PERCEIVED INSTITUTIONAL ENVIRONMENT AND ITS RELATIONSHIP TO STAFF/RESIDENT CHARACTERISTICS: AN EXPLORATORY STUDY

by

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B.A., University of Calgary, 1978

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS in the Department of Psychology

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SIMON FRASER UNIVERSITY

October 1981

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Perceived Institutional Environment and its Relationship to Staff/Resident Characteristics: An Exploratory Study

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Residents and staff at a correctional institution for incarcerated juveniles completed the Correctional Institutions Environment Scale (CIES), Personality Research Form (PRF), and a Demographics Questionnaire. In addition, staff members completed the Job Description Index (JDI). Environmental perceptions, as reflected by the CIES, were correlated with personality and demographic variables for residents and staff. In the case of staff members, environmental perceptions were correlated with job satisfaction as measured by the JDI. Finally, the extent to which staff and residents perceived the environment similarly/dissimilarly was determined.

The results of the research may be summarized as follows. Environmental perceptions were found to be related with demographic background characteristics for both staff and residents. In the case of personality variables, this relationship proved significant for residents only; although a relationship between staff personalities and environmental perceptions was not demonstrated, employee environmental perceptions were found to correlate with job satisfaction. Finally, residents and staff were found to maintain similar environmental
perceptions.

These results, as they pertain to environmental measurement via subjective perceptions (beta press environmental assessment), may be seen as tentative; while the presently demonstrated relationships suggest the potential for non-environmental variables, such as perceiver characteristics, to confound environmental perceptions, they at the same time lend support to certain aspects of beta press assessment. Implications of such findings are discussed and recommendations for future research forwarded.
ACKNOWLEDGEMENTS

Dr. R. Boesch has given me a great deal of assistance in the formulation of the research problem, design and implementation of methodology, and general stylistic changes. For this, and for his patience, encouragement, and expert guidance I sincerely thank him.

Dr. W. Krane has provided expert consultation regarding statistical analyses and corresponding computer procedures. I benefitted from his assistance with this critically important but complicated issue.

Special appreciation is extended to Dr. D. Mitchell who on short notice agreed to serve as external examiner. Her experience within correctional institutions made her comments regarding the present research especially relevant.
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INTRODUCTION

Man's environment has long been considered an important component of the human condition. In particular, the environment has often been seen as influential in determining mental health. As early as the sixteenth century Juan Luis Vives argued that the insane could be restored to sanity by gentle treatment, not harsh condemnation (Suinn, 1970). In 1773 Pinel became the first to advocate a change in the psychiatric environment, proclaiming that the insane needed only fresh air and their liberty (Zilboorg & Henry, 1941). In the 1800's Dr. Benjamin Rush and Dorothea Dix were the American Equivalents of Pinel, bringing major environmental reform to American hospitals (Suinn, 1970).

Historically, each of the major approaches to psychology and/or psychiatry have at one time or another dealt with environmental issues, some of them directly (social learning theory) and others indirectly (psychoanalytic approach). In the early 1900's analytical theorists demonstrated interest in the environment by discussing the design of environments which facilitate the working through of dynamic conflict (Alden, 1975). For example, Menninger (1938) believed that suicide could be prevented by removing object loss (rejection) from a patient's environment. With the advent of ego psychology (Erikson, 1950), environmental psychology entered the
non-analytical realm, with ego psychologists studying the relationship between ego development and the environment. For example, Marcia (1970) has suggested that an environment which promotes or requires premature acceptance of an identity ("identity foreclosure"), may have certain adverse effects upon the ego.

This increasing emphasis placed upon environmental variables led naturally to the more recent, environmentally based social learning theory, with institutional token economies representing complex and sophisticated attempts at environmental manipulation for therapeutic purposes (Ullmann & Krasner, 1969).

Although a variety of environments have been studied, the institutional environment has received special attention. From the time of Pinel to the present, observers have noted the nontherapeutic aspects of institutional environments; these include "a generally sterile, unattractive physical setting, pessimistic staff attitudes, loss of personal possessions, lack of contact with the outside world, ... large anonymous hospitals, and a dull regimented daily routine" (Alden, 1975, p. 3). Certain researchers have hypothesized a causal relationship between such damaging institutional environments and the patient's condition, labelling this condition
"institutional neurosis" (Jones, 1963). The recent development of "community mental health" and "community psychology" has actually called for the replacement of traditional hospital treatment environments, proposing instead that a healthier community environment be utilized (Dunham, 1965; Rappaport, 1977). Proponents of this approach advocate the replacement of dreary and boring institutions with community mental health centres, where patients receive necessary psychological services while retaining normal community roles (Calhoun, 1977).

ENVIRONMENTAL ASSESSMENT

While concern regarding institutional environments stimulated interest in the assessment or measurement of such environments, the first formal attempts at environmental assessment were an indirect result of personality research pertaining to the "trait-situation" controversy (Alden, 1975). Trait theorists have traditionally proposed the existence of a unique set of personal dispositions or traits based upon the uniqueness of each person's life experiences, and have defined these traits as a tendency to react to related situations in a way that remains more or less stable over time (Allport, 1961). More recently, proponents of the trait theory have subjected
trait related data to factor analysis in order to discover underlying dimensions, and have seen these dimensions as representing highly pervasive traits (Eysenck, 1970). Proponents of the situation-specific theory, on the other hand, reject personality theories which deal solely with pervasive traits, viewing personality as situation-specific or environmentally determined (Mischel, 1968). For example, Wolpe and Lazarus (1966) proposed that individuals are not "absolutely" assertive, submitting rather, that assertiveness tends to vary from situation to situation, thereby suggesting the importance of environmental variables. Similarly, Mischel (1969) has disputed trait theories by arguing that human behaviour lacks cross-situational consistency. He concluded that personality assessment instruments based on pervasive trait theory do not display concurrent or predictive validity and are therefore unable to predict behaviour beyond base rates.

Mischel (1973) and other critics of the pervasive trait theory have modified their original position, but in general, continue to support the situation-specific personality theory. Although the controversy continues, emphasis placed upon the situation (environment) has made the case for formal environmental assessment.

The need for environmental assessment techniques was
further emphasized by the "source of variance" research, which demonstrated that human behaviour can best be explained by appealing to a person X situation interaction, where responses vary from one situation to another (Bowers, 1973; Golding, 1975).

In light of this heightened awareness regarding situational variables and the need for formal environmental measurement, a great deal of research involving environmental assessment has attempted to relate institutional environment to a variety of dependent measures, including behaviour, release rate, rate of improvement, etc. (Ellsworth, Dickman, & Maroney, 1972). As this, and other research involving environmental assessment has become more and more prevalent, investigators have identified two main areas of interest. First, researchers have attempted the typing or classification of the various variables used in the measurement of environments. For example, Alden (1975) did an extensive review of environmental assessment studies, identifying four such variable categories: (1) physical aspects of the ward have been investigated by comparing attractive with unattractive decor (Holahan and Saegert, 1973) and by determining the effects of furniture arrangement on ward socialization (Holahan, 1972; Sommer, 1969); (2) staff attitudes about mental illness (Cohen
& Struening, 1964); (3) administrative policy variables such as hospital population and patient/staff ratio (Ullmann, 1967); and (4) patient behaviour on the ward (Kellam et al., 1967). The second area of interest concerns itself with the differentiation of two conflicting models or methods of environmental measurement known as "alpha" versus "beta" press assessment. The controversy surrounding these models is of critical importance to the present discussion and will be dealt with specifically in the following section.

**ALPHA VERSUS BETA PRESS ENVIRONMENTAL MEASURES**

These opposing models of environmental assessment have been postulated as a means of measuring Alden's four categories of environmental variables. The first involves objective environmental variables, or "alpha press" measures (Stern, 1970). For example, Gurel (1964) investigated the relationship between hospital policy and early release, using objective variables such as hospital size. The second, more subjective approach makes use of individual environmental perceptions, or "beta press" variables.

