FINAL REPORT

Evaluation of Cognitive-Behavioral Programs for Offenders: A Look at Outcome and Responsivity in Five Treatment Programs

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INTRODUCTION

"The figures are astounding," says Todd Clear in his book, *Harm in American Penology* (1994, p. 43). Clear is referring to the 188 percent increase in the number of offenders under correctional supervision and the 332 percent increase in the number of prisoners in the years 1973-1990. Despite the get tough strategies of the last few decades, there is evidence that the public continues to support the idea of rehabilitation of offenders over deterrence, incapacitation and retributive strategies (see Cullen, Skovon, Scott, and Burton, 1990; Applegate, Cullen, and Fisher, 1997; Cullen and Moon, 2003). One rehabilitative strategy gaining attention is cognitive-behavioral programming.

According to Lester and VanVoorhis (1997), there are four reasons why cognitive-behavioral programs are getting the attention of correctional agencies. First, cognitive programs target observable characteristics (thinking and behavior) related to criminal offending. Thus, cognitive-behavioral strategies are easier to use than other treatment methods such as psychoanalysis for example, which targets past traumas and anxieties. 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 claim that cognitive programming is receiving support in the area of offender rehabilitation is that the program targets "thinking and behaviors." Research has suggested that offenders differ from non-offenders in both the way they think and the content of their thinking (Ross and Fabiano, 1985). Research has also suggested that antisocial attitudes are among the most validated correlates of criminal behavior (Andrews and Bonta, 1999). If treatment

programs can change these cognitive characteristics of offenders, it follows that recidivism rates should be reduced. Finally, according to Lester and VanVoorhis, cognitive programs are gaining attention because of the numerous studies and meta-analyses that indicated that cognitive behavioral strategies are among the most effective programs at reducing recidivism for offenders (Andrews, Zinger, Hoge, Bonta, Gendreau, and Cullen, 1990; Antonowicz and Ross, 1994; Garrett, 1985; Izzo and Ross, 1990; and Lipsey, 1992).

Although research has found that cognitive-behavioral programs can be effective, the curriculum being evaluated in the current study has yet to be systematically studied. Moreover, recent questions have emerged in the literature regarding whether some types of offenders benefit from cognitive-behavioral programming more than others. This last issue is the Responsivity Principle, which suggests that personal characteristics such as intelligence level, self-esteem, depression, personality, and a history of sexual abuse may be related to success or failure in a treatment program.

The following study was designed to evaluate cognitive-behavioral programming in five different treatment sites in southwestern Ohio. The settings ranged from a residential drug treatment facility to a secure community-based correctional facility. Two of the facilities served women, two served men, and one of the facilities served juveniles. The research questions included:

1. ***Was the cognitive-behavioral treatment effective at reducing recidivism rates?***
2. ***Did the treatment work better for some types of offenders than others?***

METHODS

Research Design

This study utilized a quasi-experimental design. Quasi-experimental designs are used in situations where it is not possible to randomly assign subjects to experimental and control groups. The purpose of these designs is to compare two groups that are as similar as possible on key risk/need factors such as demographics and current and prior offense history. Each treatment site was compared to a site deemed to have "similar" offenders so that any treatment effects could be uncovered. In cases where there were significant differences between the groups, statistical controls were utilized to hold those differences constant.

Treatment Program

Corrective Thinking

The cognitive-behavioral program that was implemented at the five treatment programs is based on the research of Yochelson and Samenow (1976, 1977) and is called *Corrective Thinking* or *Truthought*.

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 subjects had certain unique patterns of thinking. 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 accordingly, criminals exaggerate their thinking errors and choose to commit crime.

The *Truthought* curriculum developed by Rogie Spon (1999) is slightly different than Yochelson and Samenow's original concept of thinking errors. Instead of thinking errors, 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 nine barriers in thinking and 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 the problems in 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 practicing 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 a group format. Staff member training covers both 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 toward the relevant barriers in thinking and the correctives for that barrier. Difficult participants are first asked to sit out side of the group and to come back when they can behave. If the disruptive behavior continues, problem individuals are

assigned to a "jeopardy track." Jeopardy track participants must sit in the group but cannot participate. Moreover, they will not earn points for that group.[1]

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

Sample

Treatment Groups

The treatment sample (those that received cognitive-behavioral programming) included men, women, and boys from five different treatment facilities participating in the pilot study. Each of these pilot sites implemented the *Corrective Thinking* curriculum in approximately January, 2000. Each of the treatment sites was then compared to another site with similar offenders that did not receive cognitive-behavioral treatment. Below is a description of each treatment site followed by a brief description of each comparison site.

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 offers programming for juvenile and adult males and females in both residential and non-residential settings. For this study, five Talbert House sites were selected to serve as "pilot" treatment programs. The *Corrective*

[1] Not all programs utilized a jeopardy track.

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 were felons on probation or parole, and a majority were chemically dependent. The treatment program lasted approximately 90 days, over the course of which offenders received approximately 26 hours of exposure to the Corrective Thinking curriculum. In addition to cognitive-behavioral programming, offenders received substance abuse treatment and attended other life skills groups such as parenting. They were also expected to work full-time. A total of 27 women from this program were included in the study.

Beekman

Beekman is a 60-bed halfway house serving adult males. The length of treatment was approximately 90 days, during which offenders received approximately 30 hours of *Corrective Thinking* group treatment. Other programming included chemical dependency, parenting, relationship building, and life skills courses. The residents were also expected to work full time while in the facility. The sample size of offenders from Beekman was 85.

Community Correctional Center (CCC)

CCC is a 100-bed community based correctional facility serving adult male felony offenders on probation. The length of treatment was approximately four months. Offenders at this facility received approximately 120 hours of *Corrective Thinking* treatment. Other programming included chemical dependency, GED, vocational

assistance, family services, and life skills training classes. A total of 192 offenders from CCC were included in this study.

Adapt for Women

Adapt for Women is a 20-bed residential drug treatment program. The program lasted approximately 90 days, during which offenders received approximately 36 hours of *Corrective Thinking* treatment. Other programming included drug/alcohol treatment, counseling, and family services. The study included 57 offenders from Adapt for Women.

Alternatives

Alternatives is a 60-bed residential treatment center for delinquent boys. The program lasted approximately 90 days. The boys in this facility received approximately 40 hours of *Corrective Thinking*. In addition, the boys received school instruction, counseling services, drug/alcohol treatment, and family services. A total of 61 juveniles were included in the sample from Alternatives.

Comparison Groups

Each treatment site was compared to a site in which the offenders did not receive cognitive-behavioral treatment. The comparison site for both Talbert House for Women and Adapt were women at River City Correctional Center (N=57). River City Correctional Center is a community based correctional facility in the City of Cincinnati. The program is operated as a therapeutic community due to the fact that a majority of the offenders are chemically dependent. The comparison site for Community Correctional Center was the River City Correctional Center (N=223). The comparison site for Beekman was Spring Grove (N=72), which is a halfway house operated by Talbert

House. At the time of the study, Spring Grove had not yet implemented cognitive-behavioral programming; however, offenders in Spring Grove received some psycho-educational didactic groups. Finally, the juveniles in Alternatives were compared to a sample of juveniles that were housed in the Department of Youth Services (N=87). The offenders in each of the comparison groups did receive some form of treatment. The treatment, however, the treatment was either limited, or the program utilized a different treatment approach (such as a therapeutic community) rather than a formal cognitive-behavioral approach.

Data Collection

The data were primarily collected by the project director and two additional staff members. While all offenders in the treatment sites were required to participate in the cognitive treatment groups, participation in this study was voluntary. Staff at each study site explained the study to offenders upon intake into each program. The offenders were then asked to sign a release if they agreed to participate in the study (see Appendix A). Offenders in the comparison sites also signed a release to be part of the study.

The first offenders in the sample entered the treatment programs in April 2000, and the last offenders included in the study entered the programs in September 2001. Outcome data were gathered on all offenders in January, 2003. The length of follow up time varied from 15-34 months. Some of the data were collected on both treatment and comparison groups, while other data were collected on only offenders in the treatment groups (see Table 1 for a description of the data collection).

