ADJUSTMENT EFFECTS OF
MULTI-MODAL PROGRAM PARTICIPATION
ON OHIO INCARCERATED WOMEN

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By

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* * * * *

The Ohio State University

1994

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To

Denise Joyce Broughton

(December 02, 1963 to January 29, 1994)

I would like to dedicate this study to a very special and dear friend who had very special meaning in my life. It seemed ironic for me to receive a tragic phone call one morning (February 01, 1994) informing me of the cruel, senseless murder, of a very special friend, as I researched ways to develop programs for the treatment of offenders. God be with the family and friends of Denise, she will be sorely missed among her earthly friends.

I love and miss you Denise!

Pamela Chapman
ACKNOWLEDGMENTS

Sincere appreciation is expressed to the members of my advisory committee Drs. Linda Perosa, Larry Miller and Twine Parmer for their ongoing direction, support and guidance during my research. Expressions of gratitude are shared with Mrs. Christine Money (Superintendent, The Ohio Reformatory for Women), the Ohio Department of Rehabilitation and Corrections, Franklin Prerelease Center, and Wilmington College staffs for their ongoing support and cooperation with my endeavors! Special thanks to Stephen Kiefer (Psychologist, Correctional Center for Women, Raleigh, North Carolina) for your efficient responses and encouragement. I thank the women who volunteered to participate in my research at ORW. To those individuals who had faith in me, were tolerant of my behaviors and demands, and held unconditional support, I express sincere appreciation to each of you. Most importantly, I thank my biological, Upward Bound (Case Western Reserve University), and Faith Ministries families for understanding my absences at family activities, lessened interest in family concerns, and forgetfulness; you have been tremendous and I appreciate you.
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ADJUSTMENT EFFECTS OF MULTI-MODAL PROGRAM PARTICIPATION
ON OHIO INCARCERATED WOMEN

By

Pamela Chapman, Ph.D.

The Ohio State University, 1994

Professor Linda Perosa, Adviser

One hundred twenty-three women, who were incarcerated for less than two weeks, participated in a multi-modal program. The program participants were provided training in stress management, anger management, problem solving, self-esteem building, and relaxation techniques. The control group adjusted to the environment with the admission and general incarcerated population. Adjustment was measured by: the total score of the Prison Adjustment Questionnaire; the neuroticism domain scale, anxiety facet scale, anger facet scale, vulnerability to stress facet scale, and self consciousness facet scale on the Neuroticism Extroversion Openness-Personality Inventory (Revised) (NEO- PI R); and the depression clinical scale, low self-esteem scale, and negative treatment indicator scale on the Minnesota Multiphasic Personality Inventory-2 (MMPI-2). Participants in the multi-modal program showed significant changes in their adjustment, as measured by neuroticism, total adjustment, depression, and negative treatment indicator. Some
improvement in adjustment as measured by anger, anxiety, stress, self-esteem, and self-consciousness was observed, but were not statistically significant. In addition, the variables history of arrest, certainty of outdate, sexual abuse, and having children were analyzed to predict adjustment. Significant results were found on adjustment as measured by neuroticism, anger, anxiety, total adjustment score, negative treatment indicator, and low self-esteem. Pretest scores significantly predicted depression, self-consciousness, and vulnerability to stress. Results suggest that, during admissions, teaching a multi-modal program may be beneficial on some adjustment variables. In addition, several variables predict readiness for treatment.
CHAPTER I

INTRODUCTION

During the last decade, the prison system has experienced a rapid growth in population. This trend in prison growth has continued in the decade of the 90’s. Furthermore, the inmate population doubled from 325,000 in the 1980’s to 650,000 in the 1990’s (Broder, 1991; Isikoff, 1991; Kline, 1993; Schroeder, 1991). During the first one-half of 1990, the nation’s federal and state prison population increased by 42,862 reaching 755,425 inmates (Fain, 1990; Isikoff & Thompson, 1990; Kline, 1993). Given the current data, the federal prison population has been projected to reach 1,000,000 by the mid - 1990’s (Isikoff & Thompson, 1990).

The vast expansion in the system has demanded an increase in facilities, an increase in revenue spent on rehabilitation, an increase in prison alternative programs, and an increase in personnel. The expansion has been observed in institutions for both men and women. Overall, in the decade of the 80’s, nearly 30 billion dollars were spent on the prison system (Broder, 1991; Isikoff, 1991; Kline, 1993; Schroeder, 1991). As a result of the prison population increasing, greater demands are being placed on the system. The increased population has created several problems for the inmates. These problems have made it difficult for the inmate to benefit from much needed programs such as substance abuse treatment, clinical counseling, personal development programs,
and other programs that provide cognitive skill development. Because the prison population has rapidly increased at a pace that is greater than the construction of new facilities in which to house the inmates, prisoners in some institutions, have been assigned to rooms that contain beds very close to one another. Additionally, rooms which were initially built to house two inmates, have housed three to four. Another sign of prison overcrowding has been demonstrated by inmate housing assignments in places such as hallways and basements (Schroeder, 1991; Stimer, 1991). The untraditional room assignments have created stress and chaos for both the inmates and staff, leading to additional problems related to overcrowding.

Overcrowding has also placed additional information strains on services provided by the mental health staff for inmates. For example, a long waiting list has been commonly found for the drug treatment program. Additionally, inmates who needed quick problem solving advice had to seek services elsewhere because the psychological and psychiatric staffs are often overwhelmed with paper work, calls for crises intervention and the need to see inmates with routine mental health issues. Another area of concern in regards to treatment has been that of limited space for program staff. As mentioned earlier, some institutions used staff space for housing which very often led to the termination of services.

Although the above issues impacted all inmates, incarcerated women have encountered difficulties that are slightly different. The total number of women in prison has been much lower than men; yet, the rate of women confined to prisons has tripled from 1974 to 1986 (Kline, 1993; Schroeder, 1991). Hence, the number of women sent
to prison outpaced the number of men during the last decade (Schroeder, 1991). In the U.S., women accounted only for 4.3% percent of the prison population ten years ago (Kline, 1993; Schroeder, 1991). In Ohio, from 1972 to 1992, the number of women in prisons increased 720%, from 275 to 2,257 inmates. In comparison to women, the number of men in Ohio prisons increased 275%, from 8,846 to 33,189 during that same period (O’Hanlon, 1992). These data on the prison population suggested that increasingly more women have been incarcerated than in previous years.

Reasons for the growth in the female inmate population have been examined by several researchers (Carp & Schade, 1992; O’Hanlon, 1992). O’Hanlon (1992) reported that in 1989 one in three women were incarcerated due to drug offenses as opposed to one in eight women in 1983. Thus much of the increase in the female prison population was attributed to a number of drug related crimes. In addition, women simply were not being sent to prison at the same rate as their male counterparts in the past (Kline, 1993). For example, ten years ago it was uncommon to find a pregnant woman sentenced to prison. Another reason for increases in the women prison population was that more women were sentenced for carrying guns in the course of committing a crime. Such an offense carried a mandatory three year prison sentence.

Many female prison inmates, in state operated facilities, have similar characteristics. The female inmate was generally between 25 and 34 years old, African-American, lacked a high school education, and was unemployed or a low-skilled worker (Carp & Schade, 1992; Kline, 1993). Additionally, over 50% of the female prisoners have children (Carp and Schade, 1992), were single parents, and some were pregnant
when sentenced. Also, as many as one in three women had abused drugs (O'Hanlon, 1992). Finally, over one-half of the female federal and state prison population were sentenced for property crimes, such as robbery, violent crimes, and drug related crimes (Kline, 1993; Carp & Schade, 1992); while twenty-two percent of the women were convicted for murder or manslaughter (Carp & Schade, 1992). As a result of the many issues related to overcrowding and programming, the needs of incarcerated women must be explored in order to provide appropriate services and treatment for them while they are in prison.

Setting

The present study has focused on female inmates at the Ohio Reformatory for Women (ORW). ORW is in Marysville, Ohio, which is approximately 25 miles northwest of Columbus, Ohio, the state capital. Furthermore, ORW is the only reception center in the State of Ohio for incarcerated women. During any given week 15 to 65 women arrive at ORW from various county jails in Ohio. Approximately 1,238 women are confined at ORW with various security levels. Of the incarcerated women, approximately 25% are repeat offenders (American Correctional Association, 1990).

Justification of the Study

When women were received at the state institution from county facilities, they were generally assigned to an admissions area. While in admissions, the women were issued clothing and room assignments, attended orientation where they received information about the institutional guidelines and procedures, received a series of routine medical examinations and screenings, and were administered a battery of interest,
personality, vocational, projective and intelligence tests from the psychology and education departments (Hannum, Borgen & Anderson, 1978; Smith, Sibler & Karp, 1988). The immediate collection of information from each inmate was necessary in order to provide appropriate supervision and care for inmates as well as protection for the staff. The gathered information on the women was used by various correctional staff members. The correctional staff determined security classification and job assignments for the inmates, developed treatment plans, assessed for clinical depression, identified psychiatric problems, and determined the suicidal risks of the inmates (Hannum et al., 1978; Smith et al., 1988). Therefore, the initial two week period was very overwhelming and stressful for the women.

Several professionals who work in the correctional environment have acknowledged that the early days of incarceration represented a highly stressful period (American Association of Correctional Psychologists, 1980; Pierce, 1972; Sultan, Kiefer & Long, 1986; Sultan, Long, Kiefer, Schrum, Selby, & Calhoun, 1984). Several studies have taken into account this early period of fear, confusion, defensiveness, anger, and uncertainty inmates experienced when entering a state correctional facility (Hannum & Warman, 1964; Sultan, et al., 1984; Sultan, et al., 1986). Actually, the highest period of suicide activity for women was reported during the first hour of county jail confinement (Bonner & Rich, 1990; Kerkhof & Bernasco, 1990; Olivero & Roberts, 1990); however, thoughts of suicide remained high for many women after they were transferred from the county jail to the federal or state prison. These behavioral and emotional changes and mental health issues were reportedly due to the sudden separation
from family, friends, and familiar surroundings which required the women, in many
cases, to quickly cope and adjust in a foreign environment (Hannum & Warman, 1964;
Sultan et al., 1984; Sultan et al., 1986).

While many researchers have addressed numerous aspects of female incarceration
such as parenting programs, baby placement assistance, CHOICES programs to assist
women with domestic violence issues, and prerelease programs (Carp & Schade, 1992;
Mabli, Glick, Hilborn, Kastler, Pillow, Karlson & Barber, 1985; Stimer, 1991),
published research focusing on programs specifically designed to facilitate stress
reduction and improve the adjustment of women to prison are limited. Furthermore,
research examining the prison adjustment of female inmates using the NEO-PI R, a
normal personality measure rather than a psychopathology based inventory, were not
located.

Problem Statement

Female inmates in the correctional system typically take a battery of tests upon
arrival at the state correctional institution, when they are believed to be filled with
anxiety, anger, fear, loneliness and confusion, in order for the staff to make
determinations about mental health, physical health, security risk, and a treatment
program. However, several researchers have debated whether inmates can rationally
respond to items about themselves on assessment instruments during such a turbulent
period of time. Several scholars questioned whether the tests were reliable and valid
(Dahlstrom & Welsh, 1960; Hannum et al., 1978; Hannum & Warman, 1964; Panton,
1974; Von Cleve, Jemelka & Trupin, 1991). Thus, two questions that anyone working
with women inmates who are in admissions have to address: (1) How ready are the female inmates to supply information about personality, education, vocational, and other information the department of corrections requires from them? (2) If female inmates are not ready at the time of incarceration to provide this information, then what can be done to help them develop a level of readiness?

In summary, studies about prison stress, suicide, adjustment, and anger are abundant. However, few empirical studies exist which specifically used female inmates as a sample. Nor have studies been conducted to investigate the effectiveness of stress management, anger management, and problem solving, as well as relaxation and self-esteem exercises, on prison adjustment and readiness to accurately respond in providing personal data.

The purpose of the present study was to investigate the influence of a Multi-modal Program on incarcerated women to help them adjust to the stresses of incarceration. The program consisted of teaching the women stress management techniques, anger management activities, and problem solving strategies. A second purpose of the study was to explore which variables (i.e., sex abuse, children, prior incarcerations, and certainty of outdate) are the best predictors of successful prison adjustment (i.e., neuroticism, anxiety, anger, depression, self-consciousness, vulnerability to stress, negative treatment indicator scale, low self-esteem, and total adjustment score).
Hypothesis

The prison adjustment of female inmates who participated in the Multi-modal Program is significantly greater than the adjustment of those who do not receive the intervention.

The independent variable, whether or not one receives an intervention, has two levels which are: (1) Multi-modal Program participation and (2) control group. The dependent variable for this research is prison adjustment of incarcerated women as measured by the Prison Adjustment Questionnaire total score, the Neuroticism Extroversion Openness-Personality Inventory’s (Revised) (NEO-PI-R) neuroticism domain scale, anxiety facet scale, anger facet scale, vulnerability to stress facet scale and self-consciousness facet scale; and the Minnesota Multiphasic Personality Inventory-2 (MMPI-2) depression basic scale, low self-esteem clinical scale, and negative treatment indicator scale.

Definition of Terms

Abuse: Abuse is operationally defined as inmates who were sexually, physically or emotionally abused as children or adults. The code assignments for abuse are: 1 = no abuse, 2 = abuse existed. If abused existed, 1 = abused adult, 2 = abused child, and 3 = abused as both a child and adult. The scale of measurement in nominal.

Adjustment: Adjustment will be operationally defined by an individual’s total score on a prison adjustment instrument (Sultan et al., 1984) and two personality measures, the NEO-PI R and the MMPI-2. The prison adjustment instrument is based on 13 items on a Likert-type scale ranging from 1 to 5. Scores 0-13 are an indication
of maladjustment and scores ranging from 32-65 are an indication of a very well adjusted inmate. The scale of measurement is ordinal.

The NEO-PI-R adjustment variables are the neuroticism domain scale, anger facet scale, anxiety facet scale, vulnerability to stress facet scale, and self-consciousness facet scale. Neuroticism refers to feelings of fear, sadness, anger, embarrassment and ability to cope with stress (average scores range between 72 - 95). Anger facet scale measures frustrations, disappointments and bitterness. The higher the anger score the greater the likelihood of experiencing anger (average scores range between 10 - 15). Anxiety focuses on susceptibility to worry, tense feelings, and nervousness. High anxiety scorers experience the identified feelings more often than low scorers. In addition, high scorers tend to have a pessimistic attitude (average scores range between 13 - 18). The vulnerability to stress facet scale assesses a person's comfort level when responding to stress, situations in which the person has no control, and responses to crises. Individuals with low scores feel more confident in their ability to resolve conflict (average scores range between 9 - 13). The self-consciousness facet scale describes a person's level of comfort, response to criticism, feelings of incompetence, and embarrassment. Low scorers tend not to react to clumsy or awkward situations (average scores range between 13 - 17). The neuroticism domain scale and facet scales are ordinal measurements.

Adjustment measures from the MMPI-2 are the depression clinical scale, the negative treatment indicator scale, and the low self-esteem clinical scale. The depression clinical scale measures level of anxiety, mood, level of energy, and hopelessness (average scores range between 21 - 27). The negative treatment indicator scale measures attitude
toward therapy, confidence in their ability to become a healthier person, and perception of psychologists, therapists, and counselors. High scorers are likely to resist therapy (average scores range between 5 - 12). The low self-esteem content scale measures level of self-confidence, feelings about self-worth and values. High scorers indicate a low self-esteem (average score range between 5 - 12). Scales of measurement are ordinal.

Age: Age is an interval measure that is operationally defined as the age on the date of arrest as self-reported by the inmate. Age is also an ordinal scale of measure (1 = 18 - 27, 2 = 28 - 33, and 3 = 34 - 83).

Certainty of Outdate: Knowing the date of one’s earliest release as reported on the questionnaire, is the operational definition of certainty of outdate. The interval measure used is earliest release date and earliest parole or furlough board dates. Certainty of outdate is a nominal scale of measure (1 = not certain of outdate and 2 = certain of outdate).

Custody Influence: Custody influence is defined as how much input the inmate has over who is providing primary care for her dependents. Codes associated with custody are: 1 = dependents are with family, 2 = dependents are with social services and 3 = both 1 and 2. Scale of measurement is nominal.

Dependents: Dependents will be an interval measure which are operationally defined as the number of children who were under the supervision of the inmate prior to her arrest. This list includes the number of nieces, nephews, sons, daughters, children of friends, step children, etc.
**Drug Usage:** Drug usage is operationally defined by the last time the inmate reported using drugs. Codes given for drug abuse are: 0 = no drug usage to the actual number of days of last usage. The scale of measurement is interval.

**Education:** Education is an interval measure which is operationally defined as the number of years the inmate spent in school.

**Employment:** Operationally, employment is defined as whether or not the inmate had a job, her last date of employment and type of work. Employment will be treated as an interval measure which is the number of months of last employment.

**Ethnicity:** Ethnicity is defined operationally as an inmate’s race or cultural background. Codes assigned to ethnicity are: 1 = African American (Black), 2 = European American (White), 3 = Asian American, 4 = Native American (American Indian), and 5 = Mexican American (Latino) for a nominal scale of measure.

**Marital Status:** Marital status is a nominal scale of measure that is operationally defined as an inmate who is either: 1 = never married, 2 = married, 3 = divorced, 4 = separated, 5 = widowed, or 6 = lived with someone as if they were married.

**Mental Health History:** Mental health history is operationally defined as the number of times the inmate visited a psychologist, psychiatrist, or counselor in the last year. The scale of measure is interval.

**Multi-modal Program:** The Multi-modal Program is operationally defined as a partially structured cognitive-behavioral adjustment program conducted by the researcher. The topics are stress management, anger management, and problem solving with relaxation and self-esteem applied exercises.
**Number of incarcerations:** Number of incarcerations is an interval scale of measure. It is operationally defined as the number of times the inmates went to a state operated facility, not including present incarceration.

**Prescription Medication:** Prescription medication is operationally defined as any medication an inmate was prescribed from a medical professional and whether or not the inmate is currently taking the medication. The scale of measure is nominal.

**Physical Health:** Physical health is operationally defined as the number of visits made to a physician during the past year. The ordinal scale of measure is: 1 = not at all, 2 = few times, 3 = about once a month, 4 = about 2 or 3 times a month.

**Residence:** The operational definition of residence is the state in which the inmate was a current resident prior to arrest. This nominal scale of measure was based on 1 = Ohio and 2 = other states.

**Smoke Increase:** Smoking is operationally defined as a nominal scale of measure that reports: 1 = yes or 2 = no that smoking has or has not increased.

**Stress:** Bette defined stress as "pressure from outside that can make you feel tense inside." He further described it as a kind of tension one feels when faced with a new, unpleasant, or threatening situation (1990). The frequency, intensity, outcome, and duration of stress varies according to individual perception. Psychologists have examined several components of stress from daily unavoidable events to major life changes.

**Time spent in county jail:** Time spent in the county jail is operationally defined as the number of days spent in the county jail before transferring to the Ohio
Reformatory for Women (ORW). Days spent in county jail is an interval scale of measure.

Limitations of the Study

The primary limitation of this study is the sampling process and to whom the results apply. The results of the present study will not be generalizable to incarcerated women at all prison reception centers or ORW; they will only be generalized to volunteers who had been incarcerated less than two weeks at ORW. The study will not look at men, prisoners in the county jail, women who are pregnant and are not planning to terminate their pregnancies, and inmates in prerelease. Inmates who volunteer will be randomly assigned to either program participation or the control group. Each inmate who arrives during April through June, 1994, will be encouraged to participate while they are in admissions. Therefore, the number of actual participants is not at the discretion of the researchers.

Significance of Study

The study will provide knowledge to mental health professionals and administrators to augment existing services for incarcerated women. Additionally, this study will provide information that will increase the reliability and validity of the various assessment instruments administered to female prisoners during their initial incarceration. The admissions staff will be able to anticipate which women will have difficulty adjusting to the prison environment based on information gathered at the time of arrival. Those deemed at risk can be placed in a treatment group that will have been shown to be helpful in relieving stress and promoting adjustment. Findings, associated with
women at ORW, can be implemented in the male population and federal prisoners to determine if they hold true there as well.

**Summary**

In summary, the number of females in the prison population is rapidly growing. The pace of growth is greater for women when compared to men. The influx of inmates affect the quality and quantity of services that are offered. If prisons are to be viewed as places where rehabilitation can occur, then it is important to develop effective intervention programs which can foster healthy adjustment to prison life. The earlier this adjustment takes place the sooner these women can begin to focus on the changes they must make within themselves to prepare for a crime free life once they are released.
CHAPTER II
REVIEW OF THE LITERATURE

A review of the literature section presents variables related to the prison adjustment of female inmates sentenced to state operated facilities within the first two weeks of their incarceration. This chapter is divided into three sections. The first section is a brief description of the prison environment. Structure, staff, and services are all components of the prison environment. The second section is an overview of the major active independent variable. The active independent variable, intervention, has two levels: 1) program participation and 2) control group. The third section focuses on the dependent variable, adjustment.

Prison Environment

The structure and building plans for prisons consistently include razor wire fences, concrete blocked walls, steel bars and heavy doors. Units, cottages, and cell blocks are some of the names given to the residential housing areas inside the institutions. Rooms within the living quarters also vary, ranging from single cells to large open areas containing several rows of bunk beds. Daytime housing areas in the prison setting include recreational space, a library, visiting hall, and classrooms. The size of the rooms and arrangement vary according to the space available and demands of the prison population.
**Staffing.** Recruiting, training and supervising staff are significant components of the prison operation. Gleason (1986) and Harris (1993) identified security and treatment as the primary goals of the system. DeLuca, Miller, and Wiedemann (1991) identified four objectives of the criminal justice system that they gathered from other research literature. These four objectives are: deterrence, punishment, incapacitation, and rehabilitation.

Staff recruitment is done with security and treatment goals in mind. The primary responsibility of the custody staff is to provide security for inmates and staff inside of the correctional facility, whereas, the treatment staff is primarily responsible for rehabilitation. As a result of this arrangement, treatment staff are more involved in programming such as drug treatment, job training and personal development. In essence, as the custody staff work towards maintaining control and security, the treatment staff focus on the mental health of the inmate. Some researchers believe the treatment and custody staff goals are in conflict (Dye & Sansocci, 1974).

**Services.** In addition to the physical environment and staffing issues, there are many services provided in the prison environment. Medical, mental health and educational services are examples of such services. The medical staff perform physical, dental and eye examinations along with routine immunizations. Women are also given pregnancy exams upon their arrival. Emergencies that are not treated in the facility are taken to various hospitals contracted with the state, federal and county agencies. Some departments have correctional hospitals that provide emergency and mental health services. Licensed mental health professionals, such as psychologists, psychiatrists,
psychiatric nurses, social workers and counselors attend to the mental health care of the inmates (American Association of Correctional Psychologists, 1980).

The mental health care of inmates has been governed by the American Association of Correction Psychologists (1980). The psychological staff provide many services and functions that assist the inmate with adapting to prison. One function of the psychology staff is the administration of a battery of psychological instruments to assist with the determination of mental health stability, security risk, and the development of treatment programs during initial incarceration. The Minnesota Multiphasic Personality Inventory (MMPI) is one of the most widely administered instruments in the correctional setting (Carmin, Wallbrown, Ownby, Barnett, 1989). Since the revision of the MMPI, the MMPI-2 is being administered. The Revised BETA-II Examination, Bender-Gestalt, Rotter Incomplete Sentence Blank and Wechsler Adult Intelligence Scale are some of the psychological measures administered, at least, in Ohio. In addition to administering a battery of instruments, a second function of the psychology staff is conducting intake interviews, where the inmates’ mental status, personality profile, suicidal ideation, and program interests are reviewed. During these interviews, the need for a psychiatric assessment is also determined. Generally, a staff of psychiatrists are available in the receiving facility or at another facility to attend to the psychiatric concerns of the inmates. Medication for inmates who require psychiatric care is also available. A third function of the psychological staff is to provide psychological summaries for outside agencies, such as the Adult Parole Authority.
Testing and intake interviews generally take place during the first week of incarceration. Several researchers have suggested that environmental uncertainty, noise, and separation from family, combined with no leisure and telephone privileges during the first two weeks of incarceration, increases the inmates' level of stress (Pierce, 1972; Sultan et al., 1986). Furthermore, the summaries and reports prepared for outside agencies are generally requested after the initial shock of being incarcerated, and are based on the information gathered at the time of incarceration. Thus, several researchers became interested in the reliability and validity of the assessment outcomes measured during initial incarceration (Gearing, 1979; Hannum et al., 1978; Pierce, 1972; Von Cleve et al., 1991) and ways to assist with the adjustment of inmates during initial incarceration (Sultan et al., 1984; Sultan et al., 1986).