According to beta press theorists, behaviour is related to the environment as perceived by the individual (Moos, 1976; Stern, 1970). They deny a necessary relationship between
the objective environment and behaviour, and point to research demonstrating that different individuals respond differently to the same objective stimuli. Therefore beta press researchers consider perceptions of an environment to be the most effective means of environmental measurement (assessment). Individual environmental perceptions, including behaviour of staff and patients on the ward, are recorded, and treated as a measure of environmental forces (Ellsworth & Maroney, 1972); "if the patients perceive most other patients as neatly dressed, most other patients as having a schedule of the day's events, and most other rooms as orderly, it is inferred that there is an environmental press for order" (Alden, 1975). In an attempt to investigate the extent to which objective environmental measures correspond with subjective perceptions of that environment, Moos and Houts (1968) determined the alpha press correlates of beta press measures; they demonstrated that objective environmental variables such as patient/staff ratio, number of patients on the ward, and privileges allowed were reflected in subsequent environmental perceptions.

Although the merit of alpha versus beta press measurement has become a major source of controversy, two critical aspects of this issue are especially important. First, a review of studies involving environmental assessment would indicate a
narrow range of environmental variables which can be measured objectively (via alpha press). More specifically, this type of measurement would appear limited to simplistic and easily observed variables such as seating arrangement (Sommer & Ross, 1958), general decor (Kasmar, Griffin, & Mauritzen, 1968), bedroom size (Ittelson, Proshansky, & Rivlan, 1970), hospital size (Gurel, 1964), and patient/staff ratio (Ullmann, 1967). However, in the measurement of more complicated and abstract environmental variables such as "support" and "involvement", where variable aspects cannot be quantified or easily observed, researchers have resorted to the subjective reactions of resident individuals to their environment (beta press).

Second, concern has arisen regarding the extent to which subjective beta press measures are a function of personality and demographic variables (Alden, 1975). Advocates of objective alpha measurement propose beta measures (subjective perceptions) to be so highly correlated with the personality of the perceiver that they have little, if anything, to do with the "real environment" (Astin & Holland, 1961; Sells, 1963). Alpha measures, on the other hand, are assumed to be less influenced by personality and demographic variables. Beta press advocates respond to this argument by rejecting the existence of a "real" or "actual" environment, proposing rather, the
existence of as many environments as there are perceivers within that environment (Lewin, 1951; Stern, 1970).

To date, research intended to resolve the latter issue has yielded conflicting results. Certain investigations have tended to downplay the correlation between environmental perceptions (beta press measures) and personality and/or demographic variables. For example, Moos and Houts (1968) concluded that environmental perceptions are independent of demographics such as age, sex, length of stay, etc. Ellsworth and Maroney (1972) replicated this finding, but did find small correlations between environmental perceptions and personality variables such as self-confidence and healthy presentation. However, in direct contrast to these results, other researchers have reported correlations involving both personality and background demographics. For example, Alden (1975) demonstrated small to moderate correlations between imprisoned patients' environmental perceptions and background demographics. In particular, patients who had resided in the hospital for longer periods of time perceived less involvement, support, clarity, and anger in their environment, while individuals expecting to be in the institution for longer periods of time perceived more involvement, support, practical orientation, personal problem orientation, order, clarity and less control in their environments. In
addition, previously imprisoned patients perceived greater staff control; married and better educated patients perceived less staff control. Larger correlations were obtained between personality variables and environmental perceptions. Those individuals complaining of somatic distress and feelings of unreality perceived less spontaneity and more staff control. Depressed patients perceived less support, spontaneity, autonomy, practical orientation, personal problem orientation, and clarity. In light of the discrepant research findings in this area it is recommended that questions regarding the relationship between environmental perceptions and personality/background variables be submitted to further investigation.

Although the possibility of a relationship between environmental perceptions and personality/background variables has been investigated for institutionalized patients/residents (Alden, 1975), this issue as it pertains to staff/employees remains unresearched. Other variables have, however, been forwarded as potential correlates of employee environmental perceptions. In particular, researchers have demonstrated correlations between employee environmental perceptions and certain measures of job satisfaction. For example Dorr, Honea, and Pozner (1980) investigated employee environmental perceptions in a psychiatric hospital, demonstrating a relationship
between nurse morale and perceived degree of practical orientation, order, organization, support, and involvement. As in the case of relationships involving resident personalities, such a correlation is thought to question the effectiveness of beta press environmental assessment.

ENVIRONMENTAL ASSESSMENT INSTRUMENTS

The emphasis placed upon environmental assessment has led to the development of formal environmental assessment instruments or tests. This process has in turn been influenced by the alpha versus beta press controversy. For example, Kellam et al. (1966) has developed the "Ward Information Form" (WIF), the last three items of which--ward census, patient/staff ratio, and patient freedom, are objective hospital policy factors, totally independent of any subjective perceptions.

Other researchers have used the beta press model in the construction of environmental assessment instruments. For example, Moos and Houts (1968) designed the "Ward Atmosphere Scales" (WAS). Individual patients are first asked to complete a number of "true-false" type items regarding perceptions of their ward environment. In order to correct for extreme reactions to the environment, the scores (perceptions) of all patients are then averaged and the ward mean is interpreted
as an environmental measurement. This average score across raters, also known as the "consensual score", is therefore thought to be a more representative environmental indicant than the individual beta press scores.

According to Moos and Houts (1968) the WAS tends to correlate with the Perception of Wards Scales (Ellsworth & Maroney, 1972) and the Ward Information Form, thereby demonstrating concurrent validity. According to Alden (1975), however, construct validity for the individual scales has not been demonstrated.

While environmental assessments have traditionally dealt with hospital wards (i.e. the WAS), Moos (1968) has developed a beta press Social Climate Scale (SCS) which differentiates between the psychological atmospheres of correctional institutions. The items on the initial SCS were translated from the initial form of the Ward Atmosphere Scale by both residents and staff familiar with correctional institutions. The SCS, like the WAS, is based upon a consensual beta press, or shared environmental perceptions. Individual scores (resident perceptions) are again averaged in order to arrive at an environmental index.

The SCS consists of twelve subscales constructed via rational and statistical techniques—spontaneity, support,
practicality, affiliation, order, insight, involvement, aggression, variety, clarity, submission, and autonomy. Moos (1968) found subscale intercorrelations to be small, and based upon this finding proposed factor analysis to be unnecessary. Conversely, Wilkinson (1973), demonstrated significant subscale intercorrelations; through principle components factor analysis one factor, labelled "value", was identified as the source of most of the subscale dependence.

Validity evidence for the SCS has been provided by Moos (1968) when he demonstrated a relationship between the social climate of correctional units (as measured by the SCS) and variables related to general resident reaction to the unit. For example, it was found that units with greater emphasis on spontaneity, affiliation, insight, variety, and autonomy had residents who were more likely to like the staff and to feel that they were able to test their abilities and to increase their self confidence. Units with greater emphasis on affiliation, insight, and autonomy had residents who perceived themselves as more likely to take both submissive and autonomous initiatives toward the staff.

In conclusion, interest in the environment has become an important aspect of modern day psychological research. We have progressed very rapidly from the early days of Pinel and
Dix to the sophisticated environmental assessment methods of today. More specifically, the measurement of subjective beta press has become very important. Unfortunately the speed with which this has occurred has left critical questions unanswered. In particular, the possibility of a correlation between subjective perceptions and perceiver personality has serious implications for the use of this technique. Such a correlation would imply that environmental perceptions are less a measure of the environment than they are of personality and that in an environment of divergent personalities any unitary measurement is impossible. The possibility of a correlation between environmental perceptions and job satisfaction or background demographics creates similar difficulties for the beta press model. Therefore, in spite of the aforementioned limitations and difficulties with objective alpha press measurement, it is submitted that beta press instruments require closer examination and resolution of critical issues.