Table 1: Measurement of Variables

Data Collected	Method	By Whom	Time Frame
On Both Treatment and Comparison Groups			
1. Demographic and Criminal History	Client Files	Researcher	Intake
2. Risk/Need Level			
a. Level of Service Inventory-Revised	Interview with Client	Program Staff	Intake
3. Long-term Outcomes			
a. Recidivism	Official Records	Court Staff	Post Termination
1. arrest			
2. incarceration			
Treatment Offenders Only			
1. Sexual Abuse History	Client Files	Researcher	Intake
2. Personality			
a. Jesness Inventory	Paper and Pencil Test	Offender	Intake
3. Self-esteem			
a. Rosenburg's Self Esteem Scale	Paper and Pencil Test	Offender	Intake
4. Intelligence			
a. Culture Fair	Paper and Pencil Test	Offender	Intake
5. Depression			
a. Center for Epidemiologic Studies Scale	Paper and Pencil Test	Offender	Intake
6. Antisocial Attitudes			
a. How I Think Questionnaire	Paper and Pencil Test	Offender	Intake
7. Intermediate Outcomes			
a. Successful Completion of Program	Termination Form	Program Staff	Program Completion

Data Collected on Both Treatment and Comparison Groups

Demographic and Criminal History

Demographic, criminal history, and offense characteristics data were collected on each offender upon intake into each program using archival records (client files). Research staff reviewed files at each treatment and comparison site and recorded the information on the intake form (Appendix B).

Risk/Need Level

Data on the risk/need level were collected on offenders in both treatment and comparison sites as another way to ensure that differences in the two groups could be controlled. The Level of Service Inventory-Revised (LSI-R) and the Youthful Level of Service/Case Management Inventory (Y-LSI) are interview based assessment instruments designed to assess an offender's likelihood of recidivism. The LSI-R and the Y-LSI include 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, while the Y-LSI has 42 items. The LSI-R has been found to predict successful completion of probation, institutional misconduct, and future criminal offending. Moreover, the LSI-R and the Y-LSI have been shown to be valid for a variety of offender types, including females and juveniles (Kirkpatrick, 1999; Hoge, Andrews, and Leschied, 1996).

The LSI-R and the Y-LSI were administered to participants upon intake into the program. The data were collected primarily by program staff.[2] Each interview took approximately one hour.

Long-Term Outcomes

Two measures of recidivism were collected. Arrest data were gathered on offenders through the Hamilton County Probation, Butler County Probation, and Clermont County Probation departments.[3] Adult incarceration data were gathered through the Department of Rehabilitation and Correction. Juvenile incarceration data were gathered through the Hamilton County Juvenile Probation Department and the Department of Youth Services. Outcome data were gathered in January, 2003.

Data Collected on Treatment Groups

Sexual Abuse History

Data on previous sexual victimization was gathered by reviewing the files of treatment group offenders. If a history of sexual victimization was noted in the file, research staff recorded this information on the intake form.

Personality-Jesness Personality Inventory

Personality data were collected from treatment group offenders using the Jesness Inventory Classification System (JICS). The JICS is based on the theory of interpersonal maturity and development (Jesness, 1996). The classification system was developed for use as a personality inventory for adolescents and has since been normed/validated for use with adults (Jesness and Wedge, 1983; Jesness, 1996). The Jesness Inventory is a

[2] Research staff collected these data at Spring Grove, since program staff at Spring Grove were not trained in administering the LSI.

[3] Arrest data were gathered by the probation department overseeing the offenders. Offenders from CCC were supervised by Bulter or Clermont County Probation, while all other offenders were supervised by Hamilton County Probation.

155-item true-false questionnaire with easy to understand items that yields an interpersonal maturity level and nine personality subtype scales.

VanVoorhis (1994) found that Jesnes subtypes can be grouped into four categories-- aggressives (AA, CFC, MP), neurotics (NA and NX), dependents (AP and CFM), and situationals (SE and CI) (see Table 2 for a description of these four categories).

Offenders were given the Jesness Personality Inventory upon intake into each program. The assessment was filled out by the offender using a paper and pencil test. All of the items on the assessment needed to be filled out in order to be scored. In assessments missing four or more items, the inventories were not used. In assessments with three or less missing item the reseachers scored the items in the pro-social direction.[4] There were 42 assessments that were missing three or less items, all of which were included in the sample.

Self-Esteem-Rosenburg's Self-Esteem Scale (RSES)

Self-esteem is a construct that has received significant attention in the area of corrections. While it has not been found to be a predictor of criminal conduct, it has been suggested that self-esteem is a responsivity issue; people with low self-esteem may not believe they can change and become crime-free. Thus, people with low self-esteem are hypothesized to perform worse in the program than offenders with high self-esteem.

Data on self-esteem were collected on treatment group offenders upon intake into the program. The instrument was developed by Morris Rosenburg (1979) and was

[4] These scoring rules were created and used previously in another study (see VanVoorhis et al., 2003).

Table 2. 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. Have antisocial values. Feel alienated and hostile. Act unpredictably.	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.

originally validated and normed on high school students; however, it has since been validated on a variety of populations (see Fleming and Courtney (1984). The RSES 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 (n=7).

Intelligence-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. This is primarily due to the fact that cognitive-

behavioral programs require a certain level of verbal ability as well as an ability to understand basic constructs such as values and attitudes.

Intelligence data were gathered on offenders in the treatment sites upon intake into each program. The Culture Fair Intelligence Test measures individual intelligence in a manner designed to reduce the influence of verbal fluency, cultural climate, and educational attainment. The test, designed by Catell and Catell (1963), contains four subtests involving different perceptual tasks. 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 and was found to be both valid and reliable.

Depression-Center for Epidemiologic Studies Depression Scale (CES-D)

Depression was a responsivity factor addressed in this study. Researchers have suggested 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. It is hypothesized that offenders who are depressed are less likely to participate in the groups and therefore less likely to be successful.

Data were collected on each offender upon intake into the program. The scale used in this study is from the Center for Epidemiologic Studies. The CES-D is a 20-item self-report instrument developed by the National Institute of Mental Health. The scale is widely utilized as a screening instrument 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). In addition, the CES-D is an effective screening device for depression among populations varying on several 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. A total of 16 instruments were included that had missing items.

Cognitive Distortions-How I Think Questionnaire (HIT)

Data were collected on antisocial attitudes and cognitive distortions. It is hypothesized that offenders with higher scores on this assessment will perform better in the program due to the fact that cognitive-behavioral programs are designed to target and reduce these distortions.

Data on cognitive distortions were collected on each treatment-group offender upon intake into the program. The "How I Think Questionnaire" is designed to measure self-serving cognitive distortions (Gibbs et al., 1992; Barriga and Gibbs, 1996). Although primarily designed to be used with anti-social youth, the instrument has some applicability to 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 with responses formatted in a Likert scale. The initial data on the test demonstrates good reliability and validity data (Barriga and Gibbs, 1996). An analysis was conducted on each test 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. The authors of the scale developed a method of

identifying "suspect" tests that involved adding several questions together to determine if a certain threshold score was achieved. If this score was achieved, the test was considered "suspect" and was excluded from the analysis.[5] Thirty-four assessments were excluded from the analysis.

Program Completion

Data on whether offenders completed the program successfully were collected on offenders in the treatment groups. Staff filled out a termination form on each offender indicating whether they completed the program successfully or unsuccessfully.

Analysis

The first research question was related to whether the cognitive-behavioral treatment groups performed better on the outcome measures of arrest and incarceration than the comparison groups. Bivariate analyses were conducted to describe the samples and determine if there were any significant differences between the groups across the variables of interest. Following this, variables displaying significant differences were entered into logistic regression analyses along with group membership (treatment or comparison). This was done to control for differences between the two groups. The information provided by the logistic regression analysis allowed for the calculation of the odds that an event (such as arrest and incarceration) would occur. Thus, the probabilities of arrest and incarceration were also obtained.

The second research question was related to whether certain types of offenders benefited more or less from cognitive-behavioral treatment than others. For these analyses, the offenders that attended all the treatment programs were combined into one

[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.

sample.[6] Descriptive statistics were utilized to describe the sample based on responsivity characteristics, such as intelligence and personality. Logistic regression was again utilized to determine if these characteristics, as well as basic demographics characteristics were related to both the intermediate objective (successful completion) and long-term objectives (arrest and incarceration). The variables entered into these analyses were as follows: age of offender, race, intelligence, history of sexual abuse, depression, self-esteem, personality, treatment group (CCC, Beekman, THW, Adapt), level of cognitive distortions, LSI-R score, and days at risk.

[6] Juveniles were not included due to the fact that they could not be compared to adults on most characteristics such as LSI score.

