentence.
- ii) In case of a tie, the offence to be considered for scoring is the one liable to the potentially longest term of imprisonment.

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- 111) Where an inmate has been convicted of both offences against property (eg. Theft, Breaking, and Entering), and against persons (eg. assault) he will be categorized under the offence against persons.

While these principles were set out a priori, there was little difficulty in categorizing the offences under the five following classes as not many had committed several types of offences. The offenders were thus classified as follows:

- A. All types of theft - money, vehicles, objects, eg. 'Breaking and Entering'.
- B. Offences against persons through the use of, or threats of violence, except murder, attempted murder, and sex offences - eg. assault, armed robbery.
- C. Fraud, including counterfeiting.
- D. Murder and attempted murder.
- E. Rape and other sex offences.

There were two drug traffickers who because of their minimal frequency had to be discarded, leading to a population of 137 for this test. Table X outlines the

Table X

Distribution of Behaviour Rating According to Types of

Offence

<u>Types of Offences</u>	<u>Behaviour Ratings</u>			<u>Totals</u>
	<u>1 & 2</u>	<u>3</u>	<u>4 & 5</u>	
A	27	23	21	71
B	14	16	14	44
C	3	2	2	7
D	1	4	4	9
E	<u>0</u>	<u>4</u>	<u>2</u>	<u>6</u>
Totals	45	49	43*	137

* The two drug traffickers were discarded

$$X^2 = 7.0507$$

P > .05 non-significant

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distribution of the Behaviour Ratings according to the types of criminal offences. While this classification into categories may have lead to some low cell frequencies, it was not considered logical to mix the types of offences so as to end up with fewer classes. It is felt to be quite apparent that the offenders against property, against persons, 'fraudmen', and sex offenders are distinct types. Further because of the gravity of murder or attempted murder, these offenders were separated from the 'simple' offenders against persons, such as assault. It was realized that at times the difference between a conviction for assault and attempted murder may be a judicial decision or plea bargaining, however we have to respect the ethicacy of our judicial system and assume that under grave circumstances an attempted murder charge would not be reduced to common or grievous assault. In any case, of the nine subjects in the category D, only one was convicted of an attempt, the others being convicted of non-capital murder.

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As previously, the Behaviour Ratings were grouped into the categories of 'poor' = Behaviour Ratings 1 and 2

'average' = Behaviour Rating 3

'good' = Behaviour Ratings 4 and 5

While some data may be lost in such a case, the purpose is again to avoid too many low frequency or zero frequency cells. Thus, considering the Behaviour Ratings as attributes, a 3 x 5 Contingency Table was constructed as in Table X.

Using the Chi-Square Technique,⁵ it was found that the value of $\chi^2 = 7.0507$. With eight degrees of freedom, this was not found to be significant. We therefore conclude that there is no relationship between Behaviour Ratings and the types of criminal offences which brought the inmates to penitentiary.

5. Ferguson, 1966, p. 192-211.

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7. Job Choice and Age:

Job Choice in this section refers to the attainment or non-attainment of the inmate's Job Choice. Table XI illustrates the distribution of the attainers and non-attainers according to their respective ages.

As age is a continuous variable distributed in our sample from 16 to 34 years, and Job Choice is a clearly dichotomous variable, Point Biserial Correlation was used in order to test the relationship between the two factors.¹

The value of r_{pb1} equals to .205. For 137 degrees of freedom we find our value of r_{pb1} to be significant at the .02 level of significance ($t = 2.46$). It would thus appear that there is a moderate relationship between the attainment of Job Choice and age so that, the older the individual, the greater the probability that he will attain the job of his choice.

1. Ferguson, 1966, p. 239-242.

Table XI

Distribution of Job Choice Attainment According to Age

<u>Age of Inmates in years</u>	<u>Job Choice</u>		<u>Totals</u>
	<u>Attained</u>	<u>Non-Attained</u>	
16	1	1	2
17	5	5	10
18	7	3	10
19	14	8	22
20	14	3	22
21	9	8	17
22	12	11	23
23	2	5	7
24	6	1	7
25	3	0	3
26	4	0	4
27	0	1	1
28	3	1	4
29	2	0	2
30-34	<u>5</u>	<u>0</u>	<u>5</u>
Totals	87	52	139

$$r_{pb1} = .205$$

$$P \leq .02$$

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8. Job Choice and Intelligence:

As Job Choice is clearly a dichotomous attribute, being either attained or not attained, and as I.Q. was normally and continuously distributed with a mean of 103.8, Point Biserial Correlation was used to test their relationship.¹

Table XII illustrates the distribution of the job attainers and non-attainers according to intelligence. As I.Q. scores were not available for 18 subjects, the sample contained 121 inmates.

It was found that our value for the Point Biserial Correlation, r_{pbi} , is equal to 0.235. For 119 degrees of freedom, this is significant at the .02 level ($t = 2.604$).

It can thus be concluded that there is a moderate relationship between the attainment by an inmate of his Job Choice and his intelligence as measured by the Revised Beta I.Q. Test. It therefore appears that, the higher the individual's I.Q. score, the greater is the probability

1. Ferguson, 1966, p. 239-242.

Table XII

Distribution of Job Choice Attainment According to I.Q.

<u>I.Q. in Revised Beta Scores</u>	<u>Job Choice</u>		<u>Totals</u>
	<u>Attained</u>	<u>Non-attained</u>	
61-89	8	10	18
90-94	3	7	10
95-99	8	7	15
100-104	14	7	21
105-109	13	7	20
110-114	10	5	15
115-119	9	4	13
120-129	<u>7</u>	<u>2</u>	<u>9</u>
Total	72	49	121

$$r_{pb1} = .235$$

$$P \leq .02$$

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that he will attain the job of his choice.

9. Job Choice and Education:

As education is a continuous variable ranging in grades from 3 to 12, and Job Choice is a dichotomous attribute, Point Biserial Correlation was again used to test their relationship.¹

Table XIII illustrates the distribution of the job attainers and job non-attainers according to their educational levels. The sample contains 133 subjects as the educational grade of six subjects was not available.

It was found that the Point Biserial Correlation Coefficient, r_{pb1} , equals to 0.199. For 131 degrees of freedom this value is significant at the .02 level ($t = 2.545$).

It can therefore be concluded that there is a moderate relationship between the attainment by an inmate of his Job Choice and his educational level.

1. Ferguson, 1966, p. 239-242.

Table XIII

Distribution of Job Choice Attainment According to

Educational Level

<u>Educational Level</u>		<u>Job Choice</u>		
<u>Last Completed Grade</u>		<u>Attained</u>	<u>Non-attained</u>	<u>Totals</u>
3		0	1	1
5		1	3	4
6		8	7	15
7		10	11	21
8		17	9	26
9		25	9	34
10		15	5	20
11		4	4	8
12		<u>3</u>	<u>1</u>	<u>4</u>
	Totals	83	50	133

$$r_{pb1} = .199$$

$$P \leq .02$$

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This is reflected in the appearance that the higher the individual's educational grade upon entering the institution, the greater is the probability that he will attain the job of his choice.