QUESTIONS TO BE ANSWERED

The first question concerns the role of resident personality variables in beta press environmental research. This study will investigate whether an individual's perception of the environment is related to the kind of person he or she is
Research relevant to this question has been undertaken in hospital ward environments (Kellman et. al., 1967; Moos & Schwartz, 1972), but with the exception of Alden's investigation into an adult correctional facility (Alden, 1975), tests designed to assess other environments remain relatively unstudied. For example, similar research has never before been applied to incarcerated juveniles and their environments. Therefore, the present research will investigate the relationship between resident personality and environmental perceptions in a juvenile correctional facility.

The second question concerns the role of differential resident background characteristics (demographics) in beta press environmental research. The present study will investigate whether an individual's background demographics are related to his or her environmental perceptions. Again, this has never been investigated regarding juveniles in a correctional institution although similar hospital environment research has demonstrated very small correlations (see above).

Third, the preceding questions will be answered regarding not only residents, but also staff in a correctional facility. Previous studies have used staff as subjects for the purpose of test design and/or standardization, but never before has the possibility of a correlation between staff personalities
and environmental perceptions been studied.

The fourth question concerns the role of employee job satisfaction (staff morale) in beta press environmental perceptions. The present study will investigate whether correctional employees' job satisfaction is related to their environmental perceptions. This issue has never been investigated in anything other than hospital environments (Dorr, Honea, & Pozner, 1980).

Finally, the extent to which residents and staff perceive their environment similarly/dissimilarly will be determined. The points at which these perceptions diverge will be investigated in detail.
METHOD

SUBJECTS

Subjects were 40 male residents and 78 male and female youth supervisors (staff members) who resided/worked in a juvenile detention center. All subject involvement was voluntary, and no one declined participation.

Staff subjects were supervisory in function and were classified as permanent versus auxillary employees. Resident subjects were juveniles (aged 12-17), who had been remanded (N=20) or sentenced (N=20) by the courts. ("Remanded" individuals face charges on which they have not yet been convicted, and are therefore being held prior to court appearance. "Sentenced" residents, on the other hand, have been found guilty of a criminal offense, and are therefore incarcerated within the institution.)

In order to guarantee adequate knowledge of the institution, individuals chosen as subjects must have resided or worked in the environment for at least three weeks. Although remanded residents tend to spend shorter periods of time within the institution, their relatively large numbers assured that both remanded and sentenced residents met this requirement, thereby including them in the subject pool. In addition, both auxillary and regular staff were eligible so long as they were able to meet this time criterion.
The research was conducted in a high security correctional institution for imprisoned male and female juveniles (aged 12-17) in British Columbia, Canada. The institution has an average resident population of 65, with 10 to 15% being female. Remanded individuals constitute approximately 65% of the resident population; sentenced residents comprise the remaining 35%. The detention centre employs approximately 58 permanent staff members, and 30 full time auxiliary employees. Staff members are 50% male and 50% female.

The institution consists of a modern single-story building including gymnasium and swimming pool facilities. An extension to the original building has been created by placing a mobile unit along the east wall. Grassed fields surround the institution with the perimeter being marked by tall, barbed and razor wire fences.

The institution contains ten resident units, an admissions area, administration and office space, and a nurse’s station. Two units (units three and four) serve as security units. They each contain five cells similar to those found in adult prisons. Windows are heavily barred and security is emphasized. Residents who pose security risks or behaviour problems, or
those with severe charges, are placed in these units and are often locked in their cells. Male staff are placed in charge and outings are extremely rare. Each of these units contains five residents.

Unit one is the largest unit, containing 14 rooms, and up to 28 residents. Boys are usually placed here following admission. Security in this unit is moderate, doors are wooden and windows are not so heavily barred. Both male and female staff are assigned to this unit.

Units five, six, seven, and eight constitute "dorm-side" where a dormitory atmosphere exists. In these units security is relatively light. While the units themselves are locked, individual rooms are not locked and outings are arranged. Each of the dorm-side units houses five or six residents with both male and female staff in charge.

Units nine and ten are situated in the mobile unit outside the main building. The physical setting in this area is more attractive, and security is relatively light. Residents are allowed outside the unit, and evening outings are often planned. Together these units house approximately ten residents, but are occasionally vacant due to a low resident population.

Unit two contains seven to ten female residents. In appearance it is similar to unit one, although smaller. Unit two policy is similar to that of the dorm-side units. Male
and female staff are assigned to this unit.

Policy for each of the units varies greatly, with privileges such as cigarettes, television, and outings being most limited in units three and four. Privileges increase in unit one, and again on the dorm-side units. In units nine and ten residents are allowed a great deal of freedom.

Upon entering the detention centre all residents are seen by the nurse. They are then assigned to a unit on the basis of their charges, histories on file, previous behaviour in the institution, and of course gender. An incentive program is in operation, whereby residents must earn dorm-side or mobile unit placement via acceptable behaviour. On the other hand, acting out behaviour will result in a resident being moved to the security units.

Because of the heavy emphasis placed upon security, intervention oriented programs are minimal. With the exception of units three and four all residents attend school within the institution. "Evening program" is a poorly organized attempt at evening activity, with the staff on duty taking charge of a variety of projects--leather crafting, cooking, music appreciation ("easy listening"), etc. In addition, a token economy has been instituted; residents may, via good behaviour, earn points which may later be traded for cigarettes, candy, potato
chips, soap, shampoo, etc. It is on the basis of token economy points that residents may earn transfer to a more privileged unit.

**INSTRUMENTS ADMINISTERED**

**Correctional Institutions Environment Scale (CIES), Form R.**

The Correctional Institutions Environment Scale (CIES), was designed by Moos (1968) as a measure of consensual beta press or shared environmental perceptions within correctional institutions (environments). In its early stages the CIES was known as the Social Climate Scale (SCS), Forms A and B (discussed above). Extensive item and subscale analysis (described below), resulted in the current CIES, Form R.

Details regarding test development are outlined by Moos (1975). Briefly, logical consideration of Murray's (1938) environmental press categories as they applied to correctional institutions resulted in the choice of twelve subscales. Original items were adapted from the Ward Atmosphere Scale (WAS) by residents and staff who were familiar with correctional institutions.

Subsequent item analysis entailed administration of the CIES to staff and residents of numerous correctional units. Items were eliminated if they did not significantly discriminate among units, if they were found to apply only to extreme units,
or if the items correlated highly with social desirability as measured by the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964). Item intercorrelations, item to subscale correlations, and subscale intercorrelations were calculated, and based upon these data certain of the subscales were eliminated.

The present CIES, known as Form R, consists of ninety items, each of which is a statement to be marked "true" or "false". If a respondent considers the expressed behaviour to be present in the unit, he or she marks "true". A "false" response indicates the opinion that it is not present. For example, a beta press toward "Involvement" is inferred from the following kinds of items: "Residents put a lot of energy into what they do around here", and "Residents here really try to improve and get better".

The CIES items form nine subscales, which in turn relate to the following three dimensions: people-to-people relationships, institutional programs, and institutional functioning (Wenk & Moos, 1972). "Relationships" are measured by the first three subscales--involvement, support received from inmates and staff, and the extent of spontaneity within relationships. The following three subscales--autonomy, practical orientation, and personal problem orientation are "treatment program" dimensions.
Autonomy assesses the extent to which resident independence and responsibility are encouraged; the subscale of practical orientation measures the extent to which residents receive practical preparation for release; and personal problem orientation assesses the degree to which self-understanding and insight are encouraged. The last three subscales, order and organization, clarity, and staff control, assess "system maintenance" and are related to keeping the unit orderly and organized (Wenk & Moos, 1972).

