EVALUATION OF THE FAMILYSHIPS TREATMENT MODULE FOR SEXUAL ASSAULT INMATES AT A MEDIUM SECURITY FEDERAL INSTITUTION

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The effectiveness of a Familyships Treatment Module offered at a medium security federal institution was explored. The Module was designed to help inmates build social skills to deal with dysfunctional family systems. Participants included sexual offenders and inmates convicted of other types of offenses. For the study, a measure of co-dependency that relates to personality deficiencies common to sex offenders was administered to forty-six inmates. Results from analysis of covariance indicate that, for both inmate groups studied, the higher the level of co-dependency, the greater the benefit from the treatment program. The Module was found to be most effective for offenders with severe levels of social dysfunction. Perhaps a less intensive approach could be established for inmates with less severe dysfunction. Findings demonstrate that, in the treatment of sex offenders, it is useful to explore offender background variables to better distinguish those who would benefit most from the Familyships Module.

The purpose of this article is to evaluate the effectiveness of the Familyships Module, offered by a medium security federal institution, in its ability to build social skills to help deal with dysfunctional family systems. The Familyships Module is a program that explores the relationship between codependency, chemical abuse, dysfunctional familial systems and family violence. One goal is to reduce the likelihood of inmates repeating family violence when they return to their communities and families.

One explanation of why some individuals commit sexual crimes assumes the presence of poor parenting skills in the family-of-origin. Children from such families sometimes have little opportunity to fulfill their own emotional needs. As adults, their continued inability to meet these

needs can lead to oversensitivity to threats; low self-esteem and low self-concept; high external locus of control, and denial (1-5). If the dysfunctional family experience is severe enough, it can lead to antisocial behavior, including sexual assault, in adulthood (6-9).

According to Groth (10) and Marshall (11) common personality deficits among sexual assault offenders often include a sense of worthlessness and low self-esteem, a sense of vulnerability and helplessness, impaired social relationships, dysphoric mood, mismanagement of aggression, and tenuous masculine identity. These characteristics are similar to those found in dysfunctional familial systems involving an abuser and a victim. These families are often affected by alcoholism, sexual addiction, and emotional and physical abuse. Such dysfunctional familial systems are often conceptualized by referring to the co-dependency literature (12). "Co-dependency" is a term used to describe the relationship between the chemical substance abuser and family members victimized by the abuser. Wilson-Schaef (4) presented a list of definitions for co-dependency ranging from "problematic behavior resulting from association with an alcoholic" to "people who grew up in an emotionally repressive family" to "an emotional, psychological, and behavioral condition which results from an emotionally oppressive set of rules." Weinhold and Weinhold (13) offer a different definition by stating that codependency exists when two psychologically dependent people—potential victim and abuser—form a relationship with each other. They say that each person relies on the other to complete the relationship. Often, they try to control or blame each other. Codependency is a learned dysfunctional behavior.

Perhaps one important key to the relationship between co-dependency and a dysfunctional familial system is that the latter is the result of prolonged exposure of family members to an oppressive situation. This often leads to psychological dependence for both the abuser and the victim(s). By believing that they cannot exist independently of the abuser, victims tend to inherit problems of the abuser through acceptance of blame and punishment for his or her problems. Once blame, punishment and relation-

ship responsibilities are accepted by the victim, the victim is typically co-dependent. Similarly, the abuser believes that he or she needs the victim to blame and punish because of an inability to cope with inner feelings that were suppressed in childhood. By definition then, both the abuser and victim(s) are co-dependent. Both are incapable of psychological independence until belief systems and dysfunctional behavioral patterns are changed.

THE FAMILYSHIPS MODULE

The Familyships Module attempts to begin this process. The concept of codependency makes a convenient construct to understand how the Module might help inmates. The Familyships Module is an educational program designed to be used in prison. It uses a small group approach which is considered cost effective as well as being clinically more effective for the treatment of sexual offenders. Neidig and Friedman (14) also indicate that a group approach helps participants to build social skills and identify common problems—both considered important parts of the Familyships Program.

Selection for the program consists of an initial interview with selected inmates, focusing on subjects' offenses and psychosocial history. Selected participants are required to write an autobiography. The Familyships Module runs for sixteen consecutive four-hour days. The Module focuses on the importance of communication and social skills in healthy families. Role-playing is one tool used to enhance communication skills of participants. The ultimate choice to be involved in such activities lies with the individual, but he is told repeatedly that competent skill development provides the only alternative to the behavior that led to his incarceration. Also exploration of his previous, dysfunctional, family system may significantly improve his ability to learn more appropriate social and family interaction skills.

Expression of anger is a major factor in abuse. Neidig and Friedman (14) indicate that abusive couples often have specific deficits in their abil-

ity to communicate and resolve conflict without resorting to excessively passive or aggressive strategies. In the Familyships program, participants must take responsibility for their violent behavior, and make a contract to learn more effective, nonviolent ways of resolving conflict. The program repeatedly emphasizes the need to understand and apply appropriate techniques for expressing anger and dealing with conflict.

In addition to communication and social skills training and anger management, the Module includes education on co-dependency and abusive relationships to help participants understand possible causes and implications of their means of interaction. Also, the program examines family roles, grief, and recovery from the impact of alcoholism upon family systems and parenting skills. The goal is to help participants build self-esteem and learn responsibility for their own actions in everyday functioning.

METHOD

Subjects

Two groups of male inmates (N = 46) participated in the Familyships Module. Twenty-seven had been convicted of a sexual assault while the remaining 19 subjects had non sex-offending criminal backgrounds.

Measures

The psychological characteristics of sexual assault offenders identified in the literature are captured in a general way by the Co-dependency Inventory developed by Friel (15). In turn, the Co-dependency Inventory has been found to be significantly correlated with the Buss-Durkee Hostility Inventory (16), the Fear of Negative Evaluation and the Social Avoidance and Distress Scale (17), the Perceived Stress Scale (18), the Social Expression Scale (19), the Depression Proneness Scale (20), the Spielberger State-Trait Anger Scale (21), the Regional Psychiatric Centre (Prairie) 28 (22), the Locus of Control of Behaviour Scale (23), and the Social Self-esteem Inventory (24). Therefore, Friel's (15) scale was one measure adopted to evaluate inmates' process in the Module.

The Co-dependency Inventory consists of 60 true or false questions. Scores can range from 0 to 60. Subjects who score high on this inventory tend to be low in self-esteem, socially passive, fearful of evaluation, uncomfortable in social situations, lacking in social skills, have a lot of hostility or anger, perceive themselves as being highly stressed, are prone to depression, and have an external locus of control. Therefore, the Inventory measures many of the cognitive behavioral traits often associated with sexual offenders and dysfunctional families. Social desirability was measured using the Social Desirability Scale developed by Marlowe and Crowne (25). This inventory consists of 33 items with scores ranging between 0 and 33.

The Risk indicator based on an accumulated score from 13 specific aspects of the sexual assault episode was also computed. Such factors as the amount of force used and the degree to which the victim was injured, whether or not drugs and alcohol were used in the offense, relationship to the victim and the victim's age and sex, the nature of the current offense and how long ago the crime occurred, whether the subject had previously committed a sexual offense(s), the nature of past offense, and the subject's current marital status were evaluated and entered into the evaluation. An approximate assessment of the degree to which sex offenders were motivated to deal with their problems was also entered.

Procedure

The data collection procedure for the Familyships Module required the instructor to administer the above tests on a pre- and post-test basis.

STATISTICAL ANALYSIS

According to Cronbach and Furby (26) and Harris (27), using change scores, or the differences between the post- and pre-test scores, as the dependent variable is not advisable in this experimental design. Using difference scores will significantly lower reliability (28). When change scores are used, any commonality between pre-test and post-test scores are re-

moved. This increases the error term and causes the change scores to have a poorer reliability, thus weakening the correlation between the true scores.

An analysis of covariance controlled for the initial conditions of subjects measured by pre-test scores (29). The pre-test score was the covariate. In the regression equations that follow, tests of significance performed on the predictor variables will represent their effects after their scores have been adjusted for possible differences in initial conditions or the pre-test. This should lead to a more unbiased estimate of treatment effects. A potential selection bias will be further discussed in the Discussion section.

RESULTS

Table 1 provides a description of the degree of dysfunctionality among the subjects based on their initial assessment of co-dependency. Results show that 54.4% of subjects were assessed as having severely dysfunctional profiles. As expected, a significant number of both the sex offenders and the other offenders were mildly or severely dysfunctional. In particular (63.2%) of the other offenders and 48.2% of the sex offenders had serious behavioral problems.

The overall mean score was 30.5 (S.D. = 12.8) for the Co-dependency Inventory. The mean for sex offenders and other prison subjects was 29.3 and 32.3 respectively. These scores were not statistically different across the two groups ($t\ [42] = -.79$, $p > .10$).

The Risk Assessment Inventory was completed by 12 of the 27 sex offenders. Eight of the twelve were considered to be of moderate risk of reoffending, three were mild risk cases and one was assessed as being at high risk of reoffending.

The high number of missing cases for the assessment of Risk (55%) may significantly skew interpretation of these data. The average co-dependency pre-test score among sex offenders with no risk assessment

Table 1. Degree of Dysfunction of Subjects at Initial Assessment

	All Subjects % (n)	Sexual Offenders %(n)	Other Offenders %(n)
Average Functioning	13.0 (6)	14.8 (4)	10.5 (2)
Mild to Moderate Dysfunctioning	32.6 (15)	37.0 (10)	26.3 (5)
Severe Dysfunctioning	54.4 (25)	48.2 (13)	63.2 (12)
Total	100 (46)	100 (27)	100 (19)

measure was higher compared to those cases where risk was measured. The mean for the first group was 33.6 compared to 23.9 for the second ($t[25] = 1.93$, $p < .05$).

Correlation Analysis

A moderately strong correlation between the pre- and post-test scores of the Co-dependency Inventory was expected. The pre-and post-test correlation was .64 ($p < .001$). This higher correlation makes it more likely that any change from pre- to post-test is due to a change in the subjects themselves and not from other factors. A high degree of similarity between level of risk and the pre-test measure of co-dependency ($r = .79$, $p < .01$) was found. In other words, as the level of risk increased so did the level of dysfunction of the subjects.

For the pre-test phase, the Social Desirability Scale was significantly negatively correlated with the Co-dependency Inventory of the study ($r = -.57$, $p < .001$). A drop to an insignificant correlation for the post-test phase of the study ($r = -.14$) indicated subjects did not attempt to fake their re-

sults, and change in attitude had occurred during the subjects involvement in the Familyships Module.

Multivariate Analysis

In order to examine the independent effects of each of these factors, analysis of covariance was carried out. Analysis of covariance is a method which attempts to take into account, or adjust for, the subjects' initial degree of co-dependency or pre-test scores. For the purposes of this study, the pre-test for co-dependency was the covariate and was entered first in the regression equation.

Table 2. Multiple Regression Equation: Post-Test with Pre-Test Covariate, Subject Type, and Interaction Term

Variable	B	St. Error	Beta	t	r
Pre-Test	0.51	0.11	0.59	4.58a	0.64
Sexual Assault (Subject = 1)	-4.80	3.71	-0.44	-1.29	-0.02
Interaction Pre-Test X Subject Type	0.12	0.11	0.36	1.05	0.11
Constant	12.33			3.32b	
		R^2=0.44	F=9.82	N=42	

a $p < .001$
b $p < .005$

Table 2 shows the overall regression equation for predicting post-test scores. Together, the covariate, subject type (sexual assaulter or other), and the interaction of subject type by covariate accounted for 44% of the variance in post-test scores for co-dependency.

An analysis of the difference between the variance explained by the overall equation (43.7%) and the effects of the interaction term of the covariate and subject types (42%), did not lead to a significant difference, ($F [3, 42] = 1.16$, $p > .10$). Thus, the b weights are homogeneous and a common regression coefficient is justified for the two groups.

Table 3. Mean Rating of Severely Dysfunctional Subjects Versus Average, Mild or Moderately Dysfunctional Subjects As a Function of Post-Test Scores

Group	Mean a
Severely Dysfunctional	32.74
Average, Mild or Moderately Dysfunctional	21.95

$E^2=0.497$ N=42

a $F (1,42) = 13.16$
$p < .001$

In other words, the presence of different subject types did not add significantly to the proportion of variance accounted for after allowance was made for the covariate or initial conditions. The difference in the variance explained by the two groups was only 1.1% after adjusting for the covariate ($F [2, 42] = 0.75$, $p > .05$). This means the variance accounted for was due mostly to the differences on the initial measure or pre-test results.

Within the higher co-dependency dysfunctional group (i.e., scores greater than 29), the mean pre-test scores (41.0) were significantly different from the mean post-test scores of 32.7 ($t [22] = 4.97$, $p < .001$). In contrast, for subjects with mild to moderate functioning, the difference between the pre- and post-test mean score (18.7 versus 22.7) was statistically non-significant ($t [17] = -1.33$, $p > .05$) and in the opposite direction.

A one-way analysis of variance, across groups (Table 3), showed significant differences between severely dysfunctional subjects and average,

mild, or moderately dysfunctional subjects and accounted for 50% of the variance in dysfunctionality ($F [1, 42] = 13.16$, $p < .001$).

Other Independent Variables

Controlling for the covariate, the Risk Assessment scale was introduced into the regression equation (Table 4). The overall variance explained increased by 9% to 53% however, remained statistically nonsignificant ($t = -1.258$, $p > .01$). Once the influence of the pre-test was partialed out, the influence of the Risk Assessment scale on the criterion disappears.

Table 4. Multiple Regression Equation: Post-Test with Pre-Test Covariate and Risk Assessment

Variable	B	St. Error	Beta	t	r
Pre-Test	1.01	0.39	1.10	2.61a	0.66
Risk	-1.05	0.84	-0.53	-1.26	0.35
Constant	16.47	8.54		1.93b	
		R^2=0.53	F=4.56	N= 11	

a $p < .05$
b $p < .10$

DISCUSSION

A sample of sex offenders and the general prison population was evaluated after completion of a Familyships Module. The central interest of this study was to determine what and where differences or changes in attitudes occurred among the prison population.

A design was chosen which was thought to have eliminated to a great extent a number of confounding extraneous conditions, which could jeopardize internal validity. For this study, the degree of co-dependency, as

determined by pre-test scores, could effect outcome post-test co-dependency scores. This must be taken into account during analysis in order to isolate the effect the Module has on changing the subjects' level of functioning. In particular, analysis of covariance was used to take into account initial differences in subjects' dysfunctionality in order to determine the effect of the Familyships Treatment Module. By not taking the difference between the pre-test and post-test scores as a dependent variable, statistical regression toward the mean is eliminated.

Although there was no experimental control group for either group, analysis of covariance controlled for initial conditions of subjects. History is not likely to influence this design because the number of consecutive days between the pre-and post-test is approximately 16 days. The relative isolation of inmates confined to the institution reduced the extent to which outside prison factors could affect results.

Table 5. Reduced Regression Equation: Post-Test With Pre-Test Covariate

Variable	B	St. Error	Beta	t	r
Pre-Test	0.56	0.11	0.64	5.26a	
Constant	10.81	3.50		3.09b	
		R^2=0.41	F=27.7	N=42	

a $p < .001$
b $p < .005$

The amount of variance explained by the initial measure or covariate was 41%. The regression equation is shown in Table 5. The constant of 10.81 indicates the predicted level of co-dependency when the pre-test score was zero. This equation predicts greater improvement for subjects with more dysfunctional pre-test scores, than for those with less dysfunctionality.

These results could also mean the regression coefficient (b) is a biased predictor of outcome scores. This is so because the initially higher Co-dependency scores could have significantly more variance than the lower scores and would not have constant variance (i.e., homoscedasticy) across all predictor scores. Testing for this violation was done using the Gold-field-Quandt test (30). No violation of homoscedasticy was found ($F [16, 16] = 1.434$, $p > .05$).

Subjects whose level of risk was not assessed were found to have a higher level of initial co-dependency than subjects that had their level of risk assessed. The strong positive relationship between the covariate and the Risk Assessment Scale ($r = .79$, $p < .05$) indicates a multicollinearity problem. But, the small size of 11 cases makes these results tentative.

Several findings are helpful in the understanding and treatment of prison populations. The Familyships Module addresses several maladies of an incarcerated population. It is a useful Module for the more dysfunctional members of the general prison population. It is helpful for changing the thinking among inmates who are inclined to have low self-esteem, a lot of hostility and anger, and who are deficient in social skills.

Improvement in offender social functioning, as measured by Friel's Co-dependency Inventory, was significantly greater in offenders whose pre-test scores revealed severe dysfunction. In other words, the more severe the offenders' level of co-dependency, the more effective the Module. The successful change in attitudes among inmates indicates the intervention used made a difference to those inmates. What is more encouraging is that these changes were more significant for the inmates with more serious behavioral problems, than for those with fewer personality deficits.

The assessment process is able to distinguish those inmates who could most benefit from the Familyships Module. In turn, this could optimize inmate selection for treatment. For subjects who are assessed with less severe dysfunctionality, a different intervention approach could be used.

Perhaps a less intensive approach could be established that would still be effective at addressing their presenting problems.

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