RESULTS OF THE OUTCOME EVALUATION OF COGNITIVE-BEHAVIORAL TREATMENT

Demographic and offense data were gathered on offenders in both the treatment and comparison sites and incorporated into the statistical models. This was done to control for the possibility that demographic or offense characteristics explained the variations in observed outcomes. There were four specific questions addressed:

1. ***What were the characteristics of the offenders in each treatment and comparison site?***
2. ***What differences existed between the treatment and comparison sites with regards to risk/need factors such as demographics, current offense, and prior criminal history?***
3. ***What characteristics were related to recidivism?***
4. ***Did offenders in the treatment sites perform better than offenders in the comparison sites?***[7]

Adapt for Women

Table 3 describes the demographic and risk/need factors for Adapt (N=57) and River City Women (n=57). The groups were similar on a number of demographic characteristics. The average age for both the treatment group and the comparison site was approximately 35 years old, most of the women at both sites were white, and the majority of the women had children under the age of 18. Finally, approximately 30 percent of the women in both groups had a history of sexual victimization.

However, there were significant differences in the groups in two demographic characteristics as well as in criminal history/current offense characteristics. A higher percentage of women in Adapt were married or currently live with someone than the

[7] Only those offenders that completed the treatment programs successfully were included in these outcome evaluation analyses.

Table 3: Descriptive Statistics for Demographic and Risk/Need Factors by Treatment (Adapt) and Comparison Group (River City).

Variable	Treatment (Adapt) N=57		Comparison N=57	
Demographics				
	Mean	(n)	Mean	(n)
Age	35.44	(57)	34.79	(57)
	%	(n)	%	(n)
Race				
White	67.9	(38)	54.4	(31)
Black/Hispanic	32.1	(18)	45.6	(26)
Marital Status*				
Live with or Married	35.7	(20)	17.5	(10)
No Significant Other	64.3	(36)	82.5	(47)
Children Under Age 18	70.2	(40)	75.4	(43)
H.S. Graduate**	81.8	(45)	57.9	(33)
History of Sexual Abuse	29.8	(17)	33.3	(19)
Criminal History				
Prior Incarceration**	7.5	(4)	31.6	(18)
	Mean	(n)	Mean	(n)
LSI Risk Score***	16.96	(47)	26.07	(42)
	Mean	(n)	Mean	(n)
Age at First Arrest***	29.58	(43)	23.02	(55)
Current Offense				
Alcohol/Drugs Involved*	96.2	(51)	82.5	(47)
Most Serious Offense Type***				
Violent	3.8	(2)	38.6	(22)
Property	11.3	(6)	29.8	(17)
Drug	83.0	(44)	26.3	(15)
Other	1.9	(1)	4.3	(3)

*p=.05
**p=.01
***p=.001

women in the comparison group. In addition, offenders in Adapt were more likely to be high-school graduates than offenders in the comparison group. Offenders in Adapt were less likely to have a history of incarceration, had a lower risk/need score, and tended to be older at their first arrest than offenders in the comparison group. Offenders in Adapt were also more likely to have alcohol/drugs involved in their offense and less likely to have a violent and/or property offense.

Talbert House for Women

Table 4 presents the findings with regard to the Talbert House for Women (N=27) and its comparison group (N=57). The groups were similar with regards to most of the demographic characteristics. The mean age in both groups was 35. Most of the women were white, had high-school diplomas, and had no "significant other" at the time of intake. The groups differed significantly on children. Only 53 percent of the women in THW had children under 18 compared to close to three quarters of the women in the comparison group.

Although the groups were similar with regards to prior incarceration, they differed on the rest of the criminal history and current offense characteristics. The offenders in the comparison group were higher risk, (as measured by the LSI-R) and tended to be older at the time of their first arrest. The treatment group was also less likely to have a violent and/or alcohol/drug related offense.

Table 4: Descriptive Statistics for Demographic and Risk/Need Factors by Experimental (THW) and Comparison Group (River City).

Variable	Experimental (THW) N=27		Comparison N=57	
Demographics				
	Mean	(n)	Mean	(n)
Age	34.44	(27)	34.79	(57)
	%	(n)	%	(n)
Race				
White	63.0	(17)	54.4	(31)
Black/Hispanic	37.0	(10)	45.6	(26)
Marital Status				
Live with or Married	20.0	(5)	17.5	(10)
No Significant Other	80.0	(20)	82.5	(47)
Children Under Age 18*	53.8	(14)	75.4	(43)
H.S. Graduate	59.3	(16)	57.9	(33)
History of Sexual Abuse	14.8	(4)	33.3	(19)
Criminal History				
Prior Incarceration	22.2	(6)	31.6	(18)
	Mean	(n)	Mean	(n)
LSI Risk Score***	18.81	(27)	26.07	(42)
	Mean	(n)	Mean	(n)
Age at First Arrest**	27.92	(24)	23.02	(55)
Current Offense				
Alcohol/Drugs Involved***	48.1	(13)	82.5	(47)
Most Serious Offense Type*				
Violent	7.7	(2)	38.6	(22)
Property	50.0	(13)	29.8	(17)
Drug	26.9	(7)	26.3	(15)
Other	15.4	(4)	4.3	(3)

*p=.05
**p=.01
***p=.001

Community Correctional Center

Table 5 presents findings regarding the Community Correctional Center (N=192) and its comparison site, River City (N=223). The groups were similar with regards to demographic characteristics. The average age at intake for both groups was 30 years, most had "no significant other", and almost all offenders had no history of sexual victimization. About 50 percent of the offenders in both groups had children under age 18 and had a high-school diploma. There was however, a significant difference between the two groups on race. Three quarters of the offenders in the treatment group were white compared to only 31 percent in the comparison group.

There were also some differences with regards to criminal history and current offense. Almost 50 percent of the offenders in the comparison group had a prior history of incarceration compared to only 23 percent in the treatment group. Offenders in the treatment group were higher risk and were more likely to have a violent current offense. About 20 percent of the offenders in both groups had alcohol/drugs involved in the offense. The mean age at first arrest was the same for both groups (20 years).

Beekman

Table 6 presents the findings comparing Beekman (N=85) to its comparison site, Spring Grove (N=72). There were not many significant differences between these two groups on demographics or criminal history. The mean age for the men in both facilities was 33.11 years old. Fifty percent of the offenders in both facilities were white and 50 percent black/Hispanic. Most of the men in each facility had no "significant other" and

Table 5: Descriptive Statistics for Demographic and Risk/Need Factors by Experimental (CCC) and Comparison Group (River City Men).

Variable	Experimental (CCC) N=192		Comparison N=223	
Demographics				
	Mean	(n)	Mean	(n)
Age	29.26	(191)	30.19	(223)
	%	(n)	%	(n)
Race***				
White	76.2	(144)	31.8	(71)
Black/Hispanic	23.8	(45)	68.2	(152)
Marital Status				
Live with or Married	19.6	(37)	18.4	(41)
No Significant Other	80.4	(152)	81.6	(182)
Children Under Age 18	47.6	(90)	53.8	(119)
H.S. Graduate	48.1	(91)	48.0	(107)
History of Sexual Abuse	3.6	(7)	5.4	(12)
Criminal History				
Prior Incarceration***	22.9	(43)	44.5	(98)
	Mean	(n)	Mean	(n)
LSI Risk Score***	29.25	(186)	26.25	(171)
	Mean	(n)	Mean	(n)
Age at First Arrest	19.72	(188)	19.02	(223)
Current Offense				
Alcohol/Drugs Involved	79.5	(147)	82.0	(178)
Most Serious Offense Type**				
Violent	52.9	(100)	46.2	(102)
Property	21.7	(41)	18.1	(40)
Drug	19.6	(37)	31.7	(70)
Other	5.7	(11)	4.1	(9)

p=.01
p=.001

Table 6: Descriptive Statistics for Demographic and Risk/Need Factors by Experimental (Beekman) and Comparison Group (Spring Grove).

Variable	Experimental (Beekman) N=85		Comparison N=72	
Demographics				
	Mean	(n)	Mean	(n)
Age	33.11	(73)	33.11	(71)
	%	(n)	%	(n)
Race				
White	51.4	(38)	51.5	(34)
Black/Hispanic	48.6	(36)	48.5	(32)
Marital Status				
Live with or Married	14.3	(10)	20.3	(12)
No Significant Other	85.7	(60)	79.7	(47)
Children Under Age 18	58.6	(41)	53.7	(29)
H.S. Graduate	49.3	(36)	56.1	(32)
History of Sexual Abuse	2.4	(2)	0.0	(0)
Criminal History				
Prior Incarceration	64.3	(45)	79.3	(46)
	Mean	(n)	Mean	(n)
LSI Risk Score	23.15	(68)	23.06	(71)
	Mean	(n)	Mean	(n)
Age at First Arrest	19.60	(67)	19.02	(57)
Current Offense				
Alcohol/Drugs Involved*	50.7	(35)	67.7	(42)
Most Serious Offense Type*				
Violent	46.6	(34)	60.9	(42)
Property	23.3	(17)	27.5	(19)
Drug	24.7	(18)	8.7	(6)
Other	5.5	(4)	2.8	(2)

p=.05

just over half of the men had children under aged 18 in both facilities. About half of the men in each facility had a high school diploma. No offenders in Spring Grove and only two offenders in Beekman reported a history of sexual abuse.

