

COGNITIVE-BEHAVIORAL TREATMENT: AN ANALYSIS OF GENDER
AND OTHER RESPONSIVITY CHARACTERISTICS AND THEIR EFFECTS ON
SUCCESS IN OFFENDER REHABILITATION

A dissertation submitted to the
Division of Research and Advanced Studies
of the University of Cincinnati

In partial fulfillment of the
requirements for the degree of
DOCTORATE OF PHILOSOPHY (Ph.D.)
in the Division of Criminal Justice
of the College of Education

2002

by

Dana Jones Hubbard, M.S.

B.S., University of Colorado at Boulder, 1992
M.S., University of Cincinnati, 1996

Dissertation Committee: Dr. Edward J. Latessa (Chair)
 Dr. Pat VanVoorhis
 Dr. Frank Cullen
 Dr. Sharon Kennedy

ABSTRACT

The specific responsivity principle suggests that personal characteristics of offenders may interfere with their ability to be receptive to treatment. This is the least researched aspect of the principles of effective intervention. While many have suggested this principle to be true, the exact personal characteristics thought to interfere with treatment are not yet known. This dissertation sought to address this principle by asking the following research questions, 1) Is gender a responsivity consideration? and 2) Are other characteristics such as intelligence, self-esteem, depression, personality, and a history of sexual abuse related to success in a cognitive-behavioral program? Data were gathered on 446 men and women offenders and success was measured by program completion, no arrests, and no incarcerations. While many of the characteristics were not found to be related to success in cognitive-behavioral treatment, gender and a history of sexual abuse were found to be related. Women were less likely to be arrested and incarcerated and people with a history of sexual abuse were more likely to be arrested. What is equally as interesting is that other potential responsivity characteristics such as intelligence, personality, and self-esteem were not found to be related to outcomes. These findings suggest that cognitive-behavioral treatment, a program that meets the general responsivity principle, may help different types of offenders be receptive to treatment thus overriding the specific responsivity principle.

ACKNOWLEDGEMENTS

I definitely would not have had the motivation to begin a doctoral program much less finish it, without the support of many people. First, I would like to thank my dissertation advisor, mentor, and friend, Dr. Ed Latessa. Working for him has provided me with incredible opportunities that most graduate students are never able to benefit from. I have traveled with him all over the country and have been able to meet both offenders and those who treat them. These experiences have helped shape me as a researcher, teacher, and as a human being. Dr. Latessa has taught me many things about research and yet the most important thing he has taught me is that it is possible to be a “normal” professor: one that is both loyal to others and dedicated to the field.

I would also like to thank the rest of my committee. Thanks to Dr. Cullen for all his advice and for allowing me to call or email him with questions on everything from research and writing to how to “fit in” in this field. Thanks also to Dr. VanVoorhis for being a constant support over the years as well as a mentor and friend. Finally, thanks to Sharon Kennedy for agreeing to be on my committee and traveling so far to help me.

I would also like to acknowledge Patti and Peter Adler. Without them, I would not have come to the University of Cincinnati and gotten my Ph.D. in criminal justice. They have always been only an email away for my questions and I have appreciated their advice through the years. They have been fabulous friends and mentors and I look forward to a personal and professional relationship with them forever.

Two friends have been invaluable to me through this process. When we started the program, we were six years younger and all had different last names. Shelley Johnson Listwan and Betsy Matthews have been such incredible friends and sources of support through the doctoral program. We have all had the unique experience of going through each step of the doctoral program at the same time. They truly can relate to what the last few years have been like. Without their constant motivation and support, I don’t know if I could have done it and I know that it would not have been as fun.

I would also like to thank Chris Lowenkamp for helping me with my data and statistics. He was always willing to help me at a moment’s notice and I could not have completed the dissertation without him.

I would also like to thank my mom, Joan Jones and my other parents, Cathy and Joe Hubbard. Be it watching my children or showing interest in my studies, they have all assisted me in completing this degree.

I would also like to acknowledge my father, Richard M. Jones. A Master of Science himself, he taught me the value of education. He has always been so proud of me in everything I have done and I am so happy that I could make him proud with this Ph.D. He has been a constant source of support for me during the last seven years.

I would also like to thank my immediate family. Knowing that Drew and Stella would grow up with a mom who is a Ph.D. has motivated me to finish this program. I have always wanted to role model the importance of education to my children. I love them so much and want them to know that I dedicate this dissertation to them.

Finally, I want to thank my husband and best friend, Chad Hubbard. He would watch the girls for hours on weekends and in the evenings while I worked, all the while pushing me to keep going. He has supported me in every way possible. Knowing that I made him proud by becoming a “doctor” is my greatest achievement.

TABLE OF CONTENTS

TABLE OF CONTENTS	4
TABLE OF TABLES	7
CHAPTER 1: STATEMENT OF THE PROBLEM	8
INTRODUCTION	8
BACKGROUND OF REHABILITATION	10
FEMALE OFFENDERS	13
CONCLUSIONS	14
CHAPTER 2: LITERATURE REVIEW	17
INTRODUCTION	17
HISTORY OF REHABILITATION	17
Origins of the Rehabilitative Ideal	17
Decline of Rehabilitation	20
Reaffirming Rehabilitation	22
Meta-Analyses	23
THEORY OF EFFECTIVE CORRECTIONAL INTERVENTION	28
Risk Principle	29
Need Principle	31
Responsivity Principle	32
General Responsivity	34
Behavioral Programs	35
Staff and Setting Characteristics	39
Specific Responsivity	40
Gender	41
Depression	47
Self-Esteem	47
History of Sexual Abuse	48
Personality	48
Intelligence	50
CONCLUSIONS	51
CHAPTER 3: THE METHODS	52
INTRODUCTION	52
CONTRIBUTIONS OF THE CURRENT STUDY	52
RESEARCH QUESTIONS	54
TREATMENT PROGRAM	55
Corrective Thinking	55
DATA COLLECTION	57
SAMPLE	58

Talbert House	58
Talbert House for Women	58
Beekman	59
Community Correctional Center	59
Adapt for Women	59
Sample Characteristics	60
Responsivity Assessments (Independent Variables)	65
Demographic Information Form	65
Jesness Personality Inventory	67
Rosenburg's Self-Esteem Scale	68
Culture Fair Intelligence Test	70
Center for Epidemiological Studies Depression (CES-D)	70
Control Variables	71
Level of Service Inventory-Revised	72
How I Think	72
Observer Evaluation Form	73
Participant Evaluation Form	75
Intermediate Objectives	75
Termination Form	75
Long-term Objectives	75
Recidivism	75
DATA ANALYSIS	76
LIMITATIONS OF THE STUDY	80
CHAPTER 4: THE FINDINGS	82
INTRODUCTION	82
UNIVARIATE RESULTS	82
Responsivity Characteristics	82
Control Variables	84
Intermediate Objectives	87
Long-term Objectives	88
MULTIVARIATE RESULTS	88
Intermediate Objectives	88
Long-term Objectives	92
CONCLUSIONS	101
CHAPTER 5: DISCUSSION	102
INTRODUCTION	102
SUMMARY	103
Is gender a responsivity consideration?	104
Do offenders with lower IQ's perform worse in cognitive-behavioral treatment than offenders with higher IQ's?	108

Is a history of sexual abuse related to success in a cognitive-behavioral program?	109
Is depression related to success in a cognitive-behavioral program?	110
Are offenders with low self-esteem more likely to perform worse in cognitive-behavioral treatment?	110
Is personality related to success in cognitive-behavioral treatment?	111
IMPLICATIONS OF THE FINDINGS	114
FUTURE RESEARCH DIRECTIONS	115
CONCLUSIONS	116
REFERENCES	118
APPENDIX A-RESPONSIVITY ASSESSMENTS	126
APPENDIX B-CONTROL ASSESSMENTS	130
APPENDIX C-TERMINATION FORM	135
APPENDIX D-RECIDIVISM FORM	137
APPENDIX E-CORRELATION MATRIX	139
APPENDIX F-GENDER TABLES	141

TABLE OF TABLES

Table 1: Demographic Characteristics of Offenders	61
Table 2: Current Offense Characteristics	63
Table 3: Criminal History Characteristics	64
Table 4: Measurement of Variables	66
Table 5: Summary of Personality Subtypes for the Collapsed Jesness Inventory Types	69
Table 6: Variables Entered into Logistic Regression Equations Predicting Outcome	78
Table 7: Potential Responsivity Characteristics of Offenders	83
Table 8: Control Variables	85
Table 9: Intermediate Outcomes	87
Table 10: Long-term Outcomes	89
Table 11: Logistic Regression Models Predicting Whether the Offender Completed the Program Successfully	91
Table 12: Adjusted Probabilities of the Dependent Variable Occurring for the Significant Predictors from Logistic Regression Predicting Unsuccessful Termination from the Program	93
Table 13: Logistic Regression Models Predicting Whether the Offender was Rearrested	94
Table 14: Adjusted Probabilities of the Dependent Variable Occurring for the Significant Predictors from Logistic Regression Predicting Arrest	97
Table 15: Logistic Regression Models Predicting Whether the Offender was Incarcerated	98
Table 16: Adjusted Probabilities of the Dependent Variable Occurring for the Significant Predictors from Logistic Regression Predicting Incarceration	100
Table 17: Significant Variables	105

CHAPTER 1: STATEMENT OF THE PROBLEM

INTRODUCTION

Corrections in the United States has become big business over the past few decades. The number of offenders under correctional supervision has increased more than 188 percent since 1973 (Clear, 1994). Moreover, it is likely that on most days, more than 1.8 million Americans are behind bars (Bureau of Justice Statistics, 1998). State and Federal prisons are not just increasing in numbers but they also are operating, on average, between 13-27 percent above capacity (Bureau of Justice Statistics, 1998). Women and girls have not been left out of these increases in correctional populations with data indicating that the rate of imprisonment for women increased twice as much as for men in the 1980's (Immarigeon and Chesney-Lind, 1992; Danner, 1998) and continues to increase each year at a greater rate than men (Bureau of Justice Statistics, 1998). Despite these trends, studies indicate that the public tends to support the idea of using the correctional system to rehabilitate offenders (see Cullen, Skovron, Scott, and Burton, 1990; Applegate, Cullen, and Fisher, 1997). Furthermore, there is a vast amount of literature that rehabilitation can work. Given the above information and the fact that most offenders return to the streets, the need to find ways to effectively reduce recidivism through rehabilitation of offenders is apparent.

In the past few decades, it has been demonstrated that rehabilitation programs for offenders can work. Not all programs have been shown to be equally effective, however. One rehabilitation program that has been shown to be effective is cognitive-behavioral treatment. Cognitive-behavioral treatment targets offenders' antisocial attitudes and values and attempts to teach skills such as problem solving. Cognitive-behavioral

programs are becoming a popular treatment modality with many correctional programs offering this type of programming to offenders (Little, 2001). While this type of programming has been found to be effective, its effects on various offender types are not yet known.

In addition to using behavioral techniques such as cognitive-behavioral programming, the literature on correctional rehabilitation has demonstrated that the most successful programs tend to have other features in common as well, and if these features are present, correctional programming has the ability to reduce recidivism rates up to 40 percent (Cullen and Gendreau, 1999). This “theory of effective intervention”¹ puts forth certain principles that have been shown to improve correctional programming (see Gendreau, 1996; Andrews and Bonta, 1999; Andrews, Bonta, and Hoge, 1990). Three of these principles are related to the importance of classifying offenders on certain factors, for the purposes of providing the most effective services. They include the risk, need, and responsivity principles put forth by Don Andrews and his associates (1990). Although there is research indicating that both the risk and need principle are vital to correctional programming, less researched, is the principle of responsivity. One aspect of this principle suggests that certain personal characteristics of offenders may interfere with their ability to be successful in treatment. Thus, in order for correctional treatment programs to be most effective, “the styles and modes of treatment service must be closely matched to the learning style and abilities of the offender” (Kennedy and Serin, 1997, p. 46). While there has been some research in this area and for most part there is recognition that certain personal characteristics of offenders arbitrate the success of

¹ While it has not been called a “theory” in the literature thus far, the author chose to use this terminology to describe this body of literature that puts forth certain principles.

treatment programs, the role of this principle of effective intervention has yet to be sorted out. For example, there is recognition that gender is a responsivity principle, yet what this means in practice is not yet known. Moreover, there has also been some research and theorizing that other factors such as personality, intelligence, and self-esteem, depression, and a history of sexual abuse may also be important responsivity issues. Again, there is little research on the role of these characteristics.

There are several issues that this dissertation will address. The issue of responsivity will be examined and potential personal characteristics that may interfere with treatment will be presented. This chapter will give a brief introduction to the history of rehabilitation and set the context for how it is that these issues became important. Finally, this chapter will briefly discuss the current study.

BACKGROUND OF REHABILITATION

As was stated earlier, the public tends to support the idea of rehabilitation of offenders rather than a “lock ‘me up” strategy of corrections. In fact, rehabilitation has been the guiding philosophy for most of United States history (Cullen and Gilbert, 1982; Rothman, 1978). Only until later in this century did the philosophy of corrections begin to change. There are several reasons that the United States moved away from rehabilitation as the main theory of corrections. The first reason is that the social climate of the 1960’s and 1970’s changed people’s ideas about the role of government. Liberals became disillusioned with the coercive nature of government and conservatives were angry over the “coddling of criminals” (Cullen and Gilbert, 1982). In the midst of these political sentiments, Martinson (1974), in his now famous paper reviewing treatment programs for offenders, concluded that “nothing works.”

Beginning in the late 1970's, researchers such as Palmer (1975) criticized Martinson for summarizing the overall results of the treatment studies and for not recognizing that some treatment programs actually "worked." Reviews of treatment literature that were published in the early 1980's found that rehabilitation of offenders does in fact work, but not all treatment is the same. Finally, in the late 1980's and early 1990's, a new technique called meta-analysis demonstrated that indeed rehabilitation could work "under some conditions with some offenders" (Antonowicz and Ross, 1994).

What developed from these meta-analyses and literature reviews are the Principles of Effective Intervention (see Gendreau, 1996; Andrews and Bonta, 1999; Cullen and Gendreau, 1999). This theory of effective intervention claims that rehabilitation can work and will be most effective if certain conditions are considered. Some of these conditions include; 1) high-risk offenders rather than low-risk offenders will benefit most from high-intensity treatment; 2) interventions must target "criminogenic" needs; 3) staff characteristics must be matched to personal characteristics of offenders; 4) certain personal characteristics of offenders may interfere with their ability to be successful in treatment (responsivity), therefore programs must match services with these characteristics; and 4) programs should include behavioral techniques (Gendreau, 1996). Most of these principles have been well documented with supporting evidence, however the least developed condition, is that of treatment responsivity. There are generally two aspects of the responsivity principle discussed in the literature. The first aspect, general responsivity, suggests that programs based in cognitive-behavioral and/or social learning approaches are the most successful (Andrews, Zinger, Bonta, Bonta, Gendreau, and Cullen, 1990). This is due to the fact that these treatment strategies

utilize such techniques as role-playing, role-modeling, graduated reinforcement, and skill-building techniques, which allow for the individualized learning of offenders. Along that same line is the idea that staff need to be capable of providing these services as well as have other important characteristics that facilitate change (Bonta, 1995). Specific responsivity, the other aspect of the responsivity principle, assumes that certain personal characteristics of offenders may interfere with treatment (see Andrews and Bonta, 1999 for a complete description). For example, there is some evidence that offenders exhibiting high anxiety may not do well in cognitive-behavioral programming (see Ross and Fabiano, 1985). In addition, offenders with lower IQ levels may not have the capacity to understand a cognitive curriculum (Ross and Fabiano, 1985). Finally, evidence exists that personality may be another responsively consideration (Warren, 1983; VanVoorhis, 1994).

Although there is some evidence that personal characteristics of offenders may interfere with treatment such as one's intelligence level (see Ross and Fabiano, 1985) and personality (see Warren, 1983) these precise effects have not been sorted out. Additionally, although many have written about gender and the effects certain programs have on both males and females, this area is not well researched. For example, the feminist literature has purported that men and women are different in that they have different pathways to offending and different needs. However, just how these needs affect offenders' success in programming and how programs should treat men and women differently is still unclear.

FEMALE OFFENDERS

The literature on female offenders claims that women are different and have different needs than male offenders (Belknap, 1996; Chesney-Lind, 1997; Belknap and Holsinger, 1998; Bloom, 1998). These researchers claim that because women have different pathways to offending and therefore different “needs”, their treatment should not only address these differences (see Belknap and Holsinger, 1998) but their treatment should be inherently different than males. Some of the needs that have been identified as especially important for female offenders include history of sexual assault, lack of self-esteem, anxiety, depression, separation from dependent children, and lower economic status. The theory of effective intervention tends to suggest that although men and women may have different needs in general, they have the same “criminogenic” needs (see Simourd and Andrews, 1994; Andrews and Bonta, 1999). That is, according to proponents of the principles of effective interventions, programs need to target the main correlates of crime such as antisocial attitudes and values, if crime is to be reduced for both men and women (Andrews and Bonta, 1999). The proponents of the theory do suggest however, that many of the needs discussed by feminists could be important in terms of making offender’s more responsive to treatment.

In sum, there is some indication that criminogenic needs are similar for males and females however, this area is far from being fully understood. Although the notion of criminogenic needs and the similarities for males and females has not yet been adequately addressed, the “needs” of female offenders that feminist researchers have identified could be important not just for the purposes of appropriate treatment targets, but also as potential responsivity factors. That is, many of the needs of female offenders

identified by feminists, such as depression, sexual abuse, and self-esteem may affect whether women can be successful in offender treatment programs. The proponents of the principles of effective intervention also acknowledge that many of the needs presented by feminists may be important as responsivity characteristics for both men and women. Again, there is little research on the effects of gender and other personal characteristics on success in treatment.

CONCLUSIONS

This chapter briefly discussed the background of rehabilitation and what we know now about correctional rehabilitation. Additionally, it presented an overview of the differences in the literature on female versus male correctional rehabilitation. The literature has consistently shown that rehabilitation will be successful with offenders if treatment programs follow certain programmatic principles. One aspect of this theory that is the least developed is the notion of treatment responsivity. Not only has this issue not been fully developed with males but it has been far less researched with females.

This study addresses several basic research questions; 1) Is gender a responsivity consideration? 2) Are offender characteristics such as IQ, personality, self-esteem, depression, and a history of sexual abuse related to success in cognitive-behavioral treatment?

In order to answer these questions, data was collected on a sample of both males and females. Males were selected from two different treatment programs and the females from two other different treatment programs. All of these programs have recently implemented a cognitive-behavioral treatment program. One principle of the theory of effective intervention is that programs should be behavioral in nature and many offender

treatment programs have begun to utilize this type of approach (see Lester and VanVoorhis, 1997). Also, the general responsiveness principle suggests that treatment should be based in cognitive-behavioral or social learning approaches. Thus, the study is important in that the vague concept of responsiveness will be tested in a treatment modality that is gaining in popularity in corrections today. The sample received various tests in order to determine various responsiveness characteristics at the start of treatment. Success was based on intermediate program objectives and recidivism. The following chapter describes in detail how we got to the point where this study is important and reviews the literature regarding the theory of effective intervention and correctional rehabilitation for female offenders.

CHAPTER 2: LITERATURE REVIEW

INTRODUCTION

The following chapter has a few purposes. First, the history of rehabilitation will be discussed. It will be argued that despite a brief period of time in the recent past, the United States has used the correctional system primarily as a way to reform offenders, not necessarily to punish them. The section on the history of rehabilitation is meant to set the context and explain to the reader how we got to the point where these research questions are important.

After the discussion on the history of rehabilitation, the next section will discuss the theory of effective intervention or the principles of effective intervention that are gaining popularity today. This theory states that if programs practice certain principles they are more likely to be effective at reducing recidivism rates. The principles are based on reviews of treatment literature, meta-analyses, and individual studies that have shown consistent positive effects for each aspect of the theory.

One part of the theory that has been the least researched and developed is the specific responsivity principle. This principle states that personal characteristics of offenders can interfere with their ability to be successful in treatment. The theory then, states that to be effective, programs need to classify offenders on certain personal characteristics and match the treatment accordingly. The main problem with this aspect of the theory is that is not yet known exactly what personal characteristics are most important. We have some indication of what personal characteristics can make a

difference but there is far more information about the importance of these characteristics that is needed.

The final section will discuss potential responsivity characteristics such as gender, IQ, personality, self-esteem, depression and a history of sexual abuse. Many have suggested that gender is an important responsivity characteristic. Women commit far less crimes than men, have different needs than men, have different pathways to offending than men, and have always been treated differently than men in rehabilitation efforts. Moreover, many researchers have proposed that women relate to themselves and their circumstances differently than men. Thus, it is likely that women respond to treatment differently than men. Research however, on this topic is sparse.

HISTORY OF REHABILITATION

The following section will discuss what the rehabilitative ideal is and the origins of it. This will include a history of corrections and the rise of the progressives. This section will also include a discussion of the attack on the rehabilitative ideal and the social context of why it occurred.

The Origins of the Rehabilitative Ideal

As was stated earlier, the notion that we should change offenders has dominated United States corrections. Cullen and Gendreau (1999) state that there were three major reforms in correctional ideology that changed how we think about offenders and ideas about what should be done with them. Thus, while the desire to help the troubled has generally not changed throughout United States history, ideas about how to change them have gone through major reformations (Cullen and Gendreau, 1999). Although most of United States history has been dominated by the idea that we should rehabilitate

offenders, this concept was not introduced until the advent of the first penitentiary. Prior to this first reform, deviants were punished for antisocial behavior through the use of Colonial whipping posts, pillories, and gallows (Cullen and Gilbert, 1982). Although, these techniques were used to scare offenders to change, the goal of rehabilitation did not dominate these times.

The invention of the penitentiary in the early 1800's signifies the first major reform in corrections according to Cullen and Gendreau (1999). The very word "penitentiary" demonstrates the idea that offenders can be changed and not merely punished for antisocial behavior (Cullen and Gilbert, 1982). Two models of the penitentiary were created each with slightly different ideas about why people turn to crime. The Auburn model was different than the Pennsylvania model in that the Auburn penitentiary allowed inmates to congregate together while participating in religious readings and daily labor. The Pennsylvania model was based on the belief that inmates need to be away from the corrupting influences of society and other inmates, therefore the inmates were not allowed to talk to each other. Both penitentiaries, however, were based on the belief that offenders could be reformed and returned to the society as more productive individuals.

