

Effects of MRT® on Male Juvenile Offenders Participating in a Therapeutic Community Program

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Summary—Pre- and posttest scores from six test measures were evaluated in 33 male juvenile offenders who participated in a specialized 12-bed therapeutic community. Results showed that program participants had significantly lower locus of control scores, significantly higher life purpose scores, significantly enhanced support from family, friends, and a significant other, and significantly less problem areas as a result of treatment. In addition, clients showed desirable changes in sensation seeking and moral reasoning scores over the course of treatment. All of these beneficial changes were most observed in program completers but were also present in dropouts.

Introduction

The utilization of therapeutic communities (TC) with criminal justice and substance-abusing populations has a long history, however, relatively few of such programs have been employed with juvenile offenders (Wexler, DeLeon, Thomas, Kressel, & Peters, 1999). In September 1999, Correctional Counseling, Inc. (CCI) of Memphis, Tennessee implemented a drug treatment program for male juveniles housed at the Woodland Hills Youth Development Center (WHYDC), a state of Tennessee Department of Children's Services facility located in Nashville. The program was organized and developed as a drug therapeutic community and is operated under contract from the Tennessee Department of Children's Services and funded through RSAT. It was designed to house 12 juveniles with each participant in the program for at least six months. The program utilizes MRT® as its primary treatment mode. Since its beginning, the program has operated at full capacity.

From the initiation of the program until the present, CCI has utilized a battery of pre- and posttests to measure client characteristics as well as document possible changes in client variables over the course of treatment. The tests employed are considered to be research tools rather than assessment instruments. Results utilizing these research tests form the basis of much of this report.

Method

From September 1999 until January 29, 2002, a total of 56 juvenile males had entered the WHYDC program. Pre-tests were administered within the first week of a client's program entry and within a week of program release (usually the day before release). Thus, the duration of time between the pre- and posttests varied, but was generally between six months to a year. Pre- and posttest results were available for 33 clients with current program participants ($n = 12$) excluded along with a number of clients ($n = 11$) who did not, for a variety of reasons, complete a valid pretest and/or posttest. However, all usable data gathered from clients (*i.e.*, a few pretests and posttests) were utilized when possible.

Tests Utilized

The six research tests employed in the CCI therapeutic community are all considered to be reliable, valid, and meaningful. All have been shown to have varying levels of predictive ability.

1. The **Prison Locus of Control** (PLOC) is intended to measure the degree to which an individual believes he has control over his life (Pugh, 1994). Ideally, a program should instill feelings of increasing control in clients—what is commonly referred to as *internal locus of control*. That is, as a client progresses, he should come to see that his current decisions and current behavior can have an impact on future events. In the simplest of terms, an internally controlled person believes that, “I have much control over my life.” On the other extreme, clients who believe that luck or other people completely determine what happens to them are said to have an *external locus of control*. Externally controlled people believe that, “I have little or no control over my life and what happens to me.” Internal locus of control is believed to be one of the keystones of a healthy personality. For example, people spend years in college and working in jobs with the belief that their actions can help build a positive future. A related concept is personal responsibility. Individuals who come to believe that they have no influence over their lives feel no sense of personal responsibility—thus, their behavior is frequently irresponsible. Test scores on the PLOC can range from 24 (internal locus of control) to 240 (external locus of control).

2. The **Life Purpose Questionnaire** (LPQ) is designed to assess the degree to which an individual perceives purpose or meaning in his life (Habras & Hutzell, 1982). People with high life purpose tend to be more committed to goals, engage in responsible behaviors, and are committed to important relationships. They see goals and relationships as important and believe that life has meaning beyond the pleasure or pain that may be present in the immediate situation. Participation in effective programming should increase clients' levels of life purpose. Scores on the LPQ range from 0 (no purpose perceived) to 20 (high life purpose).

3. **The Short Sensation-Seeking Scale (SSS)** is a 10-item questionnaire designed to assess risk-taking behaviors (Zuckerman, 1984). It is highly correlated to conduct disorder in juveniles and antisocial personality in adults. Individuals with high scores tend to engage in substance abuse behaviors, abusive relationships, and a host of risky activities designed to provide excitement. Ideally, an effective program should result in lower sensation-seeking behaviors. Scores on the SSS range from 0 (no risk-taking) to 10 (extreme risk-taking).

4. The **Multidimensional Scale of Perceived Social Support (PSS)** is designed to assess the degree to which an individual believes he has support from three different areas: *friends, family, and significant others* (Zimet, *et al.*, 1988). The test was included in CCI's evaluation plan for several reasons. First, it is recognized that, after release into the community, a juvenile's success can be influenced by support from others. In general, most researchers believe that increased support on all three variables is desirable. Scores on all three PSS subtests range from a low of 4 (no support) to 24 (high support).

5. The **Defining Issues Test (DIT)** is an objective measure of an individual's moral reasoning as defined by Kohlberg's stages of moral reasoning (Rest, 1986). The test measures the percentage of reasoning an individual incorporates into decision-making on five of Kohlberg's stages. Stage 2 reasoning is often described as pleasure and pain decisions; Stage 3 reasoning is essentially manipulative and is based on doing what would please other people who are deemed as important; Stage 4 reasoning is based on following the rules or law; Stage 5 reasoning is based on what is best for society or others; Stage 6 reasoning is based on ethical principles about right and wrong that transcend the individual's situation or possible gain from a given decision. An extreme example of Stage 6 reasoning can be when an adult sacrifices his or her life to save the life of a child not known by the adult. The test apportions a percentage of decision-making to these five scales (from 100% of all reasoning). In addition, stages 5 and 6 are combined into a percentage of Principled reasoning—called P%. Finally, two other subscales are measured: a lie-scale (M) is employed in the test which purports to assess the degree to which an individual is attempting to "look good" in the test—the M scale is also a test of validity; An authoritarian scale (A) measures the degree to which an individual looks to an authority for decisions.

6. The **Problem Oriented Screening Instrument for Teenagers (POSIT)** was developed by the National Institute on Drug Abuse as a screening tool to identify potential problem areas in need of deeper assessment and possibly focused treatment. It is a 139-item questionnaire that reports on a host of functional areas as well as on a total "problem score." The present study focused on the total score. The test is specifically recommended by NIDA as a pre-posttest instrument to identify client changes as a result of treatment. Ideally, effective treatment would result in lowered scores on the POSIT.

Client Characteristics

Male juveniles were referred to the program by the Department of Children's Services as a result of persistent problems with the juvenile justice system involving substance use. The average age of all clients was 16.33 years with 67% of participants falling between the ages of 15.22 to 17.44 years. Fifty percent of clients were African American, 45 percent were White, and five percent were Hispanic or "Other." Clients spent an average of 151 days in the program.

Excluding current program participants, 70 percent of participants completed the program. Program completers were defined as spending at least 6 months in the program, completing the drug treatment program format of Moral Reconciliation Therapy® (MRT), and completion of other treatment plan objectives. Program dropouts (30 percent of all clients) generally left the program voluntarily.

Results

Initial analyses compared program stayers (or completers) to dropouts. One analysis divided the completers ($n = 23$) and dropouts ($n = 10$), all of whom completed pretests, into two groups. Since many cell frequencies were too low to allow an ANOVA, a total of 16 different t -tests were performed comparing the pretest scores of the two groups on all of the tests and their subscales. Significant pre-treatment differences were found on only one score. *Program completers had a significantly lower pretest mean on the Locus of Control than dropouts (stayers = 85.57; dropouts = 104.1) $t_{26} = 1.97; p = .05$.* In sum, those who completed the program can be characterized as *having a more internal locus of control at the time of program entry as compared to those who eventually became dropouts*. Additional nonparametric tests showed no differences between dropouts and completers on age or race.

Pre- to Posttest Changes

Prison Locus of Control. At treatment initiation, the mean LOC score for all program participants was 91.18. This is generally considered to be on the high "external" side of the scale. The posttest score mean was a less "external" 74.63. A subsequent t -test for repeated measures showed that this difference was statistically significant ($t_{26} = 2.72; p = .011$). *Thus, program participants showed a significant shift to a more internal locus of control as a result of treatment.*

As discussed above, at treatment initiation program completers showed significantly lower LOC scores than dropouts. However, we wanted to assess if both completers and dropouts showed significant declines in LOC scores as a result of treatment. Thus, separate t -tests for repeated measures were performed on pre- to posttest scores for both the completers and dropout groups.

Results showed that *LOC posttest scores in both completers and dropouts declined significantly from pretests* (85.57 to 76.05 for completers; 104.1 to 68.4 for dropouts). A *t*-test showed that the posttest scores of the two groups did not differ significantly. *Thus, all those who participated in the program showed a significant and substantial shift to a more internal locus of control.* Those who did not complete the program showed the largest shift in scores, but it was not significantly different from the shift in completers.

Life Purpose Questionnaire. The mean LPQ score of all program participants on program entry was 11.22 and was 12.29 at the posttest. A *t*-test showed this change to approach significance ($t_{26} = 1.54; p = .136$). Thus, *program participants have an enhanced, but not statistically significant, perceived purpose in life as a result of treatment participation.*

To assess differences in LPQ scores between completers and dropouts, a series of analyses were performed. At treatment initiation, LPQ scores for completers (12.0) and noncompleters (9.5) were not statistically different due to high variability ($t_{30} = 1.54; p = .133$). However, at face value, it appears that completers tend to enter the program with slightly more perceived purpose in life. At the time of the posttest, *the completers (mean=13.0) showed a nonsignificant increase in LPQ scores while the dropouts showed no change (mean=9.0).* However, *the completers showed significantly higher posttest scores than the noncompleters* ($t_{26} = 2.36; p = .026$). Thus, *program completers showed desirable increases in LPQ scores from pre- to posttest, and completers showed significantly higher LPQ posttest scores than dropouts.*

To assess the relationship between LPQ scores and time spent in the program, two Pearson correlations were performed. The first related the total days each client participated in the program to the client's LPQ pretest score. Results were significant ($r_{31} = .622; p = .000$) indicating that *those with higher LPQ scores at program entry tended to remain in the program for longer periods.* The correlation between days in program and LPQ posttest scores approached significance ($r_{27} = .302; p = .126$). Thus, *high LPQ scores at the time of program entry significantly predict a client's subsequent time in program. In addition, time in program tends to result in enhanced life purpose scores.*

Short Sensation Seeking Scale. To assess the effects of program participation on SSS scores, several *t*-tests were performed. The first evaluated pre- to posttest SSS scores. Results showed that *pre- to posttest SSS scores for all participants showed a slight decline but were essentially identical* (5.27 vs. 5.11). In addition, when *t*-tests were performed between completers and noncompleters, *there were no significant differences between the groups.* Interestingly, program completers had slightly higher but nonsignificant sensation seeking scores at both the pretest (completers = 5.48 versus dropouts

= 4.8) and posttest (completers = 5.22 versus dropouts = 4.6). None of the correlations with sensation seeking scores and days spent in the program approached significance.

Multidimensional Scale of Perceived Social Support. Pre- and posttest scores for all program participants on all three scales of the PSS test showed beneficial changes and were as follows: Support from “significant other” (pretest = 23.58; posttest = 25.46); Support from “family” (pretest = 24.52; posttest = 26.29); Support from “friends” (pretest = 21.18; posttest = 23.82). Three *t*-tests for repeated measures showed that the pre- to posttest changes in the “social support from family” scale was significant ($t_{27} = 2.54; p = .017$) as was the “support from friends” change ($t_{27} = 2.41; p = .023$). The pre- to posttest change in support from “significant other” scale approached significance ($t_{27} = 1.85; p = .075$). Thus, *participants had significant increases in support from family and a significant other over the course of treatment as well as a nearly significant increase in support from friends.* Additional analyses were performed to investigate possible differences between program completers and dropouts. Results showed no significant differences. Thus, program participation appears to enhance the overall support system of all program clients.

To assess the effects of time in program to changes in PSS scores, three Pearson correlations were performed. Correlations were performed between days in program and posttest scores on each of the three scales of the PSS. None of these were significant.

Defining Issues Test. A total of eight *t*-tests evaluated differences in the mean pre- and posttest scores of all program participants. The tests evaluated scores on DIT scale 2, 3, 4, 5, 6, P%, and the M scale (a measure of honesty) and the A scale. None of these were statistically significant nor did any approach significance. Inspection of scale means showed that DIT scales 2, 3, and M decreased from pretest to posttest, while scales 4 and 6 showed increases. All of these are desirable changes and are consistent with changes seen in other participating in MRT.

POSIT Scores. The pretreatment mean on the POSIT for all participants was 87.09 as compared to 66.15 on the posttest. A *t*-test for repeated measures showed this change to be statistically significant ($t_{26} = 4.57; p = .000$). Thus, *participants tended to show a high level of problems upon program entry. By the time of the posttest, however, participants showed a significant decline in problem areas. In summary, participation in the program resulted in a significant relief of overall problem areas.*

To assess differences between program completers and dropouts, a series of analyses were performed. Pre- and posttreatment means on the POSIT were as follows: Completers pretreatment = 89.91; Dropouts pretreatment = 80.60;

Completers posttreatment = 63.77; Dropouts posttreatment = 76.6). Thus, those who complete the program tend to have higher problem levels at the time of entry and experience the largest decline in problems at the time of treatment termination. Due to high variability and low cell frequencies, however, these differences were not statistically significant. The correlations between POSIT scores and other variables were not significant. However, as related in the prior paragraph, as a result of treatment, significant relief of all participants' problem areas occurred from pre- to posttest.

Summary and Discussion

Results from this study reveal a program that produces a host of beneficial and desirable changes in participants. Program participants have a significant shift in locus of control scores from the external side to a more internal locus. In practical terms, clients tend to enter the program with feelings of helplessness and the belief that there is little they can do to change their destiny. After program participation, these clients show significantly less helplessness and shift to beliefs that they can control—to some extent—their lives. This change would predict more responsible behavior as well as producing long-term efforts to change one's life for the better.

In addition, participants enter the program with a perception of having extensive problem areas in their lives. As a result of treatment, participants show significantly less problem areas. In fact, those who complete the program enter with more problems than do eventual dropouts. Thus, something within the program appears to reduce their overall perception of problems providing significant relief. Perhaps related to this finding are the three beneficial changes observed in clients' perceived social support as a consequence of program participation. Clients tend to show significantly higher levels of support from family, a significant other, and from friends as a result of program participation.

Other results show that the clientele who enter the program have strong antisocial tendencies at the time of entry as well as typical moral reasoning employed by teenagers. When these two variables are combined, acting out tends to occur frequently. The program does appear to be both reducing sensation seeking (antisocial tendencies) as well as enhancing moral reasoning in desirable ways. Such personality characteristics are extremely difficult to change and the average time clients spend in the program (151 days) may be insufficient. In sum, the WHYDC therapeutic community is clearly impacting its clients for the better as revealed by the results of pre- and posttest measures. The program is effective in both retaining clients as well as producing beneficial changes in participants.

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