Educational programs are offered in addition to the medical and mental health services. Educational programs offered for skill enhancement have been positively reviewed (Farrell, 1986; Rutherford, Nelson & Wolford, 1985). Prerelease programs, college degree programs, general education diploma and adult basic education programs are made available in several prisons. Cosmetology, culinary arts, horticulture, and Orientation to Nontraditional Occupations for Women (ONOW) are among the many vocational-educational programs available for inmates. Programs are generally offered based on the needs of the inmate population, space available, and funds. In addition to the staffing and services present in prison settings, intervention programs, and psychotherapy are made available generally to enhance adjustment and reduce recidivism (Alexander, 1992).
**Treatment.** Treatment programs and interventions are made available for inmates to address the rehabilitation goal of corrections. Effective rehabilitation is believed to reduce the rate at which released offenders repeat crimes. Unfortunately, making available effective programs is a difficult task. Problems with available space, available funds and controlling behavior have contributed to ineffective rehabilitation programs (Schroeder, 1991). Nonetheless, correctional professionals and researchers have found ways to overcome the barriers to treatment, for substance abuse (Anglin & Hser, 1991), sexual abuse (Slater, Groves & Lengfelder, 1992; Sultan & Long, 1988), education enhancement (Farrell, 1986; Rocks, 1985), parenting skills (Brown, 1989; Clement, 1993), prerelease preparation (Calabrese & Hawkins, 1988), and self-esteem development (Cannici, Glick & Garmon, 1990; Paulhus & Paulhus, 1992; Sultan & Long, 1988) which are among the many personal development, therapeutic groups, and vocational programs provided for inmates.

In a Monitor newsletter, Freiberg (1991) reported components of a conference presentation by Paru Gendreau and Francis Cullen. In that article, Gendreau was quoted as saying, "It (treatment) is a very powerful effect ... appropriate treatment works not only for juveniles but also for adults. Francis Cullen at that same conference was quoted "... enough research has emerged which suggests that many correctional interventions are indeed effective ...." He continued by asking "... what is it that distinguishes effective from ineffective programs?" (p. 17) Those comments are supportive of treatment programs in the correctional setting. However, the content of the programs must contain particular information. Freiberg (1991) further reported in his article what
the program should include. Effective programs are those which allow inmates input in establishing rules, offer offenders skills that assist in the prevention of continual criminal behavior such as how to identify inappropriate and erroneous thinking and how to reflect on the consequences of their choices, provide social skill training for interpersonal development, and offer methods for anger control (Freiberg, 1991). The above six components of effective treatment, that is, input, problem recognition, choices, social skill development, and anger control are likely to positively influence prison adjustment and recidivism.

Similarly, Coulson and Nutbrown (1992) offered thirteen components that they strongly recommended for programs established in a correctional setting. These components are: 1) motivate clients to participate in the program; 2) use multiple instructional tools; 3) develop a detailed training manual; 4) develop a means to evaluate program; 5) provide opportunities for feedback; 6) provide exercises where skills can be applied; 7) incorporate a means for participants to evaluate teacher effectiveness; 8) provide a means for other professionals to evaluate teacher effectiveness; 9) provide a means to evaluate the outcome of the program; 10) develop criterion for client participation, exclusion, and termination; 11) repeat exercises and instruction to increase learning; 12) the teacher must be willing to be involved and follow the treatment program; and 13) keep the receiving audience and goals of program in mind. These thirteen criterion were used to evaluate the programs Coulson and Nutbrown (1992) selected as very effective. The research of Ross, Fabiano & Ewles (1988), which will be discussed later, was among them.
Offering the components identified by Coulson and Nutbrown to the content of a program enhances its effectiveness. Stress management, anger management and problem solving skills have been reviewed and are deemed important cognitive skills for inmates to possess (Bingham & Piotrowski, 1989; Larson, 1992; McColloch, Gilbert & Johnson, 1990; Rokach, 1987; Valliant & Antonowicz, 1992). Offering the interactive ingredients for effective programming and cognitive skill development in a partially structured and time limited support group setting may enhance prison adjustment.

**Multi-Modal Program**

Strategies for effective treatment plans for inmates have been studied for years. Researchers have developed effective programs which were shown to reduce recidivism (Ross et al., 1988), increase adjustment (Sultan et al., 1984; Sultan & Long, 1988), reduce stress (Sultan et al., 1986; Valliant & Antonowicz, 1992), increase self-esteem (Sultan & Long, 1988; Valliant & Antonowicz, 1992), and enhance cognitive skills (Bonner & Rich, 1992).

There is a big difference between what works in corrections and what does not work in corrections. In fact, according to Alexander (1992), there are programs that worked, but the outcome measures which determined the effectiveness of the program was inappropriate. Thus, programs are possibly discontinued when in fact they were effective. Conversely, there are ineffective programs which the outcome measures incorrectly showed to be effective. These programs were repeatedly implemented. Fortunately, there are very effective programs appropriately implemented in the correctional setting. Despite the difficulty and difference in opinion about what
constitutes effective programs, many researchers and professionals have identified
effective treatment programs (Coulson & Nutbrown, 1992; Frieberg, 1991; Ross et al.,
1988; Sultan et al., 1984; Sultan & Long, 1988). Therapeutic approaches implemented
in the correctional population include logotherapy, psychotherapy, differential therapy,
growth-centered therapy and cognitive-behavioral skills training.

Models based on a behaviorist perspective emphasize behavioral changes. But,
changing behavior does not address the initial thinking or problems that led to
inappropriate behaviors. In contrast, cognitive therapists are primarily interested in the
thinking process of the client (Cook & Campbell, 1979; Lazarus & Folkman, 1984).
Researchers have combined the cognitive and behavioral perspectives which teach people
to think, feel and act. This approach also is referred to as a transactional model with the
premise that the cognitive, affective and behavioral domains are interrelated (Cohen,

An examination of the transactional model with female inmate populations suggest
that a multi-modal approach may be quite effective. For example, criminals are
incarcerated as a result of some behavior that society deemed inappropriate or
unacceptable. Perhaps, the thinking and feeling that proceeded the behavior was most
likely deficient if the outcome was incarceration. Cognitive-Behavioral modalities
(Bingham & Piotrowski, 1989; Cohen, 1985; Villiant & Antonowicz, 1992), also
referred to as cognitive-affective approaches (Crocker, Aldermann & Smith; 1988),
multifaceted approaches (Wilfley, Rodon & Anderson, 1986), reasoning-cognitive
approaches (Ross et al., 1988), and stress-cognitive paradigms (Bonner & Rich, 1992)
have all demonstrated their effectiveness using the cognition, emotions, and behavior premise.

Stress management (Bingham & Piotrowski, 1989; Bonner & Rich, 1992; Valliant & Antonowicz, 1992), anger management training (Bingham & Piotrowski, 1989; Valliant & Antonowicz, 1992), problem solving skills (Bonner & Rich, 1992; Cohen, 1985; Ross et al., 1988; Valliant & Antonowicz, 1992), and social skills training (Bingham & Piotrowski, 1989; Cohen, 1985; Ross et al., 1988; Valliant & Antonowicz, 1992) are the cognitive-behavioral or multi-modal topics presented in the correctional literature.

The cognitive-behavioral approach for the treatment of angry adult female offenders (Wilfley et al., 1986), hopeless, suicidal male inmates (Bonner & Rich, 1992), male sex-offenders (Bingham & Piotrowski, 1989; Valliant & Antonowicz, 1992), high-risk adult male probationers (Ross et al., 1988), and male adult offenders with different sentences (Cohen, 1985) have shown a decrease in angry feelings and aggressive behaviors, an increase in prison and community adjustment, an increase in self-esteem, and a decrease in recidivism, respectively. The various reported findings are all favorable responses that planners for mental health treatment and researchers in corrections should strive to accomplish.

Cohen (1985), Garrido-Genoves, Rindondo and Perez (1989), Palmer (1992), and Ross and his colleagues (1988) have reviewed the benefits of cognitive skill development as a treatment approach for offenders. For example, Ross and his colleagues (1988) determined that the male inmates they studied were deficient in their cognitive skills that
were regarded as essential to effective programming. The lack of cognitive skills imply some relationship with negative behaviors or poor choices. Similarly, Palmer (1992) recommended treatment for offenders which included skill development, control techniques and/or, programs provided by the psychological department.

Palmer’s (1992) growth-centered intervention is similar to a multi-modal program. Moreover, Cohen (1985) reported that cognitive skill development is a critical component of the prison experiences. The cognitive components of his intervention were problem solving and social skill training which Cohen found effective among men. Likewise, Garrido-Genoves et al., (1989) found similar results when they examined the effect of a psychosocial competence intervention program with Spanish speaking young male juveniles. The components of their intervention were social skill, cognitive problem solving, reasoning, cognitive development, and stress management training.

The aforementioned research addressed various cognitive skill programs primarily implemented in male institutions. Although several cognitive skill programs have been effective with male samples, the results should not be generalized to the female population. Thus, empirical studies should be implemented in the female prison population to determine the applicability and effectiveness of these types of cognitive skills programs. The present research is an empirical study evaluating the effectiveness of a multi-modal program, based on the cognitive-behavioral interventions, developed to ease the initial trauma and adjustment of incarcerated women. Sultan et al’s., (1984)
opening paragraph was a synopsis of what takes place during initial incarceration.

Specifically, Sultan et al., (1984) stated:

The entry of a woman into a correctional facility typically bring with it a period of fear, confusion, and intense psychological upheaval. Suddenly separate from family, friends, and familiar surroundings, the female offender must cope with a new world, a new society about which she knows very little. Prison rules, expectations of staff and other inmates, lack of privacy, and sexual intimidation all confront the new inmate.

Little systematic attention has been paid to developing programs specifically designed to facilitate adjustment to prison life, despite the general acknowledgement of the correctional/psychological staff of correctional facilities that the early days of incarceration represent a highly stressful period ...(pp.49-50)

Sultan and her colleagues (1984) examined the effects of a psychodidactic approach in reducing stress, increasing adjustment and meeting the psychological needs of incarcerated women. Their approach was a three week program which met two sessions each week. The researchers had two treatment groups: a psychotherapy group and a psychodidactic group. The goals for the treatment groups were reported in Sultan et al., (1986). The goals of the psychotherapy group, which allowed the participants an opportunity to share concerns, were: 1) discussion about inmate selected topics, 2) provide an atmosphere of trust where women can share feelings of anger, fear, sadness, and loneliness, and 3) teach problem solving skills, techniques and strategies. The goals of the psychodidactic group, which involved more instruction that effected inmates' feelings of helplessness, hopelessness and confidence, were: 1) develop group support, 2) provide specific correctional information, and 3) encourage the application of learned skills to daily experiences. Thus, Sultan et al., (1984) indicated that it is important to include a supportive component to treatment programs along with didactic components,
especially when preparing programs for new inmates. Also, they recommend the use of an inmate co-facilitator.

Several concerns regarding the Sultan et al., (1984) work were raised. First, the use of an inmate co-facilitator may introduce an extraneous variable when determining the effectiveness of a treatment program. However, having an inmate facilitator offers great benefits. For example, the inmate serves as a role model for the new women. The new women may feel more comfortable with someone with a familiar experience. Furthermore, the facilitator inmate also can learn from the role she serves. Wilfley et al., (1986) encouraged the assistance of a co-facilitator as well, but on a slightly different scale. They suggested a same sex facilitator who is not an employee of the institution. Clearly, group co-facilitation offers great benefits, but given availability of staff it is necessary to determine how to present an effective program with the smallest number of staff members.

Second, the psychotherapy group alone may have impacted adjustment without cognitive instruction and application of skills. Thus, Sultan et al., (1984) developed a psychodidactic program which was designed to enhance the initial adjustment to prison life. In order to determine the effectiveness of the psychodidactic group intervention, Sultan (1984) developed a support group and control group. The psychodiagnostic intervention group provided support, but also specific information about stress and coping strategies, as well as application of those skills to their daily experiences. Several pretest and posttest questionnaires were administered to measure what the women experienced as a result of participation, in the group. The results showed no differences between
treatment groups on depression, anxiety, and adjustment so they were combined. This finding provided support for an earlier concern which was that the support group may impact adjustment without the instructional information offered in the psychodidactic group. The opportunity to interact and resolve complaints reduced stress, somatic symptoms, and provided comfort.

The Sultan et al., (1984) study is among the few which addressed the initial period of incarceration and selected women as their sample population. Thus, expanding their integrative treatment approach to a multidimensional or multi-modal approach may obtain similar results. A multi-modal treatment approach which includes specific instruction about stress management, anger management, and problem solving skills may increase women’s prison adjustment. The applied skill approach would involve applying a relaxation and self-esteem exercise. The identified modalities and applied techniques are frequently discussed and researched in the correction literature. The following sections will review that literature.

**Stress Management.** The prison experience is frequently described as stressful, frightening and unpredictable (Pierce, 1972; Sultan et al., 1986). The statement from the American Association of Correctional Psychologists (1980), describes the need for stress reduction methods and coping strategies:

The very fact of incarceration may induce psychological distress, severe depression, psychosis, or suicidal behavior and, thereby, intensify the need for mental health services. (pp. 85-85)

Studies investigating stress among female inmates (Harris, 1993; MacKenzie, Robinson & Campbell, 1989; Sultan et al., 1986; Sultan et al., 1986) and elderly

Sometimes the occurrences of stress are continuous from getting up in the morning to going to bed in the evening. Lazarus (1981) refers to daily stress as, "the petty annoyances, frustrations, and unpleasant surprises that plague us every day." (p.58) In fact, Lazarus (1981) believed the annoyances "may add up more grief than life major stressful events." (p.58) Since prison experience contains annoyances beyond the usual experience, the initial incarceration is considered to be a major stressful event. The prison environment leaves the inmates with very little control over their environment, thus, leading to feelings of powerlessness. In order for the inmate to survive, she or he has to develop coping strategies to adjust to the highly structured living conditions. Avoiding stress is difficult and in many cases impossible. However, how one prevents stress, minimizes the consequences of stress, or copes with stress is worthy of exploration, especially since one of the consequences of stress is suicide.

It has been reported by several researchers (Kerkhof & Bernasco, 1990; Olivero & Roberts, 1990) that a high percentage of suicide attempts take place during the first month of incarceration. Providing a supportive environment, cognitive skill instruction which includes stress management, anger management, and problem solving, while
building self esteem and applying relaxation techniques could perhaps help to prevent suicide during the initial incarceration.

Bonner and Rich (1990) studied the relationship between vulnerability to stress, life stress, and suicide ideation among jailed inmates. They reported that irrational beliefs, jail stress, and loneliness are related to differences in suicide intent among inmates. These factors were part of Bonner and Rich's (1990) transaction stress-vulnerability model that determined suicidal ideation. Bonner and Rich (1990) summarized that inmates who perceived the jail environment as stressful, felt lonely and alienated, had unrealistic beliefs and expectations, were not very good problem solvers, lacked life goals and social support, and were depressed about future life situations, tend to be at risk for suicide. In 1992, Bonner and Rich further examined their 1990 findings using a 'State of Mind' model. They found that jail stress was related to hopelessness, as measured by poor problem solving skills and having no future plans. When stress was added to hopelessness suicidal ideation increased.

In summary, the information provided in Bonner and Rich's (1990) study of men would be an excellent guideline in the development of a treatment program or intervention for women prisoners that addresses the factors predicting suicidal intentions. Furthermore, offering a program which included problem solving during early incarceration would not only perhaps reduce suicidal ideation and stress, but also offer skills that can be useful beyond incarceration.

Stress in the prison setting occurs in cycles. Specifically, there is stress that is associated with the initial entry into prison from the county jail (Bonner & Rich, 1992;
Sultan et al., 1984; Sultan et al., 1986; Von Cleve et al., 1991) and again each time one goes before the parole board and finally during prerelease (Mabli et al., 1985). Thus, learning coping skills during the initial period of incarceration may help prisoners adjust to these other stressful periods.

Mabli and others (1985) found that women reported more stress than men during prerelease. It is plausible to assume that initial incarceration stress is also greater for women. Mabli and his associates (1985) argued that gender difference in family relationships contributed to the greater stress that women experience. Sixty percent of incarcerated women were mothers and 50% were single parents.

In addition to stress management, anger management and problem solving skills also help reduce the stress that is sometimes the cause of inappropriate behaviors. Thus, to offer a program to assist with prison stress, the researchers or mental health professional should implement a multi-modal approach which includes: stress management, anger-management and problem solving skills. The three modalities together are likely to reduce initial anxiety, disciplinary problems, and offer tools that can be applied during and after incarceration.

**Anger Management.** Arguments and fights which occur in the prison setting generally result from feeling powerless, frustrated, stressed, and agitated. Inmates with angry feelings and who possess deficient anger management and problem solving skills, frequently have disciplinary problems. Thus, the application of effective anger management skills can reduce disciplinary occurrences (Bingham & Piotrowski, 1989; Black, 1990; Cellini, 1986; McDougall & Boddis, 1991; McDougall, Boddis, Dawson,

Specifically, Black (1990), in a study of small groups of mentally handicapped offenders with anger problems, explored the relationship between negative incidents, thought processes, and behavioral responses with anger. Three components were included in a 50 week treatment program: shared educational information, skills necessary to manage anger, and ways to apply the acquired information. Black (1990) found that the subjects in the treatment group reduced anger and were better at interacting.

McDougall, Venables and Roger (1991), with a larger sample of subjects, examined anger, aggression, and emotional control of both angry inmates and those who were not considered angry using various assessment instruments. They wanted to develop a more accurate way to assess inmate anger for the purposes of determining an appropriate instructional strategy to control anger. They used self report measures to determine the differences between scores of the angry group and non-angry group of young male offenders. No intervention was provided between the pretests and posttests. Results of the subjects who were characterized as angry were significantly higher than the control group on two aggression scales, an emotion scale, and placement on disciplinary log. However, one of the assessments McDougall et al., (1991) administered was the State-Trait Anger Scale (STAS). Kroner and Reddon (1992) recommended the STAS be used with caution with inmates. They found the Anger Expression Scale provided a better assessment of inmate anger.
Similarly, McDougall and Boddis (1991) studied anger, aggression, and emotional control. Different from McDougall et al., (1991), McDougall and Boddis (1991) implemented a cognitive instruction format which included relaxation techniques and aggression control. McDougall and Boddis (1991) concluded that short-term aggression control treatments were as effective as participation in lengthy anger control groups; thus, providing support for McDougall et al.'s., (1991) argument. McDougall et al., (1991) argued:

... that training to reduce anger should focus on aggression control rather than anger control, which might be achieved by utilizing cognitive training procedures with relaxation training to reduce tension. (pp. 628-629)

Similar to the McDougall and Boddis (1991) short training program, Rokach (1987) studied anger and aggression training in structured time-limited groups of approximately 10 inmates each. Rokach (1987) provided an Anger and Aggression Control Training (AACT) which was ... designed to enable the individual to control anger and regulate arousal when provocation occurs and to provide the client with the behavioral skill to manage the provocation experiences, so as to minimize the occurrence of aggression. (p. 354)

Instruction about cognitive skills, coping skills, and applying the skills in the prison setting were the components of the AACT. Rokach (1987) found, when the treatment group was compared to the control group, a reduction in anger and aggressive behavior, a reduction in anger as a response to potentially explosive situations, and improvements in overall interactive behavior. These were favorable results in a prison setting where stress and noise aggravate anger which often leads to aggressive behaviors.
McDougall, Boddis, Dawson and Hayes (1990) studied the effects of anger control training with youth offenders facilitated by correction officers, who were trained to provide security and control. Included in this training were the positive aspects of controlling anger, video aides depicting incidents of anger, overall education about anger training, and relaxation techniques. McDougall and her colleagues (1990) reported that youth who participated in the programs had an overall decrease in number of disciplinary occurrences when compared to those youth offenders waiting for participation. Not reported by the researchers is whether being on the waiting list for the program decreased disciplinary incidents when compared to subjects who were neither in the program nor waiting to participate in the program. Thus, the anticipation to begin the program may positively effect incidents that are aggravated with anger. Additionally, correctional staff providing a treatment program may conflict with their primary responsibility of security and control. However, programs which can be effectively implemented by non-mental health staff would allow time for the clinical staff to provide treatment for other psychological or psychiatric problems.

Cellini (1986), who also believed there is some value to custody staff providing treatment, reviewed anger with custody staff as members on a treatment team which provided treatment for violent, aggressive, and angry institutionalized clients. His multi-disciplinary treatment approach team also included the expertise of psychologists and psychiatrists. The results of this research recommends a team of specialists as an effective treatment approach for the reduction of aggressive and violent behaviors. Unfortunately, the inmate staff ratio is disproportionately high, thus it would be difficult
to provide programs with treatment teams. Therefore, effective treatment programs utilizing one or two staff members would be ideal.

Many of the approaches examining ways to implement or apply anger skills sampled men (Black, 1990; McDougall and Boddiss, 1991; McDougall et al., 1991; Rockach, 1987) and youth (McDougall et al., 1990). However, women are incarcerated in US prisons and could also benefit from cognitive-behavioral treatment approaches which would help them acknowledge, accept, and appropriately release anger. Wilfley et al., (1986) conducted a case study which was among the first in a correctional institution to provide an environment where women could: 1) share and self-explore, 2) examine how learning about anger contributed to attitudes and behaviors, 3) review stressful events the and benefits of relaxation, 4) examine appropriate and inappropriate confrontational behaviors and change beliefs, 5) learn appropriate assertive expressions, 6) replace maladaptive coping responses to provocation, 7) examine cognitive factors related to perception and feelings, and 8) examine group experiences, and finalize future goals and plans (Wilfley et al., 1986). Wilfley and others (1986) group technique was:

a multifaceted approach which included ... brainstorming, behavioral rehearsal, relaxation, verbal exercises, stress inoculation training, and discussion. Homework assignments were included throughout the eight sessions to encourage cognitive and behavior change and self monitoring of any progress. This homework consisted of readings, daily logs of anger-arousing situations, inmate responses, daily use of relaxation techniques, identification of situations in which assertive responses were desired by inmates, contracts to behave assertively in specific situation, analyses of frequency of anger experiences, degree of anger experienced subjectively, level of proficiency in managing the anger, and strategies for continuing without weekly group sessions. (p. 45)
Wilfley et al., (1986) reported that the four subjects who completed the program found it worthy of their time. For example, they learned how to think through situations and how to examine consequences before reacting inappropriately. Furthermore, the subjects were better able to control themselves, became more responsible, learned ways to develop and apply choices and developed a support system among group participants.

Wilfley et al., (1986) suggested the use of co-facilitators, women leaders, non-institutional staff, and group sizes of five to six as ideal treatment units. Additionally, given the results of the study, it maybe very beneficial to offer a multifaced approach early during incarceration to help women develop skills to adapt to the prison environment. Thus, anger management techniques and strategies appropriately applied could very well reduce the levels of stress, and assist with the constructive release of anger.

Stress management and anger management are two of three frequently reported cognitive skills reported in the literature for correctional treatment. A final area or component reviewed in the literature is problem solving with attention given to conflict resolution.

**Problem Solving.** Managing stress and anger alone does not resolve the problems associated with prison adjustment and inappropriate behaviors. An example would be diagnosing the problems of a stalled car on the highway. After several failed attempts to restart the car the driver begins to diagnose potential problems. The driver remembers the gas gauge is not working and two weeks have passed since gas was added to the car. Accurate identification of the problem and knowledge of the cause does not
resolve the problem. In order to resolve the problem, the driver has to identify alternatives and select the best one. The driver has to determine how to get gas into the car: signal for help, walk to a phone and call for help, or walk to gas station to get gas. In addition to those alternatives, there are other considerations. For example, walking to the gas station to buy gas is dependent upon having a gas can and money. To prevent future problems the driver should allocate money for gas, determine when to add gas before the car runs out, and locate several gas stations. However, to eliminate the problem, the driver has to repair the gas gauge, know when to buy, where to buy, and how to pay for gas.

Problem solving is a necessary part of cognitive-behavioral techniques. Many researchers have included a problem solving component in their cognitive-behavior programs which focuses on anger and aggression (Larson, 1992; McColloch, Gilbert & Johnson, 1990), hopelessness (Bonner & Rich, 1992; Ivan, Smyth, Grochowski & Jang, 1992), treatment of sex-offenders (Bingham & Piotrowski, 1989; Valliant & Antonowicz, 1992) and treatment for the general offender populations (Bonner & Rich, 1992; Cohen, 1985; Field, 1986; Marshall, Turner & Barbaree, 1989; Ross et al., 1988; Walsh, 1990). Researchers and correctional staff often find that inmates are deficient in their problem solving and decision making skills (Bonner & Rich, 1992; Cohen, 1985; Field, 1986; Ivan et al., 1992; Ross et al., 1988). For example, Cohen (1985) interpreted from Mahoney and Arnkoff (1978):

deviants are deficient in their ability to generate solution to their problems, that the solutions they suggested are often anti-social, and that their prediction of the probable consequences of different options are highly inaccurate. (p. 623)
Thus, problem solving and conflict resolution skills should be modalities in a multi-facet treatment program. The fact that the inmates are incarcerated is an indication of some problem solving, decision making, and conflict resolution skill deficiencies. In addition, many of the problems that occur inside of the prison setting are a result of deficient problem solving skills, stress (Valliant & Antonowicz, 1992), anger (Larson, 1992), low self-esteem (Eisenberg, 1989; Valliant & Antonowicz, 1992), and hopelessness (Bonner & Rich, 1992; Ivan et al., 1992). Hence, the development of problem-solving skills and application of those skills may perhaps reduce behaviors that result in disciplinary problems and maladjustment.