10. Job Choice and Type of Criminal Offence:

The types of offence which brought the men to penitentiary were categorized and must be considered as attributes because of their very nature. Similarly, Job Choice attainment or non-attainment is a dichotomous attribute. Consequently, the Chi-Square technique can be used to test the relationship.⁵

For classification purposes, offences were grouped into five categories. This was based on identical principals as in the section on Behaviour Ratings and Type of Criminal Offence.

The inmates were thus classified as follows:

- A. All types of simple theft - money, vehicles, objects, eg. 'Breaking and Entering'.

5. Ferguson, 1966, p. 192-211.

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- 3. Offences against persons, through the use of, or threats of violence, except murder, attempted murder, and sex offences - eg. assault, armed robbery.
- 4. Fraud - including counterfeiting.
- 5. Murder and attempted murder.
- 6. Rape and other sex offences.

The two drug traffickers were discarded because of their negligible frequency. This led to a population of 137. Table XIV illustrates the distribution of the attainers and non-attainers according to the types of offence they had committed.

Again, while five classes of offences leads to some small cell frequencies, it was not considered advisable to mix the types of offences in order to arrive at a lesser number of classes. If we wish to arrive at any relevant conclusions, this will not be done by neutralizing the results through the combining of two or more different classes. Thus in spite of the hazards of small cell frequencies, it was felt to be more

Table XIV

Distribution of Job Choice Attainment According to

Types of Criminal Offence

<u>Types of Offences</u>	<u>Job Choice</u>		
	<u>Attained</u>	<u>Non-Attained</u>	<u>Total</u>
A	41	30	71
B	25	19	44
C	4	3	7
D	9	0	9
E	<u>6</u>	<u>0</u>	<u>6</u>
Totals	85	52	137

$$\chi^2 = 10.31$$

$$P \leq .05$$

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important to maintain the internal consistency of each class of offences.

Therefore, by considering the five classes of criminal offences as attributes against the job attainment dichotomy, we have a 5 by 2 Contingency Table as in Table XIV. It was found that the value of Chi-Square for this relationship is equal to 10.310. With four degrees of freedom, this value of X^2 is significant at the .05 level.

It can therefore be concluded that there is a moderately low relationship between the attainment of an inmate's Job Choice and the type of criminal offence which brought him to penitentiary. It appears that the group of murderers and sex offenders have the best chance of attaining their job choices, while the 'fraudmen' have the least chance of Job Choice attainment. It may be hazardous to draw many conclusions from these results because of two factors - the zero frequencies in two out of the ten cells, and the fact that types of offences are related to lengths of sentences. This is especially true of murderers and sex offenders who were serving many of

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the longest sentences in the sample.

11. Job Choice and Length of Sentence:

As stated previously in the section on Behaviour Ratings and Sentence Length, it was found necessary to group the various sentences into three categories:

a) 2-5 years b) 6-9 years c) 10 years-life

The main reason for this grouping was to avoid the dilemma of attempting to accurately quantify a life sentence. While it is granted that this sort of categorization is being done basically on pragmatic and not scientific grounds, it does afford a certain continuum of sentences in terms of length.

Table XV illustrates the distribution of the attainers and non-attainers according to their lengths of sentences. In order to test the relationship between the dichotomous attribute, Job Choice and the attribute sentence length, the Chi-Square technique is used.⁵

5. Ferguson, 1966, p. 192-211.

Table XV

Distribution of Job Choice Attainment According to

Length of Sentences Being Served

<u>Sentence Length in Years</u>	<u>Job Choice</u>		<u>Totals</u>
	<u>Attained</u>	<u>Non-Attained</u>	
2-5 years	68	48	116
6-9 years	8	4	12
10-life	<u>11</u>	<u>0</u>	<u>11</u>
Totals	87	52	139

$$\chi^2 = 7.6$$

$$P \leq .05$$

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It is found that the value of χ^2 for this relationship is equal to 7.6. For two degrees of freedom, this value is significant at the .05 level. It would therefore appear that the longer the sentence the inmate is serving, the more likely it is that he will attain the job of his choice. Due however, to the presence of two low frequency cells, the results are open to question.

12. Marital Status, Job Choice, and Behaviour Ratings:

The marital status of the entire sample was as follows:

Single inmates	=	126 subjects
Married inmates	=	10 subjects
Separated inmates	=	2 subjects
Unknown status	=	1 subject

On the factors of Behaviour Rating, Job Choice, age, I.Q., and education, the married men scored as follows in Table XVI.

It is probably invalid to perform any analyses on a group of only ten subjects, especially since complete information on even these ten is not available. As a matter of scientific curiosity however, it was considered

Table XVI

Relationship Among Behaviour Ratings, Job Choice

Attainment, Age, I.Q., and Education of Married Men

<u>Behaviour Rating of each subject</u>	<u>Job Choice</u>	<u>Age</u>	<u>I.Q.</u>	<u>Education</u>
4	attained	22	119	11
3	attained	24	-	12
4	attained	34	111	9
2	non-attained	23	89	7
4	attained	31	-	8
3	attained	24	109	8
3	attained	22	99	9
3	non-attained	27	-	6
4	attained	18	116	9
<u>3</u>	attained	29	-	-
10 subjects				

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of some interest to compare this group with the sample of 139 subjects as a whole. The results are therefore as follows:

- a) Of the ten married men, eight did attain the jobs of their choice, as compared to the general attainment percentage of 62.59%.
- b) The married men received better than average Behaviour Ratings. Only one married man scored below the average of 3. As a matter of fact, he was one of the two who did not attain their Job Choice. Four married men were considered to be of 'good' (Behaviour Rating = 4) behaviour, while the other nine were 'average'. Their overall mean Behaviour Rating was 3.3.
- c) Based on the nine subjects for whom educational data was available, their mean educational grade was 8.67. This was slightly better than the overall mean of 8.30.
- d) Their average age was 23.4 years, greater than the overall mean age by two whole years.
- e) The mean I.Q. of the married men based on the six

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subjects for whom this information was available equalled 107.17, as compared to the overall mean I.Q. score of 103.8.