Validity evidence for the CIES has been provided by Frank and Michel (1972). They studied an incentive pay program based on inmate performance, and were able to demonstrate changes in the social climate as measured by the CIES. Moos (1970) utilized the CIES in order to demonstrate relationships among the social climates of a correctional unit, the reactions of the residents to that unit, and the type of initiatives that residents perceive themselves as likely to take while on the unit.

**Personality Research Form (PRF), Form E.** The Personality Research Form (PRF) consists of a large item pool comprising several personality scales, and was designed for the assessment of important personality characteristics. During its construction a great deal of attention was devoted to the properties of reliability, generalizability, and validity, and because of the
sophisticated standardization techniques utilized, the PRF has become a prominent research tool (Jackson & Guthrie, 1968). The included personality variables are those which are of interest to social and personality psychologists, thereby allowing this instrument to be used in a wide variety of settings.

The PRF exists in five formats. Form A and B are parallel forms each containing 300 items and fifteen 20-item scales. Forms AA and BB contain 440 items, including the same fifteen scales, and seven additional 20-item scales. The more recent Form E consists of 352 items, comprising twenty-two 16-item scales (Jackson, 1974). Since Form E contains the complete set of subscales, while remaining relatively short, it has become the accepted form of the PRF in research, and will therefore be utilized in the present project.

Each of the PRF scales is comprised of ten true-keyed and ten false-keyed statements or items. Scales were designed in this way in order to minimize acquiescence and to permit definition of each pole of bipolar dimensions with positively-worded content (Jackson & Messick, 1961; Jackson, Neill, & Bevon, 1973).

The 22 scales—achievement, affiliation, aggression, autonomy, dominance, endurance, exhibition, harm-avoidance, impulsivity, nurturance, order, play, social recognition, understanding, infrequency, abasement, change, cognitive structure,
defendence, sentience, succorance, and desirability were constructed from large item pools based upon definitions of each scale (at least one hundred items per scale). (Jackson, 1974)

Item analysis techniques for the Personality Research Form--Form E attempted to enhance internal consistency, minimize desirability response bias, maximize discrimination among scales, and identify items yielding scales with normal distributions with the mean at the centre of the scale (Neill & Jackson, 1976).

Validity evidence for the PRF has been provided by Kusyszyn (1968); he demonstrated that PRF scale scores were correlated with judgments of the degree to which subjects possessed a particular trait. In addition, a number of correlations are available between PRF-E scores and scores derived from a variety of other tests, including the Jackson Personality Inventory, the Bentler Interactive Psychological Inventory, the Cattell High School Personality Questionnaire, the Strong Vocational Interest Blank, and many others. (Jackson, 1974)

Reliability evidence for the PRF-E has been provided by Nesselroade and Baltes (1972). A factor analysis of the PRF-E based upon a sample of 1,862 school children yielded eight factors which corresponded closely to similar factors identified by Siess and Jackson (1971).
Job Description Index (JDI). The Job Description Index is a well-established and accepted measure of employee morale, feelings, and general job satisfaction, developed by Smith, Kendall, and Hulin (1969). It consists of 72 items forming five subscales—work, pay, promotions, supervision, and co-workers.

The JDI is based upon the model of job satisfaction as "feelings or effective responses to facets of the job situation". In other words job satisfaction is defined as feelings a worker has about his or her job (Smith, Kendall, & Hulin, 1969).

During the construction of the JDI considerable attention was paid to the concept of "employee frames of reference". The researchers understood that employees may adopt varying perspectives when evaluating their job—long term versus short term (time), absolute versus relative, and descriptive versus evaluative. Included items therefore reflected each of these perspectives in an attempt at comprehensive attitude measurement. (Smith, Kendall, & Hulin, 1969)

Large item pools based upon logical judgement were reduced via two series of item analysis. Items which failed to discriminate between subjects' best and worst jobs were eliminated. The 72 included items consist of adjectives or descriptive
phrases to which subjects respond "yes" or "no". By indicating a "yes" response to a specific item, an employee implies that this particular adjective describes his job; a "no" response implies that it does not.

Validity evidence for the JDI was provided by Smith, Kendall, and Hulin (1969). A centroid factor analysis of the items yielded five factors which corresponded closely with the five subscales. In addition, JDI measures were demonstrated to correlate with direct ratings of satisfaction in a farmers co-operative; similar relationships involving interview data in a student sample were uncovered (Smith, Kendall, & Hulin, 1969). Finally, Hulin (1966) has shown a substantial relationship between the JDI given in 1964 and termination decisions which came as much as 12 months later.

Reliability evidence for the JDI is reported by Smith, Kendall, and Hulin (1969). Split-half internal consistencies of over .80 were calculated for the JDI scales using a sample of 80 male employees from two electronic plants.

Subject Demographics Questionnaire. All subjects were required to complete a demographics questionnaire; general information recorded for both residents and staff included subject age. Additional information required of residents included most recently completed school grade, present offense(s) (violent-
nonviolent), length of sentence, status (remanded-sentenced), educational situation at time of arrest (in school-not in school), employment situation at time of arrest (employed-unemployed), and if employed--type of employment (full time-part time), and salary. Additional information required of staff included type of post-secondary education (none, trade-school, or academic), months of education, sex, marital status, length of employment at the institution, employment status (auxillary-regular) and job classification (S.O., C.O., P.O.). See Appendix A for resident demographics questionnaire, Appendix B for staff demographics questionnaire.

TESTING PROCEDURE

All testing was carried out in a quiet and isolated room. Seventy-eight (78) staff and 40 residents, for a total of 118 subjects completed the CIES, the PRF, and the demographics questionnaire. In addition, all staff members were required to complete the JDI. Approximately three months were required for collection of independent variable data.

Prior to testing subjects were instructed regarding procedure, and briefed regarding confidentiality of results. This occurred both verbally (via the tester) and non-verbally (via
a face sheet). This face sheet explained that names are not being attached to specific scores and that individual results are totally confidential.

Instructions to the subjects provided information relevant to test completion; regarding the demographics questionnaire subjects were instructed to be as precise as possible. Regarding the PRF, CIES, and JDI they were directed to mark the best or most acceptable alternative for each of the forced choice items. Following the presentation of instructions and guarantee of confidentiality, all subjects were required to sign a standard subject consent form (See Appendix C for face sheet; Appendix D for subject consent form). In addition, staff were informed that results will be made available at a later date.

Residents were brought into the testing room in small groups where instructions (face sheet) were presented and testing executed. In the case of certain residents inadequate reading skills necessitated verbal presentation of items. Staff were tested one at a time due to policy directives regarding the minimum number of on-duty employees. The tester remained close by in order to answer questions and clarify items.

Testing material was organized into a packet which subjects were required to complete. The aforementioned face sheet was attached to this packet of testing material. In addition
to instructions presented via the face sheet, standardized instructions designed for use with the CIES, PRF, and JDI preceded each of these tests.

In order to control for the effect of order, sequential presentation of the CIES, PRF, JDI, and demographics questionnaire (independent variables) were systematically varied. In the case of staff members, eight randomized orders or sequences were generated using a $4 \times 4$ Latin square and were presented equally among subjects. For the resident population, where the JDI was not administered, six sequences of presentation were sufficient.

**DATA ANALYSIS**

Once raw data were collected and tabulated the following analyses were undertaken:

1. In order to investigate the possibility of a relationship between resident personalities and their perceptions of the environment, Pearson correlation coefficients were computed between the PRF personality subscales and the CIES environmental perception subscales for all resident subjects.

2. In order to investigate the possibility of a relationship
between resident background characteristics (demographics) and their perceptions of the environment, correlation coefficients were computed between the demographic variables and the CIES subscales for all resident subjects. Pearson and point biserial correlation coefficients were utilized for continuous and dichotomous demographic variables respectively.