Field (1986) identified a model that decreased the repetitive criminal behavior of his subjects. This model was developed to address many deficient cognitive and behavioral patterns such as: impatience, poor decision-making skills, inappropriate coping strategies, and difficulty managing feelings. Field (1986) concluded that treatment for the psychological and cognitive deficiencies must include problem recognition and resolution training. It is not enough to recognize and understand problems, one must also know how to resolve or minimize them, as described in the earlier analogy.

Cohen (1985) published a cognitive therapy treatment program that was recommended for treating adult prisoners. Problem solving skill training was one of the three components. A brief summary of the literature was provided which offered several ways to teach problem solving skills. The general consensus is that the inmate has to recognize and identify the problem, develop alternatives for resolution, evaluate the possible solutions for appropriateness, and then implement the most logical alternative
(Cohen, 1985). Although Cohen (1985) received positive results, his approach is primarily for individual counseling sessions. Individual training with an overcrowded population is overwhelming. However, applying problem solving training in a group setting without sacrificing quality and effectiveness is ideal.

Ross et al., (1988), similar to Cohen (1985), received accolades (Coulson and Nutbrown, 1992) when they offered a cognitive-behavioral program for the treatment of high risk adult probationers. Three of Ross et al's. (1988) nine treatment components were variations of problem solving:

... Lateral Thinking, which teaches problem solving skills: ..... Interpersonal Cognition problem solving skills, which teaches the thinking skills required to deal with interpersonal problems and conflicts; and, Negotiation skills, which assist with conflict resolution skills .... (p. 31)

These skills are all cognitive skills related to problem solving techniques in the Ross et al., (1988) treatment program. The treatment program was designed so non-clinical staff could effectively implement the treatment. Furthermore, this program could be administered in a small group setting of approximately 25 subjects. Ross et al., (1988) found a reduction in recidivism after an 18 month follow-up among the subjects who received the cognition skills program.

Sex offenders are perceived as a difficult population to treat. Furthermore, alternatives to incarceration have received a significant amount of attention since the increase in the number of offenders being incarcerated. House arrest is one such alternative to incarceration for minor offenses. House arrest for sex offenders is generally protested by communities because sexual abuse is not viewed as a minor offense. Limited restriction in a community is not rehabilitative. Thus, an intervention
for the treatment of the behavior is necessary. In this case, Bingham & Piotrowski (1989) offered a cognitive-behavioral treatment for sexual offenders, on house arrest. Their multidimensional treatment included training for self-management, anger management, behavior modification, social skills training, stress management, and relapse prevention followed by a year long support group participation. Details outlining the program were not provided although two cases were described.

Valliant and Antonowicz (1992) also reviewed the literature to determine the types of programs available for the treatment of rapists, incest offenders and child molesters and found that other researchers applied cognitive-behavioral techniques for treatment of these types of sex offenders (Bingham & Piotrowski, 1989; Marshall & Barbaree, 1990; Quinsey, 1986; Valliant & Antonowicz, 1992). Valliant & Antonowicz (1992) applied a cognitive and social-skills training program for the treatment of sex offenders. The goal of their approach was to identify and replace erroneous thinking that led to unacceptable ideas and behaviors. Self-esteem was expected to impact comprehension, therefore social skills training was introduced for stress management and the enhancement of self-esteem. In other words, the better you feel about yourself the better you learn. Another component of the cognitive and social skills treatment program involved examining causes and need for controlling anger. Problem solving training was provided as a means to resolve the causes of anger, such as what to do once you learn you are out of gas. Thus, pretest and posttest measures were administered to determine cognitive-behavior treatment effectiveness. They found that self-esteem and anxiety were
the only variables effected. Hence, increased self-esteem of the rapist and an overall reduction in anxiety were found.

Problem solving skills are also appropriate for treatment of inmates who are not sexual offenders. Larsen (1992) published a curriculum which he believed would treat male and female juvenile delinquents, as was the case with at risk middle school students. The curriculum adapted cognitive-behavior principles and techniques to address problems with anger, aggression, and disruptive behavior. One of the three goals applied was to teach problem solving skills. Think First, the name of the curriculum, was ten sessions long and two of them, eight and nine, focused on problem solving skills.

Specifically, the self-instruction techniques for anger management, which relied on video-taped depictions of anger, involved problem solving training with three dimensions: antecedent, behavioral and consequences (Larson, 1992). This A-B-C approach is also referred to is the action or event, behavioral response to the event, and consequences or response to action (Cullen, 1992). Nonetheless, the A-B-C approach was used to reduce anger with a cognitive-behavioral treatment modality. The second problem solving component, session 9, was cognitive oriented. The group participants, using different teaching modalities, learned ways to examine problems with detail. Demonstrating a level of comprehension with the problem solving skill was required. The participants had to demonstrate their ability to: analyze aggressive behavior, control anger and aggression, and appropriately apply those behaviors as a means to control anger for problem-resolution. The effectiveness of the treatment program, which was measured by a reduction in misconduct referrals, was determined after a five week
period. The size and demand of institutions make short-term effective treatment programs, which can be group administered, very attractive.

Moreover, Bonner and Rich (1992), using a stress-cognitive vulnerability paradigm, in a study with a sample of male inmates, demonstrated that lack of or ineffective problem solving skills were significantly related to hopelessness. A state of mind model was used to determine suicide ideation. The model addressed problem solving effectiveness, shallow thinking, feeling powerless, and hopelessness. Thus, Bonner and Rich (1992) suggested:

1) inmates who viewed themselves as ineffective in problem solving, lonely and isolated from others, 2) perceived themselves as having a few adaptive resources or reasons for living, and 3) who tended to be unrealistic and rigid in their thinking appear to be particularly vulnerable. (p. 119)

Ivan and others (1992) showed similar results that, with problem solving skills, one can see hopeful alternatives; hence, without problem solving skills one is not able to see realistic alternatives and thus feels powerless. Powerlessness, institutional stress, hopelessness, and poor problem solving skills can be very traumatic for some inmates, even result in suicide (Bonner & Rich, 1990; Ivan et al., 1992).

Effective mediation of a conflict involves identifying the source of the disagreement or problem. Conflict resolution theory in the prison setting has been reviewed by a few researchers (Smith, 1987; Takigawa, 1989). In general, conflict occurs among groups, within self, and between people. For example, different views of pro-life and pro-choice supporters, Jehovah Witnesses and Christian believers, and the Israel and Palestine disagreements are all conflicts between groups or nations. Conflict within self occurs when the behavior of an individual is in conflict with their belief
system or values. For example, a vegetarian working at a meat packing market may experience internal conflict. Conflict between people involves a difference of opinion between two people; such as, husband and wife, teacher and student, and parent and child relationships.

Daily observations of conflict include comic strips, newspaper advice columnists’ reports, content of news reports, and audiences on television talk shows. Thus, knowledge and skills for applying conflict resolution and problem solving techniques are important. Frequency of problems, conflict occurrences, and the nature of the prison environment require some instruction about applying conflict resolution skills. Implementing a problem solving and conflict resolution cognitive-behavior program during initial incarceration should reduce stress, number of disciplinary conflicts, anxiety associated with hopelessness, and feelings of powerlessness throughout incarceration.

The cognitive components, stress management, anger management, and problem solving, are likely to enhance prison adjustment as interrelated components of an effective multi-modal treatment modality. Regular application of the applied exercise, self-esteem and relaxation can help maintain mental health during initial incarceration, incarceration, prerelease, and postrelease.

**Applied Skill Techniques**

Applied skill techniques, of the active independent variable in the multi-modal program participation level, are relaxation techniques and self-esteem exercises. Relaxation techniques have been taught as a means to reduce stress and anxiety in the correctional setting (McDougall & Boddiss, 1991; McDougall et al., 1990; Wilfley et al.,
Similarly, self-esteem has been examined as a treatment measure and outcome measure among incarcerated individuals (Browne, 1989; Cannici et al., 1989; Eisenberg, 1989; Rokach, 1987; Slater, Groves & Lengfelder, 1992; Sultan & Long, 1988; Witherspoon, Long & Nickle, 1991; Valliant & Antonowicz, 1992) in the past. Relaxation exercises and self-esteem measures were introduced as components of treatment in a cognitive-behavioral therapy model applied to male sex offenders (Valliant & Antonowicz, 1992) and in a logotherapy exercise of male offenders (Eisenberg, 1989). Valliant & Antonowicz (1992) found a decrease in anxiety and an increase in self-esteem. Those results suggest that relaxation and self-esteem are important components of multimodal therapy.

**Relaxation.** Relaxation is a component that is common in cognitive studies (Eisenberg, 1989; Larsen & Pagaduan-Lopez, 1987; McDougall & Boddis, 1991; McDoughall et al., 1990; Wilfley et al., 1986). There are many benefits associated with being relaxed in and out of prison. Relaxation exercises are valuable and necessary for effective mental health, emotional stability, cognitive processes, and physical functioning. Generally, relaxation is discussed when negative problems occur as a result of neglect. Cognitive, physiological, behavioral and emotional problems can be managed with relaxation exercises. For example, failure to relax may inhibit cognitive ability to solve problems, make choices, and interact with people. It can create physiological problems such as high blood pressure, hair loss, and change in weight; emotional problems like sadness, depression, and irritation; and, behavioral problems such as lack of sleep, and
physical fights. These are responses primarily due to failure to relax and/or high levels of stress.

Swada and Steptoe (1988) researched the effects of a two session meditation training on the level of distress and arousal. They found that participants in the mediation group, when compared to the control relaxation group, reported or recorded lowered distress but not arousal while in training. Of particular interest is that the results were obtained following a few sessions. Quick change is desirable, but not at the expense of the quality of services provided.

Fried (1987) examined ways to decrease stress among men and women with physical and psychological problems through an applied imagery relaxation technique and breathing exercises. Fried (1987) was able to lower the breathing rate of the male and female subjects who had panic disorders, anxiety complications and suffered from muscle tension. Fried (1987), like Swada and Steptoe (1988), found encouraging results following a short intervention.

Berger, Friedmann and Eaton (1988) studied stress reduction of undergraduate male and female students. The subjects participated in a twelve week interaction group, control group, jogging group, or a group which learned Benson’s relaxation responses. They found that subjects who were in the jogging or relaxation groups reduced their stress, for a short period of time, when compared to the interaction group. Moreover, the three groups, when compared to the control group, reported a significantly greater reduction in stress which lasted a short period of time. Furthermore, there was a main effect for gender; thus, women reported a greater reduction in stress when compared to
their men counterparts. Berger et al., (1988) made no prediction about how long the effect of treatment lasted, only that the effect was short-term and extended reduction in stress would require constant application.

Similar to prison, college can be considered a very stressful institution. However, the fact that students select to go to college and society perceives college as attractive and positive, it is perhaps less stressful than prison, where the opposite is true. But, if stress reduction techniques were beneficial for women in college, it is conceivable to assume that stress reduction techniques will reduce arousal in incarcerated women.

Larsen & Pagaduan-Lopez (1987) conducted a study of three ex-political prisoners who were sexually and mentally abused in the Philippines. Researchers explored whether a non-verbal, physical contact, and stress-tension reduction therapy would reduce tension. They found that stress-tension reduction therapy reduced tension associated with body movement and relaxation and gave the subjects the confidence to discuss their feelings associated with the traumatic experience. These results also suggest that self-confidence is remotely related to relaxation. Although the very small sample size should be taken into consideration when replicating this study, the effects of massages were clearly demonstrated. Unfortunately, non-verbal stress reduction techniques are not permitted in the correctional setting.

Relaxation techniques appropriate for the correctional setting have been explored by several researchers (Eisenberg, 1989; Mabli et al., 1985; Wilfley et al., 1986). Eisenberg (1989), through logotherapy, taught male felons methods of reducing stress.
Several components of this partially structured therapy group were: meditation, relaxation exercises, breathing and instructional sessions.

Relaxation exercises have also been implemented as components in cognitive-behavioral treatment programs for inmates who had problems with anger (McDougall & Boddis, 1991; McDougall et al., 1990; Wilfley et al., 1986). For example, Wilfley et al., (1986) explored the effects of a relaxation technique on incarcerated women. They showed that utilization of behavioral relaxation had a favorable effect on self-control, conflict resolution, anger management, and the development of social support.

Relaxation techniques decreased stress (Berger et al., 1988) for various periods of time. Thus, implementing a relaxation program, in a stressful environment, on a continuous basis should not only reduce stress but increase self confidence (Larson & Pagaduan-Lopez, 1987). If ongoing application of relaxation exercises help reduce stress (Berger et al., 1988), then continuous application of self-esteem exercises may enhance self-confidence (Eisenberg, 1989; Wilfley et al., 1986).

Self-esteem. Giallombard (1966) and Syles (1958), in several women sample studies, identified problems that contribute to stressful events which occur during the prison experience and indirectly influenced adjustment. One of the three problems that reportedly contributed to stress was the loss of self-esteem. Opportunities to receive outside positive validation for self-worth, especially when incarcerated, is often limited.

For example, Haskell (1974) emphasized:

The inmate enters the institution rejected by society and his treatment at the prison, from the day of his arrival to the day of his departure, is that of a rejectee. (p.151)
If what Haskell (1974) says is true; then self-worth, self-esteem, self-confidence, and self-concept are decreased from the time of incarceration to the end of one's sentence, unless some intervention is made that affects self-esteem enhancement. In fact, several researchers have shown a decrease in self-esteem from beginning to end of incarceration, with the lowest period, among the male population, being in the middle of incarceration (Bennett, Sorenén & Forshay, 1971; Cannici et al., 1989; Fichtler, Zimmer & Moore, 1973). Although, in opposition, Brehm and Cohen (1962) say that self-concept does not change, others have shown that self-concept changes when deliberate attempts are made to change the self-concept (Aronson & Mettee, 1968; Massimore & Shore; 1963). If loss of self-esteem is a deliberate approach by correctional staff, who are perceived by some inmates as demeaning, debasing, disrespectful, and unreasonable (Cannici, et al., 1989; Hannum et al., 1978; Haskell, 1974; Von Cleve et al., 1991), then deliberate positive approaches that address the self esteem needs of inmates should be as impactful. Thus, Sultan and Long (1988), in a study of female offenders, and Valliant and Antonowicz (1992) in a study of male sex offenders, found self-esteem increased following an intervention.

Hannum and others (1978) studied the self-concept trend that women follow while incarcerated. Specific to their research, they found changes in the women's self-concept
from the time of incarceration to six months later. They contributed that difference to personality characteristics and educational level. Reported in Hannum et al., (1978) was:

It is difficult to explain the overall mean increase in self-concept associated with incarceration. These changes could be due to the fact that the newly admitted prisoner is in a period of low self-esteem at that particular time and returns to her norm after a period of adjustment. On the other hand, perhaps the incarceration experience itself at this particular institution has a general milieu and specific programs that serve to enhance the prisoners’ self-esteem. Although the writers are inclined to believe that both forces were probably operating to yield these results, the final causal explanation was not determined in this study. (p. 278)

In sum, Hannum et al., (1978) findings were similar to other researchers (Browne, 1989; Rokach, 1987; Sultan & Long, 1988), findings that self-esteem changes at several points during incarceration. How to positively impact that change should be a concern of researchers and mental health professionals who provide programs for women during initial incarceration and men in the interim.

In a recent study, Slater, Groves and Lengfelder (1992) were interested in looking at male recreational participation and interests as a form of rehabilitation, as oppose to a reward that can be removed as punishment (Brayshaw, 1978). Specifically, Slater and others (1992) wanted to know the relationship between self-esteem and the recreational activities inmates participated in as well as those they found interesting. Slater et al., (1992) found there were no significant relationships between recreational participation and self-esteem or recreational interests and self-esteem. Variables that correlated with self-esteem were reading, utilization of the library, and involvement in religious activities.

Similar to Slater et al., (1992), Cannici et al., (1989) examined correlations of specific assessment instruments to find variables related to self-esteem, in an earlier
study. Cannici et al., (1989) measured the ego-strength of incarcerated men and women, in a co-educational federal prison whose primary goal is rehabilitation. Ego-strength of inmates were assessed when they arrived and again at the end of their sentence, ranging from three months to five years. Hence, an effect of gender on ego-strength was found. Specifically, women showed lower self-concept during their initial incarceration when compared to men. Hannum et al., (1978) found similar results and perhaps Slater et al., (1992) did not reproduce these findings because they controlled for gender. Specifically, the changes in self-esteem scores for women were 44.1 to 51.2 and 50.5 to 53.2 for men (Cannici et al., 1989). If the women’s self-esteem decreased initially while men’s increased, thus one should expect a large gain score.

In regards to the Cannici et al., (1989) study, the women could have participated in other effective programs during their incarceration, which positively influenced the way they viewed themselves. Cannici et al., (1989), however, contributed their finding to self-empowerment and independence. Several questions were raised as a result of their findings: Is there a period of less than three months that will show a difference in ego strength? If so, can that period of time be lessened if an intervention is introduced? The mandatory nature of the program was another concern because several subjects refused to respond. The subject’s willing participation raises the question: Is there a difference in the responses of those who completed the assessments and those who refused?

Another possible reason for lower self-esteem of women at initial incarceration could be related to sexual and physical abuse. Sultan and Long (1988) indicated that one
of the common personality characteristics of sexually abused women is a lack of self-esteem. It has been reported that 35 to 54 percent of incarcerated women and juveniles in prison have a history of sexual abuse (ACA, 1990). Thus, women who have been sexually or physically abused are expected to have a lower self esteem that is likely to further decrease during initial incarceration. However, it should be noted that increases in the self-esteem have been found with (Sultan and Long, 1988) and without (Cannici et al., 1989) interventions.

Valliant and Antonowicz (1992) explored the treatment of sexual abuse offenders, such as, rapists, incest offenders and child molesters. Although researchers have found that the victim's self-esteem suffers as a result of the offenders assault, the offender's self-esteem and self-confidence is generally low before the attack. This by no means justify or make an excuse for the behaviors of sex offenders. Nonetheless, the treatment approach Valliant and Antonowicz (1992) offered was cognitive-behavioral which focused on changing cognition and behavior associated with anger, reducing incarceration stress, and increasing self-esteem. They found that their cognitive-behavioral approach enhanced the self-esteem of the rapists and overall anxiety level was decreased.

A slightly different study which addressed self-esteem and inmates was reviewed by Paulhus and Paulhus (1992). Paulhus and Paulhus (1992) examined the relationship between facilitator self-esteem and other variables with inmate cooperation. Specific to self-esteem, they found that the self-esteem of the researcher was a positive-moderate correlational coefficient of .32, but it failed to reach significance. Furthermore, facilitator self-esteem appeared to overlap with other variables because the effect of the
facilitator was not present when a regression analysis was performed. In other words, the facilitator's self-esteem was not independently effecting inmate cooperation.

Many of the studies involving self-esteem were correlational studies that examined the self-esteem of inmates and staff along with several other variables. Although correlational studies provide useful information, they do not assist with the enhancement of self-esteem. Therefore, more empirical research need to be conducted in order to develop methods for treating the problems associated with low self-esteem. Browne (1989), Rokach (1987), and Sultan and Long (1988) are among the researchers who introduced an intervention program that effected self-esteem.

Browne (1989), in a study of incarcerated mothers, offered a 24 week prevention program which merely focused on parenting as opposed to targeting self-esteem. Examination of the results indicated that the participants reported an increased self-esteem. Results from this study resulted in many speculations as to why self esteem increased, especially since self-esteem was neither the independent or dependent variables. Similarly, Rokach (1987), studied a group of women who were considered angry, and found their intervention inadvertently enhanced self esteem and reduced anxiety. Possible reasons for self-esteem enhancement in both studies are: instructor effect, confidence in ability to care for child or manage anger, group support, and significant outside influences that took place between pretesting and posttesting periods.

Sultan and Long (1988) implemented an intervention, psychodidactic-supportive component program, to determine its effectiveness on the self-esteem of women who were abused. The psychodidactic-supportive component goals, as described earlier,
were: to offer a safe, trusting, and supportive environment so similar experiences can be discussed, to change and replace erroneous attitudes and beliefs, and to share significant information about abuse. Specifically, Sultan and Long (1988) hypothesized and found that sexually and physically abused women who participated in the group changed personality characteristics and behaviors which resulted from abuse, enhanced their self-esteem, developed personal feelings of control, became more trusting, and desired interpersonal relationships. These findings support the theory that self-esteem can be impacted with an effective intervention.

In summary, cognitive-behavioral studies (Malkin, 1991; Valliant & Antonowicz, 1992), therapeutic interventions (Sultan & Long, 1988), educational programs (Boor & Bair, 1992; Browne, 1989; Witherspoon et al., 1991), recreational programs (Bucci, 1989; Salter et al., 1992), and correlational studies (Bennett, Gorensen & Forshay, 1979; Cannici et al., 1989; Culbertson & Fortune, 1986; Hannum et al., 1978; Paulhus & Paulhus, 1992; Tittle, 1972) have provided support for the importance of self-esteem interventions for prison adjustment. Additional empirical research is needed that contains an applied self-esteem component. Although some researchers have found that self-esteem does not change with positive or negative interventions, further examination of the literature reveals some consistency among the research examining the self esteem trend at several periods during incarceration, when separated according to gender. For example, some researchers have shown that, during initial incarceration, self-esteem decreases and increases with time (Cannici et al., 1989; Hannum et al., 1978).
Self-esteem has also been found to increase after psychodidactic-supportive treatment (Sultan and Long, 1988), following anger interventions (Rokach, 1987) and following parenting interventions (Browne, 1989) when women are the population sampled. In contrast, self-esteem among the male population is highest before and at initial incarceration (Fichtler et al., 1973), decreases during incarceration (Bennett & Sorenen, 1971; Cannici et al., 1989; Fichtler et al., 1973), and increases during prerelease and postrelease (Bennett & Sorsen, 1971; Holley & Mabli, 1978; Tittle, 1972). If self-esteem can be enhanced, deliberate attempts to enhance it should positively effect the way an inmate perceives herself, especially during her initial period of incarceration, the period Hannum et al., (1978), Sultan et al., (1984) and Sultan et al., (1986) identify as stressful and critical. Similar to Sultan and Long (1988), this study will attempt to enhance self-esteem. In addition to a multi-modal intervention and relaxation strategies, self-esteem exercises will be deliberately and regularly applied.

Cannici et al., (1989) reported that a healthy self-esteem is associated with ability to cope with stress and make problems seem manageable. Consequently, a deficient self-esteem predicts difficulty in dealing with outside pressures or situational stress as in prison. Thus, maintaining self-esteem, teaching stress-management, anger-management, and problem solving skills will influence prison adjustment, hence, inmates with such skills can feel empowered in an environment that contributes to fear, hopelessness and powerlessness. Additionally, the skills learned during initial incarceration may also be applicable to prerelease and postrelease stress.
Cognition programs (i.e., stress management, anger management, and problem solving) have been found and considered effective interventions in the prison setting. Applied exercises (i.e., relaxation techniques and self-esteem techniques) are believed to equip women with the effective skills they will need to benefit from their prison experience. Acquired skills and knowledge should produce a lower number of disciplinary problems, lower stress level, reduced anger episodes and excellent problem solving skills; thus, positively affecting adjustment.

**Adjustment**

Adjustment, the dependent variable, is the ability to move about the prison environment, the ability to manage and cope with daily occurrences of stress, the ability to manage the appropriate release of anger, and to effectively resolve problems while feeling relaxed and self-confident. Furthermore, a well adjusted inmate would identify programs that will contribute to her personal development, career choices and mental health. Having the support of other women with similar goals and experience can be beneficial to all the women involved, especially in a psycho-educational group setting. The question of adjustment has been examined by several scholars. The common question raised is whether it is beneficial for an inmate to adjust? The answer to that question varies. Adjustment can be looked at on a continuum, from maladjustment to a positive adjustment. The inmate who is adjusted to prison is likely to be maladjusted in her postrelease environment. On the other hand, a maladjusted inmate is likely to be a problem inside the institution and outside. Therefore, healthy adjustment for the inmate is the point where she can be most constructive while incarcerated and after she is
released. For the purposes of this research, adjustment means an overall readiness for treatment. Variables that are related to adjustment are: neuroticism, anger, anxiety, self-consciousness, stress, depression, self-esteem, negative treatment indicator, and total adjustment score.

**Summary and Purpose**

Many researchers have documented the effectiveness of single components of the multi-modal treatment approach; such as, anger management, stress reduction, problem solving and the applied exercises: relaxation or self-esteem exercises with the prison population. Thus, a combination, multi-modal, or multidimensional cognitive-behavioral approach should be even more effective with this target group. Furthermore, offering the program early will equip the women with skills they can utilize and apply throughout there incarceration. This skill development component is analogous to "Give a man a fish and he will eat for the day, teach a man to fish and he will eat for a life-time ..." (Confusious)

The purpose of the present study is to demonstrate that women who participate in a three week stress management, anger management and problem solving instructional program, which includes relaxation and self-esteem exercises, during her initial incarceration, at a state operated facility, will be significantly better adjusted to the prison environment than women who are not participants in the program. Additionally, the present research will identify whether there are variables which predict adjustment or identify who might benefit most from this treatment program.
CHAPTER III

METHODOLOGY

This chapter describes the procedures used in conducting this research. The
descriptions provided are in the areas of research design, subject selection, outcome
measures, conditions of testing, intervention level, and data analysis.

Research Design

This research is a true experimental design. Campbell and Stanley (1963) labeled
this design as a Pretest-Posttest Control Group Design. History, maturation, testing,
instrumentation, statistical regression, selection bias, experimental mortality and selection
internal validity threats are controlled in the pretest-posttest control group design
(Campbell & Stanley, 1963). In addition to the above internal validity threats identified
by Campbell and Stanley (1963), other threats are: imitation of treatment, compensatory
equalization of treatments, compensatory rivalry by respondents receiving less desirable
treatments, resentful demoralization of respondents receiving the less desirable
treatments, statistical conclusion validity, reliability of treatment implementation, random
irrelevancies in the experimental setting, and random heterogeneity of respondents (Cook
& Campbell, 1979).

First, imitation of treatment involves those subjects who share the content across
the multi-modal program to the control group, after being cautioned against disclosure.
Removal of the subjects in the multi-modal program who were interacting with the control group about the content helped remove the imitation of treatment threat.

Second, no rewards were given to the control group because of inequality of treatment prior to the completion of the research thus controlling for the compensatory equalization of treatments threat. Third, the opportunity for the control group to outperform the multi-modal program participants was limited because of lack of receiving the intervention, therefore, reducing the compensatory rivalry by respondents receiving less desirable treatment threats.

Fourth, resentful demoralization of respondents receiving the less desirable treatments was monitored by journal entries and reducing the opportunity for the control group to resist. The women in the control group did not know which group they were randomly assigned to until after completing the pretest, thus reducing the opportunity for the control group to be resentful to responses on the posttest.

Fifth, presetting statistical analyses and experimenter ethics controlled the effect of statistical conclusion validity. For example, assumptions of statistical tests were identified and followed, a sample size based on direction of test was set, and percentage of power for a critical effect size was determined a priori.

Sixth, reliability of treatment implementation was reduced by following scripts for consistency. Seventh, random irrelevancies in the experimental setting was out of the control of the experimenter. However the random irrelevancies threat was minimized with randomization and a journal which allowed recording and accurate reporting of the events. Eighth, random heterogeneity of respondents was considered an external and
internal validity threat. As an internal validity threat, the independent variable was not teaching the outcome measures. Also, the outcome measure did not impact the behavior of the subjects. Randomization ruled out the external validity threat of random heterogeneity of respondents. Thus, respondents who were effected differently by treatment were equally assigned to both groups. To further reduce the random heterogeneity of respondents, repeat offenders was a variable. Although many of the intervening variables were controlled using the pretest-posttest control group design, those that were not were addressed. In addition to reducing and controlling for the effect of extraneous effects, the ability to generalize beyond the inmates who participated required specific attention.

The external validity threats of interaction of testing and treatment, interaction of selection and treatment, reactive arrangements, and multiple treatments interference were not controlled in the pretest-posttest control group design. Interaction of testing and treatment is the first external validity threat addressed. In order to reduce the interaction of testing and treatment external validity threat, the results of this study was generalized for those volunteers who were pretested.

Interaction of selection and treatment is the second external validity threat addressed. To control for interaction of selection and treatment, the results of the present research was only true for inmate volunteers at ORW who were incarcerated for less than two weeks. The third external validity threat involves reactive arrangements. All of the volunteers at ORW knew they were participating in an experiment which created a concern for the reactive arrangements threat. However, in an effort to reduce
the reactive arrangements threat, a weekly journal was maintained. At the end of the experiment the journal was reviewed to determine whether the behavior of the subjects appeared to be related to being a subject in a research project. The types of behaviors that were of concern were those where the subjects constantly mentioned their role in an experiment. For example, a comment such as, "I am just doing this so I will not mess up your experiment." The final external validity threat addressed by Campbell and Stanley (1963) is multiple-treatment interference, which was not relevant to the pretest-posttest control group design because the subjects had not participated in similar treatments. Should some had done so, randomization should have equalized the effects across groups.

External validity threats different from those addressed by Campbell and Stanley (1963) are termed population validity and ecological validity (Bracht and Glass, 1968). Experimentally accessible population verses target population and interaction of personological variables and treatment effects are the two population validity threats. First, the experimentally accessible population verses target population was controlled the same way Campbell and Stanley's (1963) interaction and selection of treatment was controlled. Second, to reduce the interaction of personological variables and treatment threat many personological variables were built into the design, generalizations about a disordinal interaction between a personological variable was avoided, and precautions were taken to prevent generalizations beyond the results of the sample. Describing the independent variable explicitly, multiple treatment interference, Hawthorne effect, novelty and disruption effects, experimenter effect, pretest sensitization, posttest
sensitization, interaction of history and treatment effects, measurement of the dependent variable and interaction of time of measurement and treatment effects are ten ecological validity threats. First, to reduce the describing the independent variable explicitly threat the description of the levels of the independent variable was described in sufficient detail so the study can be replicated and generalized.

Second, Bracht and Glass' (1968) multiple treatment interference threat is the same as Campbell and Stanley's (1963) multiple treatment interference and was controlled by randomization. Third and fourth respectively, the Hawthorne effect and the novelty and disruption effects was reduced by making journal entries, as was the case with the reactive arrangements threat from Campbell and Stanley (1963). Fifth, to reduce experimenter effect, the information taught in the treatment group was written and followed as close as possible. Sixth, the pretest sensitization was addressed by limiting the generalizations to volunteers who were pretested as in the interaction of testing and treatment threat. Seventh, to control for the posttest sensitization validity threat the results of the study were only generalized to volunteers who were posttested.

Eighth, documentation of what was going on outside of the treatment was entered into a journal in order to accurately report possible interaction of history and treatment effects. For example, a group meeting the evening before Thanksgiving was entered into the journal. Ninth, the measurement of the dependent variable threat was controlled by reporting the validity, reliability, and norms of the instruments used in Chapter 3. Finally, the interaction of time of measurement and treatment effects threat was controlled by not making generalization beyond the time period studied.
In summary, the previous section focused on the pretest-posttest control group design, internal validity threats (Cook & Campbell, 1979; Campbell and Stanley, 1963) and external validity threats (Bracht & Glass, 1968; Campbell and Stanley, 1963) that would interfere with the effect of treatment and determining to whom the results could be generalized.

**Subject Selection**

The following section identifies the target and assessible populations, sampling plan, sample size, description of subjects, potential problems associated with subjects and how the problems were addressed.

The target population for the present research were women who had been incarcerated in the state of Ohio for less than two weeks. The target population was not available for this research, an assessible population containing volunteers served as the experimentally assessible population. The results from the assessible population is generalizable to volunteers at ORW during their first two weeks of incarceration. A list of inmates who were incarcerated during the two weeks was obtained from the reception office at the Ohio Reformatory for Women (ORW). Due to the nature of this setting, an accurate list of women must be maintained constantly. Therefore, frame and selection error are controlled within the environment.

All inmates who arrived at the Ohio Reformatory for Women from a county jail during March, April, May, and June 1994 were invited to participate in a five week multi-modal program which was designed to enhance adjustment to prison life. Appendix C and D contain the specific format followed when inviting inmate participation. Names
of the identified volunteers were randomly assigned to the program participation or control group.

Approximately, 50 to 100 women arrived at ORW from their county jails in a two week period. Therefore, a sample size of 44 to 80 inmates was needed to represent the target population (see Table in: Krejcie & Morgan, 1970). However the prison population is not a defined population. Therefore, to use statistics to find group differences, if they exist, required 45 subjects. The sample size was based on a non-directional test, 90% power, a critical effect size of .50, and an alpha level set at .10 a priori (see Table in: Kraemer & Thiemann, 1987, p. 108). The alpha level was liberally set at .10 for two reasons. First, the multi-modal intervention was an exploratory study and the first time this intervention with all of it’s components combined in one treatment was used, particularly with women. Second, the program lasted a brief period of time, specifically three weeks. Therefore, it was necessary to be liberal in the test of significance so any effect program participation had on adjustment could be identified. Critical effect size was selected based on preliminary evidence which reported a very high positive relationship between subject responses (internal consistency reliability = .83) on the Prison Adjustment Questionnaire.

Fifteen subjects for each of the four predictor variables required 60 subjects (Stevens, 1992). Additionally, attrition and the possibility of a future research, would require additional subjects. Addressing the problems associated with attrition in the correctional environment was very important. For example, women who were to have a baby were transferred from ORW to the Franklin Prerelease Center in Columbus,
Ohio, during their first week at the state facility. Thus, those pregnant women were excluded from the sample.

Several other problems occurred, specifically, women were transferred to one of the two prerelease centers in Ohio, given sentence reductions, placed in isolation for disciplinary reasons, assigned to the psychiatric unit for mental health care, granted a parole, without pretest data, without complete posttest data, or voluntarily removed from the research. None of the above mentioned problems, which would lead to early program termination, were in the control of the experimenter. Therefore, when a subject decided she no longer wanted to participate or was unable to complete the program, her pretest was removed from the overall data collected. In terms of group differences, a tornado drill delayed the start of one session. Similarly, an emergency medical transfer extended the institutional count which delayed the start of a session for another group.

A sampling concern which was different from early termination and program delays is the reading ability of the participants. The subjects who had problems reading or seeing had an option to complete the series of instruments with assistance. The responses of the subjects who received assistance completing their instruments were kept separate until it was determined that there were no differences in their performance when their means were compared to the subjects who completed the instruments independently. Data of one subject was removed and data of the other subject was retained. As a result of all of the changes, 123 subjects were final participants in the present study.
Outcome Measures

Data were collected by administering two personality instruments and a questionnaire to gather personal information. The Neuroticism Extraversion and Openness - Personality Inventory Revised (NEO-PI R) (Form S) by Costa and McCrae (1989) was administered. Additionally, the Minnesota Multiphasic Personality Inventory - 2 (MMPI-2) by Hathaway and McKinley (1989) was also administered. The completion of the instruments did not take longer than four hours.

Neuroticism Extraversion Openness - Personality Inventory Revised (NEO-PI R). NEO-PI R scales consisted of 240 items answered on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). Furthermore, the NEO-PIR instrument assessed five major personality domains: neuroticism, extraversion, openness to change, agreeableness and conscientiousness. Of vital importance is that the NEO-PI R measures differences among normal individuals as opposed to psychopathological individuals. The five components separately assess useful information. The Neuroticism (N) factor assesses adjustment, proneness to psychological distress, unrealistic ideas, excessive cravings or urges, and maladaptive coping responses. Extraversion (E) assesses quality and insensitivity of interpersonal interaction, activity level, need for stimulation and capacity for joy. Openness (O) assess one’s proactive seeking and appreciation of experience for its own sake as well as toleration for and exploration of the unfamiliar. Agreeableness (A) assess the quality of one’s interpersonal orientation along a continuum from compassion to antagonism, in thoughts, feelings, and actions. The last factor is Conscientiousness (C) which assess the degree of organization,
persistence, and motivation in goal-directed behavior; contrasts the dependable and fastidious with those who are lackadaisical and sloppy (Leong and Dollinger, 1991, p. 527).

**NEO-PI R Norms, Reliability and Validity.** The NEO-PI R is normed for adults. Three hundred of those subjects were women. An alpha coefficient for the neuroticism, extraversion, openness, agreeableness and conscientiousness domains scales for women ranged from .60 to .82 (Mental Measurements Yearbook, 1992). The range estimated coefficient alpha scores on the neuroticism, extraversion and openness scales were .93, .85 and .88 respectively. Test-retest reliability scores were also obtained for women on the NEO facets were .87, .91 and .86 in that order. Consensual validation providing support for the factors with correlations for women as .56 for neuroticism, .46 for extraversion, and .45 for openness (Mental Measurement Yearbook p. 604, 1992). Additionally, it is documented in the Mental Measurement Yearbook (1992) that "studies correlating the NEO-PI with other measures show positive affect ... scales that one would expect to correlate, do correlate, and that some degree of discriminant validity is obtained as well." (p. 604)

**Minnesota Multiphasic Personality Inventory - 2 (MMPI-2).** The MMPI-2 consists of 566 true and false scales. The original purpose of the MMPI was to assign appropriate psychodiagnostic labels to individual cases (Graham, 1990). Hathaway and McKinley (1943) hoped that a group-administered paper-and-pencil personality inventory would provide a more efficient way of determining appropriate psychodiagnostic labels (Graham, 1990). The MMPI-2 was revised for several reasons. Some of those
concerns were related to the standardization sample (to include a more diverse ethnic and gender representation), content of the MMPI, and the pool of items used was too narrow to permit assessment of characteristics that were judged to be important (Graham, 1990). The MMPI-2 is different from the NEO-PI-R in that the MMPI-2 measures psychopathology. Several scales on the MMPI-2 was combined to develop the Prison Adjustment Scale which was validated by Panton (1958).

**MMPI-2 Norms, Reliability and Validity.** The normative sample for the MMPI-2 was a nationwide sample including the state of Ohio. Of the 2,600 subjects in the normative sample, 1426 were females between the ages of 18 and 84 (Graham, 1990; Hathaway & McKinley, 1989). Although the correctional setting was not part of the sample, research is currently taking place to gather information about this population (Graham, 1990). The MMPI-2 is an instrument that is widely used in the correctional setting. Reliability for the MMPI-2 was assessed for the validity (can not say, lie, infrequency, and correction scales) and clinical scales hypochondriasis, depression, hysteria, psychopathic deviant, masculinity/femininity, paranoia, psychasthenia, schizophrenia, schizophrenia, hypomania and social introversion) by calculating the Cronbach’s alpha from data collected from the normative sample. The alpha scores from Hathaway, McKinley, Butches, Dahlstrom, Graham, Tellegen and Kaemmer (1989) is provided in Table 1.
Table 1

Internal consistency alpha coefficients for the MMPI-2

...validity and clinical scales for the women in the normative sample...

<table>
<thead>
<tr>
<th>Scale</th>
<th>Alpha Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>L (Lie)</td>
<td>.75</td>
</tr>
<tr>
<td>f (Infrequency)</td>
<td>.63</td>
</tr>
<tr>
<td>K (Correction)</td>
<td>.72</td>
</tr>
<tr>
<td>Hypochondrias</td>
<td>.81</td>
</tr>
<tr>
<td>Depression</td>
<td>.64</td>
</tr>
<tr>
<td>Hysteria</td>
<td>.56</td>
</tr>
<tr>
<td>Psychopathic deviate</td>
<td>.62</td>
</tr>
<tr>
<td>Masculinity-femininity</td>
<td>.37</td>
</tr>
<tr>
<td>Paranoia</td>
<td>.39</td>
</tr>
<tr>
<td>Psychasthenia</td>
<td>.87</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>.86</td>
</tr>
<tr>
<td>Hypomania</td>
<td>.61</td>
</tr>
<tr>
<td>Social introversion</td>
<td>.84</td>
</tr>
</tbody>
</table>

N = 1462

The standard validity determinations for the clinical scales were carried over from the MMPI to the MMPI-2. No effort at the time of the revisions for the MMPI was made to reevaluate external validity (Graham, 1990). Explanation for the lack of reevaluation is that the MMPI had been widely reviewed for validity and it was suggested that much of that research is also applicable to the MMPI-2. In fact, scores on the
the correlations were greater than .98 indicating construct validity (Graham, 1990). According to Graham (1990):

... the basic validity and clinical scales of the original MMPI have been maintained relatively unchanged in the MMPI-2 and because data suggest that scores and code types for the MMPI-2 and the original MMPI are congruent, one can infer that the two instruments are basically comparable. Existing empirical data concerning the validity of the original MMPI therefore can be assumed to be relevant to the MMPI-2 as well. (p. 182)

Convergent and discriminate validity for the clinical scales of the MMPI-2 were determined based on behavioral ratings that were correlated with clinical scales. The correlation coefficients for 822 females on the ten clinical scales ranged from -.28 to .28 (Graham, 1990). The MMPI-2 has 7 validity indicators (cannot say, lie, infrequency, correction, back F, true response inconsistency, and variable response consistency) built into the instrument to assess the extent to which the test results are representative of the individual who obtained the score. The last three of the seven validity indicators are supplementary validity scales. Scales used for this study were the depression scale, low self-esteem scale, and the negative treatment indicator scale.

**Prison Adjustment Questionnaire.** This 13-item scale developed by Sultan and her colleagues (1984) focused on three areas of adjusting to prison life: (1) social/emotional functioning, (2) psychosomatic functioning and (3) level of smoking (Sultan et. al., 1984; Sultan et al, 1986). See Appendix M for a copy of the questionnaire. A pilot test on the Correctional Institutions Environment Scale (CEIS) and PAQ was conducted. A moderate positive correlation (r = .46) was obtained for the CEIS and PAQ scales. Thus, the instruments are measuring similar aspects in the correctional
environment. Also, the obtained correlation suggests that the PAQ is measuring something in addition to environment. Additionally, a very high positive internal consistency reliability estimate of .85 was obtained for the PAQ total raw score (Cronbach, 1951). Correctional experts and psychologists, Sultan, Long, Kiefer, Schrum, Selby, and Calhoun 1984, in North Carolina, developed the instrument for a correctional population in Raleigh, North Carolina, giving the instrument face validity.

**Personal Data Record.** Obtained demographic information was based on responses to a 21 item questionnaire. A copy of the questionnaire is in Appendix F. Specific information about previous convictions, ethnic identity, pregnancy, marital status, sexual abuse, and number of children were asked to assess offender status and describe the assessible population. For completion of the questionnaire, the women were asked to circle numbers to indicate their response selections. In other cases, the women were asked to write in the most appropriate responses. The questions were written using Dillman (1978) and Sultan et al., (1984) as references for format and content.

**Conditions of Testing**

Data were collected from March, 1994 to June, 1994. Regarding location and time, the treatment was given in a classroom of the reception center at ORW on either Monday and Wednesday evenings or Tuesday and Thursday evenings. The chairs in the classroom were arranged in a traditional classroom style, facing the front. The intervention groups met in the classroom from 6:00 p.m. to 8:00 p.m. to minimize conflicts with other institutional activities.
Scripts in Appendix C and D were used in order to maintain consistency across groups. Specifically, within 24 hours of committing to being a participant in the multi-modal skills program, all of the participants met as a group. During the group session, each participant was required to sign a consent form which is provided in Appendix E, received a personal identification number (PIN), completed the personal information questionnaire, completed the Prison Adjustment Questionnaire, and complete the NEO-PI-R in that order. The MMPI-2 was administered the morning after arrival by the Department of Psychological Services. The subjects provided permission to access their MMPI-2 results from the psychology department. After the subjects completed the first series of instruments, they were randomly assigned to either the multi-modal program participation or control group. During the fifth week of the research, the program participation and control groups received the MMPI-2, PAQ, and the NEO-PI R together.

**Intervention Levels**

Whether or not the female inmates receive an intervention was the independent variable with two levels: (1) multi-modal skills program participation and (2) control group.

**Multi-modal Program Participation**

The multi-modal skills program participation was treatment level one. This program was a time limited and partially structured intervention for incarcerated women who were in their initial stage of incarceration. The goals of this program were similar to Sultan and her colleagues (1984 & 1986) which were: 1) to provide a safe group
environment where the women can feel normal in a very restrictive environment. 2) to teach stress management, anger management, and problem solving skills, 3) to provide an atmosphere where the women can talk freely without concern for discipline, 4) to teach relaxation techniques through participatory exercises, and 5) to teach methods to increase self-esteem through exercises (Attachment G).

The following section describes the prison adjustment program time frame, content and cognitive instructional sessions.

**Time Frame.** The prison adjustment program was offered in six, two hour sessions. An outline of the two hours by minutes is provided in Table 2. During the first fifteen minutes of each session, the women received a relaxation exercise (Appendix H). Upon completion of the relaxation exercise, the women received instructions about specific topics for forty minutes. Following the forty minute instructional period, a ten minute break was provided. Immediately following the break, forty additional minutes of instruction was provided. The final fifteen minutes involved a self-esteem exercise which ended with reading "I AM ME I AM OKAY" (Appendix I).

Table 2

**Time Schedule and Content for Multi-modal Skills Program**

**Participants**

<table>
<thead>
<tr>
<th>Content</th>
<th>Time Allocated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relaxation Exercise</td>
<td>15</td>
</tr>
<tr>
<td>Instructional Period</td>
<td>40</td>
</tr>
<tr>
<td>Break</td>
<td>10</td>
</tr>
<tr>
<td>Instructional Exercise</td>
<td>40</td>
</tr>
<tr>
<td>Self-Esteem Exercises</td>
<td>15</td>
</tr>
</tbody>
</table>
Content of Each Session. The relaxation exercise consisted of breathing patterns which were designed to reduce stress. The women were instructed on how to breath to reduce stress, think about a place that is peaceful, and then returned their thoughts to the classroom environment. This exercise is provided in Appendix H. Following the relaxation exercise, the instructional component was introduced: stress management, anger management, or problem solving skills. A break was provided between each 40 minute instructional period. After the second instructional period self-esteem exercises were introduced. For example, the women were given strips of paper containing a positive statement to be shared with the other members of the group and read affirmations. The final self-esteem exercise included the group reading together I AM ME I AM OKAY (Appendix I).

Instructional Sessions. Stress management, anger manangement, and problem solving are all cognitive skills the subjects were taught in the prison adjustment program. The instructional exercises required six sessions with each topic requiring two sessions. Table 3 is an outline of the six sessions. Sessions one and two were stress management (See Appendix J). Session one included identifying major sources of stress, causes of internal stress, and ways to reduce stress. Session two included instructional information about the basic premise of stress, approaches and techniques to reduce stress, and reactions/over-reactions to stress.

Anger management was the topic for sessions three and four (See Appendix K). Session three defined anger and examined reasons contributed to and causes of anger. While, session four addressed ways to manage anger and assertive behavior.
Problem solving and conflict resolution were the topics for sessions five and six (See Appendix L). Session five included information about the stages of problem solving and application of the problem solving stages. Session six shared information about types of conflicts, strategies for resolving problems and conflicts, and an application of the strategies for resolving problems. A summary of the time frame, content, and instructional sessions for the program participants is outlined in Table 4.

**Control Group**

The control group was the second intervention level. This group of women followed admissions procedures as required by ORW. The women were generally in admissions two to three weeks. While in admissions, all women followed the same schedule which included: 1) breakfast at 6:15 am, 2) lunch at 10:10 am, 3) dinner at 3:15, 4) count at 4:30 pm, 5) showers 5:00 to 7:00 pm, 6) room at 8:30 pm, and 7) count time at 9:00 pm. Specifically, while in admissions the women were required to stay in their rooms unless they were going to their meals, called by a department, or having a cigarette break. There were scheduled orientation activities the women attended while they were in admissions. The schedule of activities are provided in Table 5.
Table 3

**Multi-modal Instructional Sessions**

<table>
<thead>
<tr>
<th>Sessions</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Stress Management</td>
</tr>
<tr>
<td>II</td>
<td>Stress Management</td>
</tr>
<tr>
<td>III</td>
<td>Anger Management</td>
</tr>
<tr>
<td>IV</td>
<td>Anger Management</td>
</tr>
<tr>
<td>V</td>
<td>Problem Solving</td>
</tr>
<tr>
<td>VI</td>
<td>Problem Solving</td>
</tr>
</tbody>
</table>
## Table 4

<table>
<thead>
<tr>
<th>Week</th>
<th>Session</th>
<th>Content and Topic</th>
<th>Minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Administer Info About Me, NEO-PI R, and P.A.Q.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I</td>
<td>Relaxation Exercise</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stress Management</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Break</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stress Management</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self-esteem exercise</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>Relaxation Exercise</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stress Management</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Break</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stress Management</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self-esteem exercise</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>III</td>
<td>Relaxation Exercise</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Anger Management</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Break</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Anger Management</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self-esteem exercise</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>IV</td>
<td>Relaxation Exercise</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Anger Management</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Break</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Anger Management</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self-esteem exercise</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>V</td>
<td>Relaxation Exercise</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Problem Solving</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Break</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Problem Solving</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self-esteem exercise</td>
<td>15</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Administer MMPI-2, NEO-PI R, and P.A.Q.</td>
<td></td>
</tr>
</tbody>
</table>

P. A. Q. = Prison Adjustment Questionnaire
Table 5

**Weekly Orientation Schedule for All Women in Admissions**

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>08:15 - 10:15</td>
<td>AIDS Education</td>
</tr>
<tr>
<td></td>
<td>01:00 - 1:30</td>
<td>Columbus State</td>
</tr>
<tr>
<td></td>
<td>01:30 - 2:30</td>
<td>Security</td>
</tr>
<tr>
<td></td>
<td>02:30 - 3:15</td>
<td>Medical</td>
</tr>
<tr>
<td>Tuesday</td>
<td>08:30 - 09:30</td>
<td>Public Defender</td>
</tr>
<tr>
<td></td>
<td>12:00 - 12:30</td>
<td>Psychology Department</td>
</tr>
<tr>
<td></td>
<td>01:00 - 01:30</td>
<td>Parenting Program</td>
</tr>
<tr>
<td></td>
<td>01:30 - 02:00</td>
<td>Rules/Regulations</td>
</tr>
<tr>
<td></td>
<td>02:00 - 02:30</td>
<td>Inmate Funds</td>
</tr>
<tr>
<td>Wednesday</td>
<td>08:30 - 09:00</td>
<td>Count Office</td>
</tr>
<tr>
<td></td>
<td>09:00 - 10:00</td>
<td>TIE Office</td>
</tr>
<tr>
<td></td>
<td>11:15 - 12:00</td>
<td>ONOW*</td>
</tr>
<tr>
<td></td>
<td>12:00 - 01:00</td>
<td>Case Manager</td>
</tr>
<tr>
<td></td>
<td>01:00 - 01:30</td>
<td>Recreation</td>
</tr>
<tr>
<td></td>
<td>01:30 - 02:00</td>
<td>Urbana College</td>
</tr>
<tr>
<td></td>
<td>02:00 - 02:30</td>
<td>Records Office*</td>
</tr>
<tr>
<td></td>
<td>02:30 - 03:00</td>
<td>Commissary</td>
</tr>
<tr>
<td>Thursday</td>
<td>08:45 - 10:00</td>
<td>Tapestry</td>
</tr>
<tr>
<td></td>
<td>11:15 - 12:00</td>
<td>Inspector</td>
</tr>
<tr>
<td></td>
<td>12:00 - 12:30</td>
<td>Arts and Craft</td>
</tr>
<tr>
<td></td>
<td>01:00 - 02:00</td>
<td>Religious Services</td>
</tr>
<tr>
<td></td>
<td>02:00 - 03:00</td>
<td>Safety</td>
</tr>
<tr>
<td></td>
<td>06:00 - 07:30</td>
<td>Religious Services</td>
</tr>
<tr>
<td>Friday</td>
<td>09:30 - 10:00</td>
<td>Psychiatric Services</td>
</tr>
<tr>
<td></td>
<td>11:15 - 12:00</td>
<td>Visiting/Mail</td>
</tr>
<tr>
<td></td>
<td>12:30 - 01:00</td>
<td>Library</td>
</tr>
<tr>
<td></td>
<td>02:30 - 03:15</td>
<td>Appropriate Supervisor</td>
</tr>
</tbody>
</table>

(*) Indicates meeting every other week.
**Hypothesis**

Subjects who participate in the Multi-modal Program will score higher on adjustment as measured by the neuroticism, anxiety, anger, stress, and self-consciousness scales of the NEO-PI R; lower on the depression, the low self-esteem, and the negative treatment indicator scales of the MMPI-2; and higher on the total score of the Prison Adjustment Questionnaire.

**Objectives**

1) Subjects were described on variables: age, education, ethnic identity, marital status, sexual abuse, certainty of outdate, history of arrest, children, and custody of children.

2) Sexual abuse, certainty of outdate, history of arrest, and number of children were used to determine the best predictor of treatment outcome.

**Data Analysis**

The types of analyses employed was governed by the nature and scale of measurement of the data collected, purpose of the research, and hypothesis tested. The main hypothesis, which examines whether subjects who participated in the Multi-modal Program were better adjusted than subjects who were not participants in the program, was tested by analysis of covariance procedure with pretest scores as the covariate. The objective, which examines the best predictor of treatment outcome, was tested by multiple regression procedures. A descriptive statistic was employed to describe the subjects.
The primary hypothesis was a one-tailed test, 90% power, and an alpha level set a priori at .10. Selected alpha level set at .10, as oppose to .05, was based on the initial testing the intervention. Thus, the .10 alpha level offers more statistical power for the present research. It is vitally important not to make a type I error, or conclude that the program did not have an effect on adjustment when in fact differences in the group existed.
CHAPTER IV

FINDINGS AND CONCLUSIONS

The following chapter describes the subjects on various demographic variables, reports relationships among variables, provides the outcome of analysis of covariance which determined whether or not to accept or reject the research hypothesis, and reports which variables predict adjustment.

Data Source

One hundred twenty-three women who had been at ORW for less than two weeks were subjects in this study. Only the subjects who had complete data were participants in this study. Complete data sets included two personality measures, an adjustment questionnaire, and a personal data questionnaire.

Findings

Research findings are presented in two sections, including descriptive and inferential statistics. Subjects' frequency distribution, and percentages on the variables of age, marital status, education, ethnic identity, children and children custody are described in the descriptive section. Relationships among age, certainty of outdate, sexual abuse, and number of prior arrests with neuroticism, anxiety, anger, stress, self-consciousness, depression, treatment indicator, self-esteem, and total adjustment are also reported in the descriptive section. The effect of participation in the Multi-modal Skill program on prison adjustment is reported in the inferential statistics section. In addition,
number of arrests, having children, certainty of outdate, and sexual abuse are examined as variables which predict prison adjustment.

**Descriptive**

The ages of the subjects ranged from 18 to 83 years with a mean age of 31 (Table 6). Thirty-nine percent of the subjects reported they had never been married, while 52% of the volunteers were either married, partnered, divorced, or widowed (Table 6). Seventy-eight percent of the subjects reported education of less than 12 years, while only 22% had earned a high school diploma (Table 6).

Fifty-nine percent of the subjects were African American (Black), 34% were European-American (White), and the remaining 6% were associated with Hispanic, Mexican, Native American, or Asian American ethnic groups (Table 6). Sixty-four percent of the subjects reported responsibility for at least one child, while 36% did not have the responsibility of children (Table 6). Of the 64% who were responsible for children, 59% of them stated their children are with family members, while the remaining 5% reported their children are in the custody of state operated agencies or divided between family members and state operated agencies (Table 6).
<table>
<thead>
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**Frequency and Percentages of Demographic Variables**

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Relationships among age, certainty of outdate, sexual abuse, and repeat state confinement with adjustment measures Prison Adjustment Questionnaire total adjustment score; Neuroticism Extroversion Openness Personality Inventory-Revised’s neuroticism domain scale, anxiety, vulnerability to stress, self-consciousness, and anger facet scales; and the Minnesota Multiphasic Personality Inventory-2’s low self-esteem, depression and negative treatment indicator scales follows. Correlations were described using these conventions (Davis, 1971):

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Of the 54 correlations that addressed the purpose, the relationship between the predictor variables and descriptive variables with the adjustment measures, Table 7 reveals that the highest \( r = .28 \). The relationships ranged from negligible to low. In fact, low self-esteem obtained the highest magnitude with children \( (r = .28) \). Implied by the low relationship is that women with children have tended to have lower self-esteem. Correlations between every variable and the children variable have the strongest magnitudes although those actual relationships were in the low to negligible range.
Table 7

Summary of Correlation Coefficients Among Study Variables.

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<td>-.21</td>
<td>-.42</td>
<td>-.25</td>
<td>-.22</td>
<td>1.00</td>
</tr>
</tbody>
</table>

| M   | 30.92| 2.78| 1.60| 1.77| 1.44| 1.79| 03.54| 15.67| 11.98| 5.70| 7.02| 22.84| 16.04| 16.16| 40.91|
| SD  | 8.98 | 1.85| .48 | .42 | .50 | .41 | 23.11| 4.81 | 5.26 | 4.95 | 5.08 | 5.68 | 4.64 | 4.56 | 8.27 |

Note. N=123 Correlations appropriate for scale of measurement were used.
1 = age (18-27, 28-33, and 34-83), 2 = marital status (single, married, and other), 3 = children (no or yes), 4 = certainty of outdate (no or yes), 5 = sex abuse (no or yes), 6 = prior arrests (no or yes), 7 = neuroticism, 8 = anxiety, 9 = vulnerability to stress, 10 = self-esteem, 11 = negative treatment indicators, 12 = depression, 13 = anger, 14 = self-consciousness, and 15 = total adjustment score.
Specifically, negative treatment indicator \( (r = .24) \), anxiety \( (r = .24) \), and stress \( (r = .23) \) revealed low relationships with having children. Specifically, as the number of children increased, the subjects were likely to resist therapy, experience more anxiety and stress. Low magnitudes were obtained for the depression \( (r = .03) \), anger \( (r = -.07) \), and self-consciousness \( (r = .08) \) variables with the children variable. Thus, as number of children increased from no children to having children, the subjects varied positively with depression, negatively with anger, and positively with self-consciousness.

A zero magnitude was obtained for the marital status and neuroticism correlation \( (r = -.00) \). This zero relationship for marital status and neuroticism implies that marital status and coping with stress, being fearful, and experiencing anxiety, as measured by neuroticism, are not related. Other relationships with marital status and adjustment measures were negligible with the exception of depression, where the obtained relationship was low \( (r = .10) \). Similar to marital status, age also revealed low relationships with adjustment measures.

History of arrest obtained negative negligible relationships with stress \( (r = -.01) \), anxiety \( (r = -.02) \), total adjustment \( (r = -.05) \), depression \( (r = -.06) \), and self-esteem \( (r = -.02) \). The above relationships imply that as history of arrest increased, the subject tended to score lower on stress, felt anxiety, total adjustment, depression, and self-esteem.

The correlation between sexual abuse and the total adjustment score \( (r = .05) \) revealed that subjects who were sexually abused tended to have problems adjusting to the foreign environment. As abuse increased, subjects’ low self-esteem \( (r = .25) \) and
negative treatment indicator \((r = .24)\) scores also increased. A positive low relationship with abuse and low self-esteem implied that as abuse increased there was an increase in low self-esteem. Hence, an increase in low self-esteem suggested that the subjects felt worthless and perceived themselves in a negative manner. This correlation is similar to studies that examined the effects of sexual abuse and self-esteem (Sultan and Long, 1988). The correlation between history of sexual abuse and the negative treatment indicator score revealed that as sexual abuse increased the subject's confidence in the mental health professional's ability to assist them was less \((r = .24)\).

The highest magnitude for correlations with certainty of outdate was with neuroticism \((r = .20)\). Thus, as certainty of outdate increased, the anger, fear, anxiety, and stress responses increased. Yet, the lowest magnitude obtained with certainty of outdate was with anxiety \((r = .04)\). Hence, as subjects grew more certain of their outdate their level of anxiety increased. Similar to findings of earlier research, stress and anxiety are experienced at various points of incarceration (Bonner & Rich, 1992; Sultan et al., 1984; Sultan et al., 1986; Von Cleve et al., 1991). Occurring with certainty of outdate was total adjustment score which was a negative negligible relationship \((r = -.09)\). Thus, as subjects become more certain of their release date they become less adjusted, possibly displaying prerelease anxiety.

Means and standard deviations of the adjustment variable measures are provided in Table 8. Relationships among these variables are provided in Table 7. The adjustment measures were all moderately to highly related with a few exceptions. Thus, as neuroticism increased, anxiety \((r = .83)\), stress \((r = .80)\), anger \((r = .73)\), and level
of self-consciousness ($r = .80$) increased. In addition, for neuroticism, a negative moderate relationship ($r = -.34$) with total adjustment score was found. Thus, as one responds to fear, copes with stress, and experiences anxiety, the overall adjustment decreases.

Relationships with anxiety were primarily moderate to very high. Specifically, anxiety with stress ($r = .71$), self-consciousness ($r = .63$), depression ($r = .51$), and anger ($r = .50$) were highly related, perhaps measuring similar (although different) domains. Several variables displayed moderate relationships with anxiety including total adjustment ($r = -.46$), low self-esteem ($r = .46$), and negative treatment indicator ($r = .45$). As anxiety increased the total adjustment decreased, self-esteem decreased, and confidence in therapist decreased.

Vulnerability to stress was substantially related to self-consciousness ($r = .61$), low-self esteem ($r = .60$), depression ($r = .60$), and negative treatment indicator ($r = .53$). Thus, as subjects grew more vulnerable to stress they also became more self-conscious, their level of self-esteem decreased, they grew more depressed, and they grew less receptive to treatment. There were two moderate relationships with vulnerability to stress: anger ($r = .36$) and total adjustment score ($r = -.31$). As level of stress increased, the subjects' level of anger tended to increase and they tended to be less adjusted. Stress, anger and adjustment scales were measuring similar domains.

Low self-esteem was highly correlated with negative treatment indicator ($r = .82$). Thus, low self-esteem and treatment indicator are likely measuring very similar domains. A low negative relationship was found between low self-esteem and total
adjustment score \((r = -.15)\). As the subject’s self-esteem decreased they tended to become less adjusted to the prison.

Negative treatment indicator was moderately to substantially related to self-consciousness \((r = .56)\), depression \((r = .48)\), and anger \((r = .42)\). As clients developed less confidence in therapy, their level of self-consciousness, depression and anger increased. This finding implies that subjects who did not have confidence in therapy did not have confidence in themselves, felt more depressed, and were more argumentive \((r = -.21)\). As confidence in treatment decreased, subject’s adjustment in prison slightly fell. Depression was low to moderately related to anger \((r = .24)\), total adjustment \((r = -.42)\), and self-consciousness \((r = .46)\). As the subjects grew more depressed their level of anger increased, total adjustment decreased, and self-consciousness increased. In addition, when anger increased, self-consciousness increased \((r = .45)\) and total adjustment decreased \((r = -.25)\). Finally, as self-consciousness increased total adjustment decreased \((r = -.22)\).
Table 8

Means and Standard Deviations of Dependent Variables

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Analyses of Covariance and Analyses of Variance

The effects of Multi-modal Program participation, history of arrest, sexual abuse, having children, and certainty of outdate on adjustment scales (i.e., neuroticism, anxiety, anger, stress, self-consciousness, depression, negative treatment indicator, low self-esteem, and total adjustment score) are reported.

Neuroticism

Table 9 presents the regression of program participation, history of arrest, history of sexual abuse, number of children, and certainty of outdate on neuroticism. A reading
of Table 9 indicates that a significant proportion of the variance in the dependent variable neuroticism was explained by the cumulative main effects, program participation, history of arrest, history of sexual abuse, children, and certainty of outdate; two-way interaction effects, program participation by certainty of outdate, arrest history by abuse, abuse by certainty of outdate; and covariate neuroticism (Table 9: \( R^2 = .56, F = 15.68, p < .10 \)). The main effect for program participation explained a significant \((p < .10)\) portion of the variation in the neuroticism score. Specifically, the neuroticism adjusted mean score of subjects who participated in the program was 88.09, while those who were not participants obtained an adjusted mean score of 97.41. In conclusion, subjects who received the Multi-modal Program were likely to have less difficulty with impulse control and were better able to cope under stress.

In addition, the interaction between history of arrest and sexual abuse on neuroticism was significant \((p < .10)\). Although the interaction effect was significant, there were no significant main effects (see Figure 1). Thus, indicating a disordinal interaction. Similarly, for subjects who were not abused, no main effect for arrest was found \((p > .10)\). Therefore, abused repeat offenders coped with stress, anxiety, anger, and fear better than those abused subjects who were arrested for the first time. The opposite was true for subjects who were not abused. Specifically, subject who were not abused and arrested for the first time had better coping skills than those subjects who were not abused and had a prior incarceration history. Finally, a significant \((p < .10)\) proportion of the variance in neuroticism was explained by pretest score. The relationship was such that for one unit change in pretest, expected posttest was .70 units.
In conclusion, the findings confirm the hypothesis that prison adjustment, as measured by the neuroticism scale of the NEO-PI R, of subjects who participated in Multi-modal Program is statistically (p < .10) greater than the adjustment of those who did not receive the skills program. In addition, the interaction effect of history of arrest by outdate and pretest scores on neuroticism are predictors of the neuroticism posttest score.

Table 9

**Adjusted Means and ANOVA with Neuroticism Regressed on Variables**

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<td>6517.59</td>
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<td>1743.04</td>
<td>6.80</td>
<td>.0004</td>
</tr>
<tr>
<td>Arrest (A)</td>
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<td>130.49</td>
<td>130.49</td>
<td>.51</td>
<td>.48</td>
</tr>
<tr>
<td>Abuse (B)</td>
<td>1</td>
<td>63.16</td>
<td>63.16</td>
<td>.25</td>
<td>.62</td>
</tr>
<tr>
<td>Child (C)</td>
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<td>105.93</td>
<td>105.93</td>
<td>.41</td>
<td>.52</td>
</tr>
<tr>
<td>Outdate (O)</td>
<td>1</td>
<td>41.03</td>
<td>41.03</td>
<td>.16</td>
<td>.69</td>
</tr>
<tr>
<td>P X O</td>
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<td>471.43</td>
<td>471.43</td>
<td>1.84</td>
<td>.18</td>
</tr>
<tr>
<td>A X B</td>
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<td>756.86</td>
<td>756.86</td>
<td>2.95</td>
<td>.09</td>
</tr>
<tr>
<td>B X O</td>
<td>1</td>
<td>540.64</td>
<td>540.64</td>
<td>2.11</td>
<td>.15</td>
</tr>
<tr>
<td>N</td>
<td>1</td>
<td>29528.68</td>
<td>29528.68</td>
<td>115.12</td>
<td>.0001</td>
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<tr>
<td>ERROR</td>
<td>113</td>
<td>28984.319</td>
<td>256.50</td>
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<td></td>
</tr>
</tbody>
</table>

Note: $R^2 = .56$
Figure 1. Mean neuroticism score as a function of abuse and arrest.
Anxiety

Table 10 presents the regression of program participation, history of arrest, history of sexual abuse, number of children, and certainty of outdate on anxiety. A reading of Table 10 indicates that a significant proportion of the variance in the dependent measure anxiety was explained by the cumulative main effects of program participation, arrest history, abuse, number of children, and certainty of outdate; two-way interaction, children by outdate interaction; and covariance (Table 10: $R^2 = .39, F = 7.92, p < .10$). Children by certainty of outdate interaction and pretest scores on anxiety demonstrated a significant ($p < .10$) relationship with anxiety. Relative to the anxiety score as the dependent variable, in the case of subjects who were certain of their sentence expiration date, a significant ($p < .10$) main effect for children was found. However, for those subjects who were not certain of their outdate, the main effect for children was not significant ($p > .10$). Therefore, subjects who were certain of their outdate and had children were more tense, uncomfortable and worried than those subjects who were certain of their outdate and did not have children. In conclusion, the findings failed to confirm the hypothesis that prison adjustment of subjects who participated in Multi-modal Program is statistically ($p < .10$) greater than the adjustment of those who did not receive the skills program. Further, children and outdate interaction and pretest are predictors of adjustment as measured by anxiety.

Pretest scores accounted for significant ($p < .10$) variability in anxiety. For each additional unit change in pretest scores, expected posttest score change was .60 units. Further, Figure 2 presents the child and outdate interaction effect.
In conclusion, the findings failed to confirm the hypothesis that prison adjustment of subjects who participated in the Multi-modal Program is statistically (α = .10) greater than the adjustment of those who did not receive the skills program. Further children by outdate interaction and pretest anxiety scores are predictors of adjustment as measured by anxiety posttest scores.

Table 10

Adjusted Means and ANCOVA with Anxiety Regressed on Variables

<table>
<thead>
<tr>
<th>Source</th>
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<th>F</th>
<th>P &gt; F</th>
</tr>
</thead>
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<tr>
<td>Program</td>
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<td>21.07</td>
<td>21.07</td>
<td>1.31</td>
<td>.26</td>
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<td>Arrest</td>
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<td>.30</td>
<td>.30</td>
<td>.02</td>
<td>.89</td>
</tr>
<tr>
<td>Abuse</td>
<td>1</td>
<td>8.82</td>
<td>8.82</td>
<td>.55</td>
<td>.46</td>
</tr>
<tr>
<td>Child</td>
<td>1</td>
<td>.29</td>
<td>.29</td>
<td>.02</td>
<td>.89</td>
</tr>
<tr>
<td>Outdate</td>
<td>1</td>
<td>4.32</td>
<td>4.32</td>
<td>.27</td>
<td>.61</td>
</tr>
<tr>
<td>Child/Outdate</td>
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<td>50.87</td>
<td>50.87</td>
<td>3.15</td>
<td>.08</td>
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<td>Anxiety</td>
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<td>733.50</td>
<td>733.50</td>
<td>45.46</td>
<td>.0001</td>
</tr>
<tr>
<td>ERROR</td>
<td>88</td>
<td>1419.88</td>
<td>16.14</td>
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<td></td>
</tr>
</tbody>
</table>

Note: $R^2 = .39$
Figure 2. Mean anxiety score as a function of certainty of outdate and children.
Anger

Table 11 presents the regression of program participation, history of arrest, history of sexual abuse, number of children, and certainty of outdate on anger. A reading of Table 11 indicates that a significant proportion of the variance in the dependent measure anger was explained by the cumulative main effects, program participation, arrest, abuse, children, and outdate; two-way interaction effect arrest by abuse interaction; and covariate anger (Table 11: $R^2 = .50$, $F = 12.36$, $p < .10$). History of arrest, children, arrest by abuse and covariate accounted for a significant ($p < .10$) amount of variability on the adjustment variable anger. Main effect for having children accounted for a significant amount of variability in the anger mean score. Thus, higher anger scores were obtained by subjects without children ($M = 16.95$) when compared to subjects with children ($M = 14.80$) indicating they displayed less anger. Thus, subjects without children were more argumentive than the subjects with children.

Figure 3 represents the interaction effect of abuse and arrest as a function of anger. A look at Figure 3 shows that, relative to the anger score and those subjects who were sexually abused, a significant ($p < .10$) main effect of history of arrest was found. However, for those with no abuse, no main effect for history of arrest was found ($p > .10$). Thus, subjects who were abused and were incarcerated at least once in the past, were likely to be more argumentive than those subjects who were abused and had no prior arrest. Pretest scores contributed a significant ($p < .10$) amount of variability to
posttest anger scores. For one unit change in pretest scores the expected posttest change was .55 units.

In conclusion, the findings failed to confirm the hypothesis that prison adjustment of subjects who participated in Multi-modal Skills Program is statistically (α = .10) greater than the adjustment of those who did not receive the skills program. In addition, interaction abuse by outdate and covariate, pretest, are significant predictors of anger.

Table 11

Adjusted Means and ANCOVA with Anger Regressed on Variables

<table>
<thead>
<tr>
<th>Source</th>
<th>First Arrest Means</th>
<th>Prior Arrest Means</th>
<th>F</th>
<th>P &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SD</td>
<td>n</td>
<td>SD</td>
<td>n</td>
</tr>
<tr>
<td>No Abuse</td>
<td>16.55</td>
<td>1.61</td>
<td>9</td>
<td>16.26</td>
</tr>
<tr>
<td>Abuse</td>
<td>13.53</td>
<td>1.17</td>
<td>9</td>
<td>17.16</td>
</tr>
<tr>
<td>No Child</td>
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</tr>
<tr>
<td>Children</td>
<td>14.80</td>
<td>.60</td>
<td>58</td>
<td></td>
</tr>
</tbody>
</table>

Source df SS MS  
Total 95     
Program 1 12.50 12.50 1.06 .31  
Arrest (A) 1 37.35 37.47 3.18 .08  
Abuse (B) 1 16.10 16.10 1.37 .24  
Children (C) 1 100.87 100.87 8.59 .004  
Outdate (O) 1 9.71 9.71 .83 .365  
A X B 1 52.64 52.64 4.48 .04  
Anger 1 755.40 755.40 64.33 .0001  
ERROR 88 1033.28 11.74  

Note: $R^2 = .50$
Figure 3. Mean anger score as a function of abuse and history of arrest.
Vulnerability to Stress

Table 12 presents adjusted means and the results of the analysis of covariance on vulnerability to stress. A look at Table 12 shows that a significant proportion of the variance in the dependent variable stress was explained by the cumulative main effects; program participation, arrest, abuse, children, and outdate; and covariate stress (Table 12: $R^2 = .55$, $F = 17.89$, $p < .10$). Covariate stress was the only variable which significantly ($p < .10$) accounted for variability in vulnerability to stress. The vulnerability to stress model was significant ($p < .10$) with the pretest score accounting for a large degree of variability in stress scores. The pretest relationship to the posttest is such, for one unit change in pretest score, the expected posttest change is .72 units.

In conclusion, the findings failed to confirm the hypothesis that prison adjustment of subjects as measured by vulnerability to stress scores who participated in Multi-modal Skills program is statistically ($\alpha = .10$) greater than the adjustment of those who did not receive the skills program. Similarly, the variables of arrest, abuse, children, and outdate were not predictors of adjustment as measured by stress. The only variable which accounted for variability in stress score was the pretest, which served as the covariate.
Table 12

**ANCOVA with Vulnerability to Stress Regressed on Variables**

<table>
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<tr>
<th>Source</th>
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<th>P &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
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<tr>
<td>Program</td>
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<td>18.23</td>
<td>1.32</td>
<td>.25</td>
</tr>
<tr>
<td>Arrest (A)</td>
<td>1</td>
<td>2.02</td>
<td>2.03</td>
<td>.15</td>
<td>.70</td>
</tr>
<tr>
<td>Abuse (B)</td>
<td>1</td>
<td>7.11</td>
<td>7.11</td>
<td>.51</td>
<td>.48</td>
</tr>
<tr>
<td>Child (C)</td>
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<td>21.59</td>
<td>21.59</td>
<td>1.56</td>
<td>.22</td>
</tr>
<tr>
<td>Outdate (O)</td>
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<td>33.02</td>
<td>2.38</td>
<td>.13</td>
</tr>
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<td>1181.90</td>
<td>85.29</td>
<td>.0001</td>
</tr>
<tr>
<td>ERROR</td>
<td>89</td>
<td>1233.27</td>
<td>13.86</td>
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<td></td>
</tr>
</tbody>
</table>

Note: $R^2 = .55$

**Self-Consciousness**

Table 13 represents the results of the means and self-consciousness analysis of covariance. A reading of Table 13 shows that the cumulative main effects, program participation, arrest, abuse, children, and outdate; and covariate self-consciousness explained a significant portion of variance in the dependent variable self-consciousness (Table 13: $R^2 = .33$, $F = 7.01$, $p < .10$). In respect to self-consciousness score, subjects’ pretest scores accounted for a significant ($p < .10$) amount of variability in self-consciousness score. Every pretest unit change is expected to contribute .54 units to posttest scores.

In conclusion, the findings failed to confirm the hypothesis that prison adjustment of subjects as measured by the self-consciousness scale who participated in the Multi-
modal Program is statistically (\(\alpha = .10\)) greater than the adjustment of those who did not receive the skills program. In addition, the only measure that predicted adjustment using the self-consciousness score was the information that was obtained when the women arrived.

Table 13

<table>
<thead>
<tr>
<th>Source</th>
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<td>.78</td>
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<tr>
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<td>.38</td>
<td>.02</td>
<td>.88</td>
</tr>
<tr>
<td>Abuse (B)</td>
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<td>.94</td>
<td>.94</td>
<td>.06</td>
<td>.80</td>
</tr>
<tr>
<td>Child (C)</td>
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<td>.25</td>
<td>.25</td>
<td>.02</td>
<td>.90</td>
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<td>25.90</td>
<td>1.69</td>
<td>.20</td>
</tr>
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<td>1363.52</td>
<td>15.32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: \(R^2 = .33\)

Adjustment measures from the MMPI-2 were depression, negative treatment indicator, and low self-esteem. Table 14 presents the average mean depression scores for the main effect of program participation. A reading of Table 14 indicates a significant proportion of the variance in the adjustment variable depression was explained by the combination of variables program participation, arrest, abuse, children, outdate, and a covariate (Table 14: \(R^2 = .39\), \(F = 12.18\), \(p < .10\)). Main effect for program participant accounted for a significant (\(p < .10\)) amount of variability in depression score. The relationship was such that program participants' depression mean scores (\(M = 22.21\)) were lower than the depression scores of those subjects who did not participate.
in the program (M = 23.86) (See Table 14). In summary, the subjects who participated in the program were not feeling as hopeless, anxious, moody, and sad as the subjects who did not participate in the Multi-modal Program.

Pretest scores accounted for a significant (p < .10) amount of variability in depression scores. Thus, for one unit change in pretest score a posttest change of .59 was expected for each consequential unit. Hence, Table 14 presents the average mean depression scores for the main effect of program participation. The feelings and emotions that the subject had during their initial incarceration were likely picked up in their pretest and not at posttesting.

**Table 14**

*Adjusted Means and ANCOVA with Depression Regressed on Variables*

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</thead>
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<td>61</td>
</tr>
<tr>
<td>Program</td>
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<td>.69</td>
<td>62</td>
</tr>
</tbody>
</table>

<table>
<thead>
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<tr>
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<td>.05</td>
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<tr>
<td>Arrest</td>
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<td>.40</td>
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<td>3.15</td>
<td>.15</td>
<td>.70</td>
</tr>
<tr>
<td>Child</td>
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<td>20.81</td>
<td>20.81</td>
<td>1.00</td>
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<tr>
<td>Outdate</td>
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<td>12.57</td>
<td>.60</td>
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Note: $R^2 = .39$
Negative Treatment Indicator

Table 15 presents the adjusted means and results for negative treatment indicate. A reading of Table 15 shows that the cumulative main effects, participation, arrest, abuse, children, and outdate; and interactions, participation by outdate and arrest by children accounted for a significant (p < .10) amount of the variance in the adjustment variable negative treatment indicator (Table 15: R² = .18, F = 3.60, p < .10). Participation, abuse, children, participation by outdate, and arrest by outdate accounted for a significant amount of variability in negative treatment indicator (p < .10). Significant (p < .10) negative treatment scores were obtained by the subjects who participated in the program and main effect certainty of outdate. Further, for the subjects who did not participate in the program, the main effect of certainty of outdate did not significantly (p > .10) effect adjustment as measured by negative treatment indicator. Similarly, for subjects who were not certain of their outdate, there was a significant (p < .10) main effect of program participation. No significant (p > .10) main effect for program participation for subjects who were certain of their outdate was found.

In summary, subjects who were not certain of their outdate and who did not participate in the Multi-Modal Skills Program were not ready to participate in therapy. In addition, subjects who participated in the Multi-modal Skills Program and were certain of their outdate were more receptive to therapy and had a more positive attitude toward change than the subjects who participated in the program and were not certain of their outdate.
Two-way interaction effect of program participation by outdate on treatment indicator, the number of arrest by children both significantly (p < .10) contributed to the variability in negative treatment indicator. Specifically, for the negative treatment score, subjects who were incarcerated for the first time, a significant (p < .10) main effect for children was found. In summary, subjects who were incarcerated for the first time and had children were less confident in their ability to benefit from therapy than the subjects without children. Furthermore, mean treatment scores for subjects who had prior arrests, main effect of children was not statistically significant (p > .10). In other words, repeat offenders who had children responded similarly to those without children on the adjustment measure negative treatment indicator.

Sexual abuse accounted for a significant (p < .10) amount of variability in negative treatment indicator. A main effect for sexual abuse was found; thus higher treatment mean scores were obtained by subjects who were sexually abused (M = 7.65) when compared to those who were not sexually abused (M = 5.16) on the adjustment measure negative treatment indicator. In summary, subjects who were sexually abuse resisted therapy and did not believe they could benefit from participation. Figures 4 and 5 displays the arrest by children and outdate by program participation interaction effects, respectively.

Program participation significantly contributed to adjustment as measured by negative treatment indicator. Thus, these findings confirm the hypothesis that prison adjustment of subjects who participated in Multi-modal Skills Program is statistically
(α = .10) greater than the adjustment of those who did not receive the skills program.

In addition, history of arrest by children and abuse are predictors of negative treatment indicator.

Table 15

Adjusted Means and ANOVA with Negative Treatment Indicator Regressed on Variables

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<thead>
<tr>
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<th>SD</th>
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<th>SD</th>
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<td></td>
</tr>
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<td>48</td>
<td>3.55</td>
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<td>14</td>
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<td>8.00</td>
<td>1.31</td>
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</tr>
<tr>
<td>Child</td>
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<td></td>
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<td></td>
<td></td>
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<td>3.53</td>
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<th>P &gt; F</th>
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<td>Participation (P)</td>
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<td>122.68</td>
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<td>.021</td>
</tr>
<tr>
<td>Arrest (A)</td>
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<td>8.05</td>
<td>.36</td>
<td>.551</td>
</tr>
<tr>
<td>Abuse (B)</td>
<td>1</td>
<td>182.56</td>
<td>182.56</td>
<td>8.12</td>
<td>.0052</td>
</tr>
<tr>
<td>Child (C)</td>
<td>1</td>
<td>212.98</td>
<td>212.98</td>
<td>9.47</td>
<td>.0026</td>
</tr>
<tr>
<td>Outdate (O)</td>
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<td>32.04</td>
<td>32.04</td>
<td>1.42</td>
<td>.24</td>
</tr>
<tr>
<td>P X O</td>
<td>1</td>
<td>87.34</td>
<td>87.34</td>
<td>3.88</td>
<td>.05</td>
</tr>
<tr>
<td>A X C</td>
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<td>63.29</td>
<td>63.29</td>
<td>2.81</td>
<td>.09</td>
</tr>
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<td>ERROR</td>
<td>115</td>
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</table>

Note: \( R^2 = .17 \)
Figure 4. Mean negative treatment scores as a function of arrest and children.
Figure 5. Mean negative treatment indicator score as a function of outdate and program participation.
Low Self-Esteem

Table 16 presents the adjustment means and analysis of variance of the abuse by outdate interaction effect. A reading of Table 16 indicates the cumulative main effects, participation, arrest, abuse, child, and outdate; interaction effects, participation by outdate and arrest by children accounted for a significant amount of the variance in the adjustment measure, low self-esteem (Table 16: $R^2 = .21, F = 4.46, p < .10$). In relationship to low self-esteem, for subjects who were sexually abused, a significant ($p < .10$) main effect for outdate was found. Specifically, the subjects who were certain of their outdate had lower self-esteem than those subjects who were not certain of their outdate (see Figure 6). However, no significant ($p > .10$) main effect for outdate was found for subjects who had not been abused. Additionally, for those subjects who had an outdate, a significant ($p < .10$) main effect for abuse was found. Hence, subjects who were not abused and certain of their outdate, were more confident and felt better about themselves than the subjects who were abused. No significant ($p > .10$) difference, for subjects who were not certain about their outdate, on main effect of abuse was found. In conclusion, subjects who were sexually abused and were not certain of their outdates tended to have a higher regard for self than those subjects who were certain of their outdate.

Main effect of children significantly ($p < .10$) contributed to low self-esteem. Subjects with children felt more confident ($M = 6.71$) than those subjects without children ($M = 3.84$). In other words, subjects with children felt worse about themselves than subjects who did not have children.
Thus, these findings failed to confirm the hypothesis that prison adjustment of subjects who participated in the Multi-modal Skills Program was statistically ($\alpha = .10$) greater than the adjustment of those who did not receive the skills. In addition, children and abuse by certainty of the outdate predicted low self-esteem.

Table 16

<table>
<thead>
<tr>
<th>No Abuse Mean</th>
<th>SD</th>
<th>n</th>
<th>Abuse</th>
<th>SD</th>
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<tr>
<td>No Outdate</td>
<td>4.24</td>
<td>1.08</td>
<td>18</td>
<td>3.59</td>
<td>1.43</td>
</tr>
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<td>Outdate</td>
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<td>51</td>
<td>7.88</td>
<td>.78</td>
</tr>
<tr>
<td>No Children</td>
<td>3.84</td>
<td>.79</td>
<td>44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children</td>
<td>6.71</td>
<td>.71</td>
<td>79</td>
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<table>
<thead>
<tr>
<th>Source</th>
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<th>SS/PS</th>
<th>MS</th>
<th>F</th>
<th>P &gt; F</th>
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<tr>
<td>Total</td>
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<td>2985.87</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation</td>
<td>1</td>
<td>29.03</td>
<td>29.03</td>
<td>1.42</td>
<td>.24</td>
</tr>
<tr>
<td>Arrest (A)</td>
<td>1</td>
<td>15.48</td>
<td>15.48</td>
<td>.76</td>
<td>.39</td>
</tr>
<tr>
<td>Abuse (B)</td>
<td>1</td>
<td>33.93</td>
<td>33.93</td>
<td>1.66</td>
<td>.20</td>
</tr>
<tr>
<td>Children (C)</td>
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<td>240.91</td>
<td>11.80</td>
<td>.0008</td>
</tr>
<tr>
<td>Outdate (O)</td>
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<td>104.66</td>
<td>104.66</td>
<td>5.12</td>
<td>.03</td>
</tr>
<tr>
<td>A X C</td>
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<td>41.75</td>
<td>41.75</td>
<td>2.04</td>
<td>.16</td>
</tr>
<tr>
<td>B X O</td>
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<td>75.01</td>
<td>75.01</td>
<td>3.67</td>
<td>.06</td>
</tr>
<tr>
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<td>2348.58</td>
<td>20.42</td>
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<td></td>
</tr>
</tbody>
</table>

Note: $R^2 = .21$
Figure 6. Mean low self-esteem score as a function of sexual abuse and outdate.
Total Prison Adjustment Score

Table 17 presents the adjustment means scores and analysis of covariance on total adjustment. A reading of Table 17 shows cumulative main effects participation, arrest, abuse, child, and outdate; and two-way interaction effects program participation by children interaction accounted for a significant amount of the variance in the dependent measure, total adjustment (Table 17: $R^2 = .39$, $F = 10.58$, $p < .10$). There was a significant ($p < .10$) main effect for program participation when the subjects had children. Specifically, subjects with children who participated in the program were more comfortable talking with staff, sleeping, and eating than the subjects without children and did not participate in the program.

Subjects who did not have children scored similarly on the mean prison adjustment total score measurement, regardless of program participation ($p > .10$). Further, the mean total adjustment score for the main effect of children was statistically significant ($p < .10$) when subjects did not participate in the program. Specifically, for subjects who neither participated in the program nor had children were better adjusted than subjects with children. In relation to those subjects who participated in the program, the total adjustment mean scores for the main effect of children were not statistically significant ($p > .10$). Pretest scores significantly ($p < .10$) accounted for variability in total adjustment score. One unit change in pretest is expected to contribute .54 units to posttest. Figure 7 also represents the program participation verses children interaction.
In conclusion, these findings confirm the hypothesis that prison adjustment of subjects who participated in the Multi-modal Skills Program is statistically greater than the adjustment of those who did not receive the skills program. Also, pretest performance was a significant predictor of total adjustment score.

Table 17

**Adjusted Means and ANCOVA with Total Prison Adjustment on Variables**

<table>
<thead>
<tr>
<th></th>
<th>No Program</th>
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<th>n</th>
<th>Program</th>
<th>SD</th>
<th>n</th>
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</thead>
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<tr>
<td>No Children</td>
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<td>1.46</td>
<td>24</td>
<td>42.26</td>
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<td>20</td>
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<tr>
<td>Children</td>
<td>37.53</td>
<td>1.20</td>
<td>37</td>
<td>44.17</td>
<td>1.19</td>
<td>42</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS/PS</th>
<th>MS</th>
<th>F</th>
<th>P &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>122</td>
<td>8336.02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program (P)</td>
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<td>398.60</td>
<td>9.04</td>
<td>.0032</td>
</tr>
<tr>
<td>Arrest (A)</td>
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<td>10.03</td>
<td>.23</td>
<td>.6342</td>
</tr>
<tr>
<td>Abuse (B)</td>
<td>1</td>
<td>63.53</td>
<td>63.53</td>
<td>1.44</td>
<td>.2325</td>
</tr>
<tr>
<td>Child (C)</td>
<td>1</td>
<td>24.63</td>
<td>24.63</td>
<td>.56</td>
<td>.4564</td>
</tr>
<tr>
<td>Outdate (O)</td>
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<td>2.91</td>
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<td>.7977</td>
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<tr>
<td>P X C</td>
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<td>115</td>
<td>5071.10</td>
<td>44.10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: $R^2 = .39$
Figure 7. Mean total adjustment score as a function of children and program participation.
In summary, subjects were described on variables age, marital status, education, ethnic identity, children and children's custody. In addition, the relationship among children, knowledge of outdate, sexual abuse and history of arrest with each adjustment score; neuroticism, anxiety, anger, stress, self-consciousness, depression, negative treatment indicator, low self-esteem and total adjustment score was reported and presented in a correlation matrix.

The effects of program participation on the dependent measures neuroticism, anxiety, anger, stress, self-consciousness, depression, negative treatment indicator, low self-esteem and total adjustment score were reported. Specifically, program participation significantly effected adjustment as measured by neuroticism, depression, negative treatment indicator, and total adjustment score. Adjustment performance on anger, anxiety, self-consciousness, vulnerability to stress, and self-esteem were not statistically different for levels of Multi-modal Program participation. Variables program participation, history of arrest, sexual abuse, whether the subject had children, and having an outdate were examined to determine best predictor of adjustment. Thus, several main effects and interactions were found.
CHAPTER V
DISCUSSION AND CONCLUSION

The prison adjustment of incarcerated women in a state of Ohio operated facility was the focus of this study. Consequently, the purpose of the present research was to determine whether the Multi-modal Skills Program effected adjustment. In addition, examined were variables which would likely predict adjustment. Presented in this chapter is a summary of the research and the findings, theoretical and practical implications, and recommendations for future research.

Summary of Research

The effects of a Multi-modal Program designed to enhance the adjustment of incarcerated women was studied. In addition, this study explored whether particular demographic variables predicted adjustment. A true experimental design was implemented, specifically a pretest posttest control group design (Campbell & Stanley, 1963). The major method of data collection was self-report on two personality measures and a personal data questionnaire. An assessment of adjustment was also taken.

Data Source

Research data were gathered from 123 subjects who had been incarcerated for less than two weeks. Subjects were randomly assigned to one of two levels of the primary independent variable, Multi-modal Skills Program participation and control group. The
outcome measure adjustment was based on total adjustment score, depression, low self-esteem, negative treatment indicator, neuroticism, anxiety, anger, vulnerability to stress, and self-consciousness scores.

**Summary of Findings**

The experimental Multi-modal Skills Program significantly contributed to the adjustment of incarcerated women as measured by neuroticism, total adjustment score, depression, and negative treatment indicator. Specifically, as explained by the neuroticism score, subjects who received the Multi-modal Skills Program were likely to have less difficulty with impulse control and were able to effectively respond to stress. Neuroticism score for the subjects who received the program was lower (M = 88.09) than those who did not receive the program (M = 97.41).

In regards to total adjustment score, the subjects who received the Multi-modal Program and had children were likely to talk with staff about problems, were more accepting of losing privacy, and complained less about physiological pains. Thus, subjects with children were better adjusted (M = 44.17) than the subjects without children (M = 42.27). Of equal importance is the finding that the subjects with children and no treatment (M = 37.53) had a more difficult time talking with staff and other inmates, and taking part in bathroom behaviors. These subjects were probably experiencing more psychosomatic symptoms than the subjects in any of the other four groups. The results of this section are consistent with the findings of Sultan et al. (1984 & 1986) that cognitive interventions can facilitate prison adjustment.
A significant effect of the Multi-modal Skills Program on depression was that subjects who received the program were less likely to worry excessively about their health and make somatic complaints. In addition, subjects who received the program were generally more aware of their limitations and they approached problems rationally. In contrast, high scorers on the depression scale were likely to attribute emotional problems, stress, anxiety, and depression to bodily complaints.

Finally, subjects who received the Multi-modal Skill Program and were not certain of their outdate, were very receptive to treatment and felt they still had control over their lives as measured by negative treatment indicator. Subjects who received the program and were certain of their outdate, were less receptive to therapy, would perhaps be reluctant to disclose personal information necessary for therapy, and feel powerless over their futures. Generally, one would expect subjects who are not certain of their outdate to be more willing to receive therapy in hopes of gaining their freedom or in compliance with their incarceration stipulations. When examining the effects of therapy and no program participation for the subjects who were not certain of their outdate, the attitudes of the subjects in the control group was such that they were opposed to receiving therapy more so than the subjects who were certain of their outdate and participated in the program.

Given the many economic problems states are facing, the indicator of treatment will assist with identifying who is ready for treatment. Working primarily with subjects who are ready for treatment, would save staff time and money. For example, subjects who participated in the program and were uncertain of their outdate would gain
maximum benefit from treatment during initial incarceration. In contrast, subjects who did not participate in the Multi-modal Program and were not certain of their outdated were not likely to be receptive to therapy and would perhaps demonstrate counter productive attitudes and behaviors in therapy.

These findings showed that the Multi-modal Program significantly improved the prison adjustment of incarcerated women, on adjustment variables neuroticism, total adjustment, depression and negative treatment indicator. Subjects who received the program improved their overall adjustment as measured by their self-consciousness, anger, anxiety, stress, and self-esteem scores but the improvement failed to reach significance (p > .10). Specifically, subjects moved from feeling shame and ineffective to being less concerned about situations like community toilets and showers, as measure by the self-consciousness scale. Anger improved from volunteers being rigid in their responses and interactions to becoming less explosive. Similar to Wilfrey and her colleagues (1986), who relied on a case analysis with a few subjects, the current study found improvement in anger scores of women who participated in the Multi-modal Program. Anxiety levels also improved, subjects went from being apprehensive, irritated, and agitated to less fearful and less tensed.

Prior to learning the multi-modal skills, subjects exhibited an inability to adapt to their environment. Hence, after participating in the program, their ability to resolve problems and cope with stress improved as measured by vulnerability to stress. In fact, the improvement from a high level of vulnerability to stress during initial incarceration to an average level of stress supports earlier findings that stress occurs initially and at
other points during incarceration (Bonner & Rich, 1992; Malbi et al., 1985; Sultan et al., 1984; Von Cleve et al., 1991).

Low self-esteem also showed improvement, although there were no pretest means available for comparison on subjects who received Multi-modal Skills Program across levels of treatment. Subjects who received the program exhibited a higher level of self-confidence than the subjects who did not receive the program, they were likely more self-conscious. Further, although the differences were not significant, the trends are consistent with Sultan’s and Long’s (1988) findings, psychodidactic supportive component program participation enhanced self-esteem, however, results of this study did not reach significance.

The improved behaviors and attitudes were of particular interest because the content of the Multi-modal Skills Program directly focused on stress, anger, problem solving, conflict-resolution, relaxation, and self-esteem, which were the concerns of the various adjustment measures. Unfortunately, the improvements were not statistically significant.

Findings of other intervention studies that have used cognitive-behavioral training to reduce anger (Bingham & Piotrowski, 1989; Larson, 1992; McColloch et al., 1989; McDougall, et al., 1991 and Wilfley, et al., 1986), increase self-esteem (Giallombard, 1986; Sultan & Long, 1988; and Syles, 1958). and apply relaxation techniques (Berger et al., 1978) were supported with shown improvement. However, in this study anger and self-esteem did not reach significance.
The variables history of arrest, sexual abuse, certainty of outdate, and children, significantly contributed to subjects’ adjustment, as measured by neuroticism, anxiety, anger, total adjustment score, negative treatment indicator, and low self-esteem. Specifically, those subjects who were certain of their outdate, and who had children were more tense and worried, as measured by anxiety, than those subjects without children. Perhaps they missed their children, feared their children would not remember them, and were concerned that their children were not receiving proper supervision. Not examined was whether effect of anxiety would hold true if age of the children was introduced as a variable.

The main effect of children significantly accounted for variability in the adjustment variable anger. Thus, subjects without children were likely more upset or angry than the subjects who had children. It is possible that parents or caretakers have learned not to be upset and are more patient, thus responding to many things that a person without children would find emotionally explosive. In addition, as measured by anger, subjects who were abused and were incarcerated at least once in the past were likely to be more argumentive than subjects who were not abused and had no prior incarceration. Perhaps repeat offenders may enter the system angry about the correctional process during a prior incarceration. Also, repeat offenders may have learned they can be assertive, have a right to be treated with respect, and become agitated when they feel mistreated. A final area of exploration in regards to anger is that the subjects who were incarcerated for the first time demonstrated that subjects who were abused where more tolerant of anger than those who were not abused. The
differences once again is likely due to the tolerance, endurance and coping strategies abused victims acquired.

The interaction effect of history of arrest by sexual abuse also significantly accounted for the variability in neuroticism. Emphasis was placed on the interaction as opposed to a significant main effect. The trend was that subjects who were abused and a repeat offender were likely to experience negative emotions more often than abused first time offenders. In addition, subjects with high scores on the neuroticism scale were likely to have poor coping responses to stressful situations. The highest category was the repeat offender by no abuse interaction, then the no abuse by first arrest interaction, the abused by repeat offender, and the abused by first time offender surprisingly had the lowest scores on neuroticism. Then again, as mentioned earlier about this same interaction, abused subjects may have developed excellent coping skills to deal with their abuse and effectively applied them in their new setting. Thus, number of arrests and history of sexual abuse are very good predictors of adjustment as measured by anger and neuroticism.

Variability in negative treatment indicator scores can be accounted for by the abuse main effect and arrest history with child interaction. Abused subjects scored very high on this scale. Thus, abused subjects are likely to have a very rigid and negative approach to therapy. These subjects may have experienced a lot of negative feelings and did not feel they would benefit from treatment. Further, the arrest by child interaction effect also contributed to the therapy indicator. First time offenders with children resisted therapy significantly more often than first time offenders without children. The
mothers may interpret therapy as validation that they are not good mothers or unstable. In which case, mothers maybe harder on themselves and feel they do not deserve to feel better because they are separated from their children.

Main effect children and interaction effect abuse by certainty of outdated contributed to the effect of self-esteem. Subjects with children harbored more guilt feelings than the subjects who were without children. Mothers were likely to worry, have a poor perception of self, and not feel worthy. Sexually abused women who were certain of their outdate experienced feelings of defeat and had a poor perception of self as well. Sexually abused women who were not certain of their outdate were likely to experience a high level of self-confidence. Similarly, having an outdate enhanced the self-esteem of the subjects who were not abused, the opposite was true for abused victims who were certain of their outdate. Thus, children, abuse, and certainty of outdate are predictors of self-esteem.

Implications

In summary, the results of this study are consistent with Sultan, Keifer, and Long's (1986), and Sultan, Long, Kiefer, Schrum, Selby, and Calhoun's (1984) findings of increased prison adjustment of incarcerated women with an intervention. This study extends their findings to a state of Ohio correctional facility. However, unlike Sultan and her colleagues (1984 & 1986), who also found a significant reduction in stress, the current study did not find statistical differences for stress. However, the current study found neuroticism was significantly different for program participation. Components of neuroticism included psychological distress and coping responses to stress. Further, the
vulnerability to stress adjustment measure improved over time but fell short of reaching significance. Differences in Sultan’s (1984 & 1986) studies and the current study were inmate co-facilitator and duration of program. No co-facilitator was utilized in order not to introduce a possible extraneous variable. Other studies consistent with Sultan and her colleagues (1984 & 1986) were Bonner and Rich (1990) and Von Cleve et al., (1991). They found inmates level of stress and adjustment improved over a period of time.

However, the current findings report pretest scores significantly contributed to adjustment measure vulnerability to stress. It is possible level of stress is high during initial incarceration and is steadily decreasing. In which case, the current findings would provide support for stress cycles at various time periods of incarceration, thus initial (Bonner & Rich, 1992; Sultan et al., 1984 & 1986; Von Cleve et al., 1991), prior to meeting the members of the parole board, prerelease stress (Mabli et al., 1985) and postrelease stress.

Program participation did not contribute to level of self-esteem, hence these results are inconsistent with researchers who found changes in self-esteem with or without an intervention (Browne, 1989; Rokach, 1987; Sultan & Long, 1989; and Hannum et al., 1988). The results in this study found that children, history of sexual abuse and certainty of outdate had a greater effect on self-esteem. These results are consistent with Sultan and Long (1988), they found sexually abused subjects increased their self-esteem following an intervention, therefore, self-esteem can change. Cannici et al (1989), and Hannum et al., (1987) found changes in self-esteem or ego-strength
without an intervention. In this study the intervention did not significantly contribute to the change.

The results of this study were also inconsistent with McDougall and other scholars (1991) and McDougall and Boddis’ (1991) findings of improvement with anger following a cognitive skills intervention, for youth offenders. Similar to findings of Wilfley et al (1986), the present study focused on an intervention to reduce anger. However, the present study was inconsistent with Wilfley et al’s (1986) findings.

Limitations

Although women were randomly assigned to treatments, the effect of the different housing areas that the volunteers lived in when they were transferred out of admissions was not controlled. Therefore, it is not possible to rule out the possibility that housing units effects were confounded with the treatment effects. In addition, although the effect of presentation style were consistent across groups, it is not certain that presentation style did not supersede the effect of treatment. However, presentation style should vary equally across groups.

Subjects’ family support; that is, parents, spouses, children, and friends is another area of uncontrolled variance in this study. Although, outside contact was generally controlled during the first two weeks of the study. Delays in starting the program, institutional transfers, tornado drills, medical calls, and other institutional demands were not controlled across groups.
Practical Application

On the basis of this study women who are ready for therapy can be identified, thus treating them and releasing them could possibly create space in the crowded system. Multi-modal skills can be applied during initial incarceration and prerelease if it is determined that long-term effects impact recidivism.

Multi-modal program participation can be beneficial in reducing adjustment trauma, which includes giving up privacy in the showers and the bathroom, movement in housing areas, separation from family, and stress during admissions.

On the basis of this study the new MMPI-2 negative treatment indicator can help identify subjects who are ready for treatment during their early period of incarceration. Thus, if a multi-modal program is made available with limited financial support and staff, it can be determined which subjects are receptive to treatment and identify best chances of being most helpful to them.

Future Studies

Presentation of recommendations based on current findings are offered in this section.

1- Future studies may offer additional information on the relationship between the Multi-modal Skills Program participation and adjustment. Specifically, follow-up measurement at determined periods of time, such as, during incarceration, prerelease and post-release will offer a greater understanding of how skill development effect adjustment and duration of effect. In addition, will the adjustment measures that were not statistically significant reach significance if posttests were administered at a later date.
2- Attitudes toward taking the MMPI-2 and NEO-PI R should be determined. The MMPI-2 measures psychopathology as the NEO-PI R measures healthy personality. In addition, the personality measures seem to be measuring similar effects. However, NEO-PI R is a shorter instrument and less expensive, therefore, if the attitudes are similar or healthier toward taking the NEO-PI R over the MMPI-2, then perhaps a recommendation about changing the assessments can be offered.

3- Recommended is research which compares the adjustment of women who received therapy, based on predictor variable negative treatment indicator, with women who did not receive treatment after several determined periods of time. In fact, comparison of women in treatment who are ready for treatment with women in treatment who are not ready for treatment can also be made. Further, comparisons between women who received therapy when they were ready with women who did not receive therapy and were not ready to receive therapy should be explored.

4- Several multi-modal skills did not reach significance, but observable changes were noted for anxiety, anger, self-esteem, self-consciousness, and vulnerability to stress. Thus, the relationship between the Multi-modal Skills Program and the adjustment variables mentioned above requires additional investigation. Specifically, this research may require more time for facilitation and application than provided. Thus, it maybe that each topic should be covered over three weeks instead of one week. Further, additional research is especially important because these five areas were specifically covered in the Multi-modal Skills Program. In addition, the facet scales from the neuroticism domain scale were not found significant but the domain scale did reach significance. Therefore,
determination about why the sub-scales did not reach significance should be explored further.

5- Recommendations for further studies is to explore in greater depth whether history of arrest, sexual abuse, certainty of outdate and having children predict parole success or recidivism.

6- More information is required to determine why history of arrest, child abuse, certainty of outdate, and children did not predict vulnerability to stress, self-consciousness, and depression. Identification of other demographic variables that predict stress, self-consciousness and depression is recommended for future research.

7- Additional research should be included to determine whether inmates with a prior diagnosis of schizophrenia, major depression, substance use disorders, psychosexual dysfunction, antisocial personality disorder, or post-partum depression predict adjustment.

8- Women who were pregnant were excluded from the present research. The present study should be explored with pregnant incarcerated women to determine its effectiveness.

9- The amount of variability religious beliefs and ethnic identity contribute to the adjustment of incarcerated women should be explored further.
REFERENCES CITED


APPENDIX A

BEHAVIORAL AND SOCIAL SCIENCES

HUMAN SUBJECT REVIEW COMMITTEE

APPROVAL FORM
Research Involving Human Subjects

ACTION OF THE REVIEW COMMITTEE

With regard to the employment of human subjects in the proposed research protocol:

95B0236 PRISON ADJUSTMENT PROGRAM (A STUDY OF THE PSYCHOLOGICAL EFFECTS OF STRESS REDUCTION INTERVENTION ON ADJUSTMENT OF INCARCERATED WOMEN, Linda M. Perosa, Pamela Chapman, Educational Services and Research

THE BEHAVIORAL AND SOCIAL SCIENCES REVIEW COMMITTEE HAS TAKEN THE FOLLOWING ACTION:

   ___ APPROVED
   ___ DISAPPROVED
   X   APPROVED WITH CONDITIONS*
   ___ WAIVER OF WRITTEN CONSENT GRANTED

* Conditions stated by the Committee have been met by the investigator and, therefore, the protocol is APPROVED.

It is the responsibility of the principal investigator to retain a copy of each signed consent form for at least four (4) years beyond the termination of the subject’s participation in the proposed activity. Should the principal investigator leave the University, signed consent forms are to be transferred to the Human Subjects Review Committee for the required retention period. This application has been approved for the period of one year. You are reminded that you must promptly report any problems to the Review Committee, and that no procedural changes may be made without prior review and approval. You are also reminded that the identity of the research participants must be kept confidential.

Date: August 27, 1993

Signed: [Signature]
(Chairperson)
APPENDIX B

DEPARTMENT OF REHABILITATION AND CORRECTION

HUMAN SUBJECTS RESEARCH APPROVAL FORM
RESEARCH PROPOSAL APPROVAL

Proposal Title:

The individual submitting this research proposal has read and agrees to the conditions specified on the reverse side of this approval form.

Submitted by: Pamela Chapman
Name
Post Office Box 16227, Columbus, Ohio 43216
Address
(614) 235-9278
Telephone

Date Submitted: August 19, 1993
Advisor: Lisa Curn (Ph.D.), Assistant Professor
Signature and Title
The Ohio State University (Columbus, Ohio)
Academic Institution

FOR THE DEPARTMENT OF REHABILITATION AND CORRECTION:

Research Review Central Office
M. J. Black, Ph.D.
Chief - Management Information Systems
Managing Officer/Field Supervisor

9/8/93
Date
9/16/93
Date
9/22/93
Date
APPENDIX C

TEST ADMINISTRATOR'S SCRIPT TO GROUP
Hi! My name is Pamela Chapman. I am working on a research project designed to possibly help you adjust to prison life. I need volunteers to participate in this project in order to determine its effectiveness. Therefore, I am seeking volunteers for two hours, two days a week for five weeks.

Although I will be here working with you, I am working on this project under the direction of Dr. Linda Perosa from The Ohio State University. Your voluntary participation in this program will make a contribution to what we know about adjustment to prison life.

There are some important points I have to make. They are:

You will be allowed to change your mind and withdraw at anytime during this program without disciplinary action.

Participation is not related to any benefits you may be eligible to receive from the Department of Rehabilitation and Correction. Furthermore, choosing not to participate will not effect your standing with the Department of Rehabilitation and Corrections.

The information you share will be confidential with the exception of security threats and harm to yourself or others.

This research project has met the requirements of both the Human Subjects’ Review Committee (HSRC) at The Ohio State University and Research Proposal Approval at the Ohio Department of Rehabilitation and Correction (DRC). The HSRC and DRC are the governing boards that monitor research and studies to protect your rights as participants.

A summary of the completed results will be shared with you once completed.

Within the next 48 hours, you will be contacted for participation. I hope you take the next day to think about voluntary participation. If you have general questions that you need answered now that will help you with your decision, please ask.

Thank you very much for your consideration, time, and attention.
APPENDIX D

TEST ADMINISTRATOR'S SCRIPT TO INDIVIDUALS
SCRIPT FOR TEST ADMINISTRATOR TO INDIVIDUALS

Hi! As promised during the orientation, I have called you in to ask for your participation in adjustment to prison life research.

There is not much current research about women and their adjustment to prison life. This research will add to that information which may possibly help you and others.

As I mentioned earlier:

The information I will gather will be confidential unless it is related to a security violation or harm to self or others.

Participation is totally separate from your relationship with the Department of Rehabilitation and Corrections and the Criminal Justice System.

You can change your mind at anytime during the research. However, your complete participation will be appreciated.

If you agree to participate:

I will give you an identification number which will be used for processing your information. Your name will not be connected with the research results to insure confidentiality.

I will ask you to sign a Consent to Participate form (Show the form to the prospective participant). I will keep a copy and you will have a copy.

I will ask you to complete a 'Information About Me' form. This form will ask you some personal questions (i.e., sexual abuse, psychological history, number of children etc).

I will ask you to complete the Minnesota Multiphasic Personality Inventory - II (MMPI-2) and the Neuroticism Extraversion and Openness to Experience Personality Inventory (R).

You will receive your program assignment and specific information from your program leader.

After four weeks you will be asked to take the MMPI-2, NEO-PI R. and P.A.Q. a second time.
Individual Script

There may be some changes with the first MMPI-2 responses. The Department of Rehabilitation and Correction requires the MMPI-2 for your psychological file. Instead of taking the MMPI-2 as a pretest in this study, I can request to have access to and copy your answer sheet and results from psychological services, with your permission. Or, I can administer the first test and give the department of psychological services the answer sheet and results for your psychological file.

Do you have any questions?

Will you voluntarily participate in this research project (Ph. D. dissertation under the supervision of The Ohio State University) at the Ohio Reformatory for Women that may be beneficial in your adjustment to prison life?

(No) Thank you very much for your consideration and time. (Yes) Thank you for volunteering to participate. I will call you over to begin this process within 48 hours.
APPENDIX E

CONSENT FORM FOR PARTICIPATION IN

PRISON ADJUSTMENT PROGRAM
CONSENT FORM

FOR PARTICIPATION IN

PRISON ADJUSTMENT PROGRAM

I, ____________________________, hereby consent and agree to permit Pamela Chapman, a doctoral student at The Ohio State University, to use my responses on the identified assessment instruments for research purposes only. Ms. Chapman is working on this project with Dr. Linda Perosa, who is an Assistant Professor at The Ohio State University.

She or her authorized representative has explained the purpose of the study, the procedures to be followed, and the expected duration of my participation. Possible benefits of the study have been described as have alternative procedures.

I have been informed that all my responses will be kept confidential and that the information will be used to further understand incarcerated women and prison adjustment.

I acknowledge that I have had the opportunity to obtain additional information regarding the study and that any questions I have raised have been answered to my full satisfaction. Further, I understand that I am free to withdraw consent at any time and to discontinue participation in the study without prejudice to me. Additionally, participation will have no influence on my custody with the Department of Rehabilitation and Corrections.

Furthermore, I give my permission for Pamela Chapman to have access to and copy my Minnesota Multiphasic Personality Inventory - 2 answer sheet and test results filed in the Office of Psychological Services if they are needed for research purposes only.

Finally, I acknowledge that I have read and fully understand the consent form. I sign the consent form freely and voluntarily as agreement to participate in this project conducted at the Ohio Reformatory for Women in Marysville, Ohio and allow my results to be used for research purposes only. A copy has been given to me.

Date: ____________  Signature: ________________

(Personal Investigator)

Witness: ________________  Signature: ________________

(Principle Investigator)

Witness: ________________
APPENDIX F

PERSONAL DATA RECORD
P. I. N. ________________
Date ________________

INFORMATION ABOUT ME

Please read each of the following questions carefully. Circle or write in the most appropriate answer to the questions. Accurately responding to the list of questions will help place adjustment needs in a context that is necessary for this study.

1. Your marital status. (Circle one)
   1. NEVER MARRIED
   2. MARRIED
   3. DIVORCED
   4. SEPARATED
   5. WIDOWED
   6. LIVED WITH SOMEONE AS IF YOU WERE MARRIED

2. In what state did you live in before you were arrested? _______ STATE.

3. In what city or town did you live in before you were arrested? _______
   CITY OR TOWN.

4. Your present age? _______ YEARS

5. Which of the following best describes your ethnic identification? (Circle one)
   1. AFRICAN AMERICAN (BLACK)
   2. EUROPEAN AMERICAN (WHITE)
   3. ASIAN AMERICAN
   4. NATIVE AMERICAN (AMERICAN INDIAN)
   5. PUERTO RICAN (HISPANIC)

6. Are you pregnant now? (Circle one)
   1. NO
   2. YES

7. Were you responsible for children before your arrest? (Circle one)
   1. NO
   2. YES
   (If yes) Describe the children below.

<table>
<thead>
<tr>
<th>Sex</th>
<th>Age</th>
<th>Relationship</th>
<th>Who is watching children?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   (Use extra sheet for more space)

8. Your highest level of education that you have completed: _______ YEARS
9. Before your arrest, were you: (Circle one)
   1. EMPLOYED
   2. UNEMPLOYED
   3. RETIRED
   4. FULL-TIME HOMEMAKER
      (If employed) Describe your usual occupation before incarceration:

      TITLE: _______________________

      TYPE OF WORK: ________________

10. Do you smoke cigarettes? (Circle one)
    1. NO
    2. YES
       (If yes) Do you smoke more cigarettes now than you did before you were arrested?
          1. NO
          2. YES

11. Have you ever used drugs? (Circle one)
    1. NO
    2. YES
       (If yes) When was the last time you used drugs?
          ___________ DAYS

12. Do you know your outdate? (Circle one)
    1. NO
    2. YES
       (If yes) When is your earliest outdate? _______ DATE
       (If no) When is your board date? __________ DATE

13. Have you ever been arrested before this time? (Circle one)
    1. NO
    2. YES
       (If yes)
          1. How many times have you been in jail
             _______________ NUMBER
          2. How many times have you been in a state prison? ___________ NUMBER
          3. How many times have you been in a federal prison? ___________ NUMBER

14. How long were you in the county jail before coming to ORW, this time? _______ DAYS

15. How many times did you visit a psychologist, psychiatrist or counselor in the last year? (Circle one)
    1. NOT AT ALL
    2. FEW TIMES
    3. ABOUT ONCE A MONTH
    4. ABOUT 2 OR 3 TIMES A MONTH
16. Were you taking medication received from your psychiatrist when you were arrested? (Circle one)  
   1. NO  
   2. YES  
   (If yes) Are you taking the medication now? (Circle one)  
   1. NO  
   2. YES  

17. How many times did you visit a doctor for your health concerns in the last year? (Circle one)  
   1. NOT AT ALL  
   2. FEW TIMES  
   3. ABOUT ONCE A MONTH  
   4. ABOUT 2 OR 3 TIMES A MONTH  

18. Were you taking medication you received from your doctor when you were arrested? (Circle one)  
   1. NO  
   2. YES  
   (If yes) Are you taking the medication now? (Circle one)  
   1. NO  
   2. YES  

19. Have you ever been sexually abused (raped or forced into any kind of sexual behavior) by an adult you were in a close relationship with? (Circle one)  
   1. NO  
   2. YES  
   (If yes) were you  
      1. AN ADULT  
      2. A CHILD  
      3. BOTH  

20. Have you ever been physically abused (hit, kicked, or punched often) by an adult you were in a close relationship with? (Circle one)  
   1. NO  
   2. YES  
   (If yes) were you: (Circle one)  
      1. AN ADULT  
      2. A CHILD  
      3. BOTH  

21. Have you ever been mentally abused (put down, belittled, embarrassed, insulted, or cursed at often) by an adult you were in a close relationship with? (Circle one)  
   1. NO  
   2. YES  
   (If yes) were you: (Circle one)  
      1. AN ADULT  
      2. A CHILD  
      3. BOTH  

Thank you very much for answering the questions about you. Your responses are very important and a necessary part of this program. Also, this information will be kept confidential.
APPENDIX G

PRISON ADJUSTMENT PROGRAM GOALS
PRISON ADJUSTMENT PROGRAM GOALS

The prison adjustment program is a time limited and partially structured intervention for incarcerated women who are in their initial stage of incarceration.

Goals:

To provide a supportive group atmosphere for women who have been incarcerated no more than two weeks.

To offer cognitive strategies to increase adjustment:
- Stress Management
- Anger Management
- Problem Solving

Teach relaxation techniques for regular application in order to reduce level of stress.

Teach self-esteem exercises for regular application in order to increase self-confidence.
APPENDIX H

RELAXATION EXERCISE
THE 8 - MINUTE RELAXATION PLAN

Minute 1

In a quiet room and in a comfortable chair, assume a restful position and a quiet, passive attitude. Take four deep breaths. Make each one deeper than the one before. Hold the first inhalation for 4 seconds -- the second one for 5 seconds-- the third one for 6 seconds-- and the fourth one for 7 seconds. Pull the tension from all parts of your body into your lungs and exhale it with each expiration. Feel more relaxed with each breath.

Minute 2

Count backwards from 10 to 0. Breath naturally, and with each exhalation count one number and feel more and more relaxed as you approach 0. With each count you descend a relaxation stairway and become more deeply relaxed until you are totally relaxed at 0.

Minute 3 - 7

Picture in you mind a place that you associate with complete relaxation. Go to that place and stay there for four minutes. Try to vividly, but passively, recall the feelings of that place which was relaxing.

Minute 8

Bring your attention back to yourself. Count from 0 to 10. Energize your body. Feel the energy, vitality, and health flow through you system. Feel alert and eager to resume your activity. Open your eyes.
## TENSION AND RELAXATION EXERCISES

<table>
<thead>
<tr>
<th>MUSCLE</th>
<th>TENSING EXERCISES</th>
<th>TENSION LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hands</td>
<td>Clench and relax, right, left then both fists.</td>
<td>The back of your hand and your wrists.</td>
</tr>
<tr>
<td>Upper arm</td>
<td>Bend elbows and fingers of both hands to your shoulders and tense the biceps — relax.</td>
<td>The biceps muscles.</td>
</tr>
<tr>
<td>Lower arm</td>
<td>Holding both arms straight out, stretch, extend hands up, then down — relax.</td>
<td>The upper portion of the forearm.</td>
</tr>
<tr>
<td>Forehead</td>
<td>Wrinkle the forehead and lift the eyebrows upward — relax.</td>
<td>The entire forehead area.</td>
</tr>
<tr>
<td>Eyes</td>
<td>Close the eyes tightly, relax.</td>
<td>The eyelids.</td>
</tr>
<tr>
<td>Jaws</td>
<td>Clench jaws — relax.</td>
<td></td>
</tr>
<tr>
<td>Tongue</td>
<td>Bring your tongue upward and press it against the roof of your mouth — feel tension and relax.</td>
<td>The area in and around the tongue.</td>
</tr>
<tr>
<td>Mouth</td>
<td>Press your lips tightly together, feel tension, relax.</td>
<td>The region around the mouth.</td>
</tr>
<tr>
<td>Neck</td>
<td>Press your head backward, roll to right and back, roll to the left and back, straight — relax.</td>
<td>The muscles in the back of the scalp, right and left side of the neck.</td>
</tr>
<tr>
<td>Neck and Jaws</td>
<td>Bend the head forward. Press the chin against the chest, straighten — relax.</td>
<td>The muscles in the front of the neck and around the jaws.</td>
</tr>
<tr>
<td>Shoulders</td>
<td>Bring the shoulders up toward ears, shrug and move around — relax.</td>
<td>The muscles of the shoulders and lower part of the neck.</td>
</tr>
<tr>
<td>Chest</td>
<td>Take a deep breath slowly — hold it for five seconds, exhale slowly — relax.</td>
<td>The entire chest area.</td>
</tr>
<tr>
<td>Back</td>
<td>Pull shoulders back — arch back from chair — relax.</td>
<td>Lower back.</td>
</tr>
<tr>
<td>Abdomen</td>
<td>Tighten stomach muscles, make the abdomen muscles hard — relax.</td>
<td>The entire abdominal region.</td>
</tr>
</tbody>
</table>
AUTOGENIC RELAXATION EXERCISE

INTRODUCTION: I am going to take you through a relaxation procedure will be saying phrases referring to different parts of your body. As I do so, I’d like you to say them over in your head - staying aware of the different parts of your body. I’d like you to maintain an attitude of detachment in respect to whether you are warming or your muscles are relaxing or your mind is quieting. Trust your body to do what you ask it to do. Just have a sense of “letting go” and allow it to happen.

Autogenic Phrases

1. I feel quite quiet.
2. I am beginning to feel quite relaxed.
3. My feet feel heavy and relaxed.
4. My ankles, my knees and my hips feel heavy, relaxed and comfortable.
5. My stomach and the whole central portion of my body feel relaxed and quiet.
6. My hands, my arms and my shoulders, feel heavy, relaxed and comfortable.
7. My neck, my jaws and my forehead feel relaxed. They feel comfortable and smooth.
8. My whole body feels quiet heavy, comfortable and relaxed.
9. Continue alone for a minute.
10. I am quite warm.
11. My arms and hands are heavy and warm.
12. I feel quite warm.
13. My whole body is relaxed and my hands are warm, relaxed and warm.
14. My hands are warm.
15. Warmth is flowing into my hands, they are warm, warm.
16. I can feel the warmth flowing down my arms into my hands.
17. My hands are warm, relaxed and warm.
18. Continue alone for a minute.
19. My whole body feels quiet, comfortable and relaxed.
20. My mind is quiet.
21. I withdraw my thoughts from the surrounding and I feel quiet and still.
22. My thoughts are turned inward and I am at ease.
23. Deep within my mind I see and feel myself as relaxed, comfortable and still.
24. I am alert, but in an easy, quiet, inward-turned way.
25. My mind is calm and quiet.
26. I feel an inward quietness.
27. The relaxation phrases are completed and the whole body comes alive yet remains relaxed. When you’re ready take a deep breath and think the following phrases: "I feel life and energy flowing through my legs, hips, stomach, chest, arms and hands, shoulders, neck and head... The energy makes me feel light and alive." Stretch.
APPENDIX I

SELF-ESTEEM EXERCISES
MY DECLARATION OF SELF-ESTEEM

I AM ME

IN ALL THE WORLD, THERE IS NO ONE ELSE EXACTLY LIKE ME.
EVERYTHING THAT COMES OUT OF ME IS AUTHENTICALLY MINE
BECAUSE I ALONE CHOSE IT - I OWN EVERYTHING ABOUT ME MY BODY,
MY FEELINGS, MY MOUTH, MY VOICE, ALL MY ACTIONS, WHETHER
THEY BE TO OTHERS OR TO MYSELF - I OWN MY FANTASIES, MY
DREAMS, MY HOPES, MY FEARS - I OWN ALL MY TRIUMPHS AND
SUCCESSES, ALL MY FAILURES AND MISTAKES BECAUSE I OWN ALL OF
ME, I CAN BECOME INTIMATELY ACQUAINTED WITH ME - BY SO DOING
I CAN LOVE ME AND BE FRIENDLY WITH ME IN ALL MY PARTS - I
KNOW THERE ARE ASPECTS ABOUT MYSELF THAT PUZZLE ME, AND
OTHER ASPECTS THAT I DO NOT KNOW - BUT AS LONG AS I AM
FRIENDLY AND LOVING TO MYSELF, I CAN COURAGEOUSLY AND
HOPEFULLY LOOK FOR SOLUTIONS TO THE PUZZLES AND FOR WAYS TO
FIND OUT MORE ABOUT ME - HOWEVER I LOOK AND SOUND,
WHATEVER I SAY AND DO, AND WHATEVER I THINK AND FEEL AT A
GIVEN MOMENT IN TIME IS AUTHENTICALLY ME - IF LATER SOME
PARTS OF HOW I LOOKED, SOUNDED, THOUGHT AND FELT TURN OUT
TO BE UNFITTING I CAN DISCARD THAT WHICH IS UNFITTING, KEEP
THE REST, AND INVENT SOMETHING NEW FOR THAT WHICH I
DISCARDED - I CAN SEE, HEAR, FEEL, THINK, SAY, AND DO I HAVE THE
TOOLS TO SURVIVE, TO BE CLOSE TO OTHERS, TO BE PRODUCTIVE,
AND TO MAKE SENSE AND ORDER OUT OF THE WORLD OF PEOPLE AND
THINGS OUTSIDE OF ME -
I OWN ME, AND THEREFORE I CAN ENGINEER ME - I AM ME AND

I AM OKAY

Virginia Satir. From the book Self-Esteem published by Celestial Arts, P.O. Box 7327, Berkeley, California 94707
Diplomacy is the art of letting someone else get your way

Life is not so much a matter of position as of disposition

The best vitamin for making friends, B-1

If you don’t care where you’re going any road will get you there

A pint of example is worth a gallon of advice

He who throws mud loses ground

Nobody raises his own reputation by lowering others

Nothing ruins the truth like stretching it

A smile is an inexpensive way to improve your looks

Ideas won’t work unless you do

The future is purchased by the present

One thing you can’t recycle is wasted time

Lost time is never found again

A hard thing about business is minding your own

Triumph is just "umph" added to try

Caution is not cowardly - Carelessness is not courage

He who forgives ends the quarrel

Children need more models than critics

Frogs have it easy - They can eat what bugs them

The pursuit of happiness is the chase of a lifetime

If the going gets easy you may be going downhill

Dieters - People that are thick and tired of it
Jumping to conclusions can be a bad exercise

The best labor saving device is doing it tomorrow

A turtle makes progress when it sticks its neck out

Failure is the path of least persistence

Hard work is the yeast that raises the dough

Patience is counting down without blasting off

God’s last name is not "Dammit"

Some folks won’t look up until they are flat on their backs

If you want your dreams to come true, don’t oversleep

Friend - One who knows all about you and likes you just the same

Money talks and often just says, "Good-bye"

Birds have bills too and they keep on singing

Forbidden fruit is responsible for many a bad jam

God’s retirement plan is out of this world

A good example is the best sermon

The Ten Commandments are not multiple choice

Well done! is better than, Well said!

Minds are like parachutes - they function only when open

Live as you wish your kids would

Swallowing your pride seldom leads to indigestion

If you can laugh at it then you can live with it

People don’t fail, they give up
When looking for faults use a mirror, not a telescope

Smile, it takes only 13 muscles; A frown takes 64

Kindness, a language deaf people can hear and blind can see

Heaviest thing to carry - a grudge

A smooth sea never made a skillful sailor

A small leak can sing a great ship

You can’t direct the wind, but you can adjust your sails

We lie loudest when we lie to ourselves

Tact is ability to see others as they wish to be seen

A bad conscience has a very good memory

Hug your kids at home - Belt them in the car

One thing you can give and still keep - is your word

A friend walks in when everyone else walks out

If you must cry over spilled milk then please try to condense it

Behavior is the mirror in which everyone shows their image

Make friends before you need them

It’s not the load that breaks you down, it’s the way you carry it

The smallest good deed is better than the grandest intention

Success is...more attitude than aptitude

Our favorite attitude should be gratitude

The greatest of all faults is to imagine you have none

Too many of us speak twice before we think
Some people develop eye strain looking for trouble

Everyone has 20/20 hindsight

The happiness of your life depends on the quality of your thoughts

It is much easier to be critical than to be correct

Feed your faith and doubt will starve to death

It is no crime not to be perfect

If others have sinned you need not mention it

No man knows less than the man who knows it all
patience carries a lot of wait

One who lacks courage to start has already finished

A quitter never wins - A winner never quits

Action speaks louder than words but not nearly as often

Break a bad habit- Drop it

Don’t learn safety rules simply by accident

Failing to prepare we prepare to fail

Past failures are guideposts for future success

There is no right way to do a wrong thing

Read the Bible - it will scare the hell out of you

An atheist is a person who has no invisible means of support

Money is a good servant but is a cruel master

Seek joy in what you give not in what you get

Procrastination is the thief of time

Success comes in cans - Failure comes in can’ts
Anger is one letter short of danger - Greatest remedy for anger is delay

2/3 of promotion is motion

Having a sharp tongue can cut your own throat

Of all the things you wear, your expression is the most important

THE ROAD TO SUCCESS Is Always Under Construction
Design Copyright 1988 Walrus Productions
Published & distributed by AA Graphics, Inc.
10915 47th Avenue, West
Everett, WA}
STRENGTHS

NAME:_________ DATE:_______

THINGS YOU LIKE ABOUT YOURSELF

1. ___________________________________________________________
2. ___________________________________________________________
3. ___________________________________________________________
4. ___________________________________________________________
5. ___________________________________________________________
6. ___________________________________________________________
7. ___________________________________________________________
8. ___________________________________________________________
9. ___________________________________________________________
10. __________________________________________________________
11. __________________________________________________________
12. __________________________________________________________
13. __________________________________________________________
14. __________________________________________________________
15. __________________________________________________________
16. __________________________________________________________
17. __________________________________________________________
18. __________________________________________________________
19. __________________________________________________________
20. __________________________________________________________
21. __________________________________________________________
22. __________________________________________________________
23. __________________________________________________________
24. __________________________________________________________
25. __________________________________________________________
SELF-ESTEEM SENTENCE COMPLETIONS

I am__________________________

I feel most like me when__________________________

I get angry when__________________________

I feel happiest when__________________________

I believe in__________________________

One thing I want to accomplish is__________________________

What I like most about myself is__________________________

I feel least like me when__________________________

I feel weakest when__________________________

I feel good when I remember__________________________

When I’m alone I feel__________________________

Most of all I really want__________________________

One thing I would like to change about myself is__________________________

I feel strongest when__________________________

The main thing about me is__________________________
EIGHT WAYS TO BOOST YOUR SELF-ESTEEM

1. Learn something new every day.
2. Do whatever it takes to make you feel sure of yourself.
3. Cultivate people who give you a feeling of importance.
4. Put out of your life anybody who puts you down.
5. Do something everyday that you do extraordinary well.
6. Concentrate on the things you like about yourself.
7. If you can change the things about yourself that bother you, do it -- immediately.
8. Always remember that the people around you who seem so controlled and even smug could be fighting back pure panic.

SELF-ESTEEM

1) Self-esteem is your opinion of yourself. What and how you:

Think of yourself
Feel about yourself
Perceive yourself

2) How do you learn feelings about yourself from feedback?

Positive feedback
Negative feedback
Conflicting feedback
No feedback
False (perfectionist) positive feedback

3) Where and how does self-esteem develop?

Early childhood
Environment (Home, school, church, clubs, etc)

4) How to change self-esteem?

Write self a love letter
Make a list of strengths
Give self a genuine compliment daily
Practice assertiveness skills
Redefine or reframe negative comments and statements made by others or self.
Develop a positive attitude
APPENDIX J

STRESS MANAGEMENT
STRESS MANAGEMENT

Session I (Week 2 - Day 1)

Relaxation Exercise (8 Minute Exercise)

Major sources of stress

How we cause internal stress

Break (10 minutes)

How we cause internal stress

Redefining stressful events

Ways to cut stress

Self-Esteem Exercise (Definition and Things You Like About Yourself)

Closing - Read I AM ME I AM OKAY

Session II (Week 2 - Day 2)

Relaxation Exercise (Read muscle relaxation exercise)

Basic premise of stress

Approaches and techniques to reduce and relieve stress

Break (10 minutes)

Reactions and over-reaction to stress

Coping with stress

Self-Esteem Exercise (The Road to Success is Always Under Construction strips)

Closing - Read I AM ME I AM OKAY
MAJOR SOURCES OF STRESS:

1. Changes in our environment
2. Conflict relationships
3. Emotional pressures and conflicts that we create internally

HOW WE CAUSE INTERNALIZE STRESS?

1. Worrying about situations we cannot control
2. Being perfectionist - expecting too much of ourselves and others.
3. Being competitive by turning encounters into win/lose situations.
4. Being self-critical, focusing on our faults not on our strengths.
5. Expecting others to provide for our emotional security, not ourselves.
6. Feeling powerless - failing to see available choices.
7. Making assumptions that we know how others feel and what they want from us, instead of asking.
8. Rushing - expecting ourselves to perform better and/or faster.
9. Comparing our achievements, or lack of them, to those of others.
10. Being pessimistic - expecting the worst from situations we face.
11. Expecting to be problem - free.
WAYS TO CUT STRESS:

1. Try and plan and/or schedule your time thus saving your memory and time for more creative and pleasurable things.

2. Taking a 5 minute break every hour will help you maintain your peak performance the other 55 minutes. (Don’t work past the moment of diminished returns)

3. Rehearsing stressful situation and/or confrontations before they happen will reduce the stress.

4. Doing the difficult or most dreadful tasks in the beginning of your day makes good sense. Procrastination breeds stress.

5. Set realistic and responsible goals for yourself.

6. Limit your time and energy by saying "no" when needed.

7. Getting a good night sleep, eating a balanced meal and trying to exercise helps.

8. Use positive reinforcement statements such as: "I can handle this one step at a time," instead of frightening or depressing yourself by coming up with reasons why you cannot cope.
Basic Premise of Stress

1. You are responsible for your own stress. If you are stressed by something external, the stress is not due to the external thing, person, or situation; it is a result of how you process it. In that you have the power to create your stress, you probably have the power to stop creating it.

2. Stress is a process—a process that builds. It is easier to circumvent the stress building process early in the process than later. It is advantageous to be aware of your stress building process in general, but how it begins in particular. That is, try to be aware of the first cue or sign that suggests your process has begun.

Approaches and Techniques

1. Structure your day to exclude potential stress. (This may include avoiding people who are adept at eliciting your stress, i.e., people you compete with.)

2. Structure your day to include stress reduction every day. This stress reducing activity can be even more helpful to you if it is also something you enjoy doing.

3. Time Management—One of the greatest sources of stress is poor management of time or ever-commitment. Make a reasonable time schedule for yourself and include stress reduction as a regular part of that schedule.

4. Assertiveness—When you feel something, express it; holding in emotions increases frustration and stress. It takes more energy to hold it in that to let it out.

5. Constructive Thinking—You can worry, but it is not helpful. Self-statements about what you cannot do or how awful things are not helpful. In fact, they bring on more stress; this may be one of the primary ways you maintain or increase your stress level.

6. Relaxation, Transcendental Meditation, Yoga, Imagery, etc. These are ways to remove yourself from stress which can be good for your mind and body.

7. Massage, hot showers, baths, saunas, and exercise are physical ways of reducing stress.

8. Nutrition—Stay away from caffeine (coffee, tea, cokes, etc.).

9. Get a proper amount of sleep.
10. Try to be as physically comfortable as the situation will allow. Wear comfortable clothing. Do not stand up when you can sit down. Do not sit down when you can lie down.
Relieving Stress

Work off stress - Physical activity, from sports to gardening, can be an outlet for stress and reduce tension.

Talk out your worries - Confiding in a trusted friend or trained professional may relieve your stress. Often, another person can help you get a new perspective on things that are bothering your.

Get enough rest - Lack of sleep can reduce your capacity to deal with stress. Known how much rest you need and see that you get it regularly.

Learn to accept what you cannot change - Some circumstances are beyond your control. Recognize your limitations and the limitations of others.

Relax from time to time - Schedule time to do something you really enjoy or to relax and don’t let anything interfere, especially worrying about what you’re not doing.

Take things one at a time - Don’t try to get everything done at once. Determine what is most important and work to accomplish it. Then move on the other things. Make sure the goals you set for yourself are not too high.

Use medication cautiously - Many drugs, including alcohol, mask stress symptoms but do not relieve the underlying causes. Use only those medications prescribed for you by a physician.

Like yourself - Respect your abilities and give yourself a pat on the back for the things you do well. Recognize your needs and forgive your errors.

(Ohio Department of Mental Health)
Reactions and Over-Reactions to Stress

Eustress (Stress) - Helps keep us alert, motivates us to face challenges, and drives us to solve problems. These low levels of stress can be managed and necessary for normal stimulation.

Distress - Body over reacts to events. It leads to what has been referred to 'fight or flight' reaction.

* Driving your car when the highway is backed up due to construction.

* Misplacing something in your room, office, house, etc.

* Waiting in a long line at commissary, nurse, doctors, dining hall, etc.

* Being blamed for something you did not do

* Receiving a work assignment at the last minute

* Having something break while using it, running out of supplies, a part is missing for the box

* Balancing a checkbook, commissary list,

* Car not starting up in the morning

* Ask for suggestions and pet peeves
Management of Over-Reactions

Reframe situations that cause over-reactions.

Things to reduce distress:

1. Learn to relax. Throughout the day, take 'minibreaks.' Sit down and get comfortable, slowly take a deep breath in, hold it, and then exhale very slowly. At the same time, let your shoulder muscles droop, smile and say something positive like, "I am r-e-l-a-x-e-d." Be sure to get sufficient rest at night.

2. Practice Acceptance. Many people get distressed over things they won't let themselves accept. Often these are things that can't be changed, like someone else's feelings or beliefs. If something unjust bothers you, that is different. If you act in a responsible way, the chances are you will manage stress effectively.

3. Talk rationally to yourself. Ask yourself what real impact the stressful situation will have on you in a day or a week and see if you can let the negative thoughts go. Think through whether the situation is your problem or the other's. If it is yours, approach it calmly and firmly; if it is the other's, there is not much you can do about it. Rather than condemn yourself with hindsight thinking like, 'I should have...,' think about what you can learn from the error and plan for the future. Watch out for perfectionism, set realistic and attainable goals. Remember, everyone makes errors. Be careful of procrastination - breaking tasks into smaller units will help and ranking according to importance will help get things done.

4. Get organized. Develop a realistic schedule of daily activities that includes time for work, sleep, relationships, and recreation. Use a daily "things to do" list. Improve your physical surroundings by cleaning your house and straightening up your office. Use your time and energy as efficiently as possible.

5. Exercise. Physical activity has always provided relief from stress. In the past, daily work was largely physical. Now that physical exertion is no longer a working. It accumulates very quickly. We need to develop a regular exercise program to help reduce the effects of stress before it becomes distress. Try aerobics, walking, jogging, dancing, swimming, and the like.
Management of Over-Reactions

6. Reduce Time Urgency. If you frequently check your watch or worry about what you do with your time, learn to take things a bit slower. Allow plenty of time to do so much in a given period. Practice the notion of "pace, not race."

7. Disarm yourself. Every situation in life does not require you to be competitive. Adjust your approach to an event according to its demands. You don’t have to raise your voice in a simple discussion. Playing tennis with a friend doesn’t have to be an Olympic trial. Leave behind your "weapons" of shouting, having the last word, putting someone else down, and blaming.

8. Quiet time. Balance your family, social, and work demands with special private time. Hobbies are good antidotes for daily pressures. Unwind by taking a quiet stroll, soaking in a hot bath, watching a sunset, or listening to calming music.

9. Watch your habits. Eat sensibly - a balanced diet will provide all the necessary energy you will need during the day. Avoid nonprescription drugs and minimize your alcohol use - you need to be mentally and physically alert to deal with stress. Be mindful of the effects of excessive caffeine and sugar on nervousness. Put out the cigarettes - they restrict blood circulation and affect the stress response.

10. Talk to friends. Friends can be good medicine. Daily doses of conversation, regular social engagements, and occasional sharing of deep feelings and thoughts can reduce stress quite nicely.

(Innovations in Clinical Practice: A Source Book - Vol 5 pp 427-428)
Coping With Stress

Look for causes. Who or what is at the bottom of the stress? Dealing directly with the person or issue may be the best approach.

Examine your relationships. What can you do to put more warmth, more communication and more mutual support into them?

Evaluate. Not every argument is worth trying to win. Defend values that are important. But learn to ignore lesser issues.

Seek Advice. Confiding in a friend can uncoil the tightly wound spring of tension. Seek professional assistance when needed. You are worth it.

Do Something for others. Reaching out can take the focus off self and reduce the stress caused by brooding.

Do one thing at a time. The seconds pass in single file. Yet how quickly they become minutes and hours. You'll ge more done with less "hassle" when you concentrate on each job as it comes and use a priority system.

Learn to pace yourself. You can't operate in high gear all the time. Take a break. Go for a walk. Look out the window. Do something else.

Create a quiet place. Take time to meditate, to pray. Recent studies of meditation techniques and yoga show that we can train ourselves to relax.

Analyze your stress occurrences. If you have experienced several stressful events in the past several months, you should think twice before changing jobs, environments, activities or adding to your present stress levels.

Examine your sanity savers. Review those coping techniques you have utilized and found successful in the past. Find out what events please you and occasionally list the positive things in your life. Do not dwell on failures.

Learn to creatively utilize leisure activities. Some stress may require you to divert attention to tasks that require concentration. Other times require a brisk walk, swim or other vigorous exercise. Exercise appears to reduce some people's stress levels when regularly practiced.

Turn off worry. When you face problems that have no immediate solution, try to ignore it by immersing yourself in work, hobbies and other interests.
Not everything can be done perfectly. Some days it is best to finish a task even though not perfectly in order to move onto other problems.

Establish some personal time daily. Allow yourself a daily relaxation activity and stick to it. It affords you some time to look forward to on a daily basis.
APPENDIX K

ANGER MANAGEMENT
ANGER MANAGEMENT

Session I (Week 3 - Day 1)

Relaxation exercise (Coloring Garfield pictures)

Define anger as a defense mechanism

Causes of Anger

Outside Reasons

Break (10 minutes)

Inside Reasons

Self-Esteem Exercise (Sentence completion exercise)

Closing - Read I AM ME I AM OKAY

Session II (Week 3 - Day 2)

Relaxation exercise (Tension and Relaxation exercise)

Anger Management (Outside)

Break (10 minutes)

Anger Management (Inside)

Anger Management (Behaviors)
Solicit examples to apply management skills

Self-Esteem Exercise (Eight ways to boost self-esteem)

Closing - Read I AM ME I AM OKAY
ANGER MANAGEMENT

I. Define anger as a defense mechanism
   Show faces with feelings
   Share list of feelings

II. Causes of anger

   A. Outside reasons or events you have no control over
      1. Frustrations
      2. Abuse
      3. Mistreatment
      4. Irritations

   B. Inside reasons or what one thinks and feel about what has happened.
      1. What you say to yourself
      2. What you think about situation
      3. Assuming responsibility for others problems

      Thinking:
      What do you say to yourself
      How you approve of yourself
      How do you interpret situation

      Feelings:
      Defense mechanism
      Tensions
      Sad

      Doing/Action:
      Remove self from potentially explosive situations
      Physical contact
III. Management of Anger

A. Outside events or situations:
   1. Avoid poison
   2. Avoid jokes, games, just kidding
   3. Keep positive attitude when interpreting event

B. Inside or process information:
   1. Faulty thinking (all/aone, right/wrong, etc)
   2. Develop a positive attitude
   3. Build a positive self-esteem
   4. Claiming someone else’s problems or issues
   5. Develop mechanism to stop stinking thinking.

C. Activities or Behaviors:
   1. Talking about conflict
   2. Talking positively to self
   3. Relaxation exercises and techniques (i.e., imagery, muscles relaxation, breathing exercises, and listen or view tapes).
   4. Practice daily stress management exercises
   5. Become assertive
APPENDIX L

PROBLEM SOLVING
PROBLEM SOLVING AND CONFLICT RESOLUTION

Session I (Week 4 - Day 1)

Relaxation exercise (8 minute relaxation)

Stages of problem solving

Break (10 minutes)

Ask for example and apply stages of problem solving

Self-Esteem Exercise (The Road to Success....)

Closing - Read I AM ME I AM OKAY

Session II (Week 4 - Day 2)

Relaxation exercise (Guided Imagery)

Types of conflicts

Strategies for resolving problems and conflicts

Break (10 minutes)

Apply topic to comic strips

Self-Esteem Exercise (Things I like about me)

Closing - Read I AM ME I AM OKAY
Stages of Problem Solving

Understand the Problem:

Make certain you understand the problem
Focus on the problem
Do not attack the person

Brainstorm a list of solutions and alternatives:

Examine and explore the alternatives:

Eliminate what you have tried already.
Eliminate what you will not try.
Prioritize those items that are left on list.

Decision to Act:

Select an alternative
Apply and the selected alternative

If no solution then must reframe the problem.

Reframing and Redefining the problem.

THERE ARE LIMITATIONS TO PROBLEM AND CONFLICT RESOLUTION!

PATIENCE FOR CHANGE!
CONFLICT RESOLUTION

TYPES OF CONFLICT

I. Internal conflict

II. Conflict between people

III. Conflict between group or nations

Communication exercise
   Sender
   Receiver
   Experience

MAKE EVERYONE A WINNER!

Winnings: understanding, feelings brought into the open, respect, feeling of trust, everyone feels good about solution and no one is hurt, physically or emotionally.

Goal is mutual respect not agreement.

Begin applying conflict resolution skills and problem solving skills to comic strips.
STRATEGIES FOR RESOLVING CONFLICTS AND PROBLEMS

Take turns- everybody wins

Share- people's feelings become more important than things

Chance- luck decides who wins. Both sides must agree to accept the "flip of the coin," the "draw of the straw," etc.

Postpone- put off resolving the conflict until you are more in control.

Avoid- sometimes it's not worth the bother. Let the other person have it.

Get help- people who may be counted on for a fair decision include friends, parents, teachers, religious leaders,...

Apologize- "I'm sorry" doesn't mean "I'm wrong." It lets the other person know that you are sorry about the solution.

Humor- a good laugh works miracles. Remember to laugh at the problem and not the person.

Compromise- both give up something and both get something.

FIGHT FAIR!
APPENDIX M

PRISON ADJUSTMENT QUESTIONNAIRE
ADJUSTMENT QUESTIONNAIRE

TODAY’S DATE: __________ DATE ARRIVED AT ORW: __________

Circle the answer you choose.

1. How well are you eating?
   1 Not at all
   2 Not as well as I usually do
   3 OK
   4 Good
   5 As well as I ever have

2. How well are you sleeping?
   1 Not at all
   2 Not as well as I usually do
   3 OK
   4 Good
   5 As well as I ever have

3. How often do you have headaches?
   1 Seems like all the time
   2 Often
   3 Sometimes
   4 Once in a while
   5 Not at all

4. How often do you have other kinds of aches and pains?
   1 Seems like all the time
   2 Often
   3 Sometimes
   4 Once in a while
   5 Not at all

5. How often do you cry?
   1 Seems like all the time
   2 Often
   3 Sometimes
   4 Once in a while
   5 Not at all

6. How well are you handling being away from your children and/or family?
   (This includes husbands, boyfriends, lovers, etc.)
   1 Not well
   2 Pretty
   3 OK
   4 Good
   5 Really well

7. How comfortable do you feel in talking to other inmates?
   1 Not at all uncomfortable
   2 A little uncomfortable
   3 OK
   4 Good, Pretty comfortable
   5 Very comfortable

8. How comfortable do you feel in talking to staff?
   1 Not at all uncomfortable
   2 A little uncomfortable
   3 OK
   4 Good, Pretty comfortable
   5 Very comfortable

9. How comfortable do you feel when you go to the bathroom?
   1 Not at all uncomfortable
   2 A little uncomfortable
   3 OK
   4 Good, Pretty comfortable
   5 Very comfortable

10. How comfortable do you feel when you take a shower?
    1 Not at all uncomfortable
    2 A little uncomfortable
    3 OK
    4 Good, Pretty comfortable
    5 Very comfortable

11. How bored are you in your day to day life?
    1 Very bored
    2 Somewhat bored
    3 Not bored at all
12. How angry are you feeling?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very angry</td>
<td>Pretty angry</td>
<td>Somewhat angry</td>
<td>A little angry</td>
<td>Not angry at all</td>
</tr>
</tbody>
</table>

13. For smokers only: How much are you smoking?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>A lot more than I usually do</td>
<td>A little more than usual amount I usually do</td>
<td>The same as usual</td>
<td>A little less than I usually do</td>
<td>Much less than I usually do</td>
</tr>
</tbody>
</table>