To draw any conclusions based on incomplete data for such a small group would be most spurious. We can however, state that for our sample at least, not only were the married men considerably older, but also more likely to receive average or better than average Behaviour Ratings, and more likely to attain the jobs of their choice. As to the reasons for this we can only speculate. Possible clues may be that:

- i) Since they are older, it is really the age factor that is once again being related to the Behaviour Rating and Job Choice. In other words, this is a statistical phenomena of covariance.
- ii) Since they are older, they may be given more responsibility in respect to their choices.
- iii) Since they are older and married, they may make more responsible and realistic choices which can more easily be acceded to by the institutional work

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placement board.

- iv) Since they are older and married, they may be more stable, they may have a more definite goal and settle down to their work, are better behaved, and in turn this is reflected in their higher Behaviour Ratings.

Under the present circumstances, with the relative sparseness of this group, it will not be possible to verify any of these contingencies. This could perhaps be further explored in a specific research study on the behaviour of married men in penitentiary.

13. Summary of Results:

Table XVII illustrates the overall relationships between the variables studied. As can be seen, Behaviour Ratings were found to be significantly related to Job Choice, age, and intelligence. Only the correlation with Job Choice however, can be described as moderately high. There was no significant relationship between Behaviour Ratings, and education, length of sentence,

Table XVII

Correlation between Variables

<u>Variables</u>	<u>Behaviour Ratings</u>	<u>Job Choice</u>
Behaviour Ratings	-	$r_{pb1} = 0.60****$
Job Choice	$r_{pb1} = 0.60****$	-
Age	$r = 0.24***$	$r_{pb1} = 0.205**$
I.Q.	$r = 0.201*$	$r_{pb1} = 0.235**$
Education	$r = 0.043$ n.s.	$r_{pb1} = 0.199**$
Length of Sentence	$\chi^2 = 7.32$ n.s.	$\chi^2 = 7.60*$
Type of Offence	$\chi^2 = 7.0507$ n.s.	$\chi^2 = 10.31*$

Levels of Significance:

*	= .05
**	= .02
***	= .01
****	= .001

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or type of criminal offence.

Job Choice Attainment was found to be related to all variables studied, in order of significance from intelligence to length of sentence. Because of the low moderate degrees of correlation however, their predictive value is quite doubtful.

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CHAPTER VI

DISCUSSION AND ANALYSIS OF RESULTS

1. The Determinants of Behaviour Ratings:

a) Behaviour Ratings, Job Choice and Age:

As was presented in the results, Job Choice, age, and I.Q. were found to be related to the Behaviour Ratings. Only the correlation with Job Choice ($r_{pb1} = .60$) however, can actually be thought of as a moderately high relationship which can be useful for predictive purposes. While age was significantly related to Behaviour Ratings ($r = .240$) at the .01 level, it should be borne in mind that Job Choice and age were themselves intercorrelated ($r_{pb1} = .205$) at the .02 level. It was therefore quite possible that Behaviour Ratings, Job Choice, and age are all interrelated.

In order to separate the effects of Job Choice, Table XVIII was constructed. As can be seen visually, among the sixteen to twenty-one year old attainers, 21 had 'good' Behaviour Ratings while 9 subjects scored 'poor' Ratings. On the other hand, in the age intervals of twenty-two to thirty-four years, 22 attainers scored

Table XVIII

Distribution of Behaviour Ratings According to Job Choice
Attainment and Age

Job Choice Attainers

Behaviour Ratings

<u>Age</u>	<u>1 & 2</u>	<u>3</u>	<u>4 & 5</u>	<u>Totals</u>
16-18	2	5	6	13
19-21	7	15	15	37
22-24	1	10	9	20
25-27	0	2	5	7
28-34	<u>0</u>	<u>2</u>	<u>8</u>	<u>10</u>
Totals	10	34	43	87

Job Choice Non-Attainers

Behaviour Ratings

<u>Age</u>	<u>1 & 2</u>	<u>3</u>	<u>4 & 5</u>	<u>Totals</u>
16-18	6	3	0	9
19-21	18	5	1	24
22-24	10	6	1	17
25-27	0	1	0	1
28-34	<u>1</u>	<u>0</u>	<u>0</u>	<u>1</u>
Totals	35	15	2	52

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'good' Ratings as compared to only 1 who rated a 'poor' Rating. It can therefore be appreciated that for those who attained the jobs of their choice, the incidence of 'good' Behaviour Ratings increases with age while the frequency of 'poor' Behaviour Ratings decreases with age.

Examining the non-attainers, it is found that age has little if any bearing since only a total of two subjects obtained 'good' Ratings while 'poor' Ratings were profusely distributed among all ages. The presence of many cells containing zero or one subject makes it difficult to draw steadfast conclusions. The only apparent affect of age among non-attainers is to diminish the percentage of 'poor' Ratings as age increases beyond 21 years. It therefore appears that the non-attainment of Job Choice cancels out the affect of age.

This being so, it is more helpful to discuss the relationship between attainers and age. As can be noted, fifty inmates between the ages of 16 and 21 attained the jobs of their choice while thirty-three did not do so. At the same time, thirty-seven inmates between the ages of 22 and 34 attained the jobs of their choice compared to

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nineteen who did not. It is true that the older group had a higher percentage of attainers (66.07%) than the younger group (60.24%). This does not however change the fact that a sizeable number of relatively younger inmates (16-21 years) did attain the jobs of their choice and yet did not profit from this in terms of their subsequent behaviour. On the other hand, most of the older inmates (22-34 years) who attained their jobs did score 'average' or higher in Behaviour Ratings. This has some devastating implications since it is normally felt that the younger inmates are the ones who could most profit from vocational training.

There are at least two possible avenues of explanation for this. The younger inmates are honestly less concerned with the future, especially a legitimate trade, and are less motivated, less stable, prefer immediate gratification to ultimate training and generally do not feel the same degree of responsibility as the older inmates. Often their behaviour is characterized by 'acting-out', the aim of which may be to prove their toughness and 'inmate solidity'. In other words, although they are young they

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try to give the impression that they are just as much devoted to criminal values and turn out to be greater disciplinary problems. They are thus less conforming and more 'delinquent' in prison. This in effect may be a form of overcompensation for their youth.

The older inmates may have less 'to prove' in order to neutralize the problem of youth, may have a greater degree of maturity and responsibility if not because of their older years alone, and are sensitive to the reaction of others towards their behaviour, notwithstanding their hypocrisy. As well, they have a greater degree of commitment so that when they take a decision they are able 'to stick' by it. In this instance Cognitive-Dissonance can operate. It does not so much matter what the motivations are behind a Job Choice so long as the inmate is clearly committed on that choice.

There is also the factor that if an inmate of twenty years of age or more is serving his first penitentiary sentence, as the greatest majority in this institution were, it is relatively safe to say that he is probably a 'late comer' to major criminal activity. This being the

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case, then, he probably has more 'invested' on the outside, was probably relatively less involved in delinquent activity than the inmate who came to penitentiary at sixteen years of age subsequent to an early start in delinquent acts, and may be in penitentiary for more or less economic reasons. He may thus sincerely see vocational training as the elixir of his problems and when accorded the job of his choice, he behaves well.