3. In order to investigate the possibility of a relationship between employee personalities and their perceptions of the environment, canonical correlation coefficients were computed between the PRF personality subscales and the CIES environmental perception subscales for all employee subjects.

4. In order to investigate the possibility of a relationship between continuous/dichotomous employee background demographics and their perceptions of the environment, canonical correlation coefficients were computed between the demographic variables and the CIES subscales for all staff subjects. A subsequent and more specific analysis of this relationship involved the calculation of Pearson and point biserial correlation coefficients for continuous and dichotomous demographic variables respectively. In the case of multiple category demographic variables (type of
education, marital status, and job classification), which cannot be correlated, CIES subscales were broken down by categories and subjected to analyses of variance.

5. In order to investigate the possibility of a relationship between employee job satisfaction and their perceptions of the environment, canonical correlation coefficients were computed between the JDI job satisfaction subscales and the CIES subscales for all employee subjects.

6. In order to determine the extent to which residents and staff perceived their environment similarly/dissimilarly, the consensual scores (means) for the resident CIES subscales, obtained by averaging across individuals for each of the nine scales, were compared with the corresponding scores for each of the staff subscales, using the Student t distribution.
RESULTS

RESIDENT CIES X PRF CORRELATIONS

In order to investigate the possibility of a relationship between resident personalities and their environmental perceptions, Pearson correlation coefficients were computed between the PRF personality subscales and the CIES environmental perception subscales for all resident subjects. In general, these correlations varied from low to moderate, with approximately 13% of all possible intercorrelations proving significant ($p<.05$). For specific results see Table 1.

Achievement oriented personalities perceived their environment as low in autonomy and order (organization). Individuals with a need to affiliate perceived their environment as low in clarity. Aggressive residents perceived the environment as low in involvement, support, autonomy, personal problem orientation, order (organization) and clarity. Dominant personalities tended to perceive the environment as low in involvement and order (organization). Residents high in harm avoidance perceived low freedom of expression and personal problem orientation, and high involvement, autonomy, and staff control. Impulsive residents perceived the environment as low in clarity. Nurturant individuals perceived a great deal of support and staff control. Highly ordered personalities saw clarity in
<table>
<thead>
<tr>
<th>CIES</th>
<th>PRF</th>
<th>Achievement</th>
<th>Affiliation</th>
<th>Aggression</th>
<th>Autonomy</th>
<th>Order and Clarity</th>
<th>Staff Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRF</td>
<td></td>
<td></td>
<td></td>
<td>-0.28</td>
<td>-0.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PRF</td>
<td>PRF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Control</td>
</tr>
<tr>
<td>PRF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All r’s are significant at p<.05

N=40
their environment. Those residents who present themselves in an unrealistically positive manner (high in defencence), perceived their environment as low in involvement, expressiveness, autonomy, order (organization) and clarity. Finally, those individuals who are sensitive, and able to feel or experience (high in sentience), perceived their environment as low in clarity.

RESIDENT CIES X DEMOGRAPHICS CORRELATIONS

In order to investigate the possibility of a relationship between resident background characteristics (demographics) and their perceptions of the environment, Pearson and point biserial correlation coefficients were computed between the resident demographic variables and the CIES subscales, for continuous and dichotomous variables respectively. These correlations varied from low to moderate, with approximately 28% of all possible intercorrelations proving significant (p<.05). For specific correlational results see Table 2.

With increasing age, residents perceived less involvement, support, and order (organization) within their environments. Those residents who were in school at time of last arrest perceived their environment as high in support, practical
Table 2

Pearson and Point Biserial Correlation Coefficients
Between Resident CIES and Background Demographics

<table>
<thead>
<tr>
<th>Demographics</th>
<th>CIES Involvement</th>
<th>Supportiveness</th>
<th>Expressiveness</th>
<th>Autonomy</th>
<th>Practical Orientation</th>
<th>Personal Problem Orientation</th>
<th>Organization and Order</th>
<th>Clarity</th>
<th>Staff Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-.45</td>
<td>-.32</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most recently completed school grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational situation at time of arrest (in school-not in school)</td>
<td>.30</td>
<td></td>
<td></td>
<td>.27</td>
<td>.35</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment situation at time of arrest (employed-unemployed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of employment (full time-part time)</td>
<td></td>
<td>-.45</td>
<td>-.31</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.34</td>
<td></td>
</tr>
<tr>
<td>Status (remand-sentenced)</td>
<td>-.27</td>
<td>-.34</td>
<td>-.38</td>
<td></td>
<td></td>
<td>-.27</td>
<td>-.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of Sentence</td>
<td>-.39</td>
<td>-.34</td>
<td>-.34</td>
<td></td>
<td></td>
<td>-.33</td>
<td>-.28</td>
<td>-.41</td>
<td></td>
</tr>
<tr>
<td>Offense(s) (violent-nonviolent)</td>
<td>-.40</td>
<td>-.39</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N=40 All r's are significant at p<.05
orientation, and personal problem orientation. Residents who were employed at time of last arrest perceived low levels of autonomy within their environment. Of those who were employed, those with full-time employment, as opposed to part-time, perceived their environment as low in autonomy and practical orientation; furthermore, as pre-arrest salary increased, individuals perceived less environmental autonomy. Sentenced as opposed to remanded residents perceived less involvement, support, freedom of expression, personal problem orientation, and clarity. As length of sentence increased, individuals perceived less involvement, support, freedom of expression, personal problem orientation, order (organization), and clarity. Finally, those residents charged with violent offenses, as opposed to nonviolent property damage offenses, perceived less freedom of expression and autonomy. (Note: "Violent offenses" included murder, attempted murder, assault, indecent assault, assault causing bodily harm, rape, and armed robbery.)

**STAFF CIES X PRF CORRELATIONS**

In order to investigate the possibility of a relationship between employee personalities and their perceptions of the environment, canonical correlation coefficients were computed
between the PRF personality subscales and the CIES environmental perception subscales for all employee subjects. No significant canonical correlations were found ($p > .05$).

**STAFF CIES X DEMOGRAPHICS CORRELATIONS**

In order to investigate the possibility of a relationship between continuous/dichotomous employee background demographics and their perceptions of the environment, canonical correlation coefficients were computed between the demographic variables and the CIES subscales for all staff subjects. One significant ($p < .001$) canonical variate was discovered. Of the CIES variables, involvement, expressiveness, and practical orientation loaded negatively; support loaded positively. Of the demographic variables, length of employment and status loaded negatively; sex and months of education loaded positively. See Table 3 for the canonical correlation results.

A subsequent and more specific analysis of this relationship involved the calculation of Pearson and point biserial correlation coefficients for continuous and dichotomous demographic variables respectively. In general, these correlations varied from low to moderate, with approximately 27% of all possible intercorrelations proving significant ($p < .05$). For specific results see Table 4. These analyses indicated that with
Table 3
Canonical Correlation Between Staff Continuous/Dichotomous Demographic Variables and CIES Subscale Scores

<table>
<thead>
<tr>
<th>Number</th>
<th>Eigenvalue</th>
<th>Canonical Correlation</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.44894</td>
<td>0.67003</td>
<td>45*</td>
</tr>
<tr>
<td>2</td>
<td>0.27617</td>
<td>0.52552</td>
<td>32</td>
</tr>
<tr>
<td>3</td>
<td>0.14818</td>
<td>0.38495</td>
<td>21</td>
</tr>
<tr>
<td>4</td>
<td>0.04807</td>
<td>0.21925</td>
<td>12</td>
</tr>
<tr>
<td>5</td>
<td>0.02665</td>
<td>0.16325</td>
<td>5</td>
</tr>
</tbody>
</table>