The second major reform in correctional ideology according to Cullen and Gendreau (1999) occurred in the latter part of the 1800's when people began to question the effectiveness of the two penitentiary models. The National Congress on Penitentiary and Reformatory Discipline met in Cincinnati in 1870 to discuss the current state of the penitentiary (Cullen and Gendreau, 1999). The committee came to the consensus that the problem with the penitentiary was that inmates had no incentive to change since their

release date was pre-determined prior to serving their sentence. A new plan was developed whereby a system of incentives would guide the penitentiary. The main incentive would be called the indeterminate sentence (Cullen and Gendreau, 1999; Cullen and Gilbert, 1982; Rothman, 1980). Inmates' sentence now would no longer be fixed but would be determined if and when the offender had been reformed. Thus, the "new penology" was established.

At the same time, psychologists and sociologists were examining the causes of human behavior using positivistic techniques. The correctional reformers welcomed these new insights into why people committed crime and the potential ways to change people (Cullen and Gendreau, 1999). Thus, the rehabilitative ideal was established. This rehabilitative ideal was based on the belief that many social and psychological factors contribute to why someone commits criminal acts and that these factors are uniquely combined for each individual offender. Thus, in order to treat these offenders, rehabilitation efforts need to be individualized. In order to individualize this treatment, the state needed to be given discretion and be trusted enough to do what was needed (Rothman, 1980). The first part of the 1900's, then, represents the progressive era in which the concept of individualized treatment dominated correctional ideology. During this time, many changes in the system occurred, as a juvenile justice system was created, probation was expanded to include pre-sentence investigation, and parole boards and parole releases were established. Thus, this second reform combined the study of criminal behavior and criminal justice policies to create the rehabilitative ideal.

The third major reform discussed by Cullen and Gendreau (1999) occurred in 1954, when the American Prison Association changed its name to the American

Correctional Association and prisons were re-labeled correctional institutions. At this time correctional systems introduced more treatment programs in prisons such as vocational training, college education programs, individual and group counseling, and work release programs. Emphasis was placed on community treatment and reintegration in the community and sophisticated classification systems were introduced. While rehabilitation was still the dominant philosophy, the criminal justice system was getting more sophisticated and new types of treatment programs were introduced.

For the most part, rehabilitation has dominated correctional ideology. While this concept did not really change, ideas about how to effectively rehabilitate offenders did. Rehabilitation was not only based on the belief that offenders could be changed, but also that the state could be trusted to carry rehabilitation efforts out in good faith. Both of these beliefs began to be questioned in the 1970's and for a few decades rehabilitation took a back seat to other correctional ideologies.

Decline of Rehabilitation

The attack on rehabilitation began in the early 1970's, with both conservatives and liberals criticizing the state for their "rehabilitative" efforts. While the criticisms of both parties contributed to the destruction of the rehabilitative ideal, they were based on opposite viewpoints.

The conservatives viewed the indeterminate sentences and individualized treatment as signs of a "permissive society" which "coddles law-breakers" (Cullen and Gilbert, 1982, pgs. 94-96). Conservatives blamed leniency in sentencing and the release of dangerous offenders for diminishing the costs of crime and reducing the deterrent value of punishments. Conservatives called for longer, determinate sentences, and "get

tough” policies in the belief that more certain and severe punishments would restore the social order.

Liberals on the other hand, viewed the failures of indeterminate sentences as stemming from unjust practices by the judiciary and corrections personnel. They argued that the broad discretionary powers given to judges and corrections personnel were being used to perpetuate racism and inequality rather than to encourage reform. They claimed that poor whites and non-whites were being given longer sentences and denied release in the name of rehabilitation. Further, they argued that “linking liberty to cure corrupts the very process of reform,” and undermines the rehabilitative goals of the Progressive’s design for individualized treatment (Cullen and Gilbert, 1982, p. 116). Finally, they asserted that long open-ended prison sentences were creating unnecessary burdens on offenders by keeping them in suspense about their release date and by hindering plans for reintegration. The liberals’ solution was a “justice model” whereby discretion would be minimized through the legislative establishment of determinate sentences designed to fit the offense assuring all offenders of equal treatment.

Robert Martinson, author of “What Works? Questions and Answers About Prison Reform” (1974) is credited for the dismantling of rehabilitation. His article about the failures of institutional and community-based treatment programs appeared to solidify the dissatisfaction with the criminal justice system felt by both liberals and conservatives. But the strong negative reactions to rehabilitation and the Progressives’ design for individualized treatment were more likely a reflection of the times. The 1960’s were filled with tumultuous experiences that caused everyone to question government practices. During this time, the civil rights and women’s liberation movements were at

the forefront, protests were being staged against Vietnam, and Watergate was exposed (Cullen and Gilbert, 1982). For conservatives, these events led to fears of a disintegrating social order; for liberals these events led to a strong mistrust in government. The Attica riots sealed the belief that the criminal justice system was in dire need of reform, resulting in the “get tough” policies that are still major features of our criminal justice system.

Reaffirming Rehabilitation

In 1974, Martinson published his infamous paper titled, “What Works? Questions and Answers About Prison Reform.” In it, he reviewed 231 studies that evaluated treatment programs for offenders. The studies were included in the review if they had a treatment and a comparison group and were published between 1945-1967. In this pessimistic paper about the prospects of rehabilitating adult and juvenile offenders, Martinson concluded that, “With few and isolated exceptions, the rehabilitative efforts that have been reported so far have had no appreciable effect on recidivism (Martinson, 1974, p.25). This sentence became what was to be a classic phrase in the history of rehabilitation, “Nothing Works.”

Although Martinson later wrote that he was mistaken and rehabilitation can work, as was stated earlier, the social context was ripe for anti-rehabilitation themes (Cullen and Gilbert, 1982). Cullen and Gendreau (1989) claim that Martinson was not the first researcher to claim that treatment does not work and that many people since Martinson have taken the position that rehabilitation does not work. Moreover, there were studies indicating that rehabilitation did work. However, the social context allowed for this one idea to take hold, “Nothing Works.”

Andrews and Bonta (1999) call Martinson's work, a part of the knowledge destruction that was occurring in the field of rehabilitation during the 1970's. That is, studies against rehabilitation were accepted without questions, while studies that were supportive of treatment were often criticized. Palmer (1975) criticized Martinson claiming that he did not report the findings correctly in that some programs were in fact, effective. Although many argued that Martinson was wrong and that rehabilitation can work, it wasn't until the meta-analyses, a statistical technique used to more accurately reflect findings from a body of literature, were published, that the idea that rehabilitation can work really began to take hold again.

Meta-Analyses

Meta-analysis is a sophisticated statistical technique that allows a body of research to be summarized, while at the same time taking into consideration methodological quality and other differences in study design. Until this technique was developed, most researchers who wanted to summarize the research conducted a narrative review or the ballot box method (Cullen and Gendreau, 1999). In the narrative review, a person reads all the literature and explains the findings across all the reviewed studies. In the ballot box method, the author counts the number of studies that reduced recidivism and how many didn't reduce recidivism (Cullen and Gendreau, 1999). Unfortunately, with both of these techniques, all studies tend to be given equal weight in the review despite the quality of the studies and how the authors measured the variables of interest. This was one criticism of the Martinson study and many researchers sought to better answer the question of, does rehabilitation work (Palmer, 1975; Cullen and Gendreau, 1999).

The meta-analysis allows for a more complete picture of a large body of studies. Evaluation studies tend to be vastly different in that the programs of interest occur in different settings, have treatment modalities, and all differ in quality of treatment. Moreover, the studies involve different levels of methodological controls, follow up periods, samples, and measurement of variables. The meta-analysis attempts to control for these differences and creates an “effect size” for each study. The final product of the analysis is an average effect size for all the studies. A large body of research then, can be summarized in a statistical way that allows for an accurate synthesis of the research. This technique helped change views on correctional rehabilitation by demonstrating consistent evidence that rehabilitation can work (Palmer, 1996).

Much of the earlier meta-analyses involved studies of institutional and community based treatment for juvenile offenders (see Garrett, 1985; Whitehead and Lab, 1989; Lipsey, 1990). Recently, more meta-analyses have surfaced that have been based on programs for adult offenders. The findings of both of these bodies of research are reviewed below due to the fact that they demonstrate the same general findings.

In 1985, Garrett published her meta-analysis of residential treatment programs for delinquents. These included both institutional and community residential settings. In her study, she analyzed 111 studies for differences in psychological and institutional adjustment, academic performance, and recidivism. She found that across all of the studies and all of the outcome measures, the treatment group performed better than the control group. The most effective treatment approaches were found to be cognitive-behavioral, life skills, and family therapy.

Lipsey (1990) conducted a meta-analysis that included about 400 published and unpublished studies of treatment programs for juveniles. The programs occurred in both institutional and non-institutional settings and the studies had to be experimental in nature to be included in the study. Not only did Lipsey find that treatment was more effective than the controls, he found that type of treatment was the most important variable. He concluded that multi-modal and behavioral approaches such as cognitive-behavioral programs had the most impact while deterrence/shock approaches actually made the treatment groups worse than the control groups.

Another meta-analysis was conducted by Whitehead and Lab in 1989. They analyzed 50 studies of juvenile offender programs. Although they found that 24-32 percent of the studies were found to have some effect at reducing recidivism, they concluded that the results, “provide little encouragement for advocates of correctional intervention” (Whitehead and Lab, 1989, p. 285). While this study is not usually cited by those who claim that rehabilitation does work, it is necessary to note that they do in fact find that some programs for offenders can be effective at reducing recidivism.

Davidson and his colleagues conducted a meta-analysis in 1984 using 90 studies of evaluations of juvenile offender programs. They too, found that the treatment groups outperformed the control groups. Moreover, like others, they also found that behavioral interventions were most often associated with positive outcomes.

Another meta-analysis was conducted by Izzo and Ross (1990) in which the authors analyzed 46 studies of programs for juvenile delinquents. To be included in this study, the individual studies needed to involve an experimental or quasi-experimental design, measure changes in recidivism, and be published in a referred journal between

1970 and 1985. Studies were characterized on the basis of whether or not they were theoretically based and on their specific treatment type (e.g. social learning, behavioral modification). The authors found that programs that were based on theory were five times more effective than programs with no apparent theoretical basis. Additionally, those programs that occurred in the community were more effective. Finally, those programs that included a cognitive component (i.e. programs which included problem solving, interpersonal skills training, role-playing, or modeling) were more effective than programs that did not.

In 1990, Andrews and his colleagues published a meta-analysis. In it, they used two samples of studies. One of these samples came from 45 of the 50 studies utilized in the meta-analysis conducted by Whitehead and Lab (1989) and in the other sample, used 35 additional studies, which included adult offenders. These researchers found that those programs that used “appropriate correctional service” were the most effective at reducing recidivism. Appropriate was defined as being based in theory and using behavioral strategies. Criminal sanctions without treatment were the least effective at reducing recidivism.

Finally, in a meta-analysis conducted on studies of female offender programs, Dowden and Andrews (1999a) found that “appropriate service” is most effective. The authors defined appropriate services as those programs that incorporated the risk, need, and responsivity principle. The responsivity principle was met if the program was behavioral in nature and include techniques such as role playing and reinforcement for pro-social behavior. They found that these programs produced to largest effect sizes.

Overall, these meta-analysis provided systematic proof that rehabilitation can be effective with offenders. On average, the best treatments tend to reduce recidivism rates by 30 percent (Lipsey, 1990). It is clear however, that some treatments work better than others. In addition to reviews of treatment literature, meta-analyses have shown that rehabilitation can work. Although the meta-analyses have been able to summarize the vast amount of correctional treatment literature and provide evidence that treatment works, some argue that these meta-analyses should only be seen as a guide to effective programming. Thus, according to some, meta-analysis should not be seen, “as an end unto itself” (Gaes, Flanagan, Motiuk, and Stewart, 1998). Gaes et al.(1998) claim that to improve correctional programming, more individual outcome studies need to be conducted. VanVoorhis (1987) has warned that the treatment literature has made some costly omissions from their program evaluations. Thus, if more outcome studies are to be conducted, one should be aware of the problems associated with treatment programs and program evaluations. One of these omissions she discusses has to do with classification for the purposes of treatment. Programs cannot treat all offenders the same and must classify offenders on relevant characteristics. These include risk level, personality characteristics, and other responsivity factors. If a program does not classify offenders and match offenders to appropriate treatment, program evaluations will mask the treatment effect. Programs, then will look like they didn’t work when in fact they worked for some offenders and not for others. Furthermore, programs that do not classify offenders may inevitably end up assigning offenders to harmful interventions. That is, they may end up making the offender worse. According to VanVoorhis (1987) then,

program evaluations and treatment programs have neglected to measure classification, thereby masking the treatment effect, making programs appear to have failed.

Reviews of the treatment literature combined with meta-analyses have demonstrated that when one looks carefully at this research, rehabilitation can work (see Gendreau and Ross, 1987; Andrews, Zinger, Bonta, Gendreau, and Cullen, 1990; Izzo and Ross, 1990; Lipsey, 1990; Garrett, 1985; Palmer, 1992). The question in corrections now is no longer can we rehabilitate offenders but under what conditions we can expect to reduce recidivism (Antonowicz and Ross, 1994). This growing body of evidence suggests that “some rehabilitation programs are successful with some offenders in some setting when applied by some staff (Antonowicz and Ross, 1994, p. 97). There are a number of reasons that treatment programs have been deemed unsuccessful. For example, the program 1) targeted the wrong individuals, 2) only worked with some offenders (failures cancel out successes), 3) did not target criminogenic needs, 4) was not based on a theoretical model, or 5) did not actually deliver the treatment (VanVoorhis, Cullen, and Applegate, 1995; VanVoorhis, 1987). If, however, programs classify offenders in order to effectively treat them as well as implement a theoretical program, treatment for offenders can work. These reviews of the treatment literature and meta-analyses have led to the principles of effective intervention. This “theory” puts forth certain principles that if followed, will lead to treatment programs that reduce recidivism.

THEORY OF EFFECTIVE CORRECTIONAL INTERVENTION

Gendreau (1996) provides a comprehensive list of the “principles of effective intervention,” however many other researchers agree that these are factors that all programs need to consider (Andrews and Bonta, 1999; Palmer, 1992; VanVoorhis, 1997).

Some of these principles state that treatment should be based in behavioral strategies, be located in the offenders' natural environment, be multi-modal, be intensive enough to be effective, encompass rewards for pro-social behavior, target high-risk and high-criminogenic need individuals, and be matched with the learning styles and abilities of the offender. The last three principles mentioned above are especially important for the purposes of this study. First, the risk, need, and responsivity principles provide guidance on how programs should classify offenders in order to provide the most efficient treatment. Secondly, these principles have clear implications for treatment. Finally, these principles, responsivity in particular, are the least developed part of the theory of effective intervention especially with regard to female offenders.

Risk Principle

The first of these important principles of effective intervention is the risk principle. The risk principle is related to two notions in corrections. The first one is the idea that criminal behavior can be predicted (Andrews and Bonta, 1999; Bonta, 1996; Jones, 1996). The second notion is more important for the purposes of this study and refers to the idea that the risk level of the offender is related to success in correctional programs (Andrews and Bonta, 1999). Thus, not only has it been demonstrated that it is important to separate high-risk offenders from low-risk offenders for security and maintenance reasons but it is also important for treatment considerations.

Due to research involving numerous longitudinal studies and meta-analyses of risk factors as well as evaluation studies of risk assessment instruments, it has been well documented that we can predict criminal behavior through actuarial risk assessment instruments (Bonta, 1996; Jones, 1996). These risk assessment instruments have

developed over time from a basic list of static risk factors to the inclusion of both static and dynamic risk/need factors. Because of the numerous studies on risk factors for delinquency and crime, a list of empirically validated risk factors has been developed. These risk factors include anti-social attitudes, anti-social associates, a history of anti-social behavior, weak problem-solving skills, a family life characterized by low levels of affection and parental control, and difficulties in school/work (Andrews and Bonta, 1999). Several risk/need assessment instruments such as the Level of Service Inventory and the Hare Psychopathy Checklist have provided much evidence that actuarial risk assessment instruments can be extremely effective in predicting criminal behavior (Bonta, 1996; Jones, 1996).

The other important factor with regard to risk assessment is the increasing amount of evidence that intensive treatment is more effective with higher risk offenders (Andrews and Bonta, 1999; Andrews, Bonta, and Hoge, 1990; Andrews et al., 1990). Interestingly, when intensive treatment is matched to offenders who are lower risk, recidivism rates tend to be made worse. Andrews and his colleagues (1990) provide examples of several studies that examined recidivism rates for both high and low-risk offenders. In each of the studies, the recidivism rate of high-risk offenders was only reduced through intensive treatment services. Conversely, when intensive services were applied to low-risk offenders, there was either little effect on recidivism or a negative effect (Andrews, Bonta, and Hoge, 1990). Research demonstrates that high-risk offenders tend to be more successful in treatment programs than low-risk offenders (VanVoorhis, 1997; Andrews and Bonta, 1994). Both meta-analyses and individual

evaluation studies have found that risk level is related to successful outcomes in treatment programs.

Need Principle

Another important principle of effective classification for the purposes of rehabilitation is the need principle. There are two different aspects of the need principle that has clear implications for the treatment of offenders. The first one refers to the difference between offender's general needs and criminogenic needs. Offenders often "need" a variety of services such as education, job training, help in financing, and therapy for past traumas. To be effective, according to the proponents of the theory, however, programs primarily need to target those factors that are most related to criminal behavior (Andrews and Bonta, 1999). These criminogenic needs then, are not only risk factors but they should also form the intermediate goals of correctional rehabilitation programs. So while offenders have a variety of needs, they are not always related to criminal behavior. This principle states that to be effective, programs need to target those factors most strongly related to future criminal behavior; only then will recidivism rates be reduced. The strongest criminogenic needs according to numerous studies include anti-social attitudes, anti-social associates, and skill-deficiencies such as impulsivity and poor problem-solving skills (Andrews and Bonta, 1999; VanVoorhis, 1997).

The other aspect of the need principle refers to the idea that criminogenic needs are a subset of risk factors that are dynamic in nature. That is, if targeted they can change. Criminogenic need factors then do not include such static risk factors such as age, race, and gender, but instead are those risk factors that can be changed such as

antisocial peers associations, anti-social attitudes, and personality characteristics such as low self-control (Andrews and Bonta, 1999; Palmer, 1992; VanVoorhis, 1997).

According to the need principle, in order to be effective, programs must target criminogenic needs. Only by targeting those needs that are actually related to criminal behavior and are dynamic, can offenders begin to change their criminal behavior.

Moreover, when these programs do target these criminogenic needs and the program reduces recidivism, there is then more support for the relationship between the targeted factors and crime. This leads to a greater understanding of criminal behavior.

It has been suggested that while males and females may have different needs in general, they tend to have the same criminogenic needs (Andrews and Bonta, 1994; Simourd and Andrews, 1994). In a meta-analysis of female and male delinquency studies, Simourd and Andrews (1994) found that the strongest predictors of delinquency were the same for both males and females. They included anti-social attitudes and values, anti-social associates, and temperament/misconduct problems. On the other hand, Hubbard and Pratt (2002) found that school relationships and prior physical and sexual abuse were also strong predictors of delinquency among girls. While this issue has not been fully addressed there is evidence that antisocial attitudes and values are among the most important risk/need factors for both males and females, thus using a treatment modality such as cognitive-behavioral treatment should reduce criminal behavior in both males and females.

Responsivity Principle

The third principle of effective classification is known as the responsivity principle. The main underlying notion of responsivity is that not all offenders are alike.

While offenders are similar with regards to the factors that make them more likely to commit crime (risk factors), offenders differ on various other personal characteristics. Thus, treatment should consider these differences regardless of whether or not they are risk factors. There are two types of responsivity according to Andrews and his colleagues (1990), general and specific. Other researchers have discussed responsivity in terms of external versus internal characteristics (Kennedy and Serin, 1997; Kennedy, 1999; 2000). General responsivity or external factors refers to the idea that treatment programs will be most successful if they utilize behavioral techniques such as role-playing, role-modeling, problem-solving, and graduated reinforcement techniques (Andrews, Bonta, and Hoge, 1990). Examples of treatment programs that utilize these techniques are based in cognitive-behavioral theory and/or social learning theory. Meta-analysis and reviews of the treatment literature have found these treatment strategies in particular to be the most effective (Izzo and Ross, 1990; Andrews et al., 1990; Antonowicz and Ross, 1994).

Another aspect with respect to general responsivity is the idea that staff and setting are also important in treatment success. Many researchers have suggested that certain staff perform better at the techniques described above than others. Bonta (1995) claims that “for example, a socially skilled, empathic and highly verbal staff member may be more likely to actively engage offenders to deal with their problems (p. 34).” Thus therapists may need to be matched to various offender styles and treatment. Moreover, researchers agree that those treatments performed in the community will be more successful (Kennedy, 1999; 2000).

The other issue in the responsivity principle refers to specific offender characteristics and are referred to as internal characteristics. Offenders have different learning styles, different levels of cognitive maturity, different intelligence levels, different levels of anxiety, and some may have attention deficit disorder (VanVoorhis, 1997). All of these factors may affect the offenders' likelihood of succeeding in a particular program (Warren, 1983; VanVoorhis, 1997). It is not only important to match treatment to these personal characteristics but some treatment may have the potential to make some offenders "worse" (VanVoorhis, 1997). Moreover, another implication for the failure to classify offenders on important personal characteristics and match treatment accordingly is that evaluation studies may conclude that many treatment programs have failed to reduce recidivism when in reality they worked for certain offender types and not for others (VanVoorhis, 1997). Thus, the evaluation will end up "masking" the treatment effects (VanVoorhis, 1997). Responsivity then, is an important notion for programs and program evaluators to consider if maximum effectiveness is to be achieved.

General Responsivity

Although this is a relatively new term, the notion that behavioral programs tend to meet the needs of a variety of offender types is not new. According to the general responsivity principle, programs should include techniques that tend to reach a wide range of offenders to change behaviors. Thus programs should include modeling, role-playing, skill-building, rehearsal and practice, and reinforcement for their pro-social behaviors. These behavioral techniques allow for programs to be matched to various offender types allowing for the likelihood of success to be increased. The general

responsivity principle also suggests that staff need to be capable of providing these services in a setting most conducive to change (e.g. community versus institution).

Behavioral Programs

The reviews of the treatment literature and the meta-analyses that have been conducted consistently demonstrate that those programs that are behavioral in nature have better effects on recidivism. As will be discussed later, one reason for this is that behavioral programs fall into the category of general responsivity. Due to the fact that they use a variety of techniques, they can be applied to a wide range of offenders thus meeting the responsivity (matching) principle. Cognitive-behavioral treatment is a behavioral technique that is currently gaining attention in corrections.