Another possible explanation has to do with the older inmates' experience with penitentiary. For the proportion of inmates not serving their first penitentiary sentence, it is evident that in all probability they will be relatively older. They thus acquired a certain mixture of experience, realism and what is known as 'hypocrisy' during their previous stay in penitentiary. It is also a fact that the younger inmates will be transferred to the Vocational Training Institution after a very brief stay in the Regional Reception Center. The older inmates may however, be stalled for a longer 'proving period' either in Regional Reception or another institution in the region. This longer period allows them to improve themselves,

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show their good will and demonstrate that they deserve a transfer to the V.T.I.. In addition, they have experienced more time in a less rewarding institution but have worked for and gained something positive.

The younger inmates transferred more or less automatically to the V.T.I., are being given the benefit of the doubt due to their youth and the need to separate them from the 'older cons', without their having performed anything positive themselves. Their attitude is thus not yet ready to make the most of the opportunities they are offered. At the same time, they have not sufficient 'savoir-faire' in penitentiary to know how to do 'their time' in a manner which albeit may be hypocritical, but nonetheless rewarding. In other words, when both the older and younger inmates have no legitimate goals and intend to return to a life of crime upon release, the younger inmate will act in such a way as to make the instructor aware of his attitude towards work. The older inmate with an identical point of view will however give a different impression to the instructor so that the latter recommends a raise in remuneration or possibly even a parole.

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In summary, it can therefore be said that while Job Choice attainment is related to 'good' Behaviour Ratings, this attainment is much more meaningful to the above twenty-two year old inmate than the younger ones. The reasons may be diverse. They may be related to the specific environment and culture of prison. On the other hand, it may be due to the inability of younger inmates to commit themselves on a specific vocational choice, as they cannot imagine themselves leading a legitimate, crime free, hard working, and relatively unexciting life.

b) Behaviour Ratings, Job Choice and Intelligence:

Behaviour Ratings were found to be related to intelligence ($r = .201$) with a low degree of significance. This would give the impression that the higher the inmate's I.Q. score, the higher would be his Behaviour Rating. It has to be kept in mind however, that I.Q. was found to be more significantly related to Job Choice Attainment ($r = .235$) and thus it is possible that the correlation between Behaviour Ratings and intelligence are a product of either factor's relation to Job Choice Attainment.

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In order to separate the effects of Job Choice, Table XIX was constructed. Visual inspection indicates that among the attainers, eleven inmates with I.Q.'s between 61 and 104 rated 'good' Behaviour Ratings while 4 rated 'poor'. In the 105-120 I.Q. group, 4 inmates also rated 'poor' but 25 scored 'good'.

Among the non-attainers, in the 61-104 I.Q. group, twenty-one scored 'poor' while one inmate scored 'good'. In the higher I.Q. group, fourteen scored 'poor' while again one inmate obtained a 'good' Rating.

The results are thus quite similar to those found for the age variable. Once again, among non-attainers, I.Q. had little of a positive effect (increasing the frequency of 'good' Ratings), although rising I.Q. lead to a decrease in the number of 'poor' ratings in each I.Q. interval. All in all, however, it would appear that the non-attainment of Job Choice will cancel out the effect of I.Q.

When Job Choice is attained however, I.Q., like age, has an effect of increasing the number of 'good' Behaviour Ratings as it itself rises. Also like age, the increase

Table XIX

Distribution of Behaviour Ratings According to Job Choice
Attainment and I.Q. Score

Job Choice Attainment

Behaviour Ratings

<u>I.Q.</u>	<u>1 & 2</u>	<u>3</u>	<u>4 & 5</u>	<u>Totals</u>
61-94	3	4	4	11
95-104	1	14	7	22
105-114	2	4	17	23
115-129	<u>2</u>	<u>6</u>	<u>8</u>	<u>16</u>
Totals	8	28	36	72

Job Choice Non-Attainment

Behaviour Ratings

<u>I.Q.</u>	<u>1 & 2</u>	<u>3</u>	<u>4 & 5</u>	<u>Totals</u>
61-94	14	2	1	17
95-104	7	7	0	14
105-114	10	1	1	12
115-129	<u>4</u>	<u>2</u>	<u>0</u>	<u>6</u>
Totals	35	12	2	49

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is not perfectly proportional. The affect is observed best when two intervals are grouped. The reason for this may quite simply be the low frequencies per cell.

It is not easy to answer the question why I.Q. should increase the probability of obtaining higher Behaviour Ratings even for the attainers. Two solutions can be seen however. It may be said that the more intelligent inmates are more proficient at their work placement, are bright enough to behave themselves, and can get along better with the instructor. In effect they too show more 'savoir-faire'. From another point of view, we note that there is a significant relationship at the .02 level between I.Q. and Job Choice attainment ($r = .235$). Therefore, since the more intelligent inmates attain the job of their choice more often, they are more interested in their work and do their work better in order to minimize Cognitive Dissonance.

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2. The Determinants of Job Choice Attainment.

a) Job Choice, Age, I.Q., and Education:

Job Choice Attainment was moderately related to age, I.Q., and education. It was also related to some degree to length of sentence and type of offence. In sum, the older, more intelligent, better educated and to some extent these serving longer sentences for more serious crimes, were more likely to attain the jobs of their choice.

It is felt that this can be explained with facility when one considers the criteria for the various vocations. These have to be taken into account by the institutional Inmate Training Board before an inmate is assigned or reassigned to a work placement.

The demands of each trade are different. For most trades, including electronics, auto body work, machinery, and auto mechanics, at least a grade nine education was required at the time. The inmates choosing these shops were also expected to have average or better intelligence. The programming course required grade ten education.

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These placements tend to be the most popular among all inmates. Consequently, many will ask for these even though they do not possess the education, intelligence or measured aptitude required. Given the fact that there are more requests than openings for these placements, usually the most qualified will obtain their choices. The others may be assigned to placements whose requirements are not as rigid. Examples of such shops are brick-laying, tile-laying, and painting. In these shops, it can be seen that most inmates were assigned because of their lack of qualifications and the lack of openings in more popular shops. It also becomes evident that the better educated and more intelligent inmates will meet the criteria for most placements and thus everything else being equal, they are most likely to attain the jobs of their choice. This in one way explains the relationship between Job Choice Attainment and the education and I.Q. of the inmates.

From another point of view, we should consider the realism of the inmates' choices and their relation to age, I.Q. and education. As this was a vocational training center, it should not be expected that vocational placements

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are assigned haphazardly just because the inmate mentions a certain choice. Whoever the inmate is interviewed by, be it the vocational training supervisor or his classification officer, will get a certain impression of the inmate's motivations for his choice as well as an idea of the realistic basis for it. Naturally, if an inmate's choice is founded in fantasy, it will not be attained very quickly. It is therefore felt that the older, better educated and more intelligent inmates' choices are more realistic and consequently are accorded more often.

The basis for this is supported in the literature. Ginzberg's (2) theory of occupational development postulates that realism in vocational choosing increases with age. Small's (5) study implies that reality and fantasy operate simultaneously at all ages but in his study, individuals were asked for two vocational choices at the same time, without the benefit of any information at all. In a penitentiary however, if an inmate changes his mind, it will usually be after a period of time on the job and he can receive some vocational information at least as far as it affects the available training offered.

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Small's study did show that the group making the more realistic first choices had higher I.Q.'s (average of 112.1) than the less realistic choosers (102.2). Davis' (1) study also demonstrated that subjects with higher I.Q.'s tended to be much more realistic. As far as education is concerned, the research of Stubbins (1948) indicates that choices become more realistic with increased schooling.

As Wiener (7) has pointed out, many inmates do not know their capacities and thus unrealistic choices may be a function of this. What is really necessary in an institution such as the V.T.I. is a programme of vocational guidance. At the time of the study at least, the purpose of the vocational training department was to teach various skills to the inmates and keep the shops filled. There was no really qualified vocational guidance officer on staff who could coordinate the work of the institution with the opportunities available on the outside and accord sessions of vocational counselling to individual inmates.

DISCUSSION AND ANALYSIS OF RESULTS

The point to be made however, is that whether a choice is realistic or not, commitment will be present if the man thinks he has a chance of attaining the job of his choice. Consequently, if the man does not attain his choice, Cognitive Dissonance will appear. In an institution where inmates are first asked for their choice of jobs and at the same time each inmate believes that he is just as equal as another, it is certain that they all feel that they have a chance of attaining the jobs they asked for. This would not be possible however since shops that are too large cannot function well from a learning stand-point. Thus the services of a professional vocational counsellor would greatly ameliorate this problem.

b) Job Choice, Length of Sentence, and Type of Offence:

The low moderate relationship between Job Choice, length of sentence and type of offence should all be explained in terms of the amount of time the individual has previously served in penitentiary. An inmate serving a life sentence will not normally be transferred to the

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Vocational Training Institution until he has completed a part of his sentence either in the Regional Reception Center or another institution. His experience has thus tempered his allusions and rendered him somewhat more aware of what is possible for him to attain and what is not possible. At the same time, the institutional authorities have a better impression of the man's capabilities and if he has warranted a transfer to the V.T.I., chances are that they would more quickly accede to his choice of Jobs.

3. The Determinants of Job Choice in Penitentiary.

The question remains as to why inmates choose the specific jobs they do. According to Glaser (3), inmates do have legitimate vocational aspirations. This may very well be true however, one wonders whether he did not simply accept the verbalized aspirations of incarcerated individuals at face value. The Ligonde' (4) study and the previously mentioned DBS data found high degrees of failure even with apprenticeships completed.

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It appears therefore that the aspirations of inmates are highly simplistic. While imprisoned they look forward to release, a good job, a family and everything else related to a 'good middle class suburban type of life'. The problem is however, that when they finally do obtain a job outside, they are not capable of remaining at it for very long. Obtaining a job alone does not solve all crime, nor does unemployment cause all crime. It appears that once a given life style is established, it is very difficult to change after the formative years have passed. This is especially true for a life of crime which ultimately may be hopeless but is immediately at least, more gratifying emotionally if not economically than a 'dull eight to five routine'. The goal should therefore be not only to teach trades but also to teach the inmate to plan for the future and postpone immediate gratification.

Juxtaposing the theories enunciated in Chapter II, it may be said that inmates' vocational choices are to some extent the function of their family's socioeconomic background and their interactions with their parents.

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To the greatest extent however, penitentiary occupations are chosen in order to afford immediate gratification. Thus a placement is often chosen because one's friend is in the shop, because the work is less taxing physically, because he has heard that it is easier to get along with the instructor or because the placement is more prestigious. The inmate may rationalize that the particular vocation is well paid on the outside or that he will become a sought after and skilled technician. The point to be made however, is that skilled technicians in almost all the vocational trades available could potentially become quite successful. The reason that any specific trade is chosen however, is related to practicality and the need to satisfy some particular want or interest that has developed as a result of his contacts with other inmates.

One may therefore get the impression that vocational training is useless or that the inmates' motivations are necessarily 'bad'. This is far from true. What motivates a Job Choice may to a great extent be a function of the inmate culture or values. Nevertheless, if the inmate has

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a vocational interest, no matter for almost what reason, this should be reinforced.

By granting an inmate his Job Choice, we may establish his trust in our mutual goal, and in return receive his cooperation and good behaviour. Having these basics present, we can work with the inmate through other available treatment programmes as well. In addition, at least some percentage of inmates will profit vocationally. Although Ligonde⁽⁴⁾ found that only 13% of inmates who completed their apprenticeships found jobs in their trade, during the time inmates were only given certain tests of preference and were not consulted as to their actual Job Choice. It may therefore be that a follow-up study of released qualified apprentices who had attained the jobs of their choice, could possibly yield much more positive results. For the moment at least, we would hope that increased attention be given to the Job Choices of inmates. We have no reason to believe that Cognitive Dissonance Theory does not apply to vocational choices where commitment is present. This could therefore be further utilized as a motivational tool in other inmate training programmes.

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CHAPTER VII

CONCLUSIONS

This thesis has attempted to show that the theory of Cognitive Dissonance can be employed within the context of penitentiary vocational and academic training. Specifically, inmate Job Choices were related to their later Behaviour Ratings under the hypothesis that an attained job would lead to a condition of consonance only if that individual behaved well on that placement. On the other hand, an assigned job would lead to consonance only if the inmate worked poorly on the non-chosen placement. As 'cognitive imbalance' or dissonance is considered to be unpleasant, a relationship should be discovered between attained Job Choices and favorable Ratings, and non-attained Job Choices and unfavorable Behaviour Ratings.

It is felt that the results verify these hypotheses. A moderately high Point Biserial Correlation Coefficient of 0.60 was found between the two variables. As this was the highest correlation coefficient to be found among all the variables, it would appear to indicate that if penitentiary authorities wish to obtain the most cooperation

CONCLUSIONS

and good behaviour from their inmates, they should all be given the jobs of their choice. Globally, this is correct and whenever possible Job Choices should be acceded to. It is necessary to add in haste however, that the relationship applies best to the older and more intelligent inmates who it is felt, are relatively more stable and committed to their Job Choices.

In almost all cases, therefore, the older and more intelligent inmates should be given the jobs of their choice. The question remains however of how to proceed with the younger and less intelligent inmates. In the same vein, but from another point of view, what is to be done with the less educated and less intelligent inmates who it was found had a lower probability of attaining their Job Choice? The only solution that can be seen is to upgrade them academically. This may entail placing them in school contrary to their wishes but, the results in terms of behaviour would not be any worse and ultimately could lead to success. If the inmates could be upgraded to a basic grade nine or ten education, they would at least be on a more equal footing to compete for

CONCLUSIONS

the vocational training available. How to do all this within an average two year sentence which with parole, statutory remission and earned remission ('good time') leads to a nine to sixteen month sentence is another problem. On not infrequent occasions it is even found that inmates are paroled a month or two before completing their apprenticeships. If this is to be resolved properly, the entire judicial and penological system will have to be modified. Ultimately we envision a system of indefinite sentencing, for no judge is capable of knowing a priori, how long it will take to rehabilitate a man.

For the immediate future, we would in most cases limit vocational training to those inmates who have attained a certain academic level and perhaps age as well. Most of us do not choose a specific profession until age twenty or twenty-one. It is unlikely to be any different for inmates and vocations. We thus feel that the institution would ultimately be more successful if it put greater emphasis on academic training.

CONCLUSIONS

Parallel to this, professional vocational guidance should be made available. A qualified vocational counsellor would be in a better position to channel the inmates in a proper vocational direction. He could meet and explain to inmates why they cannot always be placed in the job of their choice. This is not an easy problem to resolve. In our egalitarian society almost everyone is led to believe that they can rise to any level and attain any objective. Not everyone has the aptitude or the ability to become a computer programmer, yet many may feel that they have the same rights to take this course as the next individual. Vocational counselling can go a long way towards ameliorating this condition. In addition a vocational counsellor could best coordinate the institutional programmes and facilities with the outside vocational requirements and needs. Classification officers may be professionals in their domain but their knowledge is not vocationally attuned.

Some small pre-vocational areas should be established through which all the inmates would pass and get some idea of what each trade is all about. If they still have

CONCLUSIONS

a considerable length of time remaining to serve on their sentences after this, their choices will be more realistic, better founded and more definite. If their sentences have expired by then, they will at least have attained a basic educational level as well as an idea of what direction they wish to head, be it vocational or academic.

We feel that further research in vocational choosing based on the Theory of Cognitive Dissonance is warranted. This need not only be done within penitentiaries but in industry as well. It would be of interest to find whether the results would be similar to those found in our institution. A study could be performed on Job Choices in a maximum security institution where the inmates would have more varied backgrounds and personal characteristics.

A similar but more in depth research study should also be done in the same institution but including an interview and vocational aptitude test on each subject. In addition a vocational follow-up could be built in to discover the outcome of the attainers and non-attainers.

CONCLUSIONS

This would allow for a comparison of each individual's choice as compared to his aptitude and the eventual value of Job Choice attainment. Finally we would suggest that a study be done on the behaviour and motivations of married men in penitentiary as compared to a control group of single inmates. While the basis for this is highly speculative, the results do give some food for thought.

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APPENDIX 1

Form A-7 of the Vocational Training Institution

Utilized for the taking of academic and vocational information as well as for the notation of initial and final Job Choices and assigned placements.

VOCATIONAL TRAINING INSTITUTION - Service d'Orientation - Cours no: _____

DATE: _____ NOM: _____ MATRICULE: _____

AGE: _____ SÉQUENCE: _____ DESTINATION/SORTIE: _____

INVENTAIRE DES ACQUIS		
SCOLARITE	DEGRE DECLARE:	EQUIVALENCE:
COURS SPECIALISE		ENDROIT:
TRAVAIL ANTERIEUR		CARNET: _____
SANTE	BONNE:	MAUVAISE:

OCCUPATION DE LA PARENTELLE	
PERE:	FRERE:

FORMATION DESIREE		
ETUDE	71eme	METIER DESIRE:
8-9	10-11	

() 1ere ENTREVUE:

ORIENTATION INITIALE:

() 21eme ENTREVUE:

ORIENTATION FINALE:

APPENDIX 2

Grygier's Procrustean Table to Stretch Data On

TABLE XX

PROCRUSTEAN TABLE TO STRETCH DATA ON

N	f (X=1)	f(X=2)	f(X=3)	f(X=4)	f(X=5)	E(X=3) ²
5	1	1	1	1	1	10
6	1	1	2	1	1	10
7	1	1	3	1	1	10
8	1	2	2	2	1	12
9	1	2	3	2	1	12
10	1	2	4	2	1	12
11	1	2	5	2	1	12
12	1	3	4	3	1	14
13	1	3	5	3	1	14
14	1	3	6	3	1	14
15	1	4	5	4	1	16
16	1	4	6	4	1	16
17	1	4	7	4	1	16
18	1	4	8	4	1	16
19	1	5	7	5	1	18
20	1	5	8	5	1	18
21	1	5	9	5	1	18
22	1	5	10	5	1	18
23	2	5	9	5	2	26
24	2	6	8	6	2	28
25	2	6	9	6	2	28
26	2	6	10	6	2	28
27	2	6	11	6	2	28
28	2	7	10	7	2	30
29	2	7	11	7	2	30
30	2	7	12	7	2	30

APPENDIX 3

Directives to Instructors as to the Method of

Assigning Behavior Ratings to their Inmates

Instructions pour l'evaluation du comportement.

Lire la liste ci-jointe des detenus qui font partie de votre atelier, et ...

- a) Choisissez _____ detenus dont le comportement vous parait le plus acceptable. Inscrivez 5 a cote du nom de ce ou ces detenus.
- b) Choisissez _____ detenus autres que celui ou ceux choisis dans la premiere question, mais dont le comportement vous parait presque aussi acceptable. Inscrivez 4 a cote du nom de ce ou ces detenus.
- c) Choisissez _____ detenus dont le comportement vous semble le moins acceptable. Inscrivez 1 a cote du nom de ce ou ces detenus.
- d) Choisissez _____ detenus, autres que ceux mentionnes a la section c) dont le comportement n'est pas acceptable, mais a un degre moindre que ceux mentionnes ci-dessus. Inscrivez 2 a cote du nom de ce ou ces detenus.
- e) Il devrait rester _____ noms sans numero. Ceux-ci seront percus comme des detenus moyens ou ceux que vous ne pouvez categoriser. Inscrivez 3 a cote du nom de ce ou ces detenus

Les criteres qui determineront le comportement le plus acceptable, ou inversement le moins acceptable, sont laisses a votre discretion; vous n'avez pas a expliquer le pourquoi de votre choix.

Merci de votre collaboration.

INSTRUCTEUR: _____ ATELIER: _____

APPENDIX 4

Personal Characteristics of the Inmates

in Raw Data Form

LEGEND FOR TABLE OF RAW DATA

- X_1 = Behaviour Rating distributed from 1 to 5.
- X_2 = Job Choice: O = Non-Attainment
I = Attainment
- X_3 = Criminal Offence: A = All types of thefts.
B = Offences against persons through the use of, or threats of violence.
C = Frauds
D = Murder or attempted murder.
E = Rape and other sex offences.
F = Drug trafficking.
- X_4 = Sentence in number of years.
- X_5 = Age as of April 30, 1970.
- X_6 = I.Q. in Revised Beta Score.
- X_7 = Civil Status: S = Single
M = Married
SP = Separated
- X_8 = Education in number of grades completed
- X_9 = Assigned job placement.

TABLE XXI
TABLE OF RAW DATA

<u>INMATES</u>	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇	X ₈	X ₉
1	2	0	A	2	22	91	S	6	Painting
2	3	0	B	3	22	96	S	10	"
3	3	1	A	2	21	-	S	8	"
4	5	1	A	2	19	107	S	9	"
5	4	1	A	3	22	105	S	9	"
6	1	0	B	3	20	91	S	6	"
7	3	1	A	3	22	64	S	7	Carpentry
8	5	1	A	2	26	107	S	7	"
9	3	0	A	3	27	-	M	6	"
10	2	0	A	2	20	90	S	6	"
11	4	1	A	2	18	116	M	9	"
12	2	1	B	2	19	89	S	8	"
13	3	1	A	2	19	82	S	6	"
14	4	1	B	5	34	-	S	10	"
15	1	0	B	2	17	114	S	10	"
16	5	1	B	5	20	118	S	7	Machine shop
17	1	0	A	2	21	110	S	11	"
18	3	1	A	2	19	122	S	11	"
19	4	1	C	2	21	107	S	10	"
20	4	1	A	2	31	112	Sp	5	"

TABLE XXI
TABLE OF RAW DATA

<u>INMATES</u>	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇	X ₈	X ₉
21	2	1	A	2	19	121	S	9	Machine shop
22	2	0	A	2	21	78	S	7	"
23	3	1	B	7	29	-	M	-	"
24	3	0	A	2	20	99	S	-	"
25	3	0	B	3	22	-	S	8	Plumbing
26	5	1	A	2	18	99	S	8	"
27	3	1	B	2	16	104	S	6	"
28	2	0	A	2	19	115	S	9	"
29	3	1	B	12	20	118	S	10	"
30	4	1	A	2	22	114	S	10	"
31	1	1	B	2	22	96	S	9	"
32	3	1	A	2	20	103	S	9	Electronics
33	2	1	A	3	20	113	S	10	"
34	3	1	A	3	26	99	S	7	"
35	1	0	A	5	20	120	S	10	"
36	3	0	A	2	18	121	S	11	"
37	4	1	B	2	34	111	M	9	"
38	5	1	B	5	25	93	S	9	"
39	2	1	A	3	17	91	S	6	Brick laying
40	3	0	A	2	23	88	S	5	"

TABLE XXI
TABLE OF RAW DATA

<u>INMATES</u>	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇	X ₈	X ₉
41	3	1	B	3	26	-	S	6	Brick laying
42	4	1	A	2	19	111	S	7	"
43	1	0	A	2	20	91	S	9	"
44	5	1	B	3	20	103	S	7	"
45	5	1	F	2	20	105	S	8	Electricity
46	3	0	A	2	22	96	S	9	"
47	1	0	A	2	21	107	S	9	"
48	4	1	A	2	28	125	S	9	"
49	2	0	A	2	17	97	S	5	"
50	4	1	B	7	19	106	S	6	Welding
51	1	0	A	2	21	75	S	7	"
52	5	1	B	3	26	103	S	12	"
53	3	1	A	3	20	101	S	8	"
54	2	1	A	2	20	102	S	9	"
55	3	1	A	2	17	77	S	8	"
56	3	1	E	13	24	98	S	8	I.B.M.
57	4	1	B	8	28	108	S	-	"
58	2	1	D	11	19	110	S	11	"
59	3	1	D	10	21	124	S	-	"
60	4	1	B	3	22	119	M	11	"

TABLE XXI
TABLE OF RAW DATA

<u>INMATES</u>	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇	X ₈	X ₉
61	5	1	B	3	24	116	S	12	I.B.M.
62	1	0	C	2	21	110	S	11	"
63	3	1	C	2	29	116	S	-	"
64	3	1	B	2½	22	122	S	10	"
65	2	0	B	2	23	115	S	12	"
66	3	1	B	2	24	-	M	12	"
67	5	1	E	12	22	115	S	9	Auto mechanics
68	4	1	F	8	31	-	Sp	8	"
69	3	1	B	2	20	110	S	10	"
70	4	1	A	3	19	107	S	9	"
71	3	1	A	3	18	-	S	7	"
72	1	0	A	2	21	107	S	7	"
73	2	1	A	2½	19	129	S	10	"
74	2	0	A	5	19	93	S	8	"
75	3	1	A	2	22	102	S	9	"
76	3	1	E	3	23	98	S	9	"
77	3	1	A	2	22	104	S	10	"
78	3	1	C	2	20	122	S	9	Auto body
79	1	0	B	5	22	100	S	7	"
80	3	1	B	5	21	109	S	8	"

TABLE XXI
TABLE OF RAW DATA

<u>INMATES</u>	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇	X ₈	X ₉
81	2	0	B	3	24	112	-	8	Auto body
82	2	0	B	7	23	89	M	7	"
83	4	1	A	2	21	115	S	11	"
84	4	1	A	2	31	-	M	8	"
85	5	1	A	2	25	-	S	10	"
86	3	1	D	life	21	107	S	10	Grade 9
87	5	1	D	life	24	-	S	7	"
88	4	1	A	2	18	105	S	8	"
89	2	0	A	2	22	101	S	7	"
90	2	0	A	2	20	89	S	7	"
91	4	1	D	life	17	99	S	8	"
92	1	0	B	2	19	89	S	7	"
93	3	1	E	3	21	101	S	8	"
94	3	1	E	3	18	110	S	8	"
95	4	1	A	2	20	103	S	9	"
96	2	1	C	6	17	89	S	7	"
97	3	0	A	2	21	104	S	-	"
98	3	0	B	4	23	100	S	8	"
99	5	1	A	8	20	107	S	9	Grade 10-11
100	2	0	B	8	20	100	S	9	"

TABLE XXI
TABLE OF RAW DATA

<u>INMATES</u>	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇	X ₈	X ₉
101	1	0	A	8	28	116	S	11	Grade 10-11
102	2	0	C	3	22	107	S	9	"
103	3	0	B	3	19	117	S	8	"
104	4	1	B	3	20	112	S	9	"
105	3	1	D	4	24	104	S	9	"
106	4	1	E	2	18	-	S	10	"
107	3	1	A	2	19	96	S	10	"
108	3	0	B	3	20	102	S	10	"
109	3	1	D	12	18	-	S	10	"
110	1	0	A	2	19	82	S	10	Tile laying
111	2	0	A	2	17	96	S	3	"
112	4	1	A	2	21	84	S	10	"
113	5	1	B	2	22	-	S	8	"
114	3	1	B	10	21	-	S	9	Kitchen
115	4	1	D	8	22	109	S	7	"
116	1	0	B	2	22	61	S	6	"
117	2	0	B	5	22	90	S	7	"
118	3	1	A	2	24	109	M	8	"
119	5	1	A	2½	28	114	S	6	"
120	5	0	A	3	19	109	S	6	Laundry

TABLE XXI
TABLE OF RAW DATA

<u>INMATES</u>	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇	X ₈	X ₉
121	1	0	A	2½	21	109	S	8	Laundry
122	3	0	A	2	19	109	S	6	"
123	3	0	A	2	16	80	S	5	"
124	2	0	A	3	18	113	S	9	"
125	4	1	A	2	18	103	S	9	"
126	3	1	A	2	17	88	S	6	"
127	2	0	A	2	18	101	S	8	Utility
128	3	1	A	2	22	99	M	9	"
129	1	0	B	2	19	106	S	7	"
130	5	1	A	2½	20	94	S	6	"
131	4	0	C	2	23	91	S	8	"
132	1	1	A	3	19	-	S	9	Barbers
133	5	1	D	10	23	76	S	9	"
134	4	1	B	7	19	115	S	8	"
135	2	0	B	6	22	86	S	7	"
136	2	0	A	2	17	-	S	8	"
137	4	1	B	5	25	102	S	9	"
138	3	0	B	2	17	99	S	9	"
139	3	0	B	2	22	99	S	9	"

APPENDIX 5

Computation of Statistics

TABLE XXII

Computation of the Point Biserial Correlation Coefficient (r_{pbi})

<u>Variables</u>	<u>$\bar{X}_p$</u>	<u>$\bar{X}_q$</u>	<u>N</u>	<u>S_t</u>	<u>p</u>	<u>q</u>	<u>r_{pbi}</u>	<u>t</u>	<u>Level Of Signi- ficance</u>
BR vs Job Choice	3.55	2.08	139	1.187	.6259	.3741	.600	8.778	.001
Job Choice vs Age	22.09	20.62	139	3.463	.6259	.3741	.205	2.460	.02
Job Choice vs I.Q.	105.19	99.20	121	12.500	.5950	.4050	.235	2.604	.02
Job Choice vs Education	8.60	7.92	133	1.682	.6240	.3760	.199	2.545	.02

TABLE XXIII

Computation of the Product Moment Correlation Coefficient (r)

<u>Variables</u>	<u>$\bar{X}$</u>	<u>$\bar{Y}$</u>	<u>N</u>	<u>$E x^2$</u>	<u>$E y^2$</u>	<u>E_{xy}</u>	<u>r</u>	<u>t</u>	<u>Level of Significance</u>
BR vs Age	3.0	21.4	139	198.0	1666.7	137.2	0.24	2.90	.01
BR vs I.Q.	3.0	103.8	121	177.0	18881.34	368.6	.201	2.25	.05
BR vs Education	3.0	8.3	133	197.0	376.37	11.7	.043	.495	non-significant

TABLE XXIV

Computation of Chi-Square (χ^2)

<u>Variables</u>	<u>$\frac{O^2}{E}$</u>	<u>N</u>	<u>χ^2</u>	<u>df</u>	<u>Level of Significance</u>
BR vs Length of Sentence	146.32	139	7.32	4	Non-significant
BR vs Types of Offences	144.0507	137	7.0507	8	Non-significant
Job Choice vs Length of Sentence	146.60	139	7.6	2	.05
Job Choice vs Types of Offence	147.31	137	10.31	4	.05

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SUMMARY
OF

The Affect of Job Choice Attainment and Non-Attainment on
the Behaviour Ratings of Inmates in a Correctional Institution

The problem studied was whether the factor of an inmate's attaining or not attaining the job placement of his choice had any affect on his subsequent on the job behaviour. In other terms, will an inmate be interested in performing well on an assigned placement that he did not choose by himself?

This is conceptualized in terms of Festinger's Theory of Cognitive Dissonance. According to this theory, the amount of dissonance that exists after a decision has been made is a direct function of the number of things the person knows to be inconsistent with that particular decision.

In our situation, it was hypothesized that when an inmate attains the job of his choice, he will behave and perform well on the job in order to maintain consonance, or cognitive balance. On the other hand, an inmate whose Job Choice is not attained should behave poorly in order to maintain consonance.

SUMMARY OF THESIS

Instructors in each of the eighteen groups were asked to rate their inmates on a five point forced normal distribution, by assigning one score to each inmate under his charge. While the scores were termed Behaviour Ratings, this was defined individually so that each instructor could rate his inmates according to whatever criteria he saw fitting.

The inmates' Job Choices were found to be in their files. When an inmate was not working on a placement that he had asked for, it was assumed that he had not attained his Job Choice. If he was working on a chosen assignment, then his Job Choice was attained. The Behaviour Ratings were then correlated with the factor of Job Choice attainment and non-attainment.

In addition Behaviour Ratings and Job Choice attainment were related to several personal characteristics of the inmates such as age, intelligence as measured by the Revised Beta I.Q. Test, education, marital status, length of sentence and type of criminal offence which brought the individual to penitentiary.

SUMMARY OF THESIS

Behaviour Ratings were found to be significantly related to Job Choice Attainment with a moderately high Point Biserial Correlation Coefficient of 0.60. This was the highest correlation to be found among all the variables. There was also a moderate relationship between Behaviour Ratings and the age and intelligence of the inmates, so that the older and more intelligent inmates were more likely to score higher on their Behaviour Ratings.

Job Choice Attainment was found to be related to all the variables studied in order of significance from intelligence to length of sentence. This implies that the older, more intelligent, better educated inmates serving longer sentences for graver criminal offences had a higher probability of Job Choice Attainment.

Further analysis showed that the affect of Job Choice Attainment on Behaviour Ratings was more significant for the older and more intelligent inmates than the younger and less intelligent individuals. It is concluded therefore that whenever possible, the older and relatively more intelligent inmates should be given the jobs of their choice.