Coefficients for Canonical Variables of the First Set (CIES)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Canvar 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement</td>
<td>-0.66190</td>
</tr>
<tr>
<td>Support</td>
<td>0.50611</td>
</tr>
<tr>
<td>Expressiveness</td>
<td>-0.15052</td>
</tr>
<tr>
<td>Autonomy</td>
<td>0.08733</td>
</tr>
<tr>
<td>Practical Orientation</td>
<td>-0.29674</td>
</tr>
<tr>
<td>Personal Problem Orientation</td>
<td>-0.14945</td>
</tr>
<tr>
<td>Order and Organization</td>
<td>1.02319</td>
</tr>
<tr>
<td>Clarity</td>
<td>-0.10362</td>
</tr>
<tr>
<td>Staff Control</td>
<td>0.11422</td>
</tr>
</tbody>
</table>

Coefficients for Canonical Variables of the Second Set (demographic variables)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Canvar 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.03071</td>
</tr>
<tr>
<td>Sex</td>
<td>0.63042</td>
</tr>
<tr>
<td>Months of Education</td>
<td>0.50956</td>
</tr>
<tr>
<td>Length of Employment</td>
<td>-0.37231</td>
</tr>
<tr>
<td>Status</td>
<td>-0.28493</td>
</tr>
</tbody>
</table>

*p<.001
Table 4

Pearson and Point Biserial Correlation Coefficients
Between Staff CIES and Background Demographics

<table>
<thead>
<tr>
<th>Demographics</th>
<th>CIES</th>
<th>Involvement</th>
<th>Support</th>
<th>Expressiveness</th>
<th>Autonomy</th>
<th>Orientation</th>
<th>Practical Orientation</th>
<th>Personal Problem Organization</th>
<th>Order</th>
<th>Clarity</th>
<th>Staff Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td>.20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td>.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.35</td>
<td>.28</td>
<td></td>
</tr>
<tr>
<td>Months of Education</td>
<td>- .22</td>
<td>- .25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of Employment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- .33</td>
<td>- .27</td>
<td>- .27</td>
</tr>
<tr>
<td>Status (auxiliary or regular)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- .41</td>
<td>- .29</td>
<td></td>
</tr>
</tbody>
</table>

N=78

All r's are significant at $p<.05$. 
increasing age, staff perceived increasing involvement. Males tended to perceive greater support, order (organization), and clarity. Individuals with more education perceived their environment as being low in involvement, freedom of expression, and personal problem orientation. As length of employment increased, staff perceived less order (organization), clarity, and staff control. Auxiliary, as opposed to regular employees, perceived greater order (organization) and clarity.

In order to determine the relationship between multiple category demographic variables (type of education, marital status, and job classification) and CIES subscales, the latter were broken down by categories. The resultant groups were then subjected to analyses of variance in order to determine whether demographic categories differed in terms of the various CIES variables. Two such relationships were discovered. The first indicates that individuals with tradeschool educations, as opposed to those with academic educations, perceived greater amounts of involvement within their environment, $F(2, 75)=3.36, p<.05$; the second demonstrates that the three employee job classifications (SO, CO, PO,) perceived respectively decreasing amounts of order (organization) within their environments, $F(3, 74)=3.80, p<.05$. See Tables 5, 6, and 7 for specific
Table 5

Analysis of Variance Involving CIES Variables

Broken Down By Type of Education

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement</td>
<td>2</td>
<td>11.23</td>
<td>3.36*</td>
</tr>
<tr>
<td>Support</td>
<td>2</td>
<td>0.05</td>
<td>0.011</td>
</tr>
<tr>
<td>Expressiveness</td>
<td>2</td>
<td>6.06</td>
<td>2.49</td>
</tr>
<tr>
<td>Autonomy</td>
<td>2</td>
<td>3.72</td>
<td>1.04</td>
</tr>
<tr>
<td>Practical Orientation</td>
<td>2</td>
<td>0.53</td>
<td>0.13</td>
</tr>
<tr>
<td>Personal Problem Orientation</td>
<td>2</td>
<td>5.56</td>
<td>1.81</td>
</tr>
<tr>
<td>Order and Organization</td>
<td>2</td>
<td>3.32</td>
<td>0.57</td>
</tr>
<tr>
<td>Clarity</td>
<td>2</td>
<td>0.55</td>
<td>0.13</td>
</tr>
<tr>
<td>Staff Control</td>
<td>2</td>
<td>2.64</td>
<td>1.30</td>
</tr>
</tbody>
</table>

*p<.05
Table 6

Analysis of Variance Involving CIES Variables
Broken Down By Job Classification

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement</td>
<td>3</td>
<td>1.39</td>
<td>0.38</td>
</tr>
<tr>
<td>Support</td>
<td>3</td>
<td>3.49</td>
<td>0.75</td>
</tr>
<tr>
<td>Expressiveness</td>
<td>3</td>
<td>0.46</td>
<td>0.18</td>
</tr>
<tr>
<td>Autonomy</td>
<td>3</td>
<td>3.62</td>
<td>1.01</td>
</tr>
<tr>
<td>Practical Orientation</td>
<td>3</td>
<td>1.09</td>
<td>0.26</td>
</tr>
<tr>
<td>Personal Problem Orientation</td>
<td>3</td>
<td>3.41</td>
<td>1.09</td>
</tr>
<tr>
<td>Order and Organization</td>
<td>3</td>
<td>19.77</td>
<td>3.80*</td>
</tr>
<tr>
<td>Clarity</td>
<td>3</td>
<td>8.15</td>
<td>1.20</td>
</tr>
<tr>
<td>Staff Control</td>
<td>3</td>
<td>3.03</td>
<td>1.51</td>
</tr>
</tbody>
</table>

*p<.05
Table 7

Analysis of Variance Involving CIES Variables
Broken Down By Marital Status

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement</td>
<td>5</td>
<td>2.21</td>
<td>0.61</td>
</tr>
<tr>
<td>Support</td>
<td>5</td>
<td>0.86</td>
<td>0.18</td>
</tr>
<tr>
<td>Expressiveness</td>
<td>5</td>
<td>1.01</td>
<td>0.38</td>
</tr>
<tr>
<td>Autonomy</td>
<td>5</td>
<td>2.93</td>
<td>0.80</td>
</tr>
<tr>
<td>Practical Orientation</td>
<td>5</td>
<td>0.34</td>
<td>0.08</td>
</tr>
<tr>
<td>Personal Problem Orientation</td>
<td>5</td>
<td>0.66</td>
<td>0.20</td>
</tr>
<tr>
<td>Order and Organization</td>
<td>5</td>
<td>2.72</td>
<td>0.46</td>
</tr>
<tr>
<td>Clarity</td>
<td>5</td>
<td>0.96</td>
<td>0.21</td>
</tr>
<tr>
<td>Staff Control</td>
<td>5</td>
<td>2.29</td>
<td>1.13</td>
</tr>
</tbody>
</table>
analyses of variance results, involving multiple category demographics.