Behavior therapy is based on the notion that environment affects learning and behavior. The principles of operant and classical conditioning are basic to behavioral therapy. The Behaviorist assumes that offenders have learned antisocial behaviors by watching others and/or by being rewarded for the behaviors in the past. As a result, these offenders continue to exhibit antisocial attitudes and continue to commit antisocial behaviors. Behavioral therapy for offenders then, involves behavioral rehearsal, modeling, and token economies (Corey, 1996; Sweet and Loizeaux, 1991).

Cognitive therapy on the other hand assumes that faulty thinking leads to problematic behavior (see Fabiano, Porporino, and Robinson, 1991, pp. 102). Evidence has been found suggesting that offenders often are impulsive and lack self-control (Fabiano et al., 1991; Gottfredson and Hirschi, 1990; Grasmick, Tittle, Bursik, and Arneklev, 1993). Additionally, offenders tend to be concrete rather than abstract thinkers (Kohlberg, 1976) and often fail to consider the consequences of their actions (Fabiano et

al., 1991). Due to the fact that they also lack interpersonal problem solving skills, offenders often utilize thinking errors (see Yochelson and Samenow, 1976, 1977; Fabiano et al., 1991; Corey, 1996). Cognitive therapies in general focus on changing the thought patterns that produce certain behaviors; not by changing the behavior directly (Corey, 1991). The therapy involves tactics such as thought rehearsal and correction “of distorted views or processes” (Sweet and Loizeaux, 1991, p. 161).

Many cognitive and behavioral researchers have acknowledged the link between thinking and behavior. Many behaviorists have acknowledged that thinking does play a direct part in antisocial behavior (see Bandura, 1969; Meichenbaum, 1977). In turn, many cognitive theorists have also begun to recognize the role that modeling and rewarding has on the production and sustainability of behaviors (see Ellis, 1984; Beck, 1976). Cognitive-behavioral therapy then, includes both a focus on changing the content of offenders’ thinking as well as how they think. Moreover, the therapy involves skill-building techniques such as self-talk and relapse prevention plans by utilizing role-playing, rehearsal, and rewards and punishers. This type of treatment has recently found its way into correctional treatment programs and is gaining in popularity.

According to Lester and VanVoorhis (1997), there are four reasons why cognitive behavioral programs are getting the attention of correctional agencies. First, as was stated earlier, cognitive programs target observable characteristics (thinking and behavior). Second, cognitive-behavioral programming can be conducted by correctional staff, unlike traditional counseling, such as psychotherapy, that needs to be done with a clinical psychologist. Third, cognitive programming targets behaviors that tend to

characterize offenders and can be easily seen by correctional personnel. Finally, cognitive behavioral programs have been found to work at reducing recidivism.

For correctional staff, treating observable offender characteristics such as an offenders' thinking and behavior is easier to do than targeting fears, past traumas, and unconscious motivations that have been targeted with other forms of correctional treatment. Cognitive therapy then, targets characteristics that are present in the individual at the time of treatment and can be seen. Thus, cognitive behavioral strategies are easier to use than other treatment methods. Second, this type of programming is less costly than other programming because virtually anyone can be trained in these techniques. "It is clear that Cognitive programs can be conducted by well-trained and well-supervised staff"(Ross, Fabiano, and Ewles, 1988).

The third reason that Lester and VanVoorhis (1997) claim that cognitive programming is receiving support in the area of offender rehabilitation is the program targets "thinking and behaviors." The idea that offenders "think differently" is implicit in many theories of criminality, and anti-social attitudes and values are among the most validated correlate of criminal behavior for both males and females (Andrews and Bonta, 1999). From the very earliest studies of risk factors, Glueck and Glueck (1950) claimed that offenders differed from non-offenders in their temperament or level of impulsivity. These authors also claimed that offenders differed from non-offenders in their ability to problem solve. In addition, many well-validated theories maintain that anti-social attitudes and values are the cornerstone of the development of anti-social behavior. For example, social learning theory, which has been found to explain criminal behavior especially in juveniles, claims that people learn to commit crime through modeling and

being reinforced for anti-social attitudes from anti-social friends (Akers, 1994). Finally self-control theory, which has also been found to be predictive of criminal behavior, suggests that offenders differ from non-offenders in their ability to exhibit self control; that offenders tend to be more impulsive than non-offenders (Gottfredson and Hirschi, 1990).

Cognitive theory suggests that offenders tend to display limited problem solving skills (Ross and Fabiano, 1985), have antisocial values and attitudes (Jennings, Kilkenny, and Kohlberg, 1983), and are known to display thinking errors (Yochelson and Samenow, 1976). Cognitive behavioral strategies, then, teach offenders how to develop self control, manage their anger more appropriately, develop empathy through role playing, improve problem solving abilities, and develop their level of moral reasoning (Hollin, 1990). If treatment programs can change these cognitive characteristics of offenders, it follows that recidivism rates should be reduced.

In the correctional rehabilitation literature, both individual outcome studies and the numerous meta-analyses have demonstrated that cognitive-behavioral strategies are among the most effective treatment approaches for offenders. One of the most researched cognitive-behavioral programs for offenders is the Reasoning and Rehabilitation program (Ross, Fabiano, and Ewles, 1988; Robinson, Grossman, and Porporino, 1991; Robinson, 1995). These studies have all shown consistent effects of this cognitive-behavioral program over control groups. Another cognitive-treatment program that has been shown to be effective is Moral Reconciliation Therapy (MRT) (Little, 2000). Moreover, the meta-analyses have also consistently shown cognitive-behavioral programs to be effective at reducing offender recidivism (Andrews, Zinger, Hoge, Bonta,

Gendreau, and Cullen, 1990; Antonowicz and Ross, 1994; Garrett, 1985; Izzo and Ross, 1990; and Lipsey, 1990).

Staff and Setting Characteristics

Research has demonstrated that staff characteristics are also important in making someone “treatable” (Kennedy and Serin, 1997, Kennedy, 2000, Bonta, 1995). In a study of probation officers, Andrews and Kiessling (1980) found that those officers that were rated by offenders as high on interpersonal sensitivity and were warm and flexible received the most favorable ratings from offenders and more importantly, those offenders served by them had the lowest recidivism rates. In another study, Gillis, Getkate, Robinson, and Porporino (1995) found that correctional work supervisors who provided enthusiasm and positive reinforcement for pro-social behavior had offenders on their caseload that had positive work attitudes and greater work motivation. Finally, researchers have suggested that “setting characteristics” also are important. Programs should be performed in the least restrictive environment with those occurring in the community being most successful (Kennedy, 1999; 2000).

General responsivity or external considerations dictates that programs be behavioral in nature so that the greatest number of offenders can be reached. These techniques have been found to be effective. Moreover, there is some evidence that staff need to be matched to these services based on their personal characteristics. Finally, setting characteristics are also important considerations. Researchers have also suggested that the type of treatment and staff characteristics should be matched to the individual offender in order to achieve maximum success. It is important that interventions do not make offenders “worse.” While there is research indicating support for the external or

general responsivity principle, there is still more that needs to be done regarding the importance of various offender characteristics on success in treatment.

Specific Responsivity

The notion of specific responsivity refers to the idea that individual personal characteristics may make offenders more or less responsive to treatment (Andrews, Bonta, and Hoge, 1990). Although not a new idea, the labeling of the practice of matching treatment to personal characteristics (responsivity) is relatively new. As early as the 1950's Freud warned that psychotherapists should be aware that their highly verbal style of therapy was inappropriate for certain offender types such as those with poor verbal abilities (Freud, 1953). Recently, there has been some research indicating that personal characteristics such as intelligence and personality may mediate the effects of treatment. However, despite one study, which found that IQ may affect success in cognitive-behavioral treatment (Ross and Fabiano, 1985), few studies have addressed the issue of responsivity with regards to cognitive-behavioral treatment (VanVoorhis, 1997).

The assumption behind the specific responsivity principle is the idea that not all offenders are alike. Not unlike the general population, people have various characteristics that may affect a person's ability to succeed in treatment. For example, cognitive-behavioral treatment is generally performed in a group setting and targets offenders' attitudes and values. Certain personal characteristics can affect whether an individual understands the treatment, can focus in treatment, and/or has the capacity for change. Several potential responsivity characteristics include gender, depression, self-esteem, history of sexual abuse, intelligence, and personality.

Gender

While there is some indication that the most important criminogenic needs such as antisocial attitudes and peers are important for both males and females, there is debate about the importance of other “needs” of women. Feminists argue that programs need to consider the complex nature of female offending when designing treatment programs for women. They claim that they have different needs than men and these needs should be addressed in their treatment. This has led to a call by feminists for “gender specific programming.” Gender specific programming refers to treatment that considers all the needs of women and addresses them in safe environments that empower women to change.

Feminists claim that women commit different crimes than men, have different pathways to offending, and have always been treated by the system in sexist ways. Moreover, the fact that they have different needs, means treatment programs should be altogether different than males. Finally, women relate differently to the world than men and thus programming should take this into account. While the proponents of the theory of effective intervention claim that the criminogenic needs are the same in men and women, how programs should respond differently to men and women is still being discussed.

Commit Different Crimes. Although women and girls’ rates of crime have been increasing in the last few decades according to official statistics, data indicate that females commit crime at far less rates than their counterparts (Belknap, 1996; Belknap, Holsinger, and Dunn, 1997). Moreover, without looking carefully at the types of crimes that have been increasing, it is difficult to get an accurate picture of the situation.

Furthermore, when one looks closer at the rates of female crime, female delinquency rates have not changed as dramatically as has been suggested.

In a review of FBI statistics and data from the National Crime Victimization Survey, Steffensmeier and Allan (1998) found that there are both differences and similarities in male and female offending. First, females still commit crimes at far less rates than males. The authors note that female arrests, for most categories of offenses, are 15 percent or less of the total arrests. This percentage is largest for prostitution and minor property crimes and smallest for more serious crimes (Steffensmeier and Allan, 1998). The total female percentage of arrests for all crimes however, has increased in the last few decades, from 11 percent in 1960 to 19 percent in 1995. This increase according to Steffensmeier and Allan (1998) is related to the sharp increase in the numbers of women arrested for minor property crimes. Steffensmeier and Allan (1998) point to increased economic hardship for women, increased opportunities for female crime, and an increase in drug dependency in women. Other scholars have pointed to the war on crime and drugs in this country over the past few decades, which has led to an increase in the number of drug dependent women in prison (Bush-Baskette, 1996). Still other scholars have explained this increase in female crime to economic recessions and the increases in new facilities being built for women (Chesney-Lind, 1990).

Official statistics indicate that crime rates for females are increasing dramatically and self-report studies indicate that girls engage in similar amounts of delinquency than boys. Many have argued that on the surface, it appears as if delinquency rates are similar however, a closer examination reveals that there are major differences. First, longitudinal research has revealed that boys engage in delinquency more frequently than girls, engage

in more serious delinquency than girls, and have longer “careers” than females (Sheldon and Chesney-Lind, 1993). Second, although rates of less serious crime have been increasing for females, the rates of more serious crimes have stayed the same and in some cases have decreased (Chesney-Lind and Brown, 1998; Steffensmeier and Allan, 1998). For example, the female share of arrests for murder went from 17 percent in 1960 to 9 percent in 1995 (Steffensmeier and Allan, 1998). Although data indicate that female crime has been increasing, the female share of the total arrests is less than 20 percent (Steffensmeier and Allan, 1998). Further, a close examination of the arrest types reveal that females rate of increase in crime over the past few decades is due to an increase in minor crimes rather than serious crimes. Thus, many argue that males and females are different in that they commit far less crime than males and are involved in far less serious crimes than males. These differences according to some, indicate that there are different reasons that males and females commit crime.

Sexist Treatment. Not only are there differences in rates of crime for males and females but women and girls have always been treated differently by the correctional system. Many have argued that women have historically been treated much harsher in prison than their male counterparts (Feinman, 1986; Freedman, 1974; Fox, 1984). Moreover, the unique needs of women have not been addressed by correctional agencies (Dobash, Dobash, and Gutteridge, 1986; Wooldredge and Masters, 1993; Morash et al., 1994; Belknap, Holsinger, and Dunn, 1997). Furthermore, there has always been a lack of programming for women in prisons and what programming did exist has been sexist and has failed to provide financial security (Feinman, 1986; Morash et al., 1994; Fox, 1984).

Females have always been treated harsher for less serious offenses than males (Fox, 1984). Historically, these less serious offenses such as adultery, prostitution, and gossiping were a violation of the “female moral code” (Fox, 1984). Females were held to higher moral standards than men and women who did not remain in the proper sex role and were punished because they were considered a threat to the social order. This cult of true womanhood allowed women to be punished for far less serious offenses than men. Thus, an offense such as adultery would land a woman in a reformatory where she would learn to be a proper woman and uphold ladylike virtues.

These reformatories came after female reformers championed the cause of separate facilities for women. Prior to these reformatories, women sentenced to corrections were housed in male facilities, usually in a separate wing (Dobash, Dobash, and Gutteridge, 1986). While in these male facilities, women were kept in deplorable and unsanitary conditions (Feinman, 1986). Both male inmates and male guards had contact with female inmates and rape and pregnancy became commonplace (Feinman, 1986). The reformers blamed female criminality on men and their influences and argued that women needed separate institutions staffed by female guards who could be role models and show women how to be good wives and mothers. Thus reformatories were established that resembled home-like environments where women could be re-socialized.

In these reformatories, women were taught such skills as sewing, cooking, waitressing, homemaking, and typing (Feinman, 1986). Ideas about women’s roles and proper job skills are still with us today. The skills taught in these reformatories are similar to the skills taught in prisons and correctional agencies today. Unfortunately, these skills are not profitable enough for women to actually be successful in society.

These stereotypical female jobs helped to keep women dependent (Morash, Haarr, and Rucker, 1994). So, while the men in these correctional facilities historically and today receive higher education, construction skills, and business skills, many times women are still taught skills that are sexist and will not earn women enough money to stay out of trouble in the future.

Different Pathways to Offending. The literature on female offenders also discusses the differences in male and female pathways to offending. Feminists claim that unlike boys, girls are often led to crime through the escape of sexual assault at home. Many girls enter the system through status offenses such as runaway and/or truancy. Once in the system, they find it hard to get out (Belknap, 1996; Chesney-Lind, 1997). Moreover, many tend to use drugs to self-medicate and enter relationships where the cycle of victimization occurs again.

Different Needs. It is argued that men and women have vastly different needs. Feminists argue that these distinct needs such as self-esteem, history of sexual assault, economic deprivation, and dependent children need to be addressed in correctional programming. Thus, another problem in female corrections historically and today according to feminists, is that the unique needs of females continue to go un-addressed. Many women in the correctional system have been sexually and physically abused and many are pregnant and/or have dependent children. This makes women more susceptible to separation anxiety and thus more difficult to deal with. Many women thus, have emotional and drug-related problems (Morash et al., 1994). According to many scholars, these needs should be addressed in correctional programming.

Advocates of the theory of effective intervention claim that although women and men have different needs in general they have the same criminogenic needs (See Simourd and Andrews, 1994). That is, the factors that should be targeted in treatment such as anti-social attitudes, anti-social peers, and family life are the same for both males and females. This is due to the idea that these factors are the strongest risk factors for both males and females. While there is still more research that needs to be done with regards to criminogenic needs and female offenders, there has been little research with regards to responsivity and females. Perhaps the needs identified by the feminists as being especially important for women such as self-esteem, depression, and sexual assault are important responsivity considerations. There is some research indicating that women with dependent children suffer from separation anxiety and become depressed while under correctional supervision. This inevitably interferes with treatment success.

So while the advocates of the theory of correctional intervention claim that the theory fits with all correctional treatment programs, many feminists think it falls short of explaining the complex nature of female offending (Bloom, 1998). According to feminist researchers, without addressing issues of patriarchy and inequality, general theories of correctional intervention will not provide guidance on correctional programs for women (Bloom, 1998). These gender specific programming advocates believe women are different from men and thus need different programming than their male counterparts.

Women Relate to the World Differently. Feminist theories of criminality discuss the importance of relationships in the lives of women. Women tend to relate to the world in terms of attachment and affiliation with others (Bloom, 2000), while men relate in terms of their power and independence. Dr. Carol Gilligan (1982) has done work in the

field of females and their identities of self. She found that the presence of a close adult during adolescence was extremely important in development and could be a protective factor for a non-criminal lifestyle. Because women view themselves in relationship to others, their identity is wrapped up in the way others see her. Due to the way women are portrayed in society, this may cause women to have low self-esteem and be depressed. Those advocates of gender specific programming claim that treatment for female offenders should increase self esteem and provide positive role models while teaching women how to promote positive relationships with others.

Depression

Many researchers have suggested that depression could be an important responsibility characteristic (VanVoorhis, 1997; Kennedy and Serin, 1997; Bonta, 1995). How depression is related to success or failure however is still not known. While many researchers have mentioned it as a potential responsibility factor, there is little research on its effects. Due to the fact that depression has been linked to self-esteem and sexual abuse, feminists have argued that programs need to consider this mental health need in programming for women (Kearney-Cooke, 2002).

Self-esteem

There has been much discussion about the importance of self-esteem as a predictor of criminal behavior, however little discussion about how it may work as a responsibility consideration. Some research has indicated that it may have differential effects on criminal behavior depending on personal characteristics. For example, one study found that self-esteem worked as a predictor of delinquency for white girls and not African American girls (Smith, 1982). It has even been suggested that people with high

self-esteem are more at risk for criminal behavior than those with low self-esteem (Bushman, 1998). Despite this, it has been suggested by both feminist researchers and proponents of the theory of effective intervention that self esteem may interfere with treatment success (Bloom, 1998; Bonta, 1995). Those offenders with low self-esteem may not participate in group therapy and may need more skilled staff members. Again, the role of this characteristic is not yet known. It has however been discussed throughout the gender specific literature that it is an important need for women and should be addressed in treatment.

History of Sexual Abuse

A history of sexual abuse is recognized as a risk factor for crime in both males and females yet it is also likely an important responsivity consideration. Women tend to have a greater likelihood of sexual abuse backgrounds than men. The incidence of sexual abuse in female offenders is even higher. A recent study by the American Correctional Association (1990) found that approximately 36 percent of all female offenders had been sexually abused. Many researchers however, claim that this statistic is much higher due to the amount of underreporting. While the prevalence of sexual abuse is high in women, it is not yet known what the effects of this personal characteristic on success in treatment programs.

Personality

One of the earliest studies of responsivity in corrections occurred in the 1960's by James Douglas Grant (1965). In this study, called the PICO project, inmates were categorized as either "amenable" or "non-amenable." "Amenable" inmates were highly motivated, mature, and verbally skilled. Conversely, the "non-amenable" were less

verbally skilled and unmotivated to participate in treatment. The “amenables” tended to have lower recidivism rates than the “non-amenable.” Moreover, in another study conducted by Grant (1965), he found that low-maturity inmates respond better to highly structured treatment programs.

Interpersonal maturity theory was created in the 1950’s by Sullivan, Grant, and Grant (1957). These psychologists attempted to explain differences in psychological development in order to differentiate treatment plans for juveniles under correctional supervision (Warren, 1983). They found they could classify juveniles into one of four levels of interpersonal maturity ranging from I Level 2 to I Level 5. Specifically, I Level refers to the way in which a person views himself and the world around him (Warren, 1983). In addition to an interpersonal maturity scale, Warren defined nine personality types. People she claimed, fall into one of these nine subtypes: unsocialized aggressive (AA), unsocialized, passive (AP), immature conformist (CFM), cultural conformist (CFC), manipulator/pragmatist (MP), neurotic, acting out (NA), neurotic, anxious (NX), situational emotional (SE), and cultural identifier (CI).

What developed from Warren’s work on interpersonal maturity and personality is a comprehensive classification system designed to measure interpersonal maturity and personality sub-types called the Jesness Inventory. While originally used on juveniles, revisions were made to the instrument in 1972 that made the assessment more relevant to adults and females (Jesness, 1988). Research has indicated that these personality subtypes are predictive of criminal behavior (Palmer, 1975). For example, VanVoorhis (1994) found that the 9 personality subtypes could be collapsed into four categories consisting of aggressives (AA, CFC, and MP), neurotics (NA and NX), dependents (AP

and CFM), and situationals (SE and CI). She found that aggressives were more likely to display aggressive behaviors in the prison camp and penitentiary than the other personality subtypes. Finally, Johnson-Listwan (2001) found that neurotics and aggressives were significantly more likely to engage in criminal behavior. While there is research indicating personality is a risk factor for crime, there is still little research with regards to how it operates as a responsivity consideration.

Intelligence

In addition to maturity and personality, other responsivity characteristics have been shown to mediate treatment success. For example, Ross and Fabiano (1985) found that intelligence was related to success in a cognitive-behavioral treatment program. They found that offenders with IQ's lower than 85 may not be successful in a cognitive program. Offenders with lower intelligence levels may not have the ability to understand cognitive curriculums. For example, many curriculums emphasize learning the difference between thoughts and feelings and learning to act only on thoughts rather than feelings. This might be too hard a concept to grasp for those offenders with low IQ's. Thus, they may appear to be uninterested or unsuccessful when they cannot understand the material. Despite this one study, little research has addressed the issue of intelligence as a responsivity consideration.

Although there are studies indicating that personal characteristics and abilities of offenders are related to success in treatment, far more research is needed. Given the fact that cognitive-behavioral treatment has been found to be effective and that many correctional treatment agencies have implemented these types of programs, it is important to examine potential responsivity factors with regard to this type of treatment. The

theory of effective intervention then, has been found in numerous individual studies and meta-analyses to be effective. The least developed aspect of the theory is the responsivity principle.

CONCLUSIONS

This chapter attempted to set the context for how we arrived at the point where the research questions proposed in this dissertation are important for the field of correctional rehabilitation. The history of rehabilitation was meant to explain to the reader that rehabilitation has dominated correctional ideology and has been found to be effective. The theory of effective intervention was also presented in detail. It was argued that the least developed aspect of the theory is that of the responsivity principle.

Some of the responsivity factors addressed included gender, depression, self-esteem, history of sexual abuse, IQ, and personality. Evidence was provided that some of these factors have been shown to be related to success in offender treatment programs. However, it was also discussed that these factors need to be more systematically researched.

CHAPTER 3: THE METHODS

INTRODUCTION

For the last few decades, both practitioners and researchers have been trying to determine how to effectively rehabilitate offenders. A large body of research indicates that rehabilitation can work if certain principles are followed. One such principle is the responsivity principle. The general responsivity aspect of the principle suggests that interventions should be behavioral in nature. Cognitive-behavioral programming is one behavioral program that has been found to be successful at reducing recidivism (Ross, Fabiano, and Ewles, 1988; Robinson, Grossman, and Porporino, 1991; Robinson, 1995). What has not been well researched, however, is the notion of specific responsivity. Specific responsivity refers to the idea that certain personal characteristics of offenders may affect whether one is successful in a program and/or whether one recidivates. Most evaluations of cognitive-behavioral programs have looked at whether certain types of treatment interventions have reduced recidivism. The goal of this study is to extend the research by examining the concept of specific responsivity. That is, to determine if personal characteristics are related to treatment amenability in cognitive-behavioral programming. This chapter will describe the methods of the current study as well as why this study contributes to the existing research.

CONTRIBUTIONS OF THE CURRENT STUDY

The research indicates that those programs which are based in cognitive behavioral theory tend to be effective at reducing recidivism (see Fabiano, Porporino, and Robinson, 1991; Ross, Fabiano, and Ewles, 1988; Ross and Fabiano, 1985; Izzo and Ross, 1990). Instead of attempting to determine if cognitive-behavioral programming

“worked,” the analysis addressed the question as to which offenders this treatment worked best and least for. The general responsivity principle suggests that those programs that are behavioral in nature allow treatment to be better matched to the learning style of the individual offender, and thus tend to be more effective (Andrews et al., 1990). Unlike the majority of previous studies, however, this study attempted to sort out the notion of specific responsivity by 1) examining specific personal characteristics and their relationship to success in a cognitive-behavioral program, i.e. depression, self-esteem, history of sexual abuse, IQ, and personality and 2) examining if gender is a responsivity consideration. This study, then, is unique in that it goes beyond the research question of “does it work,” and asked for which type of offender it worked best and least.

It is important for both treatment staff and program evaluators to be aware of the responsivity principle. Treatment staff need to understand that they can be more effective if treatment is tailored to offender characteristics that are related to treatment amenability. However, it is not yet known what these characteristics are. Program evaluators also should recognize the potential for responsivity characteristics of offenders to be related to success of a program. In the past, evaluators have failed to address responsivity and thus, have “masked” treatment effects. Therefore, many programs may have appeared to have “failed” when in reality they had no effect with some offenders and “worked” with others. Thus, the evaluations have masked the treatment effects and possible harm that may have been done to certain offender types (VanVoorhis, 1997). This study, then, is important for both practitioners and program evaluators in that it can serve as a guide for what responsivity characteristics could be important to address in treatment and evaluation studies in the future.

Another problem with previous evaluation studies is that the evaluator assumed that the program was being implemented as designed, while in actuality many treatment programs failed to implement programs effectively and at times failed to implement them at all (VanVoorhis, Cullen, and Applegate, 1995; VanVoorhis, 1997). The evaluator then assumed that the program “did what it was supposed to do.” Without controlling for quality of programming, true effects would be hard to uncover. This study is unique in that the researcher attempted to evaluate the quality of the intervention and control for these variations in the analysis.

Another reason this study is important is that it included women. While there are numerous studies on effectiveness of programming for men, there is hardly any research on the effects of correctional programming for women. Given the fact that women are the fastest growing correctional population (Bureau of Justice Statistics, 1998), the need to determine what “works” for women is vital. Studies such as these will help improve correctional programming for both men and women.

This study contributes in many ways to the existing literature on correctional interventions. First, the study addressed the least developed aspect of the theory of effective intervention: specific responsivity. Second, the study included females in the analysis. Finally, this study addressed the issue of program quality.

RESEARCH QUESTIONS

There are two primary research questions this study addressed. The literature has indicated that certain personal characteristics of offenders may be important in mediating the effects of treatment. This study attempted to determine if these characteristics matter in determining if an offender is successful or unsuccessful in cognitive-behavioral

treatment. The research questions are as follows; 1) Do women do better or worse than men in cognitive-behavioral treatment? 2) Do other responsivity characteristics help to determine if one is successful in cognitive-behavioral programming? Specifically, a) Is personality type related to success in cognitive-behavioral programming?; b) Do offenders with lower intelligence levels perform worse in cognitive-behavioral programming than offenders with higher intelligence levels?; c) Do depressed offenders do worse than those offenders who are not depressed?; d) Do offenders with low self-esteem perform worse in cognitive-behavioral programming than offenders with high self-esteem?; e) Do offenders with a history of sexual abuse do worse in the program than offenders with no history of abuse? In order to answer the above questions, a cognitive-behavioral program was implemented at four treatment sites. Data were collected on offenders at each site and analyzed to determine if these characteristics were related to success in the program.

TREATMENT PROGRAM

Corrective Thinking

The cognitive-behavioral program that was implemented at the four treatment programs is based on the research of Yochelson and Samenow (1976, 1977). Yochelson and Samenow were interested in discovering why people committed crime. After working closely with 30 criminals found not guilty by reason of insanity or incompetent to stand trial, they found that their sample had certain patterns of thinking that were unique to them. The authors identified 52 thinking patterns found in criminals that can be separated into 10 general “thinking errors.” Yochelson and Samenow (1976, 1977) claimed that both law breakers and non-law breakers may have some errors in thinking.

While responsible people recognize the danger of the errors and change their thinking, criminals, on the other hand, exaggerate their thinking errors, and choose to commit crime.

The Corrective Thinking curriculum developed by Rogie Spon (1999) is based on the work of Yochelson and Samenow (1976, 1977). Instead of thinking errors however, the curriculum teaches offenders how to recognize their “barriers in thinking” and replace them with the appropriate “correctives.” The curriculum consists of a series of exercises aimed at teaching the offenders the nine barriers in thinking and the nine correctives. For example, one of the nine barriers is “victim stance.” The corrective for this barrier is “taking responsibility.” Participants go through a series of exercises designed to change their thinking from blaming someone else for their lives to taking responsibility for the choices they make. The program is generally considered a cognitive “restructuring” program rather than a skill building program. However, there are some exercises that involve role playing and the practicing of new behaviors.

The program is designed for use with both adolescents and adults in any setting. The curriculum involves over “110 hours of exercises for reinforcing cognitive processes for responsible, decision-making and genuine responsible lifestyles (Charting a New Course Curriculum, 1999, pp iii).” The program is offered to participants in the form of a group. Staff members are trained in how to present the material and how to control the group. In each group, an exercise is presented. Staff then must be able to facilitate the discussion back to the barriers in thinking and the correctives for that barrier. In addition to staff training on the material, the staff is taught how to handle difficult participants. These difficult participants are first asked to sit outside the group and to come back when

they can behave. If this does not work to change their disruptive behavior, they are assigned to jeopardy track. Jeopardy track participants must sit in the group but cannot participate. Moreover, they will not earn points for that group.²

Currently, there is no research on the effectiveness of this particular cognitive-behavioral program. Cognitive-behavioral programming in general however, has been found to be effective with offender populations (see Ross, Fabiano, and Ewles, 1988; Robinson, Grossman, and Porporino, 1991; Robinson, 1995).

DATA COLLECTION

This study was part of a larger study funded by the Ohio Office of Criminal Justice Services. The data were primarily collected by the author of this dissertation and two other grant staff members. While all offenders in the above treatment programs were required to participate in the cognitive treatment groups in each study site, participation in this study was voluntary. Staff at each study site explained the study to offenders upon intake into each program and offenders were asked to participate. The offenders were then asked to sign a release if they agreed to participate in the study.

The first offenders in the sample entered the various treatment programs in April, 2000. The last offenders included in the study entered the programs in September, 2001. Follow up data were gathered on all offenders in January, 2002. Data were collected from archival records, interview based assessments, self-administered questionnaires, and observation. In addition to demographic characteristics, which were collected through files in order to describe the sample, there were four other categories of data collection instruments. They include responsivity assessments (independent variables), control

² It should be noted that not all programs utilized a jeopardy track.

variables (level of risk, anti-social attitudes, days at risk, and quality of program measures), intermediate objectives (program completion), and long-term objectives (arrest and incarceration). First, the data on the sample will be presented followed by the measurement of the variables included in this study.

SAMPLE

The sample included men and women from four different treatment facilities who received cognitive-behavioral treatment. The groups in this case were combined to increase sample size and to insure a diverse population was represented.³ Included in this sample are 344 men and 102 women. A description of where the samples came from follows.

Talbert House

Talbert House is a non-profit social service agency founded in 1965. Talbert House operates 23 programs, which can be divided into 10 “treatment” clusters. The agency not only serves offenders but also provides services to victims, people in crisis, and “at risk” youths. Talbert House as a whole offers programming for juvenile and adult males and females in both residential and non-residential settings. For purposes of this study, four Talbert House sites were selected to serve as “pilot” treatment programs. The Corrective Thinking curriculum was implemented in each of these sites. A brief description of each site follows.

Talbert House for Women

Talbert House for Women is a 20-bed halfway house. The offenders are felons under various supervision levels, and a majority tend to be chemically dependent. The treatment program lasts approximately 90 days, over the course of which offenders

receive approximately 26 hours of Corrective Thinking. In addition to cognitive-behavioral programming, offenders receive substance abuse treatment as well as attend other life skills groups, such as parenting. They are also expected to work full-time.

Beekman

Beekman is a 60-bed halfway house serving adult males. The length of treatment tends to be 90 days, during which time offenders receive approximately 30 hours of Corrective Thinking groups. Other programming includes chemical dependency, parenting, relationship building, and life skills. The residents are expected to work full time while in the facility.

Community Correctional Center

CCC is a 100-bed community based correctional facility serving primarily adult male felony probationers. The length of treatment tends to be approximately four months. Offenders at this facility receive approximately 120 hours of Corrective Thinking. Other programming includes chemical dependency, GED classes, vocational assistance, family services, and life skills training.

Adapt for Women

Adapt for Women is a 20-bed residential drug treatment program. The program lasts approximately 90 days, during which time offenders receive approximately 36 hours of Corrective Thinking. Other programming includes drug/alcohol treatment, counseling, and family services.⁴

³ Differences in the groups will be controlled for through the use of risk/need level and quality of program.

Sample Characteristics

The sample includes offenders from all four treatment programs described above. Table 1 describes the demographic characteristics of the sample. The total number of offenders included in this study is 446. The majority of the sample are white (65.6%) and are males (77.1%). The majority of the sample are under 40 (82.2%) while close to 50 percent are under 30 years of age. Most of the offenders in the sample are single (51.9%). About half of the men and women in the sample have less than a high school diploma (48.7%). The majority of offenders have children under age 18 yet only about a third of the sample have the children living with them. Close to 75 percent of the sample have one or two children under the age of 18.

Table 2 describes the current offense characteristics for the sample. Approximately 40 percent of the people in the sample are serving time for a violent offense (41.0%), while a third of the people in the sample were convicted of a drug offense (32.9%). The majority of cases did not include a weapon in the offense (83.9%). Finally, in almost three quarters of the cases, alcohol and/or drugs were involved (74.7%).

Table 3 describes the criminal history characteristics of the offenders in the sample. Most of the offenders in the sample had prior arrests (82.5%), prior misdemeanors (72.2%), and prior probation sentences (74.6%). Close to half of the offenders in the sample had prior felonies on their record (47.8%), while approximately a third of the sample had previously been convicted on a violent charge (33.2%). The majority of the sample have not served time in prison (71.9%) or had probation

⁴ Differences in number of hours of Corrective Thinking and other program characteristics were controlled for by a quality of programming variable.

Table 1: Demographic Characteristics of Offenders (N=446).

	n	%
Gender (N=446)		
Male	344	77.1
Female	102	22.9
Race (N=425)		
White	279	65.6
Black	142	33.4
Hispanic	3	.7
Bi-Racial	1	.2
Age at Intake (N=429)		
18 to 22	108	25.1
23 to 30	107	24.9
31 to 40	133	31.0
41 and older	81	18.8
Mean	31.07	
Median	30.00	
Marital Status (N=416)		
Single	216	51.9
Married	64	15.4
Divorced	80	19.2
Separated	26	6.3
Widowed	1	0.2
Living together	29	7.0
Educational Status (N=421)		
8 th Grade or Less	19	4.5
Some High School	186	44.2
High School Diploma	113	26.8
GED	48	11.4
Some College	43	10.2
Associates Degree	8	1.9
Bachelors Degree	4	1.0
Children Under Age 18 (N=417)		
Yes	228	54.7
No	189	45.3

Table 1: Demographic Characteristics of Offenders, continued.

	n	%
Number of Dependents Under Age 18 (N=229)		
One	94	41.0
Two	72	31.4
Three	32	14.0
Four	22	9.6
Five	3	1.3
Six or more	6	2.5
Dependents Live with Offender (N=202)		
No	128	63.4
Yes	74	36.6

Table 2: Current Offense Characteristics (N=446).

	n	%
Most Serious Charge (N=420)		
Violent Offense ¹	172	41.0
Property Offense	91	21.7
Drug Offense	138	32.9
Other	16	3.8
Weapon Involved in Offense (N=397)		
No	333	83.9
Yes	64	16.1
Involved Alcohol/Drugs ² (N=411)		
Yes	309	74.7
No	104	25.3

¹If the offender had a weapons charge, it was considered violent.

²The offender had alcohol/drugs on their person or were using alcohol/drugs.

Table 3: Criminal History Characteristics (N=446).

	n	%
Prior Arrests (N=446)*		
Yes	368	82.5
No	78	17.5
Prior Misdemeanors (N=446)*		
Yes	322	72.2
No	124	27.8
Prior Felonies (N=446)*		
Yes	213	47.8
No	233	52.2
Prior Violent Convictions (N=446)*		
Yes	148	33.2
No	298	66.8
Served Time in Prison (N=446)*		
Yes	125	30.3
No	314	71.9
Served Probation Sentence (N=446)*		
Yes	305	74.6
No	141	31.6
Probation Revocations (N=446)*		
Yes	162	41.5
No	284	63.6
Age at First Arrest (N=396)		
19 or Younger	214	54.0
20 and Higher	182	45.9

*If there was no record in the files, it was coded as no.

revocations (63.6%). Finally, a little over half of the offenders in the sample were arrested for the first time prior to the age of 20 (54.0%).

Responsivity Assessments (Independent Variables)

Table 4 presents the measurement of all variables. Upon entry into each of the various program, subjects received various tests to determine potentially important responsivity characteristics. Information from files was also collected at this time. The instruments mentioned in this section were only given to the subjects one time (upon entry into program) due to the fact that the scores on these instruments would not likely change and/or the program was not designed to change these characteristics. The instruments/data collection forms included a demographic information form (see Appendix A), the Jesness Personality Inventory, Rosenberg's Self Esteem Scale, the Culture-Fair Intelligence test, and the Center for Epidemiologic Studies Depression Scale.

Demographic Information Form

Information was collected from the files in order to describe the sample as well as to determine potential responsivity characteristics such as gender and sexual abuse history. Additionally, important information such as age and race were collected in order to control for these characteristics in the analysis. Other offender characteristics were collected regarding marital status, dependent children, employment history, and educational status. Criminal history information collected included level of offense, whether alcohol/drugs were involved, and whether a weapon was involved. Information on previous offenses was also collected.

Table 4: Measurement of Variables

Data to be Collected	Method	By Whom	Time Frame
Independent Variables			
1. Demographic and Criminal History	Client Files	Researcher	Intake
2. Sexual Abuse History	Client Files	Researcher	Intake
3. Personality			
a. Jesness Inventory	Paper and Pencil Test	Offender	Intake
4. Self-esteem			
a. Rosenberg's Self Esteem Scale	Paper and Pencil Test	Offender	Intake
5. Intelligence			
a. Culture Fair	Paper and Pencil Test	Offender	Intake
6. Depression			
a. Center for Epidemiologic Studies Scale	Paper and Pencil Test	Offender	Intake
Control Variables			
1. Risk/Need Level			
a. Level of Service Inventory-Revised	Interview with Client	Program Staff	Intake
2. Antisocial Attitudes			
b. How I Think Questionnaire	Paper and Pencil Test	Offender	Intake
3. Evaluation of Groups by Researcher	Observers Evaluation Form	Researcher	3 times for each program
4. Evaluation of Groups by Clients	Clients Evaluation Form	Client	Program Completion
Intermediate Outcomes			
1. Successful Completion of Program	Termination Form	Program Staff	Program Completion
2. Rating of Corrective Thinking Performance	Termination Form	Program Staff	Program Completion
3. Number of Violations while in the Program	Termination Form	Program Staff	Program Completion
4. Change in Antisocial Attitudes			
a. How I Think Questionnaire	Paper and Pencil Test	Offender	Program Completion
Long-term Outcomes			
1. Recidivism	Official Records	Court Staff	21 months after start of study

In addition to demographics, data on sexual victimization were gathered. It is hypothesized that those offenders who have been victimized will perform worse than those who have not. If the files contained no information about sexual abuse, it was assumed that the offender has no history of sexual abuse and was coded as such at that time.

Jesness Personality Inventory

Personality and other psychological characteristics have been found to be related to how successful offenders will be in treatment programs (see Warren, 1983, VanVoorhis, 1994). Little research has been done, however, with regard to the effect of personality on success in a cognitive-behavioral program (VanVoorhis, 1997). It is hypothesized that certain offender subtypes such as aggressives (AA), cultural conformist (CFC) and manipulator/pragmatist (MP) will be more successful in the program due to the fact that the program targets antisocial attitudes. The above-listed subtypes are individuals who exhibit high levels of negative attitudes toward family, authority, and/or school.

The Jesness Inventory Classification System was developed from research by Warren and Associates and is based on the theory of interpersonal maturity and development (Jesness, 1996). The classification system was developed as a personality inventory for adolescents (Jesness and Wedge, 1983) and has since been normed/validated for use with adults (Jesness, 1996). The JI is a brief (155 item) true-false questionnaire with easy to understand items yielding an interpersonal maturity level and nine personality subtype scales.

As discussed earlier, VanVoorhis (1994) found that the Jesness subtypes could be grouped into four categories-- aggressives (AA, CFC, MP), neurotics (NA and NX), dependents (AP and CFM), and situationals (SE and CI) (see Table 5 for a description of these four categories). VanVoorhis (1994) found that the aggressives were more likely to be viewed unfavorably by staff. Moreover, staff reported more hostile behaviors in the aggressives in both the prison camp and penitentiary. It is hypothesized that the aggressives would be more successful in cognitive-behavioral treatment due to the need in this area.

Offenders were given the Jesness Personality Inventory upon intake into each program. The assessment was filled out by the offender in a paper and pencil test. In order to be scored, all the items on the assessment needed to be filled out. In assessments missing four or more items, the actual scores on the inventories were not used. In assessments with three or less missing items, however, the author scored these items in the pro-social direction. There were 42 assessments that were missing three or less items. These were all included in the sample.

Rosenburg's Self-Esteem Scale

Self-esteem is a construct that has received a lot of attention in the area of correctional population. Although it has been found in numerous studies that self-esteem is unrelated to offending in males and that there is some evidence to the effect regarding females, the literature on female offending continues to discuss the issue. It is suggested that self-esteem is a responsivity issue. Thus people with low self-esteem are hypothesized to perform worse in the program than offenders with high self-esteem. The instrument was developed by Morris Rosenberg (1979) and was originally validated and

Table 5. Summary of Personality Subtypes for the collapsed Jesness Inventory types (Van Voorhis, 1994).

Personality Subtypes	Definition	Relationship to Criminal Behavior
Aggressives (Aa, Cfc, Mp)	Tend to be manipulative. Has antisocial values. Feels alienated and hostile. Acts unpredictable.	High probability of criminal behavior.
Neurotics (Na and Nx)	Tend to be anxious and insecure. Tend to be cynical and hostile.	High probability of criminal behavior when unstable.
Dependents (Ap and Cfm)	Although behavior may be conforming tends to follow others, including criminals.	Criminal behavior less likely than other types.
Situationals (Se and Ci)	Tend to view convention positively. Can be naïve and rigid.	Criminal behavior less likely.

normed on high school students, but has since been validated on a variety of populations (see Fleming and Courtney (1984). The RSE is a 10-item scale with higher scores on the test correlating with higher self-esteem. If more than five items were missing on the scale, the instrument score was not used.

The Culture Fair Intelligence Test

There is some evidence that intelligence is an important factor in the success of cognitive-behavioral treatment (Ross and Fabiano, 1985). It is hypothesized that those individuals with lower intelligence levels will not perform as well as individuals with moderate to higher intellectual levels. The Culture Fair Intelligence Test measures individual intelligence in a manner designed to reduce the influence of verbal fluency, culture climate, and educational level. The test, which contains four subtests involving different perceptual tasks, was designed by Catell and Catell (1963) and the subtests have since undergone several revisions. The test used in this study was designed for use with all ages. The test has been studied extensively with both reliability and validity data supportive of the test.

Center for Epidemiologic Studies Depression Scale (CES-D)

Depression is a potential responsivity factor that will be addressed in this study. Researchers have found that depression may be related to female delinquency (Obeidallah and Earls, 1999). Feminist researchers have also identified depression as one of the many needs facing female offenders. It is hypothesized that offenders who score high on the depression scale will perform worse in the treatment than offenders who score low on the depression scale. Like self-esteem, it is hypothesized that offenders who are depressed are less likely to participate in the groups and therefore be successful. The

scale used in this study is from the Center for Epidemiologic Studies. The CES-D is a 20-item self-report instrument developed at the National Institute of Mental Health. The scale is widely utilized as a screening instrument and in order to distinguish depressed subjects from non-depressed subjects in non-clinical settings (Radloff, 1977). Subjects were asked whether they had experienced a variety of symptoms in the previous week. The CES-D scale has been found to correlate with other measures of depression including the DSM-III (Fechner-Bates, Coyne, and Schwenk, 1994) and has been found to be an effective screening device for depression despite differing personal characteristics such as age, gender, and cognitive impairment (Lewinsohn, Seeley, Roberts, and Allen, 1997). If more than five items were missing from the instrument, the score was not used. Scales with four or less missing items were added together without the missing items.

Control Variables

Several assessments were conducted in order to control for variables that will likely be related to success in the cognitive-behavioral program. These include the Level of Service Inventory (LSI) and the How I Think Questionnaire. The LSI was conducted at intake and The How I Think Questionnaire was conducted both at intake and when the offenders were released from the program.

It is also important to control for quality of programming since different sites have different staff and will vary in how well the program is actually delivered. Two evaluation forms were utilized to determine quality (observer's evaluation form and participant evaluation form) (see Appendix B for actual assessments). Finally, a "days at risk" variable was calculated to control for the various lengths of time the offenders were out of the programs.

The Level of Service Inventory-Revised

The risk principle suggests that those individuals at a higher risk of recidivating will benefit from treatment more than lower-risk individuals (Andrews and Bonta, 1999) and lower risk individuals may be made “worse” from intensive services. Moreover, higher risk offenders are more likely to be unsuccessful and recidivate than lower risk offenders. It is important then, to collect information on risk/need level. Risk/need level will be collected using the Level of Service Inventory.

The LSI is a risk/need instrument designed to assess an offender’s likelihood of recidivism. The LSI includes static factors, such as criminal history, as well as dynamic attributes of offenders, such as substance abuse and attitudes about crime. The LSI-R (the version for adults) collects 54 pieces of information about each offender. The items of the LSI are scored in a 0-1 format and added to produce a total score. This makes scoring and adding the scores fairly simple (see Bonta, 1995 for a complete description). The LSI has been found to predict successful completion of probation, institutional misconduct, as well as future criminal offending. Moreover, the LSI has shown to be valid for a variety of offender types, such as females and juveniles (Kirkpatrick, 1999; Hoge, Andrews, and Leschied, 1996).

The LSI was administered to participants upon intake into the program. The data were collected by a project staff member. Each interview took approximately one hour.

How I Think Questionnaire

The How I Think Questionnaire (Gibbs et al., 1992; Barriga and Gibbs, 1996) is designed to measure self-serving cognitive distortions. Although primarily designed to be used with anti-social youth, the instrument has some applicability with adults. The

test is based on a typology of four categories of cognitive distortions: Self-Centered, Blaming Others, Minimizing/Mislabeling, and Assuming the Worst. The test consists of 63 questions in a Likert scale. The initial data on the test demonstrates good reliability and validity data (see Barriga and Gibbs, 1996). These data were used as a control variable because not all offenders have the same level of need in the area of anti-social attitudes. This test was given to offenders upon intake and at release from the program. Once offenders were given the test, an analysis was conducted to determine the number of missing items and whether the test was considered “suspect.” If there were more than five missing items, the actual score was not used. Moreover, the authors of the scale developed a way to determine if the test was suspect by adding several questions together to determine if a certain score was achieved. If this score was achieved, the test was considered “suspect” and was excluded from the analysis.⁵

Many evaluations in the past have failed to measure program quality. This is problematic in that many evaluations assume that the program was implemented as designed. Programs may appear to have “failed” when in many cases the program was not actually implemented as designed (VanVoorhis, Cullen, and Applegate, 1995; VanVoorhis, 1997). Several measures of program quality were gathered, including the observer’s evaluation form and the participant’s evaluation form.

Observer’s Evaluation Form

This observer evaluation form was created by the author of this study with the help of Dr. Pat VanVoorhis. It includes five sections that relate to cognitive-behavioral programs in general as well as specific aspects of the Corrective Thinking curriculum

⁵ Several items were added together to get an average. If this number was over a 4.25, the test was considered suspect and was not used.

(see Appendix B). The form includes sections that relate to general issues and class control, organization, delivery of subject matter and response to offenders, sensitivity to offender's feelings, and group participation. The researcher completed the form through observation of the cognitive-behavioral groups at each treatment site. Each site was visited three times throughout the duration of the study and groups were observed. Each item in each section was scored as 0, 1, or 2 with 0 being "unsatisfactory," 1 being "satisfactory, needs improvement," and 2 being "very satisfactory." Each item was added together and divided by the total number of possible points for a total percentage score. These three scores from each site were averaged to form an observer evaluation score. Each site then, has one score representing a percentage of items that were very satisfactory. It is hypothesized that in programs with high observer evaluation scores, participants will be more likely to complete the program and will be less likely to recidivate.

There were several problems associated with collecting this data. First, each site was only observed three times during the span of this study. Many offenders then have an evaluation score that represents the site yet may not represent the exact group they attended. Second, due to the turnover at each site, different staff were observed thus the staff member being observed may not be the staff member that each individual offender had conducting their groups. Each site received one "observer evaluation score." Despite these problems, only the author of this dissertation observed the group thereby eliminating the problem of inter-rater reliability.

Participant Evaluation Form

This survey is comprised of 20 questions related to how the offender felt about the program, how well they felt they did in the program, and how well they like the program delivered the cognitive-behavioral treatment (see Appendix B).

Intermediate Objectives

Success in the treatment program will be measured through successful completion of the program. Information was also collected, however, on other intermediate objectives such as high ratings by staff of each offender on the Corrective Thinking rating, violations in the program, and a improvement in the How I Think Questionnaire Score (See Appendix C for the Termination Form).

Termination Form

Data as to whether the offender was terminated successfully or unsuccessfully were gathered on each offender. Staff at the various programs filled out a form on each offender detailing whether the offenders met the intermediate objectives. The intermediate objectives included whether they completed the program successfully, and whether they received any violations while in the program. Additionally, it included an objective analysis of the offenders' performance while in the program (Corrective Thinking rating). Offenders also filled out a post How I Think Questionnaire to determine if scores on this assessment improved.

Long-term Objectives

Recidivism

Recidivism data were collected in January, 2002, and were gathered through official records kept through Hamilton County, Butler County, and Clermont County

Court Records.⁶ The average follow up period was approximately 20 months. Due to the fact that no one indicator of recidivism gives a complete picture, a variety of indicators of recidivism were gathered on each offender. These include data on new arrests, technical violations, and new incarcerations (see Appendix D for a copy of the Recidivism Form).

DATA ANALYSIS

First, univariate analyses were conducted in order to describe the sample on the various responsivity characteristics, control variables, and intermediate and long-term objectives. Second, logistic regression analysis was conducted to determine what characteristics were related to intermediate objectives and long-term objectives discussed earlier in cognitive-behavioral treatment for both males and females.⁷ Because the dependent variables utilized in this study were nominal and dichotomous, ordinary least squares could not be used. A dichotomous dependent variable does not allow for a random distribution of error, and therefore heteroskedasticity would be likely to occur. Thus, a different type of analysis was required. Logistic regression analysis transforms the dichotomous dependent variable into a probability scale and automatically considers the interaction between the independent variables (Blalock, 1970). Logistic regression, then, was ideal for this study, given that the dependent variables were coded as 0 and 1.

Missing data can be problematic when using logistic regression. This is due to the fact that any missing data will cause the entire case to be dropped from the analysis,

⁶County was included in the multivariable analyses and was found to be unrelated, thus was taken out of the analysis presented in this study.

⁷ In order to determine the effects of gender, two additional analyses were conducted. First, logistic regression analyses were conducted on men and women separately. Second, interaction variables were entered into the logistic regression models that included both men and women.

leaving a smaller sample size. For this reason, the missing cases were included in the analysis through the use of mean replacement.⁸

Logistic regression was utilized to predict whether an offender completed the program successfully and whether they were arrested and incarcerated. Logistic regression allows for both nominal variables and interval level variables to be included as independent variables in the analysis (see Table 6 for the coding for each variable). In the models predicting all the outcomes, four nominal level variables were included in the analysis. The nominal level variables that were included in all the models include gender (0=males, 1= females), race (0=white, 1= non-white), a history of sexual abuse (0=no, 1=yes), and personality. If race was not known, the offender was coded as being white (21 cases then were recoded as 0). If there was nothing in the files regarding a history of sexual abuse, the offender was coded as having no history of sexual abuse.⁹

Each personality variable was entered separately in each model as the small number of cases made the addition of variables in the models difficult. Each personality characteristic was coded as 0= all other personality subtypes and 1= aggressives (model 1), neurotics (model 2), dependents (model 3), and situationals (model 4). In cases where the Jesness Inventory personality type was missing, the offenders were coded as 0 in each of the models. In 26 cases, the personality type was missing.

In the analyses predicting arrest and incarceration, whether the offender completed the program was included as an independent variable. This variable was coded as 0=successful and 1=unsuccessful.

⁸ Interval level variables that were missing were coded with the mean and nominal level variables that were missing were coded as the most common case (0).

⁹ This coding was done at the time of data collection so the number of cases is not known.

Table 6: Variables Entered into Logistic Regression Equations Predicting Outcome

Variable	Measurement
1. Gender	0=Men, 1= Women
2. Age	Interval Level Variable
3. Race dummied	0=White, 1=Non-white
4. Sexual Abuse	0=No, 1=Yes
5. I.Q.	Interval Level Variable
6. Depressed	Interval Level Variable
7. Self-Esteem	Interval Level Variable
8. Aggressives	0=All other personalities, 1=Aggressives
9. Neurotics	0=All other personalities, 1=Neurotics
10. Dependents	0=All other personalities, 1=Dependents
11. Situationals	0=All other personalities, 1=Situationals
12. Antisocial Attitudes	Interval Level Variable
13. LSI Score	Interval Level Variable
14. Observer Evaluation	Interval Level Variable
15. Days at Risk*	Interval Level Variable
16. Non-Completion of Program	0=No, 1=Yes

*Both Days at Risk and Unsuccessful in Program were only entered in the analyses predicting arrest and incarceration.

Many of the variables included in the analyses were entered as interval level continuous variables. These include age, intelligence score, self esteem score, and depression score. If these data were missing, the mean was substituted. In 17 cases, the age was missing so the mean of 31 was substituted. In eight cases, the intelligence score was missing. In these cases, the mean of 96 was substituted. In 45 cases, the depression score was missing so the mean of eight was substituted. Finally, in 25 cases the self-esteem score was missing so the mean of 19 was substituted. The control variables, antisocial attitudes, LSI, and observer evaluation, were also entered in the analysis as interval level variables. In 17 cases, the How I Think score was missing so the mean of 2.13 was substituted. In 42 cases, the LSI score was missing so the mean of 26 was substituted. There were no missing scores for the observer evaluation. Finally, “a days at risk” variable was calculated that gave each offender the number of days between discharge from the program and the date of the recidivism checks. This was entered as an interval level variable in the analyses predicting recidivism. There were no missing cases for this variable.

Several variables were left out of the analysis. First, participant evaluation scores were left out due to the small number of participant evaluations actually filled out. Only 102 offenders in the sample filled out these questionnaires. If these results were entered into the analysis many cases would have had to be rejected, making the models more unstable. Moreover, a change in the How I Think questionnaire score was not utilized because only a small number of offenders actually completed the post-assessment (n=118). Finally, other control variables such as “Talbert House program” and “number of Corrective Thinking hours” were left out of the analysis because they were highly

correlated with other variables in the analysis such as gender and observer evaluation (see correlation matrix in Appendix D).

LIMITATIONS OF THE STUDY

As with any study limitations always exist. The first and perhaps the most important limitation refer to the differences in treatment sites. Four different treatment sites were combined to form the sample for this study. Each of these treatment sites differed with regard to the number of residents, the number of hours of Corrective Thinking, and the number of hours of other various treatment services. However, this problem was reduced with the control of the quality of programming delivered at each site, the risk/need level of the offenders, and the level of antisocial attitudes.

The second limitation was related to the difficulty in retrieving data from treatment groups. For example, certain variables had to be rejected from the analysis due to the number of missing cases. Additionally, data (such as the participant evaluation and the post How I Think Questionnaire) were gathered on offenders upon release from the program. The researcher would have an estimated date of discharge and would arrive at the sites only to find the offenders had left the facility. If staff at each facility were entrusted with this task, the result was the same. Thus, many offenders did not complete these assessments.

The final limitation was related to the quality of treatment variable. Each site was observed three times during the length of the study. Thus, each offender received an observer evaluation score. This score may have represented classes that the offender did not actually attend. This made it difficult to capture the quality of treatment that each offender in the sample received.

Despite these limitations, the study will further the research in this area. The study included women in the analysis and questions whether gender itself is a responsibility characteristic. The study also includes many of the personal characteristics that have been discussed as potentially affecting success in correctional treatment.

CHAPTER 4: THE FINDINGS

INTRODUCTION

To this point, this dissertation has summarized the issues relevant to the history of correctional treatment, the literature regarding the most effective treatment, and the methods used in this study. This chapter is a presentation of the findings from the current study. Both univariate and multi-variate analyses were conducted to answer various research questions related to the issue of specific responsivity.

UNIVARIATE RESULTS

Responsivity Characteristics

Table 7 presents the responsivity characteristics of offenders in the sample. Data on intelligence level was collected on 438 offenders. Close to 20 percent of the sample had IQ levels at 85 and below (n=84). The largest category of the sample fell between 86 and 99 (n=194, 44.2 percent). The mean intelligence level was 96.7. Most of the sample had no history of sexual abuse as an adult or as a child (91.7%). It should be noted that this information was collected through use of the files and it is probable that this information was not gathered by staff on every offender who had abuse histories. Moreover, many offenders failed to report this information even if asked by program staff.

About one quarter of the sample appeared to be high in the area of depression as measured by the Center for Epidemiological Studies Depression Inventory (25.9%, n=104). On this scale, the higher the score, the more depressed the individual was. The mean score for the sample of offenders was 8.34 out of 20.

Table 7: Potential Responsivity Characteristics of Offenders (N=446).

	n	%
Culture Fair Intelligence (N=438)		
85 and Under	84	19.2
86-99	194	44.2
100-151	160	36.5
Mean	96.75	
History of Sexual Abuse ¹ (N=446)		
Yes	35	8.3
No	385	91.7
Center for Epidemiological Studies Depression Inventory (N=401) ²		
1-5	122	30.4
6-11	175	43.6
12-20	104	25.9
Mean	8.34	
Rosenburg's Self Esteem (N=421) ³		
1-15	84	20.0
16-30	337	80.0
Mean	19.10	
Jesness Personality Subtypes (N=420)		
AA	10	2.4
AP	15	6.0
CFC	28	6.7
CFM	30	7.1
CI	22	5.2
MP	65	15.5
NA	84	20.0
NX	67	16.0
SE	99	23.6
VanVoorhis's 4 Jesness Subtypes (N=420)		
Aggressive (AA, CFC, MP)	103	24.5
Neurotic (NA and NX)	151	35.9
Dependent (AP and CFM)	45	10.7
Situational (SE and CI)	121	28.8

¹History of sexual abuse as an adult and/or child.

²The higher the score the more depressed the offender.

³ The higher the score the higher the self esteem of the offender.

The majority of the sample of offenders in this study did not have a problem with low self esteem. On this scale, the higher the score, the higher the self esteem was. The highest score was 30 and the mean was 19.1. Eighty percent of the sample scored 16-30 on the assessment. Twenty percent of the sample scored in the lower half of the assessment.

Almost a quarter of the sample were “situational” according to the Jesness personality assessment (n=99, 23.6%). These are people with mostly positive attitudes toward convention yet tend to be naïve and rigid. Another 36 percent of the sample was divided among the two neurotic categories, “neurotic acting out” and “neurotic anxious.” Finally, only 2.4 percent of the sample was categorized as “un-socialized aggressive.”

Because of the small numbers of offenders in each of these categories and due the fact that VanVoorhis (1994) found that the nine subtypes can be collapsed, data were combined to form four categories instead of nine. A quarter of the sample, then, fell into the “aggressive” category (n=103, 24.5%). Close to 35 percent of the sample were categorized as “neurotic” (n=151, 35.9%). Approximately 30 percent fell into the “situational” category (n=121, 28.8%) and 10 percent were “dependents” (n=45, 10.7%).

Overall, there appeared to be variation among these responsivity characteristics in the sample.

Control Variables

Table 8 presents the descriptive data on the control variables used in this study. As was discussed in Chapter 3, the Level of Service Inventory is a risk/need assessment that is a composite measure of risk of re-offending. The higher the score, the higher the risk of recidivating was. The mean risk score for the sample is 25.7 out of a possible 54.

Table 8: Control Variables (N=446).

	N	%
Level of Service Inventory (LSI) Total Scores (N=404)		
1-20	96	23.8
21-26	97	24.0
27-31	105	25.9
32-43	106	26.2
Mean 25.7		
How I Think Attitude Scale (N=442) ¹		
1.00-2.73 (non-clinical range)	363	85.4
2.74-5.30 (clinical range)	62	14.6
Mean 2.13		
Observer Evaluation Scale (N=446) ²		
33	118	26.5
54	65	14.6
59	37	8.3
74	226	50.7
Mean 58.9		
Days at Risk (N=446) ³		
Range is 101-647		
101-268	112	25.1
269-358	112	25.1
359-464	110	24.7
465-647	112	25.1
Mean 367 Days		

¹ The authors of the scale developed these cut-off points. Above 2.74 is highly antisocial.

² Each program was visited three times by the author and evaluated. These scores were averaged for this score.

³ Refers to the time between discharge and when the recidivism data was collected.

Most of the offenders in the sample did not demonstrate antisocial attitudes to the degree of being called “clinical.” Approximately 85 percent of the sample fell below this range. Almost 15 percent did fall into the category of “clinical” according to the authors of the instrument. The clinical range demonstrated that the individual was “externalizing psychopathology” and was indicative of severe cognitive distortions in thinking.

As discussed in Chapter 3, each program had three observer evaluation scores that were averaged to form one score indicating the percentage of items that were very satisfactory. Higher scores indicate a higher quality of program. Fifty percent of the sample had an average score of 74 percent, the highest of the four programs. The mean score of the observer evaluation was 58.9 percent.

Days at risk refers to the number of days between release from the program and when the recidivism data was collected. The mean number of days was 367 (approximately one year).

Intermediate Objectives

Table 9 presents descriptive data on the intermediate objectives. Most of the offenders included in the sample completed the programs successfully (n=353, 79.1%). About 2.2 percent of the sample moved out of the county. About 40 percent of the sample had no violations while in the program (n=144). Close to 30 percent of the sample had three or more violations (n=101).

Staff were asked to rate offenders on a scale of 1 to 6 on their performance in the Corrective Thinking groups, with 1 being unsatisfactory and 6 being very satisfactory. Almost 50 percent of the sample were rated as 1, 2, or 3 by staff (n=196). About 40 percent of the sample received ratings of 5 or 6 (n=181).

Table 9: Intermediate Outcomes (N=446).

	N	%
Type of Discharge (N=446)		
Successful	353	79.1
Unsuccessful	73	16.4
Escape	10	2.2
Reclassified	10	2.2
Number of Violations while in Program (N=357)		
0	144	40.3
1 or 2	112	31.4
3 or more	101	28.2
Rating by Staff of Performance in CT (N=427) ¹		
1-3	196	45.9
4	130	30.4
5 or 6	181	42.3
Change in How I Think Score (N=118) ²		
Less Antisocial	74	65.5
No Change	6	5.3
More Antisocial	33	29.2

¹Staff were asked to rate offenders' performance in the Corrective Thinking groups on a scale of 1-6, with 1 being unsatisfactory and 6 being very satisfactory.

²Change was monitored through a pre/post test. A decrease in score means a decrease in antisocial attitudes. If scores stayed the same or went up, they were recorded as no.

Finally, only 118 offenders in the sample took both the pre and post “How I think Questionnaire”. About 65 percent of those decreased their score on the assessment thus improving their antisocial attitudes and cognitive distortions. Approximately 30 percent actually increased their scores, meaning their attitudes worsened. Five percent of the sample had no change in their scores.

Long-term Objectives

Table 10 presents the univariate analysis on the long-term objective variables. About a quarter of the sample was arrested in the year-and-a-half follow up time (n=116, 26%). About 6 percent were arrested for a misdemeanor (n=26) and four percent for a felony (n=19). Approximately 16 percent were incarcerated during the follow up period (n=73). Finally, about a quarter of the sample had technical violations reported to the court (n=107).

MULTIVARIATE RESULTS

In Tables 11, 13, and 15, logistic regression coefficients are reported with the standard error in parentheses. The statistically significant variables are noted by asterisks with the number of asterisks representing the level of significance. The asterisks highlight whether the variable was significant at the standard 0.05*, 0.01**, and 0.001*** levels.

Intermediate Objectives

Table 11 presents the results of four models predicting whether the offender completed the program successfully. In these models, 446 were included in the analysis due to mean replacement. In each model, a different personality category was represented. In model 1, the Jesness personality category of “aggressives” was included

Table 10: Long-term Outcomes (N=446).

	N	%
Arrested (N=446)		
Yes	116	26.0
No	330	74.0
Arrested for Misdemeanor (N=446)		
Yes	26	5.8
No	420	94.2
Arrested for Felony (N=446)		
Yes	19	4.3
No	427	95.7
Incarcerated (N=446)		
Yes	73	16.4
No	373	83.3
Technical Violations Reported to Court (N=446)		
Yes	107	24.0
No	339	76.0

in the analysis. “Aggressives” (recall VanVoorhis’s (1994) four categories) were coded as 1 and all other categories coded as 0. In model 2, “neurotics” were coded as 1 and all other personality categories as 0. In model 3, “dependents” were coded as 1 and all other personality categories as 0 and finally, in model 4, “situationalists” were coded as 1 and all other categories as 0.

In all the models predicting whether the offender did not complete the program successfully (Table 11), three variables were significantly related. Age was significant with a negative coefficient. Older offenders were more likely to be successful in the cognitive-behavioral treatment than younger offenders ($p \leq .05$). Thus, younger offenders appear to be less receptive to the treatment than older offenders. This finding is not surprising given the research on lifecourse which says that younger people tend to commit more crimes than older people (see Sampson and Laub, 1993). Also not surprisingly, offenders who had higher risk scores were less likely to complete the program successfully than offenders with lower risk scores ($p \leq .01$). This too, is consistent with previous research. Finally, those offenders participating in programs with higher observer evaluation scores (higher quality) were more likely to complete the program than offenders participating in programs with lower observer evaluation scores ($p \leq .001$). This finding demonstrated that quality of programming was related to getting offenders to successfully complete the program.

All the models were significant at the .001 level. In all the models predicting whether an offender did not complete the program, the potential responsivity

Table 11: Logistic Regression Models Predicting Whether the Offender Did Not Complete the Program Successfully (Logistic Coefficients Reported, Standard Error in Parentheses)

	Model 1	Model 2	Model 3	Model 4
<u>Offender Characteristics</u>				
Female	.3144 (.3814)	.3554 (.3792)	.3237 (.3800)	.4146 (.3822)
Age	-.0372* (.0167)	-.0360* (.0166)	-.0383* (.0167)	-.0358* (.0166)
Non-white	.4135 (.2699)	.3797 (.2673)	.3760 (.2670)	.3595 (.2670)
<u>Responsivity Characteristics</u>				
I.Q.	-.0088 (.0065)	-.0088 (.0065)	-.0069 (.0066)	-.0080 (.0065)
Sexual Abuse	-.9884 (.6487)	-.9821 (.6515)	-.9207 (.6489)	-.9758 (.6520)
Depressed	.0657 (.0376)	.0627 (.0382)	.0687 (.0378)	.0586 (.0381)
High Self Esteem	.0623 (.0404)	.0584 (.0401)	.0607 (.0399)	.0569 (.0399)
<u>Jesness Personality</u>				
Aggressives	-.3060 (.3160)			
Neurotics		.1187 (.2913)		
Dependents			.5506 (.3931)	
Situationals				-.4553 (.3435)
<u>Control Variables</u>				
Antisocial Attitude (HIT)	.1132 (.2574)	.0726 (.2545)	.0504 (.2565)	-.0140 (.2631)
LSI Score	.0576**(.0231)	.0581**(.0232)	.0613**(.0232)	.0603**(.0233)
Observer Evaluation	-.0281***(.0080)	-.0279***(.0080)	-.0278***(.0080)	-.0279***(.0080)
Model Chi-Square	34.309***	33.511***	35.209***	35.174***
D.F.	11	11	11	11
	N=446	N=446	N=446	N=446

*p ≤ .05
 **p ≤ .01
 ***p ≤ .001

characteristics described in this study were not related to whether the offender completed the program successfully.¹⁰

Probabilities for each case occurring were calculated and are presented on Table 12. An offender who is 22 had a 12 to 18 percent chance of not completing the treatment programs whereas a 40 year old offender had between a 6 to 10 percent chance. In addition to age, both LSI and the observer evaluation variables were important predictors in determining those offenders who did not complete the program. Offenders who received a 34 on the LSI were approximately 10 percentage points more likely to be unsuccessful in the program than those offenders who received an 18 on the LSI. Moreover, offenders who graduated from programs that received a 76 on the observer evaluation score had an eight percent chance of not completing the program as compared to offenders graduating from one of the programs receiving a 42 on the instrument for which they had a 20 percent chance of being unsuccessful. Again, quality of programming is related to whether an offender completes the program successfully.

Long-term Objectives

Tables 13 and 15 present logistic regression models predicting the long-term objectives of recidivism. Two more control variables were entered into the analysis, “days at risk” and “unsuccessful” in the program. Table 13 presents the results of four models predicting whether the offender was arrested during the follow up time. In all

¹⁰ The following interaction variables were entered into the analysis: gender and abuse, gender and depression, and gender and self-esteem. None of these variables were significantly related to completion of the program. In addition, men and women were run separately in logistic regression models. There were two many variables to get an accurate reflection of the effects on women however, in the analysis of men, the results were the same as the whole sample. See Appendix F for the tables describing the differences between men and women in the sample on demographics and on the responsivity characteristics.

Table 12: Adjusted Probabilities of the Dependent Variable Occurring for the Significant Predictors from Logistic Regression Predicting Unsuccessful Termination from the Program

Variable	Probability of Occurance			
	Model 1	Model 2	Model 3	Model 4
Age				
22	13%	12%	18%	14%
31	9%	9%	13%	10%
40	7%	6%	10%	8%
LSI Score				
18	8%	7%	18%	9%
26	13%	12%	26%	14%
34	19%	18%	36%	21%
Observer Evaluation				
42	20%	18%	18%	20%
59	13%	12%	12%	14%
76	8%	8%	8%	9%

Table 13: Logistic Regression Models Predicting Whether the Offender Was Rearrested (Logistic Coefficients Reported, Standard Error in Parentheses)

	Model 1	Model 2	Model 3	Model 4
<u>Offender Characteristics</u>				
Gender	-1.0129*(.4191)	-1.0070*(.4186)	-1.0114*(.4181)	-1.0226**(4185)
Age	-.0049 (.0141)	-.0048 (.0141)	-.0052 (.0141)	-.0056 (.0142)
Non-white	-.0962 (.2656)	-.1031 (.2632)	-.0990 (.2627)	-.0937 (.2633)
<u>Responsivity Characteristics</u>				
Sexual Abuse	.9212* (.4758)	.9259* (.4851)	.9302* (.4759)	.9279* (.4749)
I.Q.	.0009 (.0061)	.0010 (.0061)	.0015 (.0062)	.0008 (.0061)
Depressed	-.0178 (.0344)	.0175 (.0347)	-.0177 (.0344)	.0141 (.0349)
High Self Esteem	.0260 (.0363)	.0252 (.0362)	.0256 (.0360)	.0261 (.0361)
<u>Jesness Personality</u>				
Aggressives	-.0412 (.2879)			
Neurotics		-.0191 (.2619)		
Dependents			.2135 (.3979)	
Situationals				.1759 (.2940)
<u>Control Variables</u>				
Antisocial Attitude (HIT)	-.0603 (.2265)	-.0640 (.2245)	-.0690 (.2238)	-.0257 (.2336)
LSI Score	.0593**(0216)	.0598**(0217)	.0601**(0215)	.0594**(0215)
Observer Evaluation	.0148* (.0076)	.0149* (.0076)	.0149* (.0176)	.0149* (.0075)
Days at Risk	.0021* (.0010)	.0021* (.0010)	.0021* (.0010)	.0021* (.0010)
Unsuccessful	.9157***(.2917)	.9170***(.2915)	.9065***(.2923)	.9263***(.2920)
Model Chi-Square	56.111***	56.096***	56.374***	56.447***
D.F.	13	13	13	13
	N=446	N=446	N=446	N=446

*p ≤ .05
 **p ≤ .01
 ***p ≤ .001

four of these models, six variables were found to be significant. In all models, women were significantly less likely to be rearrested ($p \leq .05$; Model 4 was .01) than men.

Despite the fact that variables such as level of risk, quality of programming, and characteristics such as sexual abuse and depression were controlled for, gender still was significant. While women tend to have a lower recidivism rate in general than men, it does appear as if women were more responsive to cognitive-behavioral treatment than men.¹¹

Like the models predicting whether an offender completed the program, both LSI scores and observer evaluation scores were significant. Surprisingly, the observer evaluation score was significant in the opposite direction as expected. Those offenders participating in programs that scored high on the assessment (higher quality), were more likely to be arrested than those offenders participating in programs receiving a lower score on the observer evaluation ($p \leq .05$). This is significant despite the fact that we controlled for level of risk. It is true that those offenders who participated in the program with the highest observer evaluation score were also the highest risk levels. However, even controlling for that, observer evaluation score was still significant. What is not surprising is that again offenders with higher LSI scores were more likely to be arrested ($p \leq .01$) than offenders with lower LSI scores.

A history of sexual abuse was found to be significant in these models predicting arrest, yet was not found to be significantly related to whether an offender was unsuccessful in the program. Offenders with a history of sexual abuse were significantly

¹¹ Like the models predicting completion of the program, interaction variables were added and men and women were run separately. The interaction variables were not significant and the results for the regression analysis did not change.

more likely to be arrested than offenders with no history ($p \leq .05$). Finally, the two variables that were not entered into the models predicting whether an offender was unsuccessful in the program, but were entered into the models predicting recidivism, were both found to be related to recidivism. Offenders who were unsuccessful in the treatment programs were more likely to be arrested ($p \leq .001$) and offenders with more time out of the program were more likely to be arrested (days at risk) ($p \leq .05$). Besides gender and history of sexual abuse, no other responsivity characteristics were found to be related to whether an offender was rearrested. Moreover, while age was related to whether offenders were successful in the program, it was not related to arrest.

Table 14 presents the probabilities of arrest occurring for the significant variables predicting arrest. While women had approximately a 10 percent chance of being rearrested, men had close to a 25 percent chance. Again, it appears as if women may be more responsive to cognitive-behavioral treatment than men. The chances of someone with a history of sexual abuse being arrested are almost double the chances of an offender with no history being arrested (28 percent to 51 percent). Similarly, offenders receiving a 34 on the LSI had twice the chance of being arrested as offenders receiving an 18 on the instrument (41 percent to 19 percent). An offender who did not complete the program was also twice as likely to be arrested as offenders who successfully completed the program (47 percent to 28 percent). The longer the offender was out of the program and on the street, the chances of re-arrest increased anywhere from 6 to 13 percentage points. Finally, in the opposite direction as expected, offenders participating in programs with higher scores on the observer evaluation instrument were about 10 percentage points more likely to be arrested.

Table 14: Adjusted Probabilities of the Dependent Variable Occurring for the Significant Predictors from Logistic Regression Predicting Arrest.

Variable	Probability of Occurrence			
	Model 1	Model 2	Model 3	Model 4
Gender				
Men	28%	30%	28%	27%
Women	11%	12%	10%	9%
History of Sexual Abuse				
No	28%	30%	28%	27%
Yes	51%	54%	50%	49%
LSI Score				
18	19%	20%	18%	18%
26	28%	30%	28%	27%
34	41%	44%	40%	39%
Unsuccessful				
No	28%	30%	28%	27%
Yes	47%	49%	46%	45%
Observer Evaluation				
42	13%	37%	19%	18%
59	16%	43%	23%	27%
76	20%	50%	28%	27%
Days at Risk				
240	10%	37%	19%	18%
366	13%	43%	23%	22%
493	16%	50%	28%	27%

Table 15: Logistic Regression Models Predicting Whether the Offender Was Incarcerated¹ (Logistic Coefficients Reported, Standard Error in Parentheses)

	Model 1	Model 2	Model 3	Model 4
<u>Offender Characteristics</u>				
Gender	-1.7962**(.6960)	-1.8150**(.6959)	-1.8324**(.6978)	-1.8083**(.6970)
Age	-.0140 (.0178)	-.0147 (.0179)	-.0160 (.0180)	-.0136 (.0179)
Non-white	-.3749 (.3425)	-.3380 (.3388)	-.3312 (.3391)	-.3550 (.3394)
<u>Responsivity Characteristics</u>				
Sexual Abuse	1.1423 (.6054)	1.1111 (.6028)	1.1191 (.6116)	1.1128 (.6046)
I.Q.	-.0015 (.0074)	-.0018 (.0075)	-.0015 (.0076)	-.0015 (.0074)
Depressed	-.0153 (.0422)	.0155 (.0425)	-.0142 (.0421)	-.0189 (.0427)
High Self Esteem	-.0050 (.0440)	-.0015 (.0439)	-.0001 (.0438)	-.0015 (.0437)
<u>Jesness Personality</u>				
Aggressives	.2531 (.3545)			
Neurotics		.0318 (.3145)		
Dependents			.5898 (.4751)	
Situationals				-.2227 (.3865)
<u>Control Variables</u>				
Antisocial Attitude (HIT)	-.2435 (.2702)	-.2135 (.2674)	-.2109 (.2670)	-.2579 (.2785)
LSI Score	.0760**(.0280)	.0733**(.0279)	.0753**(.0276)	.0741**(.0277)
Observer Evaluation	.0343* (.0102)	.0338* (.0101)	.0341* (.0102)	.0339* (.0102)
Days at Risk	.0049**(.0014)	.0049**(.0014)	.0050**(.0014)	.0049**(.0014)
Unsuccessful	1.0812**(.3499)	1.0694* (.3498)	1.0317* (.3503)	1.0592* (.3498)
Model Chi-Square	79.552***	79.059***	80.510***	79.389***
D.F.	13	13	13	13
	N=446	N=446	N=446	N=446

*p ≤ .05
 **p ≤ .01
 ***p ≤ .001

Table 15 presents the findings with regard to predicting whether the offender was incarcerated during the follow up time. In all four models, the same five variables were significant. Like the models predicting arrest, women were less likely than men to be incarcerated ($p \leq .01$). Not surprisingly, those offenders with higher LSI scores were more likely to be incarcerated than offenders with lower LSI scores ($p \leq .01$). Offenders who did not complete the program were more likely to be incarcerated ($p \leq .05$; Model 1 is $.01$). The longer the offenders were out of the program, the more likely they were to be incarcerated ($p \leq .01$). Again, like the models predicting arrest, those offenders participating in programs with higher observer evaluation scores were more likely to be incarcerated ($p \leq .05$). All four of these models were significant at the $.001$ level.

The adjusted probabilities for the models predicting whether the offender was incarcerated during the follow up time are presented in Table 16. In model 1, men had a 12 percent chance of being incarcerated as compared to women, who had only a two percent chance. Not surprising, those offenders scoring high on the LSI (34) had approximately a 20 percent chance of recidivating as compared to offenders scoring 18, who had an eight percent chance of recidivating. Those offenders who were unsuccessful in the treatment program had a 30 percent chance of being incarcerated as compared to 12 percent of those offenders who completed the program successfully. It is surprising that offenders coming from programs that received a high score on the observer evaluation were more likely to be incarcerated (21 percent compared to 8 percent). Finally, the longer the offender was on the street, the more likely he/she was to be incarcerated (20 percent compared to 7 percent).

Table 16: Adjusted Probabilities of the Dependent Variable Occurring for the Significant Predictors from Logistic Regression Predicting Incarceration.

Variable	Probability of Occurrence			
	Model 1	Model 2	Model 3	Model 4
Gender				
Men	12%	6%	8%	13%
Women	2%	2%	1%	2%
LSI Score				
18	7%	7%	5%	8%
26	12%	12%	8%	13%
34	19%	18%	14%	21%
Unsuccessful				
No	12%	12%	8%	13%
Yes	28%	29%	20%	30%
Observer Evaluation				
42	7%	7%	5%	8%
59	12%	12%	8%	13%
76	19%	20%	14%	21%
Days At Risk				
240	7%	7%	5%	7%
366	12%	12%	8%	13%
493	20%	20%	14%	22%

CONCLUSIONS

This study demonstrates a number of significant findings. First, it appears that gender is an important responsivity consideration. Despite controlling for level of risk and quality of programming, women were less likely to be arrested and incarcerated than men. Additionally, a history of sexual abuse was significantly related to whether an offender was arrested and incarcerated. Finally, age was related to whether an offender did not complete the program.

Other variables were also found to be related to outcomes in this study, which include level of risk, observer evaluation score, success in program, and days at risk. These findings demonstrate the need to control for a variety of factors including risk level of offender and quality of programming.

Overall, this study produced significant findings with regard to several important factors related to responsivity of treatment. The next chapter will discuss these findings in more detail as well as the broader implications of this research.

CHAPTER 5: DISCUSSION

INTRODUCTION

This study attempted to sort out the least researched principle of effective intervention: specific responsivity. The responsivity principle assumes that certain personal characteristics of offenders may mediate the effects of treatment. That is, personal characteristics may affect whether an offender can succeed in correctional treatment. This study was different in that we were not comparing offenders to non-offenders and attempting to determine variables related to successful completion of treatment programs and recidivism. Rather, this study was concerned with differences within an offender sample. All of the participants in the study were offenders. The goal of this research was to determine what personal characteristics were related to success in correctional treatment.

Cognitive behavioral therapy has been gaining attention for a variety of reasons. One reason for its popularity is that it is easier to use than traditional counseling. Correctional staff can easily be trained to conduct the treatment in a relatively short period of time. Another reason for the increase in the use of cognitive-behavioral programs is that positive effects for this type of treatment have been found in the correctional treatment literature (Ross, Fabiano, and Ewles, 1988; Robinson, Grossman, and Porporino, 1991; Robinson, 1995). Cognitive-behavioral programming also targets one of the strongest correlates of crime, antisocial attitudes (Andrews and Bonta, 1999). Finally, cognitive-behavioral programs meet the principle of general responsivity. This principle states that programs should be behavioral in nature and include techniques such as role-playing. For these reasons, cognitive curriculums are dominating correctional

treatment. It is important, then, that as more and more treatment programs adopt this form of treatment, the exact effects are sorted out. Although there is evidence that cognitive-behavioral curriculums work, for which offenders they work best and least has not been sorted out. Despite Ross and Fabiano's (1985) research that found intelligence to be related to success in cognitive-behavioral treatment, there is only speculation as to what personal characteristics may be important in mediating success in treatment. This study sought to determine what personal characteristics may be important in a popular treatment modality; namely, cognitive-behavioral intervention.

This dissertation is an analysis of personal characteristics of offenders and their importance with respect to success in a cognitive-behavioral treatment program. Chapter 1 described the current state of corrections, the background of rehabilitation, and female offenders, and included a brief depiction of the current study. Chapter 2 reviewed the literature regarding the history of rehabilitation and the principles of effective intervention; specifically, responsivity. Chapter 3 discussed the contributions of the current study and the methods employed, while Chapter 4 presented the findings. This chapter will review the findings and overall implications of this study.

SUMMARY

The current study utilized a longitudinal design with a sample of 344 male and 102 female offenders. A battery of assessments was given to offenders as they entered one of four programs that offered the same cognitive-behavioral treatment. Outcome data were then gathered to determine if any of the personal characteristics of offenders were related to whether an offender did not complete the program, was arrested, and/or incarcerated. While many variables were found to be related to the outcomes measured

in this study, just as interesting was how many variables were not found to be related. Table 17 presents the significant variables with regard to all three outcome variables. The next section will address each research question posed in Chapter Three.

Is gender a responsivity consideration?

While gender was not related to whether an offender completed the program, it was found to be significantly related to recidivism (both re-arrest and incarceration). Men were significantly more likely than women to be arrested and incarcerated. While men tend to have higher recidivism rates in general, it is still interesting that despite controlling for many factors that would likely explain this relationship away such as level of risk, quality of programming, sexual abuse, depression, and self-esteem, gender emerged as an important responsivity consideration. There could be several reasons for this finding. First, it could be a result of failing to control for other system factors. For example, there could be something about the programs for women that differ from the programs for men. This could be due to different staff, different leadership, different programming, and/or overall implementation of the curriculum. Another explanation for this finding could be that women are more receptive to cognitive-behavioral treatment. In this case, the question becomes, what is it about women that make them more receptive? While more research is needed in this area, perhaps women are more motivated, able to take responsibility for their actions, and/or relate better to the curriculum. Due to the lack of literature in this area, the reasons for this finding are speculation at this point.

Table 17: Significant Variables

Predicting Unsuccessful in Program

- 1) Older Offenders More Likely to be Successful than Younger Offenders
- 2) Offenders with Higher LSI Scores More Likely to be Unsuccessful
- 3) Offenders from Programs with Higher Scores on Observer Evaluation More Likely to be Successful in the Program

Predicting Arrest

- 1) Women Less Likely than Men to be Arrested
- 2) Offenders with a History of Sexual Abuse More Likely to be Arrested than Offenders with No History of Sexual Abuse
- 3) Offenders with Higher LSI Scores More Likely to be Arrested
- 4) Offenders from Programs with Higher Scores on Observer Evaluation More Likely to be Arrested
- 5) Offenders with More Time Out on the Street More Likely to be Arrested
- 6) Offenders who are Unsuccessful in the Program More Likely to be Arrested

Predicting Incarceration

- 1) Women Less Likely to be Incarcerated than Men
 - 2) Offenders with Higher LSI Scores More Likely to be Incarcerated
 - 3) Observer Evaluation (+)
 - 4) Offenders from Programs with Higher Scores on Observer Evaluation More Likely to be Incarcerated
 - 5) Offenders with More Time Out on the Street More Likely to be Incarcerated
 - 6) Offenders who are Unsuccessful in the Program More Likely to be Incarcerated
-

One explanation for why women responded better to cognitive-behavioral treatment than men in this study could be that the study failed to control for all the potential factors that could offer an explanation. There were two women's programs and two men's programs represented in this sample. Perhaps merely controlling for quality of program and level of risk was not enough. All the programs differed somewhat in terms of staff and leadership. Given the finding that staff can influence success in programs (see Andrews and Kiessling, 1980), it is possible that staff in the women's programs were more qualified, motivated, consistent with rules, and/or good role models. All of these characteristics could be important in determining whether an offender is successful in cognitive-behavioral programs. Leadership in the program could also be important. Each program differed in terms of the type of leader running the program.

Another possibility for a gender effect could be related to the differences in the additional programming offered at these sites. The programs for women included groups targeting those other "needs" discussed in Chapter Two such as self-esteem, sexual abuse, and/or parenting. Without controlling for these differences in the analysis, it is difficult to discern whether these differences would have an effect.

Despite the fact that there were differences in the programs, this study controlled for important variables. In addition to a "quality of program" variable and level of risk/need of the offender, various other characteristics were included in the model that in theory should explain the gender effect. These include the various other responsibility characteristics such as depression, self-esteem, and a history of sexual abuse. Gender, however, was still significant.

It appears that the women in this study were more receptive to cognitive-behavioral treatment than men. Or perhaps, the men were more resistant to cognitive-behavioral treatment than women. There could be several reasons for this finding. Perhaps women were better able to relate the curriculum to their own lives and make appropriate changes within themselves. Another reason might be associated with the culture of women's programs. Finally, women may be more motivated than men to change.

One of the first steps in the Corrective Thinking curriculum is being able to accept responsibility for the choices you make in your life. Perhaps there is something about women that makes them better able to take responsibility for their actions. It is possible that many of the women blame themselves for their circumstances while men blame others. This may allow for cognitive-behavioral treatment to succeed more with women than men.

Another possibility is that there is something about women's programming that is more supportive of change than men's programming. As was discussed in Chapter Two, women tend to be relationship oriented and tend to define themselves in terms of their relationships with others while men tend to view themselves more as individuals (Gilligan, 1982). Perhaps the culture in the women's programs is more supportive of change thus allowing for a change in thinking. Women may support each other in the groups and therefore participate more than the men. Or perhaps women are more motivated to change than men. This study did not assess offenders on motivation however, maybe women feel they have "more to lose" such as custody of children and are therefore more motivated to stay out of crime.

There are generally two explanations for these findings then. The first one is that there is something about this study that produced this finding. That is, if we controlled for quality of staff for example, perhaps gender would not appear significant. The other explanation however, is that there is something about women that makes them more receptive to cognitive-behavioral treatment. This could be related to motivation and/or ability to take responsibility for their actions. It should again be noted that men tend to recidivate more than women in general yet this finding is still interesting. It is clear however, that more research is needed.

Do offenders with lower IQ's perform worse in cognitive-behavioral treatment than offenders with higher IQ's?

Ross and Fabiano (1985) found that offenders with intelligence levels less than 85 perform worse in cognitive-behavioral treatment than offenders with higher IQ's. In this study, intelligence level as measured by the Culture Fair was not related to intermediate or long term objectives in this study. Those with lower IQ's performed as well in cognitive-behavioral treatment as those with higher IQ's.

There are several possible explanations for the fact that intelligence was related to success in the Reasoning and Rehabilitation program and not in the current study. First, it is possible that that Corrective Thinking is better suited to treat offenders with a large range in IQ. Reasoning and Rehabilitation, the program Ross and Fabiano evaluated, is considered a cognitive skills program while the program in this study is a cognitive restructuring program. Much of the "R and R" curriculum is devoted to learning to problem solve difficult situations while the Corrective Thinking curriculum focuses on

changing what you think when encountering difficult situations. It is possible that intelligence level matters more in a skill program.

Another explanation for this finding could be due to the measure of IQ that was used. Perhaps the Culture Fair is less broad than the measure used by Ross and Fabiano (1985). Moreover, the intelligence measure used in the R and R study could have included a measure of functioning not merely intelligence. Finally, it could be that the delivery of services to the lower intelligence offenders was better at the sites in this study than in the program represented in the Reasoning and Rehabilitation study.

In this study, intelligence did not emerge as a responsivity consideration. Offenders with lower IQ's did as well in the program and were as likely to recidivate as offenders with higher IQ's. More research however, is needed in this area to determine whether this finding is related to the type of cognitive-behavioral program and/or whether it is a function of the curriculum and/or staff.

Is a history of sexual abuse related to success in a cognitive-behavioral program?

It does appear as if a history of sexual abuse is a responsivity consideration. A history of sexual abuse was significantly related to whether an offender is arrested. Thus, those offenders who are sexually abused are less responsive to cognitive-behavioral treatment than offenders who have no history of sexual abuse. There could be several reasons for this. Perhaps people who are sexually abused are less open to change. These particular offenders may need to deal with issues around the abuse before they can participate in cognitive-behavioral treatment. It is possible that offenders who have been sexually abused may be less trusting, feel more vulnerable, and thus less likely to take the risks in groups needed to actively participate in the treatment. Unfortunately, due to the

lack of research in this area, why sexual abuse is an important responsivity consideration is not yet known. It is evident however, that more research is needed in this area to determine why those offenders who are histories of sexual abuse are less responsive to treatment than offenders with no history.

Is depression related to success in a cognitive-behavioral program?

While one study found depression was related to female delinquency, (see Obeidallah and Earls, 1999) it is generally thought of as a responsivity consideration (VanVoorhis, 1997; Kennedy and Serin, 1997; Bonta, 1995). Depression as measured by the CES-D scale was not related to successful program completion and/or recidivism. Those who were depressed performed equally as well as those who were not depressed.

Are offenders with low self-esteem more likely to perform worse in cognitive behavioral treatment?

Self-esteem has received a lot of attention in the literature on correctional rehabilitation. The Feminist literature has asserted that self-esteem is an important need of female offenders and thus treatment programs should address this need. Other researchers have suggested that self-esteem is not a criminogenic need. It has been suggested in this study that self-esteem is a responsivity issue. However, like depression, self-esteem as measured by Rosenberg's Self-Esteem Inventory was not related to any intermediate or long-term objectives. Those offenders with low self-esteem were just as likely to be unsuccessful in the program, arrested, and incarcerated. It appears as if self esteem is not a responsivity characteristic in cognitive behavioral treatment.

Is personality related to success in cognitive-behavioral treatment?

It was hypothesized in this study that aggressives would perform better in cognitive-behavioral treatment. This is due to the fact that aggressives as measured by the Jesness Inventory, tend to display anti-social attitudes. Cognitive-behavioral treatment targets these attitudes. The Corrective Thinking curriculum attempted to restructure these attitudes toward more pro-social ones. Like intelligence, depression, and self-esteem, personality as measured by the Jesness Inventory was not found to be related to success in cognitive-behavioral treatment. Aggressives performed equally as well in treatment as all the other personality subtypes. Moreover, neurotics, dependents, and situationals did not perform differently from each other. More research is needed in this area given the fact that personality is emerging as an important variable in corrections research at predicting crime and success in programs.

Overall, these results demonstrate that gender and a history of sexual abuse were important responsivity considerations. While it is only speculation at this point why these characteristics were significant in this study, they were in fact found to be related to future arrests and incarceration despite controlling for a variety of factors. Equally informative is the fact that intelligence, depression, personality, and self-esteem were not important responsivity considerations in cognitive-behavioral treatment.

In addition to these responsivity considerations, the logistic regression models demonstrated that many of the control variables were related to both program completion and recidivism. For example age was related to successful completion of the program. Specifically, younger offenders were more likely to be unsuccessful in the program than older offenders. While in this study, age was a control variable, it may be considered a

responsivity consideration. Younger offenders may not be willing or able to participate effectively in the program. This could be related to motivation and/or maturity level. Younger offenders may need more intensive treatment than older offenders. Moreover, perhaps the curriculum needs to be different based on age. Younger offenders may need more concrete examples that hold their attention and are relatable to them.

As expected, level of risk was found to be related to many of the outcome indicators. It was highly significant at predicting whether an offender was successful in the program, whether the offender was arrested and whether the offender was incarcerated. This demonstrates the need to match level of programming to the level of risk. Higher risk offenders need more intensive treatment for a longer duration than lower risk offenders. Moreover, this finding highlighted to importance of collecting information on risk/need level and controlling for it in future evaluation studies.

In order to attempt to gauge the “quality” of the service deliver, an observer evaluation form was developed. The instrument included 38 indicators of quality such as the organization of the group, control over the group, and ability to get offenders to participate. Each of the four programs represented in the study consisted of different staff, leadership, and overall implementation of the curriculum. The quality of the treatment thus varied. Each treatment program was evaluated in terms of quality of treatment, three different times. The score was highly related to whether an offender completed the program successfully. Those offenders coming from programs that received low evaluation scores were significantly more likely to not complete the program. This finding is consistent with what one would expect to find. Better quality programs allow for more offenders to graduate from the program successfully.

The observer evaluation score, however, was related to arrest and incarceration in the opposite direction as expected. Those offenders coming from programs with higher scores on the instrument (higher quality) were actually more likely to be arrested and incarcerated. There are several explanations for this finding. First, it is possible that the observer evaluation form was a better measure of quality of staff rather than quality of the program. Good staff could help offenders complete the program successfully yet may not be related to longer objectives such as recidivism. Or possibly there were other factors that should have been included in the analysis that would explain this finding. As was stated earlier, there were problems associated with collecting this data. Each offender in the sample could have received different quality groups yet each site only had one score representing quality. It is clear that more research is needed in the area of quality of programming.

“Days at risk” was another control variable found to be related to both arrest and incarceration. Those offenders who were released from the programs early in the study and had more time out on the street were more likely to be arrested and incarcerated. This is not a surprising finding. This finding demonstrates the importance of controlling for time out of the program in future evaluation studies. Additionally, this finding has implications for treatment programs as well. Programs need to spend time in treatment discussing the problems offenders will confront the longer they are on the street.

Finally, whether the offender completed the program successfully was related to both long-term objectives. Thus those offenders who were did not complete the program successfully were significantly more likely to be arrested and incarcerated. The program then did appear to have an affect on whether an offender is arrested and incarcerated.

IMPLICATIONS OF THE FINDINGS

This study has implications for treatment programs as well as for evaluators studying responsivity in the future. First, more research is needed to determine if, like this study indicates, women are more responsive to cognitive-behavioral treatment than men. This entails collecting data on both men and women and including them in the same sample. As was discussed earlier, many research studies fail to include women and men in the same sample. Moreover, it is important to control for a variety of program implementation and “quality” factors. Finally, other responsivity considerations such as intelligence, sexual abuse, and personality still need to be researched.

In addition to this study having implications for future research, the findings have implications for treatment programs. Staff need to be aware of the fact that there could be something about the way men relate to the world and see their lives that make them less responsive to cognitive-behavioral treatment. Perhaps, men need a pre-treatment group that first breaks down their thoughts regarding their responsibility for their actions. Moreover, perhaps more needs to be done in the male groups to allow for more support of each other.

Sexual abuse was also found to be a responsivity consideration. It could be that these issues need to be dealt with before these offenders can participate in the cognitive group. The feminist literature has asserted that sexual abuse is an important need of female offenders. In terms of implications, those offenders with histories of sexual abuse, both males and females should be identified and offered specific programming to deal with those issues. Perhaps these issues need to be dealt with prior to the start of groups in cognitive-behavioral treatment.

One of the most important implications has to do with the link between the general and specific responsivity principles. The general responsivity principle suggests that programs that are behavioral in nature tend to reach the greatest numbers of offenders because of the variety of techniques used. The specific responsivity principle asserts that certain personal characteristics of offenders may interfere with their ability to succeed in the treatment. This study found little support for the specific responsivity principle. In so doing, the study may support the general responsivity principle. The treatment program studied in this dissertation is a cognitive-behavioral program. Cognitive-behavioral programming has been found to be successful at reducing recidivism for many reasons discussed earlier such as the fact that it targets a known correlate of crime (antisocial attitudes) and uses a variety of behavioral techniques such as role-playing, reinforcement, and modeling. Perhaps, specific responsivity characteristics were not found to be related to the outcomes because the cognitive-behavioral program succeeds at reaching a wide range of learning styles of offenders. While more research is needed in the future, this finding suggests that behavioral programs may help negate the effects of offender personal characteristics on treatment success.

FUTURE RESEARCH DIRECTIONS

It is clear that more research is needed in the area of responsivity. This study looked at many different responsivity characteristics of offenders in a cognitive-restructuring program. This study controlled for risk/need level and quality and included women in the sample. These are all factors that need to be replicated in future studies.

While intelligence wasn't related to success in this particular cognitive-behavioral program, future research needs to examine if this is the result of being a cognitive restructuring program versus a cognitive skills program. Cognitive restructuring programs change the content of our thinking while cognitive skills treatment teaches offenders how to think differently through skill building. Perhaps intelligence would be more related to success in the skill building program.

This study also included women in the sample. Past research has failed to include women offender populations in the samples and thus much of the research on women is qualitative. While qualitative data is informative, women need to be included into quantitative data sets also. Moreover, quantitative data can guide qualitative data. Once it is found that gender is a responsivity consideration, it will be important to have qualitative data that helps researchers to determine what it is about women and men that make them different in terms of responsiveness to treatment.

This study also controlled for many different variables. In addition to many different potential responsivity characteristics, this study controlled for level of risk and quality of programming. In the future, studies need to control for more "quality" variables such as staff and setting characteristics.

CONCLUSIONS

This study attempted to sort out the notion of specific responsivity in a cognitive-behavioral treatment program. This study consisted of a sample of both male and female offenders from four different treatment programs that implemented cognitive-behavioral treatment. The study sought to understand potential differences in personal characteristics and how they are related to success in the program. First, despite

controlling for many factors, gender and a history of sexual abuse were found to be important responsivity characteristics. This has implications for both treatment programs and for future research. In addition, it is interesting that other potential responsivity characteristics such as intelligence and personality were not related to success in cognitive-behavioral treatment. This study examined a cognitive-behavioral program that tends to be more effective because it meets the principle of general responsivity. Perhaps no other personal characteristics were found to be related to program completion and recidivism because the programming is able to reach a variety of offender types. It is clear that future research needs to be conducted that examines the issue of responsivity. Given the fact that the correctional population is increasing dramatically, it is important that programs be as effective as possible at reducing recidivism. If programs are going to be effective, the responsivity principle needs to be addressed. In order to accomplish this, research needs to uncover the characteristics of offenders most likely to interfere with success in treatment programs. Moreover, given the fact that cognitive-behavioral treatment is being implemented in many offender treatment programs, research needs to be conducted on this type of treatment that addresses personal characteristics of offenders including gender. Finally, studies such as these need to be replicated to determine whether the general responsivity principle can override the specific responsivity principle.

REFERENCES

- Akers, R. L. (1994) Criminological Theories: Introduction and Evaluation. Los Angeles: Roxbury Publishing.
- American Correctional Association (1990) The Female Offender: What Does the Future Hold? Washington DC: St. Mary's Press.
- Andrews, D.A. and J.J. Kiessling (1980) "Program Structure and Effective Correctional Practices: A Summary of the CaVIC Research." Pps. 441-463 in R.R. Ross and P. Gendreau, (eds.) Effective Correctional Treatment. Toronto: Butterworths: 441-463.
- Andrews, D.A., J. Bonta, and R.D. Hoge (1990). "Classification for Effective Rehabilitation: Rediscovering Psychology." Criminal Justice and Behavior, 17, 19-52.
- Andrews, D.A., I. Zinger, R.D. Bonta, P. Gendreau, and F.T. Cullen (1990). "Does Correctional Treatment Work? A Psychologically Informed Meta-Analysis." Criminology. 28, 369-404.
- Andrews, D.A. and J. Bonta (1999). The Psychology of Criminal Conduct. Cincinnati: Anderson Publishing Co.
- Antonowicz, D.H. and R.R. Ross (1994). "Essential Components of Successful Rehabilitation Programs for Offenders." International Journal of Offender and Comparative Criminology. 38(2):97-104.
- Applegate, B.K., F.T. Cullen, and B.S. Fisher (1997) "Public Support for Correctional Treatment: The Continuing Appeal of the Rehabilitative Ideal." The Prison Journal. 77: 237-258.
- Bandura, A. (1969). Aggression: A Social Learning Analysis. Englewood Cliffs, NJ: Prentice Hall.
- Barriga, A.Q. and J.C. Gibbs (1996). "Measuring Cognitive Distortion in Antisocial Youth: Development and Preliminary Validation of the "How I Think" Questionnaire." Aggressive Behavior. 22:333-343.
- Beck, A.T. (1976) Cognitive Therapy and the Emotional Disorders. New York: Meridan.
- Belknap, J (1996). The Invisible Woman: Gender, Crime, and Justice. Cincinnati: Wadsworth Publishing Co.
- Belknap, J., K. Holsinger, and M. Dunn (1997). Moving Toward Juvenile Justice and Youth-Serving Systems that Address the Distinct Experiences of the Adolescent Female: A Report to the Governor. Office of Criminal Justice Services, Columbus, Ohio.

- Belknap, J. and K. Holsinger (1998). "An Overview of Delinquent Girls: How Theory and Practice Have Failed and the Need for Innovative Changes." In R. Zaplin (ed.) Female Offenders: Critical Perspectives and Effective Intervention. Gaithersburg, MD., Aspen Pub.
- Bloom, B. (1998) "Beyond Recidivism: Perspectives on Evaluation of Programs for Female Offenders in Community Corrections." Paper presented at the International Association for Community Corrections, September, 1998.
- Bloom, B. and S. Covington (1998) "Gender-Specific Programming for Female Offenders: What is it and Why is it Important?" Paper presented at the 50th Annual Meeting of the American Society of Criminology, November 11-14, 1998, Washington D.C.
- Bonta, J. (1995) "The Responsivity Principle and Offender Rehabilitation." Forum on Corrections Research, 7 (3), 34-37.
- Bonta, J. (1996) "Risk-Needs Assessment and Treatment." In A.T. Harland (ed.) Choosing Correctional Options that Work: Defining the Demand and Evaluating the Supply. Thousand Oaks, CA., SAGE Pub.
- Bureau of Justice Statistics (1998) Women in Prison. Washington D.C.: Government Printing Office.
- Bush-Baskette, S.R. (1996) "The War on Drugs as a War Against Black Women." In S.L. Miller (ed.) Crime Control and Women: Feminist Implications of Criminal Justice Policy. Thousand Oaks, CA, SAGE Pub.
- Bushman, B.J. (1998) "Threatened Egotism, Narcissism, Self-Esteem, and Direct and Misplaced Aggression: Does Self-Love or Self-Hate Lead to Violence?" Journal of Personality and Social Psychology. 75 (1).
- Catell, R.B. and A.K.S. Catell (1963) Culture Fair Intelligence Test. Champagne, I.L.: Institute for Personality and Ability Testing.
- Chesney-Lind, M. (1997) The Female Offender: Girls, Women, and Crime. Thousand Oaks, C.A., SAGE Pub.
- Chesney-Lind, M., & Brown, M. (1998). "Girls and violence: An overview." In D.J. Flannery & C.R. Huff (Eds.), Youth violence: Prevention, intervention, and social policy . Washington, DC: American Psychiatric Press.
- Clear, T.R. (1994) Harm in American Penology: Offenders, Victims, and Their Communities. Albany: SUNY Press.
- Corey, G. (1996) Theory and Practice of Counseling and Psychotherapy (5th Ed.). Pacific Grove, C.A.: Brooks/Cole.

- Cullen, F.T. and K. Gilbert (1982) Reaffirming Rehabilitation. Cincinnati: Anderson.
- Cullen, F.T., S. E. Skovron, J. Scott, and V. Burton (1990) "Public Support for Correctional Rehabilitation: The Tenacity of the Rehabilitative Ideal." Criminal Justice and Behavior, 17, 6-18.
- Cullen, F.T., P. VanVoorhis, and J.L. Sundt (1996) "Prisons in Crisis: The American Experience." Prisons 200: An International Perspective on the Current State and Future of Imprisonment. UK: Macmillan (US: St. Martin's), pp. 21-52.
- Cullen, F.T., and P. Gendreau (1989) "The Effectiveness of Correctional Rehabilitation: Reconsidering the "Nothing Works" Debate" In L. Goodstein and D. MacKenzie (eds.) The American Prison: Issues in Research Policy. New York: Plenum.
- Cullen, F.T. and P. Gendreau (1999) "Assessing Correctional Rehabilitation: Policy, Practice, and Prospects." Forthcoming.
- Danner, M.J.E. (1998) "Three Strikes and It's Women Who Are Out: The Hidden Consequences for Women of Criminal Justice Policy Reforms" In S.L. Miller (ed.) Crime Control and Women: Feminist Implications of Criminal Justice Policy. Thousand Oaks: Sage.
- Davidson, W, R. Gottschalk, L. Gensheimer, and J. Mayer (1984) Interventions with Juvenile Delinquency: A Meta-Analysis of Treatment Efficacy. Washington D.C.: National Institute of Juvenile Justice and Delinquency Prevention.
- Dobash, R.P., R.E. Dobash, and S. Gutteridge (1986) The Imprisonment of Women. New York: Basil Blackwell.
- Dowden, C. and D.A. Andrews (2001) "What Works for Female Offenders: A Meta-Analytic Review" Pps. 368-380 in E.J. Latessa, A. Holsinger, J.W. Marquart, and J.R. Sorensen (eds.) Correctional Contexts: Contemporary and Classical Readings (2nd Ed.). Los Angeles: Roxbury Press.
- Ellis, A. (1984) "Rational-Emotive Therapy" Pps. 196-238 in R.J. Corsini (ed.) Current Psychotherapies. Itasca, I.L.: F.E. Peacock Publishing, Inc.
- Fabiano, E.A., F.J. Porporino, and D. Robinson (1991) "Canada's Cognitive Skills Program Corrects Offenders' Faulty Thinking." Corrections Today, August: pp102-108.
- Fechner-Bates, S, J.C. Coyne, and T.L. Schwenk (1986) "The Relationship of Self-Reported Distress to Psychopathology" Journal of Consulting and Clinical Psychology, 62, 550-559.
- Feinman, C. (1986) Women in the Criminal Justice System. New York: Praeger.

- Fleming, J.S. and B.E. Courtney (1984) "The Dimensionality of Self-Esteem: II. Hierarchical Facet Model for Revised Measurement Scales." Journal of Personality and Social Psychology. 46(2): 404-421.
- Fox (1984) "Women's Prison Policy, Prisoner Activism, and the Impact of the Contemporary Feminist Movement: A Case Study."
- Freedman, E. (1974) "Their Sisters' Keepers: An Historical Perspective on Female Correctional Institutions in the United States: 1870-1900." Feminist Studies 2:77-95.
- Freud, S. (1953) A General Introduction to Psychoanalysis. New York: Perma Books.
- Gaes, G. G., Flanagan, T. J., Motiuk, L., and Stewart, L. (1998). "Adult Correctional Treatment" In Michael Tonry and Joan Petersilia (eds.), Crime and Justice: A Review of Research. 26.
- Garrett, C. (1985) "Effects of Residential Treatment on Adjudicated Delinquents: A Meta-Analysis." Journal of Research in Crime and Delinquency, 22(4):287-308.
- Gendreau, P (1996) "The Principles of Effective Intervention with Offenders." In A. Harland (ed.), Choosing Correctional Options that Work: Defining the Demand and Evaluating the Supply. Thousand Oaks, CA., SAGE.
- Gendreau, P and R. Ross (1987) "Revivification of Rehabilitation: Evidence from the 1980's." Justice Quarterly. 4: 349-409.
- Gibbs, J.C., K.S. Basinger, and D. Fuller (1992) Moral Maturity: Measuring the Development of Sociomoral Reflection. Hillsdale, N.J.: Erlbaum.
- Gilligan, C. (1982) In a Different Voice. Cambridge, M.A.: Harvard University Press.
- Gillis, C., M. Getkate, D. Robinson, and F. Porporino (1995) "Correctional Work Supervisor Leadership and Credibility: Their Influence on Offender Work Motivation" Forum on Corrections Research. 7 (3): 15-17.
- Glueck, S. and E.T. Glueck (1950) Unraveling Juvenile Delinquency. Cambridge: Harvard University Press.
- Gottfredson, M. and T. Hirschi (1990) A General Theory of Crime. Stanford, CA: Stanford University Press.
- Grant, J. (1965) "Delinquency Treatment in an Institutional Setting." In Quay, H. (ed.) Juvenile Delinquency Research and Theory. Princeton, NJ: Van Nostrand.

- Grasmick, H. G, Tittle, C. R., Bursik, R. & Arneklev, B. (1993). "Testing the Core Empirical Implications of Gottfredson and Hirschi's General Theory of Crime." Journal of Research in Crime and Delinquency, 30: 5-29.
- Harris, P. (1988) "The Interpersonal Maturity Level Classification System: I-Level." Criminal Justice and Behavior. 15: 58-77.
- Hoge, R., D. Andrews, and A. Leschied (1996). "An investigation of Risk and Protective Factors in a Sample of Youthful Offenders" Journal of Child Psychology and Psychiatry. 37(4): 419-424
- Hollin, C. (1990) Cognitive Behavioral Interventions with Young Offenders. New York: Pergamon Press.
- Hubbard, D.J. and T. Pratt (Forthcoming 2002) "A Meta-Analysis of Girls' Delinquency" Journal of Offender Rehabilitation.
- Immarigeon, R. and M. Chesney-Lind (1992) Overcrowded and Overused. San Francisco: National Council on Crime and Delinquency.
- Izzo, R. and R. Ross (1990) "Meta-Analysis of Rehabilitation Programs for Juvenile Delinquents: A Brief Report." Criminal Justice and Behavior. 17:134-142.
- Jennings, W., R. Kilkeny, and L. Kohlberg (1983) "Moral Development Theory and Practice for Youthful and Adult Offenders." In W. Laufer and J. Day (eds.), Personality Theory, Moral Development and Criminal Behavior. Lexington, MA: Lexington Books.
- Jesness, C. and R. Wedge (1983) "Classifying Offenders: The Jesness Inventory Classification System." Sacramento, CA: Youth Authority.
- Jesness, C. (1988) "Jesness Inventory Classification System." Criminal Justice and Behavior. 15: 78-91.
- Jesness, C. (1996) The Jesness Inventory Manual. North Tonawanda, NY: Multi-Health Systems.
- Johnson-Listwan, S. (2001) Personality and Criminal Behavior: Reconsidering the Individual. A dissertation submitted to the University of Cincinnati.
- Jones, P. (1996) "Risk Prediction in Criminal Justice." In A. Harland (ed.), Choosing Correctional Options that Work: Defining the Demand and Evaluating the Supply. Thousand Oaks, CA., SAGE.
- Kearney-Cooke, A. (2002) "Gender Differences and Self-Esteem" The Journal of Gender-Specific Medicine.
- Kennedy, S (1999) "Responsivity: The Other Classification Principle" Corrections Today February: 49-74.

- Kennedy, S (2000) "Treatment Responsivity: Reducing Recidivism by Enhancing Treatment Effectiveness" Forum on Corrections Research. 19-23.
- Kennedy, S and R. Serin (1997) "Treatment Responsivity: Contributing to Effective Correctional Programming" The ICCA Journal, April: 46-52.
- Kirkpatrick, B. L. (1999). "Exploratory research of female risk prediction and LSI-R." Corrections Compendium: The National Journal for Corrections. 24, 14-17.
- Kohlberg, L. (1976) "Moral Stages and Moralization." In T. Lickona (ed.), Moral Development and Behavior. New York: Holt, Rinehart, and Winston.
- Lester, D. and P. VanVoorhis (1997) "Cognitive Therapies" In P. VanVoorhis, M. Braswell, and D. Lester (eds.) Correctional Counseling and Rehabilitation. Cincinnati: Anderson Pub.
- Lewinsohn, P.M, J.R. Seeley, R.E. Roberts, and N.B. Allen (1997) "Center for Epidemiological Studies Depression Scale (CES-D) As a Screening Instrument for Depression Among Community-Residing Older Adults" Psychology and Aging. 12 (2). 277-287.
- Lipsey, M. (1990) "Juvenile Delinquency Treatment: A Meta-Analytic Inquiry into the Variability of Effects." Paper prepared for the Research Synthesis Committee of the Russell Sage Foundation.
- Little, G.L. (2001) "Meta-Anaysis of MRT Recidivism Research on Post-Incarceration Adult Felony Offenders" Cognitive-Behavioral Treatment Review Third and Fourth Quarter. 4-6.
- Martinson, R. (1974) "What Works? Questions and Answers about Prison Reform." The Public Interest. 35 (Spring): 22-54.
- Meichenbaum, D. (1977) Cognitive-Behavioral Modification: An Integrative Approach. New York: Plenum Press.
- Morash, Merry, Robin Haarr and Lila Rucker (1994). "A Comparison of Programming for Women and Men in U.S. Prisons in the 1980's." Crime and Delinquency. 40: 197-221.
- Obeidallah, D.A. and Earls, F.J (1999). Adolescent Girls: The Role of Depression in the Development of Delinquency. Washington D.C., National Institute of Justice, July.
- Palmer, T. (1975) "Martinson Revised." Journal of Research in Crime and Delinquency, 12:133-152.
- Palmer, T. (1992) The Re-emergence of Correctional Intervention. Newbury Park, CA., SAGE.

- Palmer, T. (1996) "Programmatic and Non-programmatic Aspects of Successful Intervention: New Directions for Research." Crime and Delinquency. 41:100-131.
- Radloff, L.S. (1977) "The CES-D Scale: A Self-Report Depression Scale for Research in the General Population" Applied Psychological Measurement. 1(3):385-401.
- Reckless, W.C. (1967) The Crime Problem. New York: Appleton Century Crofts.
- Robinson, D. (1995) The Impact of Cognitive Skills Training on Post-Release Recidivism Among Canadian Federal Offenders. Research Division, Correctional Research and Development, Correctional Service of Canada. Ottawa, Ontario, Canada.
- Robinson, D., M. Grossman, and F. Porporino (1991) Effectiveness of the Cognitive Skills Training Program: From Pilot to National Implementation. Research Brief No. B-07. The Research and Statistics Branch, Correctional Service of Canada.
- Rosenburg, M (1979) Conceiving the Self. New York: Basic Books.
- Ross, R. and E.A. Fabiano (1985) Time To Think. Johnson City: Institute of Social Science and Arts, Inc.
- Ross, R.R., E.A. Fabiano, and C.D. Ewles (1988) "Reasoning and Rehabilitation" International Journal of Offender Therapy and Comparative Criminology. 32:29-35.
- Rothman, D. (1978) "The State as Parent: Social Policy in the Progressive Era." In W. Gaylin, I. Glasser, S. Marcus, and D. Rothman (eds.). Doing Good: The Limits of Benevolence. New York: Pantheon Books.
- Rothman, D. (1980) Conscience and Convenience: The Asylum and its Alternatives in Progressive America. Boston: Little, Brown.
- Sheldon, R.G. and M. Chesney-Lind (1993) "Gender and Race Differences in Delinquent Careers." Juvenile and Family Court Journal. 44(3):73-90.
- Simourd, L. and D.A. Andrews (1994) "Correlates of Delinquency: A Look at Gender Differences." Forum on Correctional Research. 6:26-31.
- Smith, E.J. (1982) "The Black Female Adolescent" Psychology of Women Quarterly. 6(3).
- Spon, R. (1999) Corrective Thinking Treatment Manual: Charting a New Course Curriculum.
- Steffensmeier, D. and E. Allan (1998) "The Nature of Female Offending: Patterns and Explanation." In R.T. Zaplin (ed.) Female Offenders: Critical Perspectives and Effective Interventions. Gaithersburg, MD., Aspen Pub.

- Stewart, L. and W. Millson (1995) "Offender Motivation for Treatment as a Responsibility Factor." Forum on Corrections Research. 7:5-7.
- Sullivan, C., M.Q. Grant and J.D. Grant (1957) "The Development of Interpersonal Maturity: Applications to Delinquency." Psychiatry. 20, 373-385.
- Sweet, A. and A. Loizeaux (1991). Behavioral and Cognitive Treatment Methods: A Critical Comparative Review. Journal of Behavioral Therapy and Experimental Psychiatry. 22, 159-185.
- VanVoorhis, P. (1987) "Correctional Effectiveness: The High Cost of Ignoring Success." Federal Probation. 51(1):56-62.
- Van Voorhis, P. (1994). Psychological Classification of the Adult Male Prison Inmate. New York: State of New York Press.
- VanVoorhis, P., F.T. Cullen, and B. Applegate (1995) "Evaluating Interventions with Violent Offenders: A Guide for Practitioners and Policymakers." Federal Probation. 59:17-28.
- VanVoorhis, P. (1997) "An Overview of Offender Classification Systems." In P. VanVoorhis, M. Braswell, and D. Lester (eds.) Correctional Counseling and Rehabilitation. Cincinnati, Anderson Pub.
- Warren, M. (1976) "Intervention with Juvenile Delinquents." In M. Rosenheim (ed.) Pursuing Justice for the Child. Chicago: University of Chicago Press.
- Warren, M. (1983) "Application of Interpersonal Maturity Theory to Offender Populations." In W. Laufer and J. Day (eds.), Personality Theory, Moral Development, and Criminal Behavior. Lexington, MA: Lexington Books.
- Whitehead, J.T. and S.P. Lab (1989) "A Meta-Analysis of Juvenile Correctional Treatment." Journal of Research on Crime and Delinquency. 26, 276-295.
- Wooldredge and Masters (1993) "Confronting Problems Faced by Pregnant Inmates in State Prisons." Crime and Delinquency. 39(2):195-203.
- Yochelson, S. and S.E. Samenow (1976) The Criminal Personality Volume 1: A Profile for Change. New York: Jason Aronson.
- Yochelson, S. and S.E. Samenow (1977) The Criminal Personality, Volume 2: The Change Process. New York: Jason Aronson.

Appendix A

INTAKE FORM

The following information should be gathered from the client's files.

_____ Name of Researcher completing form

_____/_____/_____ Today's Date

_____ Program Code (2= Adapt for Women, 3= Talbert House for Women, 4= CCC, 5= Beekman)

_____ Control Number of Client

_____ Date Client Entered Program

_____ Approximate Date of Release

_____ Gender of client (2= male, 3= female)

Part 1: Client Characteristics

1. _____ Client Name
2. _____ SS #/Case Number
3. _____/_____/_____ Date of birth
4. _____ Race/ethnicity (2= White, 3= Black, 4= Asian, 5= Hispanic, 6= Bi-racial, 7= Appalachian, 8= Other)
5. _____ Marital Status (2= Single, 3= Married, 4= Separated, 5= Divorced, 6= Widowed, 7= Living with boyfriend/girlfriend, 8= Other)
6. _____ Education Status (2= 8th grade or less, 3= some high school, 4= high school diploma, 5= GED, 6= some college, 7= associates degree, 8= bachelors degree, 9= graduate degree, 10= other)
7. _____ Did current offense involve alcohol or drugs? (2= no, 3= yes)
8. _____ If female, is she pregnant? (2= no, 3= yes)
9. _____ Have dependent children under the age of 18? (2= no, 3= yes)
10. _____ If yes to above how many?
11. _____ Do the children live with the defendant? (2= no, 3= yes)

Part 2: Criminal History

12. _____ Most serious conviction charge (1=violent offense, 2= property offense, 3= drug offense, 4= weapons charge, 5= other _____)

_____ Does the client have any prostitution charges? (1=no, 2=yes)

13. _____ Please list most serious charge.

14. _____ Weapon Involved in Offense (1=yes, 2= no).

15. Please check if client has any of the following?

Prior arrests? _____

Prior misdemeanor convictions? _____

Prior felony convictions? _____

Prior violent convictions? _____

Prior sex offender convictions? _____

Prior prostitution convictions? _____

16. _____ Previous prison sentence? (1=yes, 2= no)

17. _____ Previous probation sentence? (1=yes, 2= no)

18. _____ Probation revocations? (1=yes, 2= no)

19. _____ Age at first arrest.

Part 3: Drug Treatment History

20. _____ Previous drug treatment (1=yes, 2= no)

21. _____ History of drug problem (1=yes, 2= no)

Part 4: Abuse History

22. _____ History of sexual abuse under age 13 (1=yes, 2=no)

By Whom _____

23. _____ History of sexual abuse under age 18 (1=yes, 2=no)

By Whom _____

24. _____ History of sexual abuse as an adult (1=yes, 2=no)

By Whom _____

Appendix B

OBSERVERS EVALUATION FORM

Name of Researcher _____

Today's Date _____ / _____ / _____

Program Code _____ (2= Adapt for Women, 3= Talbert House for Women, 4= CCC, 5= Beekman, 6=Alternatives, 7= Outpatient, 8= Springrove, 9= Pathways, 10= Rivercity)

Name of Group Leader _____

Co-facilitator _____

Lesson Taught _____

Please rate each group accordingly: 2= Very Satisfactory
1= Satisfactory (Could be worse/could be better)
0= Needs Improvement

I. General Issues and Class Control

- 1. _____ Leader's control over participants.
- 2. _____ Leader's ability to manage and enforce group rules.
- 3. _____ Evidence of group pledge.
- 4. _____ Evidence of enforcement of rules and sanctions for inappropriate behavior.
- 5. _____ Evidence of use of thinking reports.
- 6. _____ Evidence of use of reflection bench/jeopardy track.
- 7. _____ Ability to deal with difficult participants.
- 8. _____ Ability to deal with participants who dominate group discussion.

Total _____ % _____

II. Organization

- 9. _____ Adherence to scheduled starting and ending time.
- 10. _____ Adherence to lesson plan for the day.
- 11. _____ Adequacy of preparation for the lesson.
- 12. _____ Clarity of presentations.
- 13. _____ Use of examples, illustrations, definitions, etc.
- 14. _____ Relevance of examples, illustrations, definitions, etc.
- 15. _____ Use of a variety of instructional strategies.
- 16. _____ Timely conclusion of the day's lesson (a conclusion which does not leave matters "in the air" or skip key issues of the lesson).
- 17. _____ Organization of the lesson.
- 18. _____ Review of points from previous lesson.

- 19. _____ Pace, not too slow or too fast.
- 20. _____ Summary of the lesson at the end.

Total _____ % _____

III. Delivery and Response to Participant's Use of Skills

- 21. _____ Leader's skill in assisting participants to self-discovery.
- 22. _____ Objectivity/open-minded stance toward participants.
- 23. _____ Flexibility: Ability to respond to where the group is.
- 24. _____ Enthusiasm.
- 25. _____ Ability to recognize when participants do not understand concepts.
- 26. _____ Ability to redirect clients to thinking errors
- 27. _____ Ability to give clients the appropriate correctives.
- 28. _____ Use of positive feedback.

Total _____ % _____

IV. Sensitivity to Participants Feelings

- 29. _____ Ability to keep participants safe from ridicule from other participants.
- 30. _____ Ability to empathize with participants.
- 31. _____ Ability to confront participants without demeaning them.
- 32. _____ Respect for participants.
- 33. _____ Professional detachment (e.g., from personal issues, from taking comments too seriously).
- 34. _____ Boundaries with participants (e.g., avoids inappropriate use of authority, yet keeps an appropriate leadership (not friendship) role with participants.
- 35. _____ Appropriate modeling.

Total _____ % _____

V. Group Participation

- 36. _____ Level of group participation.
- 37. _____ Level of cooperation between leaders (do not rate if only one leader).
- 38. _____ Engagement of most rather than some participants.

Total _____ % _____

Overall Total _____ % _____

PARTICIPANTS EVALUATION FORM

Directions: We would like to know what the corrective thinking class was like for you. Please mark whether you agree or disagree with each of the following statements.

The responses that you provide to these questions will be kept CONFIDENTIAL. That is, no one at this agency will know how you answered this survey. *Thank you for helping to improve services to correctional clients.*

- 1) The barriers to thinking that were taught in this class were helpful to me.
_____ Agree _____ Disagree
- 2) The correctives to thinking were helpful to me.
_____ Agree _____ Disagree
- 3) I could see how I have barriers to thinking.
_____ Agree _____ Disagree
- 4) The group leader did a good job of giving us examples and showing us what she/he meant.
_____ Agree _____ Disagree
- 5) Some group members did not behave well in class.
_____ Agree _____ Disagree
- 6) The classes helped me improve the way I handle problems.
_____ Agree _____ Disagree
- 7) Sometimes, I had trouble understanding what they were trying to teach us.
_____ Agree _____ Disagree
- 8) By using the steps that I learned here, I will know how to get out of bad situations.
_____ Agree _____ Disagree
- 9) I do not think I will use these steps when I leave this facility.
_____ Agree _____ Disagree
- 10) The instructor used real life examples to demonstrate her/his point.
_____ Agree _____ Disagree
- 11) Sometimes, we role-played to practice parts of the lesson.
_____ Agree _____ Disagree
- 12) I felt comfortable speaking in class.
_____ Agree _____ Disagree

Appendix C

CORRECTIVE THINKING EVALUATION TERMINATION FORM

- 1) Client Name _____
- 2) Social Security Number _____
- 3) Program Code: _____ (2= Adapt; 3= Talbert House for Women; 4= CCC;
5= Beekman)
- 4) Date of Discharge ____/____/____
- 5) Number of violations while in the program _____
- 6) Type of Discharge _____
- 1= Successful 4= Reclassified, moved
2= Unsuccessful 5= Other (specify: _____)
3= Escape
- 7) Criminal Justice Placement _____
- 1= Parole 4= Prison
2= Probation
3= Jail
- 8) On a scale of 1-6, please rate how this individual performed in the corrective thinking group.

Needs Improvement						Very Satisfactory
1	2	3	4	5	6	

Appendix D

CLIENT DATA

- 1. Name:
- 2. DOB:
- 3. Case Number:
- 4. Date of Disposition:

RECIDIVISM DATA

Arrest Date (MM/DD/YYYY) (Code Missing 99/99/9999)	Was this arrest for: 0—General Traffic 1—DUI 2—Misdemeanor 3—Felony 9—Unknown	Type of Offense: 0—Drug 1—Property 2—Violent 3—Sex 4—Other 9—Unknown	Was the Offender Convicted: 0—No 1—Yes 2—Pending 9—Unknown	If convicted, was the offender incarcerated 0—No 1—Yes Local Jail 2—Yes State Prison 3—Yes Federal Facility 4—Yes Other Facility 9—Unknown
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.
26.	27.	28.	29.	30.

Appendix E

Zero Order Correlations

	1	2	3	4	5	6	7	8	9	10
1. Gender	----									
2. Age of Offender	.225**	----								
3. Non-white	.041	.013	----							
4. Sexual Abuse	.306**	.016	-.056	----						
5. I.Q.	-.094	-.284**	-.213**	-.004	----					
6. Depressed	.080	-.008	-.112*	.060	-.050	----				
7. Self Esteem	.019	.036	.155**	-.015	-.043	-.575*	----			
8. Aggressives	-.159**	-.061	.185**	-.097*	-.075	-.088	.144**	----		
9. Neurotics	-.051	-.146**	-.136**	.012	.151**	.279**	-.271**	-.392**	----	
10. Dependents	.066	.089	.068	-.040	-.198	.011	-.003	-.184**	-.240**	----
11. Situationals	.172**	.154**	-.050	.034	.055	-.213**	.159**	-.334**	-.437**	-.204**
12. Antisocial Attitudes	-.306**	-.239**	.053	-.074	-.055	.174**	-.287**	.146**	.177**	.043
13. LSI	-.447**	-.276**	.004	-.050	.032	.105*	-.181**	.016	.215**	-.069
14. Observer Evaluation	-.101*	-.148**	-.133**	-.023	.103*	.178**	-.223**	-.126**	.189**	-.047
15. Days at Risk	-.108*	.033	-.079	-.001	-.015	-.004	.024	.010	.019	-.012
16. Unsuccessful	-.041	-.098*	.108*	-.072	-.079	.040	.042	.011	.011	.069
17. Number of CT Hours	-.536**	-.226**	-.137**	-.144**	.134**	.124**	-.206**	-.040	.188**	-.072
18. Arrested	-.189**	-.129**	-.021	.022	.034	-.014	.004	-.010	.051	.005
19. Incarcerated	-.198**	-.110*	-.063	.010	.039	.029	-.056	.002	.080	.033
	11	12	13	14	15	16	17	18	19	
11. Situationals	----									
12. Antisocial Attitudes	-.368**	----								
13. LSI	-.176**	.328**	----							
14. Observer Evaluation	-.043	.091	.349**	----						
15. Days at Risk	-.031	.049	-.047	-.197**	----					
16. Unsuccessful	-.097*	.069	.094*	-.126**	.207**	----				
17. Number of CT Hours	-.109	.216**	.494**	.887**	.122**	-.100**	----			
18. Arrested	-.028	.084	.234**	.127**	.114*	.176**	.196**	----		
19. Incarcerated	-.079	.087	.241**	.193**	.164**	.178**	.253**	.746**	----	

Appendix F

Table 18: Demographic Characteristics of Offenders by Gender (N and %)

	Males		Females	
	N	%	N	%
Race	N=325		N=100	
White	216	66.5	63	63.0
Black	107	32.9	35	35.0
Hispanic	2	.6	1	1.0
Bi-Racial	0	0	1	1.0
Age at Intake	N=327		N=102	
18 to 29	179	54.7	29	28.4
30 to 45	124	37.9	66	64.7
46 and older	24	7.3	7	6.8
Marital Status	N=318		N=98	
Single	184	57.9	32	32.7
Married	37	11.6	27	27.6
Divorced	55	17.3	25	25.5
Separated	15	4.7	11	11.2
Widowed	0	0.0	1	1.0
Living With	27	8.5	2	2.0
Educational Status	N=322		N=99	
8 th Grade or Less	16	5.0	3	3.0
Some High School	161	50.0	25	25.3
High School Diploma	79	24.5	34	34.3
GED	42	13.0	6	6.1
Some College	19	5.9	24	24.2
Associates Degree	3	.9	5	5.1
Bachelors Degree	2	.6	2	2.0
Children Under Age 18	N=318		N=99	
Yes	163	51.3	65	65.7
No	155	48.7	34	34.3
Number of Dependents Under Age 18	N=164		N=65	
One	70	42.7	24	36.9
Two	45	27.4	27	41.5
Three	22	13.4	10	15.4
Four	19	11.6	3	4.6
Five	3	1.8	0	0
Six or more	5	3.0	1	1.5
Live with Offender	N=141		N=61	
No	112	79.4	16	26.2
Yes	29	20.6	45	73.8

Table 19: Current Offense Characteristics of Offenders by Gender (N and %)

	Males		Females	
	N	%	N	%
Most Serious Charge	N=325		N=95	
Violent Offense	169	52.0	6	6.3
Property Offense	70	21.5	21	22.1
Drug Offense	70	21.5	61	64.2
Other	9	2.8	7	7.4
Weapon Involved in Offense	N=314		N=83	
No	253	80.6	80	96.4
Yes	61	19.4	3	3.6
Involved Alcohol/Drugs	N=314		N=97	
Yes	228	72.6	79	81.4
No	86	27.4	18	18.6

Table 20: Criminal History Characteristics of Offenders by Gender (N and %)

	Males		Females	
	N	%	N	%
Prior Arrests	N=344		N=102	
Yes	302	87.8	66	64.7
No	42	12.2	36	35.3
Prior Misdemeanors	N=344		N=102	
Yes	382	82.0	40	39.2
No	62	18.0	62	60.8
Prior Felonies	N=344		N=102	
Yes	178	51.7	35	34.3
No	166	48.3	67	65.7
Prior Violent Convictions	N=344		N=102	
Yes	143	41.6	5	4.9
No	201	58.4	97	95.1
Served Time in Prison	N=344		N=102	
Yes	114	35.7	11	11.7
No	205	64.3	91	89.2
Served Probation Sentence	N=344		N=102	
Yes	257	80.6	48	47.0
No	62	19.4	54	52.9
Probation Revocations	N=344		N=102	
Yes	143	45.5	19	18.6
No	171	54.5	839	81.3
Age at First Arrest	N=314		N=82	
19 or Under	203	64.6	11	13.4
20 and Higher	111	35.3	71	86.5

Table 21: Responsivity Characteristics of Offenders by Gender.

	Men		Women	
	n	%	n	%
Culture Fair Intelligence	N=337		N=101	
85 and Under	49	17.5	25	24.8
86-99	149	44.2	45	44.5
100-151	129	38.2	31	30.6
History of Sexual Abuse	N=344		N=102	
No	333	96.8	79	77.5
Yes	11	3.2	23	22.5
Center for Epidemiological Studies Depression ¹	N=314		N=87	
1-5	102	32.5	20	23.0
6-11	133	42.3	42	48.2
12-20	79	25.1	25	28.7
Rosenburg's Self Esteem ²	N=324		N=97	
1-15	84	21.6	14	14.4
16-30	254	78.3	83	85.5
How I Think Attitude Scale	N=340		N=102	
1-2.73	266	82.1	97	96.0
2.74-5.30	58	17.9	4	4.0
Jesness I-Level	N=323		N=97	
I2	21	6.5	5	5.2
I3	103	31.9	20	20.6
I4	199	61.6	72	74.2
VanVoorhis's 4 Jesness Subtypes	N=323			
Aggressive (AA, CFC, MP)	92	28.4	11	11.3
Neurotic (NA and NX)	121	37.4	30	30.9
Dependent (AP and CFM)	31	9.5	14	14.4
Situational (SE and CI)	79	24.4	42	43.2

¹The higher the score the more depressed the offender.

² The higher the score the higher the self esteem of the offender.