There was no significant difference between the groups on number of offenders that served time in prison; 65 percent of the treatment group and 80 percent of the comparison group had been incarcerated. The offenders at both facilities had similar likelihoods of recidivating. The mean LSI score was 23 for both sites. They were also similar in terms of age at first arrest: 19 years for men in both sites. However, there were significant differences with regards to current offense characteristics. Close to 70 percent of the comparison group had alcohol/drugs involved in the current offense compared to 51 percent of the treatment group (p=.05). Moreover, 61 percent of the offenders in Spring Grove were there for a violent offense compared to less than 50 percent in Beekman (p=.05).

Alternatives

Table 7 presents the findings comparing the juvenile treatment site, Alternatives (N=61) to its comparison site, the Department of Youth Services (N=87). The only significant differences between these two groups were in age and current offense type. The juveniles in the treatment site were slightly older (16.46 years) than the juveniles in the comparison site (15.76 years), and almost half of the youth in the comparison site were serving time for a violent offense compared to only 26.7 percent in the treatment group. Close to 15 percent of the youth in Alternatives were serving time primarily for a drug offense, compared to only 8.6 percent of juveniles in the comparison site.

Table 7: Descriptive Statistics for Demographic and Risk/Need Factors by Treatment (Alternatives) and Comparison Group (Department of Youth Services).

Variable	Treatment (Alternatives) N=61		Comparison N=87	
Demographics				
	Mean	(n)	Mean	(n)
Age**	16.46	(61)	15.76	(87)
	%	(n)	%	(n)
Race				
White	60.7	(37)	46.0	(40)
Black/Hispanic	39.3	(24)	54.0	(47)
Criminal History				
	Mean	(n)	Mean	(n)
YO-LSI Risk Score	22.53	(19)	21.24	(87)
Current Offense				
Most Serious Offense Type*				
Violent	26.7	(16)	40.7	(33)
Property	45.0	(27)	44.4	(36)
Drug	16.7	(10)	8.6	(7)
Other	11.6	(7)	0.0	(0)

*p=.05
*p=.01

Race and criminal history were not significantly different between the two groups. The treatment group had a slightly higher percentage of white offenders (60 percent) compared to the comparison group (46 percent) but the difference was not significant. The mean Y-LSI score was approximately 22 for both groups.

It should also be mentioned that there were statistically significant different between the two groups on the time from discharge from the program to the time that recidivism data were collected. The mean number of days from discharge to the time that

follow up data were collected was 791.26 for Alternatives and 706.81 days for the comparison group.[8]

Multivariate Analysis

The next analysis used logistic regression to predict arrest and incarceration in the effort to determine if participation in the cognitive-behavioral treatment programs was a predictor of criminal involvement.

Adapt for Women

Results from the logistic regression analysis for Adapt and its comparison site revealed that only two variables were significant predictors of arrest and incarceration: risk and group (see Appendix C for logistic regression table). Higher risk offenders were more likely to be arrested and incarcerated, and Adapt offenders were more likely to be arrested than comparison group offenders.

Figure 1 presents the adjusted probabilities of arrest and incarceration for offenders from Adapt and its comparison site. The results indicate that when controlling for all of the other variables, Adapt offenders had a 68 percent chance of being arrested compared to a 36 percent chance for comparison group offenders. In addition, Adapt offenders had a 41.5 percent chance of being incarcerated while comparison group offenders had a 25 percent chance of being incarcerated.

Talbert House for Women

Results from the logistic regression analysis for Talbert House for Women and its comparison group revealed only one significant finding (see Appendix D for logistic

[8] For this reason, "days at risk" variable was entered into the logistic regression models in order to control for differences between the groups. This variable however, did not affect the analysis and was taken out of the final analysis. Taking this variable out did not change the results. This variable was not entered into the other group comparisons because there were no differences on this variable.

regression table). Risk was predictive of arrest but not incarceration. Thus, offenders with higher LSI scores were more likely to be arrested. Group membership was not significant; offenders from both THW and the comparison group were equally likely to be arrested and incarcerated.

Figure 2 presents the adjusted probabilities of arrest and incarceration for THW and its comparison group. Offenders in both groups had an 8.3 percent chance of being arrested, and less than a 1 percent chance of being incarcerated.

Community Correctional Center

Results from the logistic regression analysis for CCC and its comparison group revealed several significant predictors of arrest and incarceration (see Appendix E for table). Like previous models, the results indicated that offenders with higher LSI scores were significantly more likely to be arrested and incarcerated. Unlike previous models, the offenders in the comparison group were significantly more likely to be arrested than the treatment group. There was no significant difference between the two groups in terms of the incarceration variable.

Figure 1: Probabilities of Arrest and Incarceration for Adapt and Comparison Site

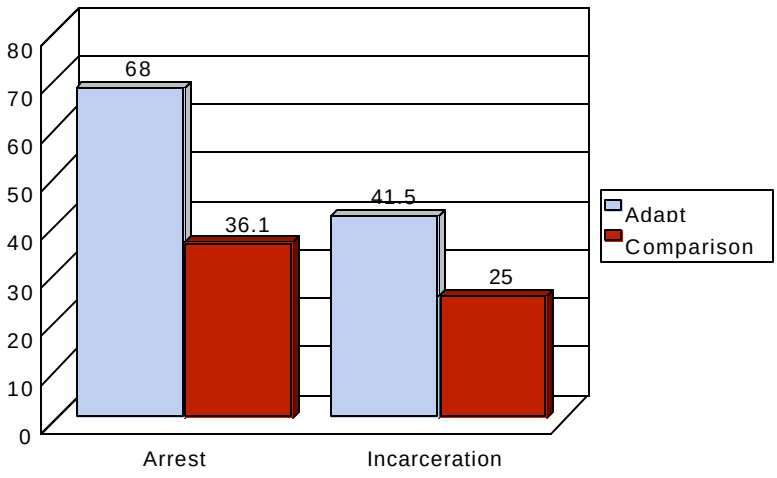


Figure 2: Probabilities of Arrest and Incarceration for THW and Comparison Site

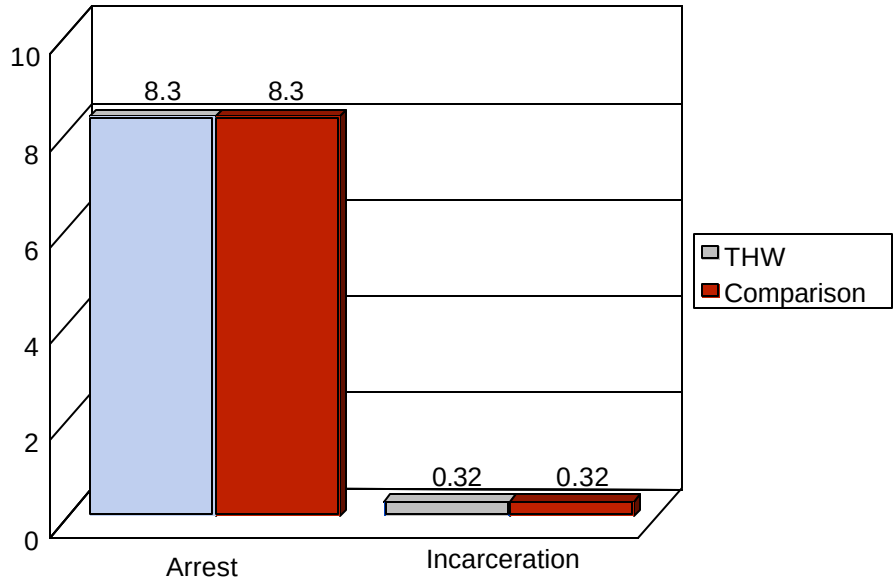


Figure 3 presents the probabilities of arrest and incarceration for CCC and comparison group offenders. Offenders completing CCC had a 41.2 percent chance of being arrested compared to 68.4 percent of offenders in the comparison site. Offenders from CCC had a 35 percent chance of being arrested while offenders from the comparison group had a 33.6 percent chance.

Beekman

Results from the logistic regression analysis predicting arrest and incarceration for Beekman revealed only one predictive variable (see Appendix F for table). Surprisingly, the LSI score did not predict arrest. However, offenders with higher LSI scores were more likely to be incarcerated. Group membership was not predictive of arrest or incarceration; offenders had similar likelihoods of being arrested and incarcerated in both the treatment and comparison groups.

Figure 4 presents the adjusted probabilities predicting arrest and incarceration for Beekman and its comparison group. While Beekman offenders had a 38.8 percent chance of being arrested, comparison group offenders had a 43.6 percent chance. Offenders completing Beekman had a 3.5 percent chance of being incarcerated compared to a 7.5 percent chance for comparison group offenders.

Figure 3: Probabilities of Arrest and Incarceration for CCC and Comparison Site

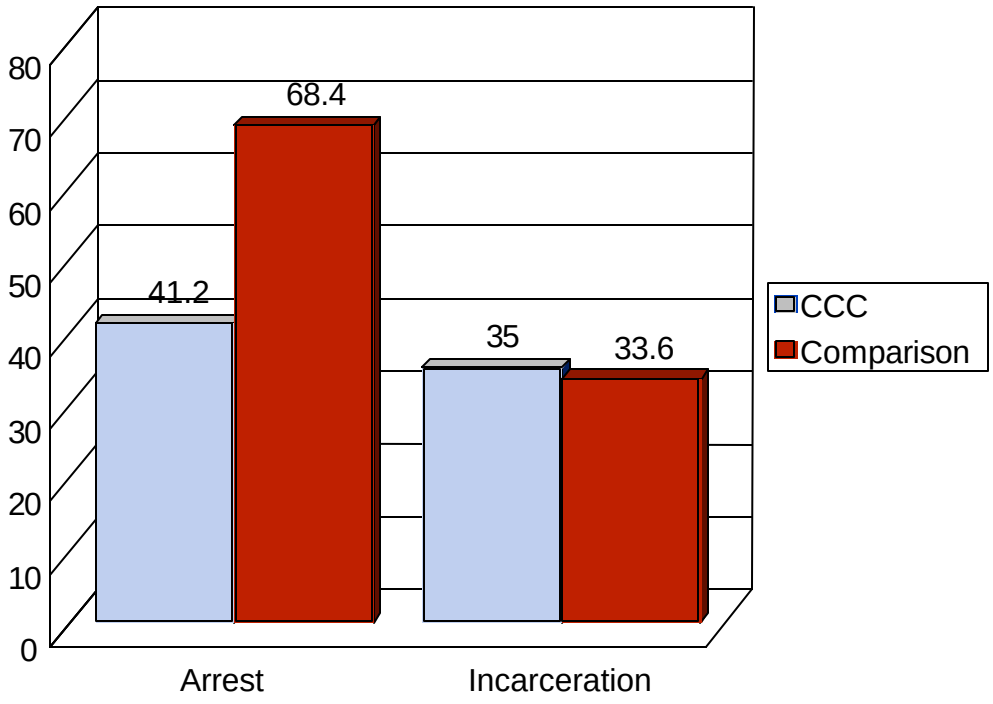
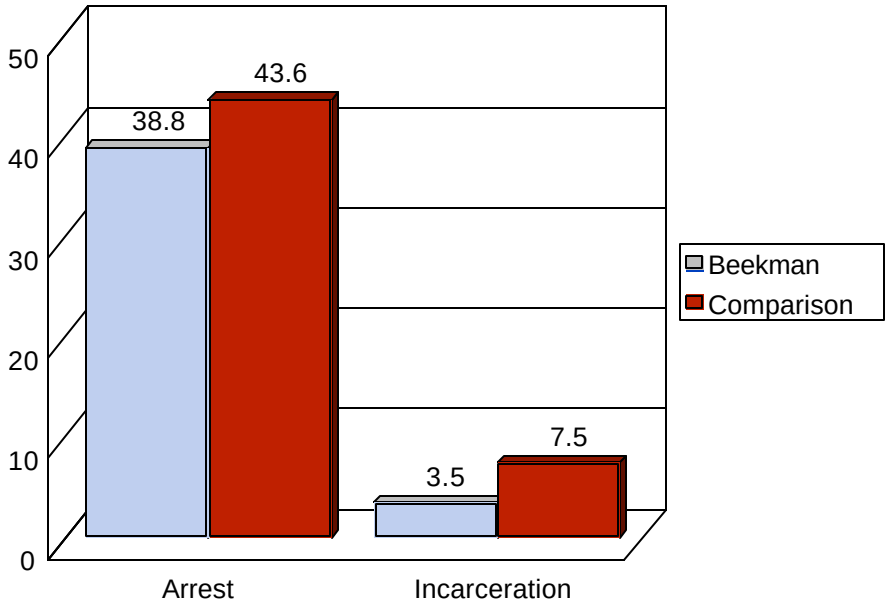


Figure 4: Probabilities of Arrest and Incarceration for Beekman and Comparison Site



Alternatives

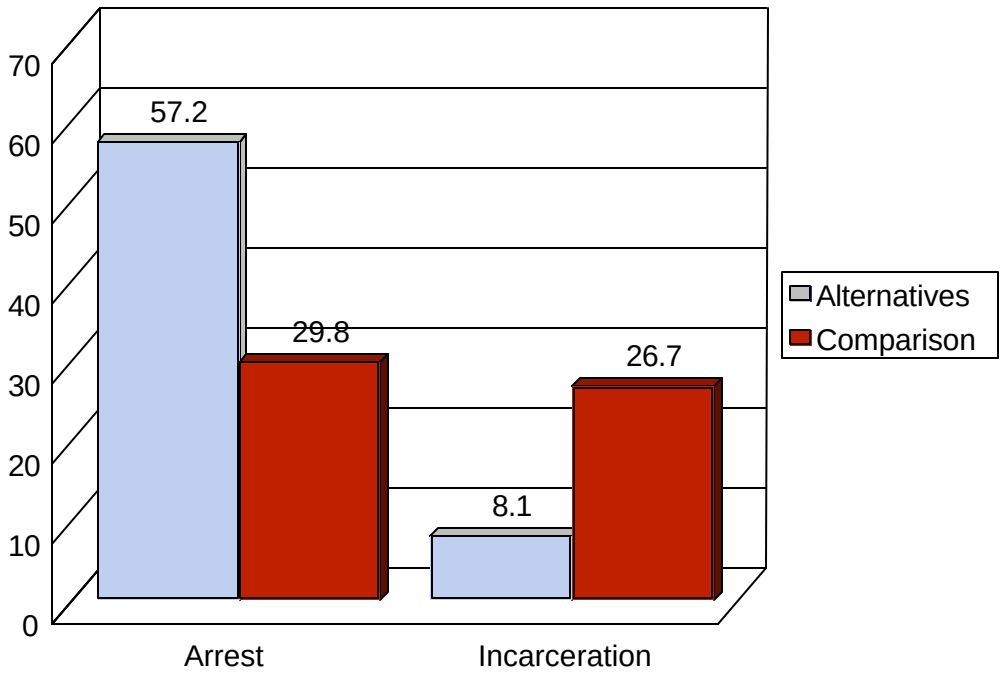
The results of the logistic regression analysis for Alternatives and its comparison site revealed two significant variables: age and group membership (see Appendix G for table). The comparison group was *less* likely than the treatment group to be arrested yet significantly *more* likely to be incarcerated during the follow-up period. In addition, younger offenders were more likely to be incarcerated than older offenders. Risk score was not predictive of arrest or incarceration.

Figure 5 presents the probabilities of arrest and incarceration for the juveniles in Alternatives and the comparison group. Controlling for the other variables, juveniles in Alternatives had a 57.2 percent chance of being arrested compared to 29.8 percent for the comparison group. On the other hand, juveniles in Alternatives had an 8.1 percent

chance of being incarcerated compared to a 26.7 percent chance for the comparison group.

The results of the outcome evaluation indicated that overall, the treatment group did not perform better than the comparison group. The results were mixed in that in some cases treatment offenders did worse than the comparison group (Adapt and Alternatives on arrest), while in two cases the treatment group performed better than the comparison group (CCC and Alternatives on incarceration).

Figure 5: Probabilities of Arrest and Incarceration for Alternatives and Comparison Site



RESULTS OF THE RESPONSIVITY EVALUATION

The second part of this research project was designed to determine if the cognitive-behavioral treatment worked better for some offenders than others. As stated in the methods section, numerous assessments were conducted with offenders in the treatment sites to determine differences in responsivity characteristics, and to determine if these differences were related to treatment outcomes. The specific research question addressed was:

1. ***Did the Corrective Thinking Treatment work better for some offenders than others?***

Descriptive Statistics

In order to answer the above research question, the treatment groups were combined to form one sample to determine if individual characteristics were related to outcomes.[9] Table 8 presents the findings with regards to the descriptive statistics of the responsivity characteristics. The results indicate that approximately 20 percent of the sample had an IQ of 85 or under and most offenders in the sample scored between 86 and 99. The mean IQ for the sample was 97. The Center for Epidemiological Studies Depression Inventory measures the degree to which offenders feel depressed. Approximately 25 percent of the sample scored in the high range of the scale, indicating depression. The Rosenburg's Self Esteem Assessment was utilized to gauge offenders' level of self-esteem. Lower scores indicate a potential problem with self-esteem. Only 20 percent of the sample scored in the lower half of the scale. Finally, the Jesness personality assessment was broken down into four categories as proposed by VanVoorhis (see Table 2 for a complete description). About 25 percent of the sample fell into the

[9] Juveniles in Alternatives were not included in the Responsivity sample due to the fact that we were unable to compare juveniles to adults on risk/need level and Responsivity characteristics.

"aggressives" category. A third of the offenders were neurotic and 28 percent fell into the "situationals" category.

Table 9 presents the findings with regards to the control variables. Less than 25 percent of the total sample were low risk on the LSI-R, while the majority were medium risk. The women in the sample were lower risk than the men. For example, 67 percent of the women in Adapt were lower risk compared to only 8 percent in CCC. Only one offender in Adapt fell into the high level on the LSI. With regards to the results from the "How I Think" questionnaire, most of the offenders in the sample were in the non-clinical range on the HIT scale (this assessment measures cognitive distortions.) However, 15 percent of the sample fell into what the authors of the instrument refer to as the "clinical range" meaning severe cognitive distortions. The final control variable was "days at risk." This variable measured the time from discharge to the date that follow up recidivism data were collected. The values ranged from 463 days (1 year and 2 months) to 1043 days (2 years and 9 months).

Multivariate Analysis

Variables were entered into three analyses predicting whether an offender was unsuccessfully terminated in the program, whether an offender was arrested, and whether an offender was incarcerated. Each analysis had four models, each representing a treatment program.

In the models predicting whether an offender was unsuccessful in the program (see Appendix H for the table), only two variables were significant. In all but one

Table 8: Potential Responsivity Characteristics of Treatment Group Offenders (N=446)

	Adapt		THW		CCC		Beekman		Total	
	n	%	n	%	n	%	n	%	n	%
Culture Fair IQ Test (N=438)										
85 and Under	13	20.3	12	32.4	35	15.6	24	21.2	84	19.2
86-99	31	48.4	14	37.8	92	41.1	57	50.4	194	44.3
100-151	20	31.3	11	29.7	97	43.3	32	28.3	160	36.5
Mean 96.75										
History of Sexual Abuse (N=446)										
Yes	18	27.7	5	13.5	8	3.5	3	2.5	34	7.6
No	47	72.3	32	86.5	218	96.5	115	97.5	412	92.4
Center for Epidemiological Studies Depression Inventory (N=434)										
1-5	12	18.8	10	27.8	59	26.6	53	47.3	134	30.9
6-11	28	43.8	18	50.0	103	46.4	38	33.9	187	43.1
12-20	24	37.5	8	22.2	60	27.0	21	18.8	113	26.0
Mean 8.2										
Rosenburg's Self Esteem Assessment (N=434)										
1-15	12	18.8	4	11.1	59	26.6	14	12.5	89	20.5
16-30	52	81.3	32	88.9	163	73.4	98	87.5	345	79.5
Mean 19.03										
VanVoorhis' 4 Category Jesness Subtypes (N=420)										
Aggressive (AA,CFC,MP)	5	7.9	6	17.6	49	23.0	43	39.1	103	24.5
Neurotic (NA and NX)	21	33.3	19	26.5	96	45.1	25	22.7	151	35.9
Dependent (AP and CFM)	8	12.7	6	17.6	18	8.5	13	11.8	45	10.7
Situational (SE and CI)	29	46.0	13	38.2	50	23.5	29	26.4	121	28.8

Table 9: Control Variables of Treatment Group Offenders (N=446)

	Adapt		THW		CCC		Beekman		Total	
	n	%	n	%	n	%	n	%	n	%
Level of Service Inventory (LSI-R)(N=404)										
1-20	34	66.7	18	48.6	17	7.7	27	28.1	96	23.8
21-31	16	31.4	15	40.5	113	51.4	58	60.4	203	50.0
32-43	1	2.0	4	10.8	90	40.9	11	11.5	106	26.2
Mean 25.73										
How I Think Cognitive Distortion Scale (N=429)[1]										
1.00-2.73 (non-clinical range)	62	95.4	35	97.2	172	78.9	97	89.0	366	85.5
2.74-5.30 (clinical range)	3	4.6	1	2.8	46	21.1	12	11.0	62	14.5
Mean 2.13										
Days at Risk (N=446)[3]	Mean		Mean		Mean		Mean		Mean	
Range is 463-1043 days	802.57		821.84		858.59		883.50		853.97	

[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 to obtain this score.
[3] Refers to the time between discharge and when the recidivism data was collected.

model, risk/need score was predictive of whether an offender was unsuccessful in the program. Higher risk offenders were more likely to be unsuccessful. The other variable that was significant was "treatment program." Offenders in CCC were less likely than offenders in the other programs to be unsuccessful. On the other hand, offenders in Beekman and the Talbert House for Women were more likely to be unsuccessful than offenders in the other programs. No other factors were related to whether an offender was unsuccessful in the program.

Next, variables were entered into logistic regression models predicting both arrest and incarceration. In these models, only those offenders that completed each program successfully were included in the analyses. In the models predicting arrest, two variables were significant: risk and treatment program (see Appendix I for the table). Like the models predicting unsuccessful program termination, the LSI-R score was predictive of arrest in all of the models. Treatment program was also predictive of arrest. Offenders in CCC were *less* likely to be arrested than offenders in the other treatment programs. On the other hand, offenders in Adapt were *more* likely to be arrested than offenders in the other programs. No other responsivity characteristics were significant in the models predicting arrest.

The models predicting incarceration resulted in similar findings to those from the arrest model (see Appendix J for table). Higher LSI-R scores were related to incarceration. Moreover, Beekman offenders were *less* likely to be incarcerated than offenders from the other programs and Adapt offenders were *more* likely to be incarcerated than offenders from other programs.

DISCUSSION OF RESULTS

This study was designed to answer two main research questions. The first question asked whether cognitive-behavioral programming was more effective (that is produced less arrest and incarceration rates) than various other forms of treatment (e.g. therapeutic communities). The second research question tested the responsivity principle which suggests that personal characteristics of offenders may affect whether they can be successful in correctional programming. This study sought to answer these questions by comparing each cognitive-behavioral treatment site to a comparison site and by conducting a within group analysis. That is, the second part of the study involved looking at only the sample of offenders that received cognitive-behavioral treatment to determine if certain offender characteristics were related to intermediate and long-term outcomes.

The evaluation of cognitive-behavioral programming involved comparing each treatment site to a comparison site serving similar offenders. Each comparison site was providing some treatment to its offenders. The study then compared cognitive-behavioral programming to other forms of treatment. The results indicated that the cognitive-behavioral treatment program was not more effective than other forms of treatment (see Table 10).

In two programs (Adapt and Alternatives), offenders were more likely than the comparison group offenders to be arrested. Despite the fact that the female offenders from the comparison site were higher-risk in terms of LSI score and prior criminal history, offenders served by Adapt for Women were more likely to be arrested. In

Table 10: Significant Findings

Outcome Evaluation of Cognitive-Behavioral Treatment

1. Adapt For Women offenders were *more* likely to be arrested than comparison group offenders.

2. CCC offenders were *less* likely to be arrested than comparison group offenders.

3. Alternatives offenders were *more* likely to be arrested than comparison group offenders, yet *less* likely to be incarcerated.

4. Risk/Need Score was predictive of arrest and incarceration in most models.

Responsivity Evaluation

1. CCC offenders were *less* likely than offenders in the other treatment programs to be arrested and to finish the program unsuccessfully.

2. Offenders in THW and Beekman were *more* likely than offenders in the other treatment programs to finish the program unsuccessfully.

3. Adapt offenders were *more* likely than offenders in the other treatment programs to be arrested and incarcerated.

4. Beekman offenders were *less* likely than offenders in the other treatment programs to be incarcerated.

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addition, boys in Alternatives were more likely than boys that served time in the Department of Youth Services to be arrested.

In two programs the results indicate that the cognitive-behavioral treatment may have been effective. Offenders in CCC were less likely than offenders in the comparison group to be arrested. Offenders served by the Community Correctional Center were less likely to be arrested than the offenders from the comparison site. However, this finding does not hold for incarceration. Offenders served CCC were equally as likely as offenders in the comparison group to be incarcerated. While the finding regarding arrest appears to suggest that cognitive-behavioral programming was more effective than the comparison group, caution should be observed. Offenders in CCC live in more rural areas than offenders that were served by the comparison site. Perhaps the offenders in the rural areas were less likely to be "caught" than offenders in a city such as Cincinnati. Also, since arrest data were gathered through the local probation departments it is possible that the arrest data is less reliable than the data for incarcerations.

The results also indicate that the offenders in Alternatives were less likely to be incarcerated than the boys in DYS. Alternatives offenders were more likely to be arrested, yet less likely to be incarcerated. One possible explanation is that while juveniles from Alternatives were being arrested more often, the comparison group youth were committing more serious crimes and thus more likely to be incarcerated. It is also likely that once a youth has been committed to DYS judges are more likely to impose incarceration as a sentence. Age was also an important predictor of arrest and incarceration. Younger boys in both facilities were more likely to be arrested and incarcerated than older boys.

One of the best comparisons in this study was between Beekman and Spring Grove. As described in Table 6, offenders in these two sites were similar in most demographic and criminal history characteristics. Moreover, Spring Grove offenders did not receive a "model" of treatment. Rather, they received psycho-educational didactic groups on a variety of subjects. Unfortunately, the data indicate that Beekman offenders were more likely to be arrested or incarcerated.

The second question was related to whether personal characteristics of offenders were related to success in the cognitive-behavioral program. For this analysis, only offenders that participated in the cognitive-behavioral programming were included in the sample.

When predicting success in the program, only two variables were significant: risk level and program. Higher-risk offenders were more likely to be unsuccessful in the program. In addition, offenders in CCC were less likely to complete the program, while offenders in Beckman and Talbert House for Women were more likely to complete the treatment successfully. No other personal characteristic such as intelligence, personality, self-esteem, and depression were significant.

In the models looking at arrest and incarceration, offenders in CCC were less likely than offenders in the other programs to be arrested. Offenders in Adapt were more likely to be arrested than offenders in the other programs. Interestingly, Adapt for Women had the lowest risk offenders yet, its offenders were most likely to be arrested and incarcerated.

POLICY IMPLICATIONS AND CONCLUSIONS

This study sought to understand whether cognitive-behavioral programming was more effective than other forms of treatment, as well as to find out if the treatment worked better for some offenders than for others (see Table 11). The results of this study were mixed. While it cannot be concluded that the cognitive treatment offered in the treatment sites was more effective than other forms of treatment, it does appear that for the most part, it was at least as effective as other treatments.

There could be several reasons for this finding. First, it may be that the curriculum was not effective as currently designed. The curriculum relies on cognitive restructuring and changing attitudes rather than skill building through behavioral strategies. It may be that without consistent practice and reinforcement the curriculum was not as effective as it could be. The second possible reason for this finding may be the implementation of the programs. Research staff observed the treatment groups at each site three times and it was apparent that quality of implementation varied from site to site and group to group.[10] For the most part, the research staff did not see high quality delivery of the cognitive-behavioral programming that research indicates is required for correctional programming to be effective. Role playing, rewards and punishers (jeopardy track), graduated rehearsal and practice, and appropriate modeling were not consistently being used.

The second research question was related to whether cognitive-behavioral programming "worked" better for some types of offenders than for others. Data were collected on offenders in the treatment sites on such characteristics as intelligence,

[10] Because of staff turnover and the fact that the quality of the groups varied so much within each site, clear conclusions about the quality of each site could not be drawn.

personality, self-esteem, and depression. The results indicated that these personal characteristics of offenders were not related to treatment outcomes. Clearly, more research however is needed in the area of Responsivity.

Risk level, as measured by the LSI score, was related to all three outcome measures; program completion, arrest, and incarceration. More attention should be given to the ability of the LSI to predict these outcomes. It is clear that higher-risk offenders need more supervision, attention, and services in these programs to increase program completion rates as well as to reduce recidivism.

In closing, this study found that at least one cognitive behavioral curriculum was no more or less effective than other correctional programming in reducing recidivism. In addition, personal characteristics of offenders such as personality, intelligence, self-esteem, and depression were not related to treatment outcomes.

Table 11: Policy Implications

1. The Corrective Thinking Cognitive Program was not more effective than other forms of treatment. This may be due to flaws in the curriculum or implementation issues.

2. It does not appear that the cognitive behavioral curriculum was always implemented as designed. Thus, if this program is to be utilized, more attention should be given to staff training, quality assurance, and the use of behavioral strategies.

3. Risk/Need Score is predictive of all treatment outcomes and should be better incorporated into treatment programs. Intensity and duration of programming should be based on risk and needs, and consideration should be given to separating higher and lower risk offenders.

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Appendix A

University of Cincinnati Division of Criminal Justice
Talbert House Evaluation

We are currently conducting an evaluation of 5 Talbert House Programs. We are interested in the success of a new treatment modality and whether differences between individuals influence whether they are successful in the program. This information will provide us with exciting and important knowledge about how to serve clients in the most beneficial way. In order to obtain this information, we will be collecting intake information from files (i.e., demographics, arrest charge) and outcome information (i.e., recidivism rates). We will also be asking you to participate in an interview with University of Cincinnati staff. Before agreeing to participate in this study, it is important that the following explanation of the proposed procedures be read and understood. It describes the purpose, procedures, risks, and benefits of the study. It also describes the right to withdraw from the study at any time. It is important to understand that no guarantee or assurance can be made as to the results.

- Your intake and outcome information will be kept confidential. Intake information will be collected from your files/records. Signing this document entitles us to have access to your files. This information will be kept confidential. Your responses to the interview will also be confidential. We will be issuing you a control number and will not be using your name or social security number. Members of the University of Cincinnati research team will be the only individuals with access to your information. Even if you have previously signed a release to the parole board, probation, and/or the courts thus making any information you provide while in the program subject to be received by these agencies, we will not give this information out. The data will only be reported in the aggregate and will not identify any individual's data. There will be no release of individual information to any Talbert House employee including the Clinical Director.

- Your participation is voluntary. You may refuse to participate at any time, even after you have begun to complete or have already completed the questionnaire. If at any time in the next five years you do not wish to have your responses used as part of the study, please contact Dr. Edward Latessa at (513) 556-5827. If you decide not to participate for any reason, your questionnaires will be destroyed. Your refusal to participate will not influence your case in any way and only members of the University of Cincinnati research team will have knowledge of your decision to participate. If you will be on parole following this program, the parole board will have no knowledge about your participation in this program (45CFR46.305(a)6).

- If you decide to participate, the results of the interview will not influence your case in any way, only the University of Cincinnati will have access to your answers. Your answers will be stored in a locked filing cabinet and destroyed at the end of the study period.

- Approximately 1200 respondents will participate in this survey. Their responses will be analyzed and published in research articles and reports. Results will only be presented for the group as a whole and will not be linked to any individual.

- If you become uncomfortable at any time you have the right to skip any question or decide not to continue.

- We are unable to provide any financial reimbursement for your participation.

- If you have any questions or concerns regarding the survey, your rights as a participant, or you find this survey to be upsetting, please direct them to Dr. Edward Latessa (513) 556-5827 or Dana Hubbard (513) 556-0615 at the University of Cincinnati.

- The University of Cincinnati follows a policy of making all decisions concerning compensation and medical treatment for injuries occurring during or caused by participation in behavioral research on an individual basis. If you believe you have been injured as a result of this research, you can contact Dr. Edward Latessa at (513) 556-5827, Dana Hubbard at (513)556-0615, and/or Dr. Margaret Miller at (513)556-4335.

Thank you for taking time to respond to the questionnaire. Please know that your responses will be very helpful in uncovering the most effective ways to serve correctional clients in Ohio.

Your signature indicates that you understand this introduction to the questionnaire, that you are giving your consent to participate, and that you understand that your participation is voluntary.

Your Signature_____Date_____

Print Name_____

_____

Signature of Guardian (if minor) Date

Signature of Witness_____Date_____

_____

Signature of the Researcher Date

Appendix B

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= 8^{th} 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 C

Logistic Regression Results Predicting Arrest and Re-Incarceration for Adapt for Women and the Comparison Group.

	Arrest		Re-Incarceration	
Variable	B	S.E.	B	S.E.
Significant Other	-.2693	.5149	-.0964	.5529
Below High School	.0919	.4991	-.2593	.5473
LSI Risk/Need Score	.0989*	.0417	.1011*	.0446
Comparison Group	-1.3274*	.6234	-.7564	.6469
Constant	-1.3459	.7863	-2.4887	.8922
	Chi-Square	DF	Chi-Square	DF
Model	6.896	4	5.808	4
	N=87		N=87	

* p=.05

Appendix D

Logistic Regression Results Predicting Arrest and Re-Incarceration for Talbert House for Women and Comparison Group.

	Arrest		Re-Incarceration	
Variable	B	S.E.	B	S.E.
Children Under 18	-.5484	.5861	-.1850	.7084
LSI Risk/Need Score	.0896*	.0429	.0963	.0566
Comparison Group	.0440	.6107	1.2643	.8552
Constant	-2.3976*	1.2123	-5.7294**	1.9731
	Chi-Square	DF	Chi-Square	DF
Model	7.473 (N=68)	3	9.878* (N=68)	3

*p=.05

Appendix E

Logistic Regression Results Predicting Arrest and Re-Incarceration for CCC and Comparison Group

	Arrest		Re-Incarceration	
Variable	B	S.E.	B	S.E.
Black/Hispanic	.1472	.2538	.0866	.2649
LSI Risk/Need Score	.0881***	.0216	.0850***	.0223
Comparison Group	1.1266***	.2711	-.0606	.2747
Constant	-2.8046	.6505	-2.9832	.6537
	Chi-Square	DF	Chi-Square	DF
Model	37.020***	3	29.322***	4
	N=357		N=357	
p=.001				

Appendix F

Logistic Regression Results Predicting Arrest and Re-Incarceration for Beekman and Comparison Group

	Arrest		Re-Incarceration	
Variable	B	S.E.	B	S.E.
Comparison Group	.2008	.3410	.8138	.4562
LSI Risk/Need Score	.0197	.0243	.0596*	.0304
Constant	-.4549	.6116	-3.3162	.8399
	Chi-Square	DF	Chi-Square	DF
Model	1.001	2	7.280	2
	N=139		N=139	

* p=.05

Appendix G

Logistic Regression Results Predicting Arrest and Re-Incarceration for Alternatives and Comparison Group.

	Arrest		Re-Incarceration	
Variable	B	S.E.	B	S.E.
Comparison Group	-1.1478**	.3697	1.4084**	.5356
Age	-.2801	.1533	-.5125**	.1933
YO-LSI Risk/Need Score	.0619	.0361	.0417	.0376
Constant	3.4597	2.6087	4.9136	3.1710
	Chi-Square	DF	Chi-Square	DF
Model	15.323**	3	21.068***	3
	N=148		N=148	

*p=.05
**p=.01
***p=.001

Appendix H

Logistic Regression Models Predicting Whether the Offender was Unsuccessful in the Program (Logistic Coefficients Reported, Standard Error in Parentheses)

	Model 1		Model 2		Model 3		Model 4	
Offender Characteristics								
Age	-.0267	(.0183)	-.0218	(.0176)	-.0202	(.0175)	-.0176	(.0172)
Non-white	.3859	(.3051)	.4796	(.3010)	.4844	(.3010)	.5741	(.2987)
Responsivity Characteristics								
I.Q.	-.0065	(.0074)	-.0084	(.0072)	-.0075	(.0073)	-.0089	(.0071)
Sexual Abuse	-1.4285	(.7747)	-.8657	(.7674)	-1.1135	(.7723)	-.6881	(.7975)
Depressed	.0469	(.0407)	.0659	(.0409)	.0454	(.0400)	.0597	(.0402)
High Self Esteem	.0486	(.0460)	.0482	(.0451)	.0564	(.0442)	.0553	(.0437)
Personality Aggressives	-.1116	(.3466)	-.1937	(.3448)	-.0667	(.3427)	-.1507	(.1461)
Program								
CCC	-1.3291***	(.3597)						
Beekman			1.0518**	(.3384)				
Talbert House for Women					1.0900*	(.4659)		
Adapt for Women							-1.0119	(.6937)
Control Variables								
Antisocial Attitude (HIT)	-.1092	(.2887)	-.2205	(.2900)	.0342	(.2858)	-.0844	(.2789)
LSI Score	.0855***	(.0252)	.0559**	(.0226)	.0472*	(.0215)	.0271	(.0210)
Constant	-2.7181	(1.9654)	-2.8348	(1.9345)	-3.1250	(1.9103)	-2.2005	(1.8731)
Model Chi-Square	30.788***		26.050**		21.680*		18.993*	
DF.	10		10		10		10	
	N=347		N=347		N=347		N=347	

*p = .05
**p = .01
***p = .001

Appendix I

Logistic Regression Models Predicting Whether the Offender was Arrested (Logistic Coefficients Reported, Standard Error in Parentheses)

	Model 1		Model 2		Model 3		Model 4	
Offender Characteristics								
Age	-.0025	(.0147)	.0006	(.0145)	.0007	(.0145)	-.0041	(.0148)
Non-white	.2561	(.2934)	.3476	(.2893)	.3788	(.2879)	.3025	(.2907)
Responsivity Characteristics								
I.Q.	.0132	(.0073)	.0126	(.0073)	.0122	(.0073)	.0121	(.0074)
Sexual Abuse	.4931	(.4705)	.7642	(.4497)	.7186	(.4548)	.1629	(.5059)
Depressed	.0202	(.0360)	.0248	(.0358)	.0235	(.0356)	.0118	(.0363)
High Self Esteem	.0218	(.0403)	.0280	(.0401)	.0337	(.0397)	.0387	(.0402)
Personality Aggressives	.0629	(.3060)	.0407	(.3067)	.0716	(.3032)	.2021	(.3117)
Program								
CCC	-.6965*	(.3375)						
Beekman			.2636	(.3442)				
Talbert House for Women					-.3756	(.5414)		
Adapt for Women							1.1529**	(.4645)
Control Variables								
Antisocial Attitude (HIT)	.1435	(.2518)	.1449	(.2515)	.1516	(.2509)	.1784	(.2531)
LSI Score	.0801***	(.0215)	.0592***	(.0182)	.0548**	(.0181)	.0794***	(.0208)
Days at Risk	.0004	(.0011)	.0003	(.0011)	.0003	(.0011)	.0005	(.0011)
Constant	-4.3756	(2.0162)	-4.4284	(2.0094)	-4.3122	(2.0264)	-5.1946	(2.0610)
Model Chi-Square	23.464*		19.665*		19.573*		25.372**	
D.F.	11		11		11		11	
	N=281		N=281		N=281		N=281	

*p = .05
**p = .01
***p = .001

Appendix J

Logistic Regression Models Predicting Whether the Offender was Incarcerated (Logis tic Coefficients Reported, Standard Error in Parentheses)

	Model 1		Model 2		Model 3		Model 4	
Offender Characteristics								
Age	-.0123	(.0167)	-.0118	(.0167)	-.0146	(.0166)	-.0202	(.0171)
Non-white	.1052	(.3318)	.1290	(.3338)	.0702	(.3266)	-.0084	(.3308)
Responsivity Characteristics								
I.Q.	.0033	(.0080)	.0032	(.0082)	.0030	(.0079)	.0031	(.0081)
Sexual Abuse	.7394	(.5086)	.4711	(.4856)	.6367	(.4877)	-.0721	(.5459)
Depressed	.0082	(.0401)	.0022	(.0402)	.0091	(.0402)	-.0069	(.0408)
High Self Esteem	-.0203	(.0450)	-.0125	(.0448)	-.0222	(.0449)	-.0211	(.0454)
Personality Aggressives	.2075	(.3494)	-.1229	(.3589)	.2156	(.3485)	-.0970	(.3605)
Program								
CCC	.3428	(.3772)						
Beekman			-1.0845*	(.4856)				
Talbert House for Women					-.7916	(.8105)		
Adapt for Women							1.4696**	(.5520)
Control Variables								
Antisocial Attitude (HIT)	.0887	(.2726)	.1471	(.2766)	.0517	(.2739)	.0928	(.2771)
LSI Score	.0800***	(.0248)	.0827***	(.0223)	.0883***	(.0223)	.1231***	(.0268)
Days at Risk	.0012	(.0012)	.0014	(.0013)	.0012	(.0012)	.0015	(.0013)
Constant	-4.1529	(2.3048)	-4.2471	(2.3070)	-3.8879	(2.3214)	-5.1237	(2.3894)
Model Chi-Square	32.789***		37.751***		33.057***		39.010***	
D.F.	11		11		11		11	
	N=281		N=281		N=281		N=281	

*p = .05
**p = .01
***p = .001

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