**STAFF CIES X JDI CORRELATIONS**

In order to investigate the possibility of a relationship between employee job satisfaction and their perceptions of the environment, canonical correlation coefficients were computed between the JDI job satisfaction subscales and the CIES subscales for all employee subjects. One significant ($p<.05$) canonical variate was discovered. Of the CIES variables, involvement, personal problem orientation, order (organization), and staff control loaded positively; support loaded negatively. Of the JDI variables, work, promotion, and people loaded positively; pay loaded negatively. It would seem that staff who are dissatisfied with their pay, but maintain positive attitudes regarding the promotion system, the people they work with, and their work in general, perceived the institutional environment as high in involvement, personal problem orientation, order (organization), and staff control, but low in support. See Table 8 for canonical correlation results.
Table 8
Canonical Correlation Between Staff JDI and CIES Subscale Scores

<table>
<thead>
<tr>
<th>Number</th>
<th>Eigenvalue</th>
<th>Canonical Correlation</th>
<th>df</th>
</tr>
</thead>
<tbody>
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<td>1</td>
<td>0.34558</td>
<td>0.58786</td>
<td>45*</td>
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<tr>
<td>2</td>
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<td>0.42998</td>
<td>32</td>
</tr>
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<td>3</td>
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<td>0.39996</td>
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</tr>
<tr>
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<td>0.27667</td>
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<tr>
<td>5</td>
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Coefficients for Canonical Variables of the Second Set (CIES)

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>Support</td>
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</tr>
<tr>
<td>Expressiveness</td>
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</tr>
<tr>
<td>Autonomy</td>
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</tr>
<tr>
<td>Practical Orientation</td>
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</tr>
<tr>
<td>Personal Problem Orientation</td>
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</tr>
<tr>
<td>Order and Organization</td>
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</tr>
<tr>
<td>Clarity</td>
<td>0.02775</td>
</tr>
<tr>
<td>Staff Control</td>
<td>0.23707</td>
</tr>
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</table>

Coefficients for Canonical Variables of the First Set (JDI)

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Work</td>
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</tr>
<tr>
<td>Supervision</td>
<td>0.00781</td>
</tr>
<tr>
<td>Promotion</td>
<td>0.29300</td>
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<tr>
<td>Pay</td>
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</tr>
<tr>
<td>People</td>
<td>0.67216</td>
</tr>
</tbody>
</table>

*p<.05
In order to determine the extent to which residents and staff perceived their environment similarly/dissimilarly, the consensual scores (means) for the resident CIES subscales, obtained by averaging across individuals for each of the nine scales, were compared with the corresponding scores for each of the staff subscales using the Student t distribution. Results indicated that for one of the CIES subscales, that of staff control, staff and residents had significantly different environmental perceptions, with residents perceiving more control than did staff, \( t (116) = 2.00, \ p < .05 \). See Table 9 for results.
Table 9

Student t Comparison of Staff and Resident Consensual Subscale Scores

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>t</th>
</tr>
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<td>Clarity</td>
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<td>-0.83</td>
</tr>
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<td>2.00*</td>
</tr>
</tbody>
</table>

*p < .05
DISCUSSION

The present study would indicate that for staff and residents of a large juvenile correctional facility, environmental perceptions are related to background demographics and personality variables in the case of residents, and job satisfaction and background demographics in the case of staff.

In contrast to earlier investigations (Ellsworth & Maroney, 1972; Moos & Houts, 1968), relationships between resident demographics and environmental perceptions were found to be relatively common. In particular, with increasing age residents perceived less involvement, support, and order (organization) within their environment, due perhaps, to an improved sense of awareness accompanying increased maturity; on the other hand, these perceptions may reflect a tendency on the part of staff to attend more readily to the needs of younger residents. Those residents who were in school at the time of last arrest, perceived their environment as high in support, practical orientation, and personal problem orientation, due possibly, to some distinguishing feature which allowed them to stay within and benefit from an educational setting, while at the same time influencing environmental perceptions; although it would be very difficult to label this "distinguishing feature", it would seem logical to interpret it as some quality
similar to "emotional stability". Residents who were employed at time of last arrest, especially those individuals maintaining full-time positions with relatively high salaries, perceived their environment as low in autonomy, a finding consistent with the independent natures of working adolescents and their reactions to a detainment situation. Sentenced, as opposed to remanded residents, perceived the environment very negatively (low in involvement, support, expressiveness, personal problem orientation, and clarity). Residents serving relatively long sentences maintained similar perceptions, and in addition perceived the environment as low in order (organization). It would appear that these individuals are bitter regarding their relatively long stay in the institution, and are projecting these feelings through their environmental perceptions; on the other hand they may actually represent a separate and different population (i.e. more violent, serious offenses, long time offenders, etc.), which would explain the fact that they are sentenced, while at the same time influencing perceptions. Finally, those residents charged with violent offenses viewed the environment as low in expressiveness and autonomy, reflecting the possibility that such individuals may be afforded fewer freedoms; conversely, they may once again represent a separate group which perceives the
environment differently.

Although the possibility of a relationship between staff demographics and environmental perceptions has never before been investigated, the existence of such a relationship was demonstrated by the present research. More specifically, as employee education increased, individuals perceived less involvement, expressiveness, and personal problem orientation. This finding is due perhaps, to the emphasis in university education upon free discussion (expressiveness), participation (involvement), and assistance with problems (personal problem orientation). Such an interpretation is supported by the finding that staff members with university educations, as opposed to those with trade-school training, maintained similar perceptions. Finally, as length of employment increased, staff members perceived low order (organization), clarity, and staff control, due possibly, to the tendency of long term correctional employees to attach great importance to the control of inmates, clarity of rules, and general order and organization.

Although correlations between resident personalities and environmental perceptions have been previously reported (Alden, 1975; Sells, 1963) certain of these relationships as presently demonstrated are noteworthy. In particular, high achievement residents perceived their environment as low in autonomy and
order (organization), due in part, to the necessity of such personalities to reside in a free, open, and organized environment, where creative achievement is possible. Aggressive residents perceived the environment very negatively (low in involvement, support, autonomy, personal problem orientation, order, and clarity). These perceptions may simply represent the projection of an aggressive personality unto the surrounding environment; on the other hand, staff members may react quite differently with such individuals. Impulsive residents perceived their environment as low in clarity, due probably, to the intense need of such individuals for a highly structured and predictable environment, which can counter or balance their impulsive natures. Finally, those residents who present themselves in an unrealistically positive manner (defendence), perceived the environment as low in involvement, expressiveness, autonomy, order (organization), and clarity, due in part, to the inability of such individuals to establish genuine rapport, for fear of divulging too much of themselves. In addition, because of their highly defensive nature, others may not value their company, thereby contributing to environmental perceptions.

Although a correlation between employee job satisfaction and environmental perceptions has been previously demonstrated
in a hospital setting (Dorr, Honea, & Pozner, 1980), the present research has extended this relationship to include correctional employees. More specifically, those employees (staff) who were unhappy with their salary, but positive regarding the promotion system, their co-workers, and their work in general, perceived the environment as high in involvement, personal problem orientation, order (organization), staff control, and low in support, thereby representing still another environmental perception correlate.

Whatever the interpretations given the above data, it would appear that how these residents/staff perceived their environment was influenced by the types of people they were, by job satisfaction, and by background demographics such as education and length of sentence. Furthermore, results such as these have been thought to contraindicate the use of subjective environmental perceptions in the measurement or assessment of environments (Astin & Holland, 1961; Sells, 1963). Proponents of this viewpoint assert the reality of an actual and objective environment which can and must be measured. They consider it imperative that any instrument used in the measurement of environments (i.e. environmental perceptions), must be sensitive to actual aspects of the environment, as opposed to irrelevant non-environmental variables.
Accordingly, variables such as personality, background demographics, and job satisfaction are viewed as confounding and extraneous variables which may interfere with the "measurement" process to the extent that they replace environment as the object of measurement. The prospect of one environment receiving two very different measurements based upon separate sets of environmental perceptions runs counter to the philosophy of measurement maintained by many individuals.

While this line of logic does raise interesting questions, it nonetheless oversimplifies the situation. Before nonenvironmental variables, including perceiver characteristics such as personality, background demographics, and job satisfaction, can be seen as necessarily interfering with beta press environmental assessment, it must be demonstrated that these variables cause environmental perceptions. Although the presently demonstrated correlation between nonenvironmental variables and environmental perceptions would support this possibility, it does not rule out alternative explanations. More specifically, the possibility that different groups of individuals maintain realistic environmental perceptions, but are exposed to different environments, would be similarly consistent with the present data. For example, while aggressive residents
perceived the environment very negatively, it cannot be determined from the present data whether these individuals perceived the environment differently from their peers, or whether they were exposed to a qualitatively different environment in terms of treatment and placement within the institution.

This is not to say the present findings are irrelevant; simply that limitations and qualifications must be applied. Despite the preceding discussion, correlations such as those presently demonstrated can have important implications for the assessment or measurement of environments. First, although such correlations may not automatically contraindicate subjective environmental assessment, they suggest "potential" problems with its use. In the event that no such relationships were found to exist, the potential for these problems would become negligible, thereby automatically demonstrating validity of the beta press technique. On the other hand, the fact that these relationships have been presently demonstrated to exist would suggest that this issue remain open. It should be noted, however, that the present results do not provide definitive clarification regarding this controversy; although environmental perceptions were found to be related with demographic variables for both staff and residents, in the case of personality
variables this relationship proved significant for residents only. If indeed there exists a confounding influence involving perceiver characteristics (i.e. personality), one would expect it to manifest itself regarding all environmental perceptions. The fact that no such correlation was found for staff members may question the extent of the phenomenon. This issue is further complicated by the finding that, for the most part, staff and residents perceived the environment similarly. The fact that environmental perceptions were related to personality variables for residents, but not for staff, may indicate the latter to be more accurate perceivers of the environment; and yet the fact that these two groups perceived the environment similarly would lend construct validity to the beta press hypothesis that after averaging across individuals, the influence of nonenvironmental variables becomes less significant.

Second, these potential difficulties regarding beta press subjective assessment would suggest the development and use of improved objective or "alpha" techniques. Although many environmental variables are not suited to objective definition (see above), it may prove useful to achieve even a partial or pseudo alpha measurement for at least certain of these variables. Such a measure will be more or less objective and therefore less
likely to be influenced by extraneous and confounding variables. For example, certain of the CIES subscales, such as "order and organization" and "staff control", can be operationally defined based upon policy directives, pervasiveness of rules, etc. In addition, it could prove beneficial to use trained observers/raters, for whom inter-rater reliability had been calculated, as opposed to daily members or inhabitants of the environment.

Third, in the event that proposed changes to the environment are being based upon subjective environmental assessment (beta press), the present results could prove relevant. This is especially true when costly changes, based upon subjective environmental perceptions, are proposed for an environment in which there is soon to be a systematic change in the type of resident population. For example, administrators of a remand facility could, on the basis of recent beta press environmental assessment, propose major changes to the institutional environment. If, however, the institution is soon to house sentenced as opposed to remanded residents, subjective perceptions may change drastically, thereby negating the original environmental assessment. The environmental changes may no longer be necessary.

Finally, in addition to designing innovative objective alpha press measures, the present data may indicate the means
by which subjective beta press techniques may be improved. More specifically, the present data indicate the possible existence of considerably more variance in environmental perceptions than can be accounted for in the actual environment. Only by appealing to nonenvironmental variables such as perceiver characteristics (personality, background demographics, and job satisfaction), may we truly understand this distribution of environmental perceptions. It would therefore seem that beta press assessment is not merely the recording of a precise and objective physiological perception, but rather a highly personalized and individual phenomenon. While the issue of whether it is so personalized so as to be useless as an environmental measurement cannot presently be answered, there are important implications regarding "type" or "style" of subjective assessment. In particular, the individual/personal nature of subjective perceptions may be better represented via individual beta press scores, as opposed to one consensual score which disregards and masks this variance by averaging across all individuals. The individualized quality of subjective environmental perceptions would in this way be deemed important, and the contribution of personality, background demographics, and job satisfaction to within groups variance would
be represented, thereby providing a more accurate style of environmental measurement. Support for this argument was provided by Alden (1975), who demonstrated individual beta press scores to be superior to consensual beta press in the prediction of behaviour change. Although subsequent partialling out of perceiver characteristics improved the predictive powers of the consensual score, that of the individual scores remained unchanged, thereby suggesting that variables such as personality, background demographics, and job satisfaction may obscure consensual beta measurement more so than individual beta measurement.

The preceding discussion would clearly recommend the necessity for further investigation into the extent to which perceiver characteristics influence perceptions and therefore measurement. In resolving this complex issue, the present study may be seen as necessary but not sufficient, in that it serves as preliminary indicant that problems "could" exist, but leaves more specific determination to future research. First, it must be determined whether individuals form divergent perceptions of one environment, or whether they are exposed to, and realistically perceiving, multiple and different environments. For example, since institutions (correctional,
hospital, etc.) typically house residents in areas which vary in terms of security, program emphasis, and general freedom, it is possible that sub-environments exist within the general institutional environment, and that varying perceptions realistically represent this situation. In order to test this hypothesis it would be useful to measure changes in environmental perceptions as individuals progress through the various sub-environments. An additional question for future research pertains to construct validation of subjective beta press assessment; this could be accomplished by determining the relationship between beta press measures, and more objective environmental alpha measures. For example, as was mentioned above, certain of the CIES subscales, such as "order and organization" and "staff control", lend themselves to objective operational definition based upon policy directives, pervasiveness of rules, etc. In the event that subjective perceptions are highly correlated with these objective environmental indicants, construct validity of beta press assessment will have been demonstrated. In addition, some form of experimental laboratory research is recommended. For example, it would be useful to manipulate an objectively defined environmental variable, and determine its influence upon environmental perceptions. Since such research
would control for the possibility of multiple environments, any variation in environmental perceptions could not be interpreted as realistic perceptions of various sub-environments.

In conclusion, although there exists a demonstrated relationship between environmental perceptions and nonenvironmental variables such as perceiver characteristics (personality, demographics, and job satisfaction), it cannot be determined from the present data whether individuals perceive an environment dissimilarly because of nonenvironmental influence, or whether they are actually exposed to divergent environments. While the present study suggests the potential for perceiver characteristics to confound environmental perceptions, it at the same time, lends support to certain aspects of beta press measurement. The question of whether subjective environmental perceptions are so influenced by interfering variables that the environment is not actually being measured is therefore left to future research. Finally, the present data would recommend the development of more sophisticated alpha measures, and the use of individual environmental perceptions in addition to one consensual score.
APPENDIX "A"

Resident Demographics Questionnaire

Age: ________

Most recently completed school grade: ________

Were you in school at the time of last arrest: ________

Were you employed at the time of last arrest: ________

Was it full-time or part-time: ________

What was your salary: ________

Status (Check one of the following):

sentenced ________

remanded ________

Sentence: ________

Present Offense (charge): ________
APPENDIX "B"

Staff Demographics Questionnaire

Age: _______

Sex: _______

Education (If you have attended university or some other post secondary institution, please indicate the nature of the institution and the number of years spent there):

_________________________________________________

_________________________________________________

Marital status: ________________

Length of employment at Y.D.C.: ________________

Status:

auxillary _______

regular _______

Job Classification:

SO _______

CO _______

PO _______
APPENDIX "C"

Face Sheet: Instructions and Guarantee of Confidentiality

The research to be undertaken at Willingdon Youth Detention Centre will investigate the way in which residents view their environment. In particular it will be determined whether individuals tend to have similar perceptions, or whether different individuals view the environment differently. For purposes of comparison staff members will also be asked to take part.

All results will be totally confidential. No attempt will be made to attach names to specific scores. Analysis of data will be statistical and shall apply to generalized groups as opposed to individual cases.

Volunteers will firstly be required to provide demographic information about themselves; please be as precise as possible. Following this you will be asked to complete paper and pencil tests of the "yes-no" and "multiple choice" variety. Please use a pencil to clearly mark the best or most acceptable alternative.

If you wish to volunteer please sign the provided consent form.

Thank you very much.
Subject Consent Form

I understand that the results of this project are totally confidential and do hereby volunteer as a research subject.

Signature: ______________________

Date: ______________________

Witness: _____________________
BIBLIOGRAPHY


Smith, P.C., Kendall, L.M. and Hulin, C.L. The measurement of satisfaction in work and retirement. Chicago Illinois:


