

## The Effectiveness of Art Therapy in Reducing Depression in Prison Populations

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Major obstacles block the effectiveness of therapy in prison. Many inmates have an inherent mistrust for verbal disclosure. Rigid defenses exist for basic survival. Despite these defenses, there has been support for art therapy as a valuable tool. Unfortunately, there has been little research to measure the effectiveness of art therapy in prison. Two quantitative studies were initiated in a North Florida prison to measure the effectiveness of art therapy with inmates, specifically in decreasing depressive symptoms. This article will present a pilot and follow-up study. The methods, including the Formal Elements Art Therapy Scale (FEATS) and the Beck Depression Inventory-Short Form, will be delineated. What was revealed was that although the FEATS proved more effective as a measurement tool for the pilot than for the follow-up study, ultimately, the results reflected a significant decrease in depressive symptoms in those inmates who participated in the program.

**Keywords:** *art therapy; BDI-II; depression; Formal Elements Art Therapy Scale; prison*

Major obstacles block the effectiveness of therapy in prison. Many inmates have an inherent mistrust for verbal disclosure. Rigid defenses exist for basic survival. Despite these defenses, there has been support for art therapy as a valuable tool. Unfortunately, there has been little research to measure the effectiveness of art therapy in prison. Two quantitative studies were initiated in a North Florida prison to measure the effectiveness of art therapy with inmates, specifically in decreasing depressive symptoms. This article presents a pilot and follow-up study. The methods, including the Formal Elements Art Therapy Scale (FEATS) and the Beck Depression Inventory-Short Form, are delineated. What was revealed was that although the FEATS proved more effective as a measurement tool for the pilot than for the follow-up study, ultimately, the results reflected a significant decrease in depressive symptoms in those inmates who participated in the program.

## Literature Review

In prison, defenses are used for self-preservation as inmates take advantage of weakness and vulnerability. Defenses such as silence, lies, and aggressive acts interfere with daily living skills and effective therapy. Increased illiteracy and organicity create additional impediments for an inmate to communicate mental, emotional, and/or physiological problems (Gussak, 1997). These barriers make it difficult for successful treatment.

Inmates seeking psychiatric treatment are seen as vulnerable by others, which is unhealthy where the weak are preyed on. "Inmates with mental illness are the most vulnerable in our state prisons. They can be victimized by predatory inmates or untrained staff" (Warner, n.d., ¶ 7). How they are perceived and what they say is always being judged by others. What may seem to be a harmless statement outside may be used against someone inside.

Prison life can cause psychological distress and aggravate and intensify preexisting conditions (Morgan, 1981). Consequently, there is a general need for mental health treatment in prisons, and many facilities offer art therapy services. According to the *Bureau of Justice Statistics Special Report*, mental health care is prolific in correctional settings (Beck & Maruschak, 2001). Despite the overwhelming statistics that emphasize that mental health care is being provided in the correctional system, the types of verbal therapy offered may not always be best. Inmates may lie or remain silent to avoid appearing weak or vulnerable.

One of the most prevalent mental illnesses in prison is depression. Eyestone and Howell (1994) found that 25% of 102 inmates evaluated demonstrated severely depressive symptoms. Another 31% had depressive-like symptoms but did not meet all of the 1994 standards (American Psychiatric Association, 1994) to justify a diagnosis. Depression often leads to suicidal tendencies and self-abusive behaviors. It is surprising to note that despite the prevalence of rigidly held defenses, and debilitating mental health conditions such as severe depression, there seems to be a natural desire for creative and artistic expression by inmates (Gussak, 1997, 2004; Hanes, 2005; Kornfeld, 1997; Ursprung, 1997).

*Art in prison.* Artistic expression is a fundamental component of prison. This is evidenced through craft shops, inmate-painted wall murals, decorative envelopes that inmates use to send letters to loved ones, and intricate tattoos designed and displayed with pride. The ability to create "good art" is a status builder and can earn respect and friendship for the artist from his or her peers (Gussak & Ploumis-Devick, 2004; Kornfeld, 1997). Such creative expression may originate through the sublimation of aggressive and libidinal impulses (Dissanayake, 1992; Kramer, 1993; Rank, 1932; Rubin, 1984) and may provide the artistic inmate an acceptable "escape" (Gussak, 1997; Gussak & Cohen-Liebman, 2001). It has also been demonstrated that art making

decreased the number of disciplinary reports written on inmates who participated in an Arts-in-Corrections program (Brewster, 1983), and recidivism (California Arts In Corrections, 1987) as measured during a 6-month and a 2-year period of time.

*Art therapy in prison.* There are many advantages of art therapy in correctional settings. *Art therapy* can be defined as "the therapeutic use of art making, within a professional relationship, by people who experience illness, trauma, or challenges in living" (American Art Therapy Association, 2005, p. 1). In 1997, Gussak delineated eight benefits that art therapy may have in prison:

1. Art is helpful in the prison environment, given the disabilities extant in this population, contributed to by organicity, a low educational level, illiteracy, and other obstacles to verbal communication and cognitive development.
2. Art allows the expression of complex material in a simpler manner.
3. Art does not require that the inmate and/or client know, admit, or discuss what he has disclosed. The environment is dangerous, and any unintended disclosure can be threatening.
4. Art promotes disclosure, even while the inmate and/or client is not compelled to discuss feelings and ideas that might leave him vulnerable.
5. Art has the advantage of bypassing unconscious and conscious defenses, including pervasive dishonesty.
6. Art can diminish pathological symptoms without verbal interpretation.
7. Art supports creative activity in prison and provides necessary diversion and emotional escape.
8. Art permits the inmate and/or client to express himself in a manner acceptable to the inside and outside culture.

Much of the literature supports such benefits through case vignettes (Day & Onorato, 1989; Liebmann, 1994). These outcome studies reported here verify some of the advantages of art therapy with correctional populations. The pilot study used a quasi-experimental, single group pretest/posttest design. For the follow-up study, a control group pretest/posttest design was used. In both studies, it was hypothesized that inmates receiving art therapy services will exhibit marked improvement in their mood, socialization, and problem-solving abilities.

## Pilot Study

### Participants

The pilot study was conducted in a medium- to maximum-security, male adult prison in rural Florida. Forty-eight inmates chosen by the facility's mental health counselor received art therapy services for a 4-week period, two group sessions per week. The age range for these participants was from 21 to 63 years. For 44%, this

was their first prison sentence. Their crimes ranged from grand larceny to murder. They all had an Axis I diagnosis such as dysthymia or bipolar disorder, manic type. All attended counseling sessions on the day-treatment unit and were expected to attend the art therapy sessions as part of their treatment. Fifty-one percent received psychotropic medication.

## Measures

An art therapy-based assessment, the FEATS, and a survey developed by the staff counselor and the primary researcher were implemented. These tools were administered twice, once before the intervention and once after, with the scores compared to ascertain therapeutic change.

**FEATS.** The participants were asked to use standardized art materials to draw a picture of a person picking an apple from a tree (PPAT). These drawings were used for a pre- and posttest comparison and were assessed using the FEATS rating guide (Gantt & Tabone, 1998). The FEATS comprises 14 Likert-type scales with possible scores of 0 through 5 on each scale or drawing characteristic: Prominence of Color, Color Fit, Implied Energy, Space, Integration, Logic, Realism, Problem Solving, Developmental Level, Details, Line Quality, Person, Rotation, and Perseveration. Although this rating scale was designed primarily to assess the presence of four major diagnoses: (a) major depression; (b) bipolar disorder, mania; (c) schizophrenia; and (d) delirium, dementia, amnesic, and other cognitive disorders, it can also be used to assess change in the client over time. For example, Gantt and Tabone (2003) used the FEATS to assess change in symptoms in a 40-year-old man who was hospitalized for schizophrenia before and after receiving electroconvulsive therapy. In the pilot study, the FEATS was used as an outcome measure to ascertain change in all of the participants:

According to Gantt and Tabone (1998), the diagnostic categories are assessed based on the ratings of a combination of several characteristics. For example, it is assumed that low ratings in prominence of color, color fit, energy, space, realism, details and person reflect major depression (p. 26). In this study, although changes were evaluated considering these diagnostic criteria, this tool was also used to measure other changes, such as general socialization skills and attitude towards the participating inmates' situation. It was also assumed, although this has not been explored in previous studies, that certain characteristics might also be used independently. For example, if the problem-solving scale demonstrates improvement, then the inmates may have gained problem-solving abilities over the course of treatment. (Gussak, 2004, pp. 247-248)

Prior to the studies conducted by Gantt and Tabone in establishing this assessment, and the studies described in this article, only one other study has been conducted using the FEATS. It was used as a means to ascertain differences within drawings between children with attention-deficit/hyperactivity disorder (ADHD) and those

without (Munley, 2002). Despite the limited literature available, the FEATS was deemed a viable tool because of its ease in administration; the presence of a simple, valid and reliable rating method; and the primary researcher's familiarity with its rating process. It was also hoped that the current study would add to the literature on this assessment technique.

*Survey.* A 6-point Likert-type scale pre- and posttest observation survey and rating manual were developed specifically for the pilot study by the primary investigator. The survey consisted of seven categories focusing on the inmate's interactions and compliance with prison rules and expectations: compliance with rules, compliance with correctional staff, socializes with peers, optimistic attitude toward medications, compliance with medications, compliance with diet, and regular sleeping patterns. The scores range between 0-5, with 0 indicating *poor compliance and expectations* and 5 indicating *positive compliance and expectations*.

The mental health counselor completed the pre- and posttest observational survey, used to rate the participants' behavior, after receiving feedback from the correctional staff and observing them herself in the general population. The mental health counselor did not attend the art therapy groups.

## Procedure

All art therapy groups were conducted on the mental health day-treatment unit and were conducted twice a week for 4 weeks. There were six groups of eight members. The facility's mental health counselor worked with the primary researcher to assign the participants to their respective groups. Although they all signed a release form that explained that they would be taking part in art therapy sessions to ascertain change in those who participated, they were not provided details on what those changes might be nor how the changes would be measured. Of the 48 participants, 44 attended groups consistently, of which 39 attended all sessions, including the last one. Each group was coled by two art therapists.

Prior to the pilot-study sessions, the mental health counselor completed a survey on each of the participants. During the first session, each participant drew a PPAT (Gantt & Tabone, 1998).

Subsequent art therapy interventions developed from simple to complex and from individual art tasks to more interactive group projects. For example, an initial session may have been the name embellishment project. Each participant wrote his name on a sheet of paper and designed and embellished it in such a manner to tell another member of the group something about himself. This task was relatively simple and was an individually focused task. By the end of the sessions, the groups focused on more group-oriented, complex projects such as asking the members to design their ideal environment together using three-dimensional forms and paper sculptures.

**Table 1**  
**Results of Comparison of Pre- and Postsession Survey Results**

Title of Category	Pretest	Posttest	df	t	Significance
Compliance With Rules	2.93 (.85)	4.66 (.57)	40	-13.24	.000*
Compliance With Correctional Staff	2.98 (.79)	4.66 (.58)	40	-14.25	.000*
Socializes With Peers	2.13 (.68)	4.39 (.67)	40	-21.21	.000*
Optimistic Attitude Toward Medications	2.59 (.68)	3.57 (.79)	37	-6.53	.000*
Compliance With Medications	2.74 (.72)	3.61 (.82)	37	-5.30	.000*
Compliance With Diet	2.49 (.98)	4.68 (.47)	40	-14.34	.000*
Regular Sleeping Patterns	2.19 (.89)	4.50 (.60)	39	-15.59	.000*

\* $p < .05$ .

During the last session meeting, all of the participants were asked to draw another picture of a PPAT. After the sessions were over, the mental health counselor on the unit completed the survey on all of the participants.

## Results

The pre- and postsurvey and the FEATS results were analyzed using simple paired  $t$  tests to find differences in the pre- and postresponses. The results of both analyses were compared to ascertain if there was indeed positive change in the participating inmates. The effect sizes for each item on both assessments were calculated using Cohen's  $d$  equation. The pre- and posttest observational surveys indicated significant changes on each of the seven items (see Table 1).

Thirty nine of the 44 participants completed the pre- and post-FEATS drawings. Changes on each of the 14 FEATS scales are presented in Table 2. As noted, there was significant change in seven of the 14 scales: Prominence of Color, Color Fit, Implied Energy, Space, Integration, Details of Objects, and Environment and Line Quality. Because the smallest  $p$  value falls well below .05/14 (Bonferroni correction), the hypothesis was supported.

## Discussion

All seven items of the pre- and posttest observational surveys reflected significant change ( $p \leq .001$ ). This demonstrates that the participants improved in their attitude, compliance with staff and rules, and their socialization skills. These behavioral changes were observed in the art therapy sessions.

Seven of the 14 scales of the FEATS reflected statistically significant change. Improvement in five of these scales (Prominence of Color, Color Fit, Energy, Details of Objects, and Environment and Space) supported the conclusion that there was a decrease in depressive symptoms and an elevation of mood (Figures 1 and 2). Gantt

**Figure 1**  
**Pretest Person Picking an Apple From a Tree, Pilot Study**

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and Tabone (1998) postulated that few colors, dark colors, and constricted use of space reflect depressed mood and loss of energy. Other theorists support these claims (Groth-Marnat, 1997; Wadeson, 1980).

Posttest drawing characteristics reflected increased space, more details, and later compositional integration, which reflect more awareness of their surroundings. The pre- and posttest observational survey also seemed to strengthen this claim based on the positive results of the socialization scale. There was an improved attitude and increased acceptance of each other and the environment. The participants demonstrated greater investment in the therapeutic process, took the art therapy sessions seriously, and displayed greater compliance with directives. Figures 1 and 2 are examples of a pre- and posttest drawing done by a participant.

Perseveration and rotation, two drawing characteristics of those with organic brain disorders (Lacks, 1984), did not change; this may have been expected, as few of the participants were diagnosed with organicity or neurological damage. If they did have

**Figure 2**  
**Posttest Person Picking an Apple From a Tree, Pilot Study**



such difficulties, it was unlikely that such tendencies could be changed within 4 weeks, no matter how powerful the therapeutic intervention. The categories for realism and developmental level also yielded no significant change. As the art therapy activities were not established to teach art skills, or to educate, it was assumed that the participating inmates' drawing abilities and developmental levels would not improve.

The observational survey and the FEATS in conjunction with some of the statements and observations of the correctional staff support the notion that there was an elevation in mood, an improvement in attitude, and greater cooperation with the staff and their peers. Because art therapy was the only new intervention provided for these inmates, and based on the results of the two measures, it can be concluded that the art therapy produced positive change.

Using a quasi-experimental design is appropriate for a pilot study. As an initial test study on the effects of art therapy with prison inmates, the objective was to determine if art therapy sessions could be offered in this setting, if it was possible to administer assessment procedures, and to generate a broad inspection of the benefits of art therapy. In this respect, the current study was successful and yielded information that was valuable in establishing a future study.

There were some major shortcomings in the pilot study, and thus the results of the pilot study should not be generalized to other populations. One limitation may have been the number of therapists that conducted the sessions; although more therapists offering the services meant more participants could take advantage of this therapy, this may have been a confounding variable not considered nor figured into the statistical



**Table 2**  
**Results of Pre- and Posttest Formal Elements Art Therapy Scale (FEATS)**  
**Comparison Results**

Title of Category	Pretest	Posttest	df	t	Significance
Prominence of Color (amount of color used)	2.81 (1.02)	3.68 (.92)	38	-4.71	.000*
Color Fit (how colors fit the drawn objects)	3.85 (.75)	4.12 (.82)	38	-2.081	.045*
Implied Energy (assumption of energy used to complete drawing)	3.16 (.68)	3.65 (.88)	38	-3.22	.003*
Space (space of drawing in relation to whole page)	3.45 (.82)	4.20 (.78)	38	-4.39	.000*
Integration (overall balance of composition and relationship of objects)	3.49 (.70)	3.97 (.86)	38	-3.13	.003*
Logic (components of picture fit the task)	4.24 (.84)	4.47 (.64)	38	-1.61	.116
Realism (recognizability of images)	3.22 (.79)	3.46 (1.00)	38	-1.69	.100
Problem Solving (effective solution in picking apple)	3.30 (1.27)	3.68 (1.63)	38	-1.45	.155
Developmental Level	3.75 (1.09)	3.88 (.89)	38	-.980	.333
Details of Objects and Environment	2.37 (1.09)	3.24 (1.38)	38	-3.20	.003*
Line Quality (implied control by artist)	3.67 (.53)	4.05 (.60)	38	-3.18	.003*
Person (person is drawn accurately)	4.15 (.93)	3.92 (1.33)	38	.95	.351
Rotation (tilting object or person relative to imaginary vertical axis)	4.97 (.16)	4.95 (.32)	38	.44	.661
Perservation (lines or elements are drawn repeatedly without conscious control)	4.77 (.71)	4.91 (.43)	38	-1.03	.311

\* $p < .05$ .

evaluation. Not only were the therapists different, so were the directives chosen for each group. Although the focus of the groups remained consistent, the directives did vary depending on the personality of the therapist. This made it difficult to ascertain which art therapy interventions and interactions influenced the results. To remedy this, only one therapist was chosen to conduct all of the sessions for the follow-up study. The participants were not randomly assigned to participate, and most of the participants were chosen by the mental health counselor because of her prior work with them. This resulted in a confounding variable and thus less-than-reliable conclusions. It was not clear what other mental health care the participants were receiving and how long the majority of the participants were receiving psychotropic medication. Such medication and continuing attention may have augmented or even interfered with the art therapy intervention.

What is more, it is likely that the participants were cooperative with the activities to please the mental health counselor with whom the majority has had previous working relations. As well, cooperation with researchers in correctional facilities may be considered good behavior and thus is seen as deserving of extra privileges. Although none of them had been promised any specific benefits for attending these sessions, the participants could very well have believed that positive participation would ensure that they could continue their relationships with the counselor after the art therapy sessions were over and that they may indeed be rewarded. All of these factors could have greatly lessened the impact of the current research. Thus, a control group was created in the follow-up study, and all volunteers involved in that study would be randomly assigned to the experimental and control groups to lessen the impact that this may have had in diluting the strength of the outcome.

Although the results of the pre- and posttest observational surveys were positive, it was believed that using an already established, standardized tool to measure change would be less biased. The results of the pilot study indicated a decrease in depression and an elevation in mood. Therefore, it was decided to study the effectiveness of art therapy for improving mood and social interaction with prison inmates.

## **Follow-Up Study**

### **Participants**

There were two groups of participants for the follow-up study (Gussak, 2006): an experimental group, which received art therapy services one group a week for 8 weeks, and a control group. Participants were volunteers, and a call for volunteers for this project was made on all of the units. The participants were randomly assigned to either the control group or the experimental group.

Twenty-seven inmates were assigned to the experimental group. The age range for the participants was from 21 to 59 years. For 41% of these participants, this was their first prison sentence. Their crimes ranged from possession of narcotics to murder. Only two of the participants were not taking medication for a mental illness. Of these 27 participants, only 16 attended all eight sessions and completed the posttests.

The control group ( $n = 17$ ), received no therapeutic interventions but was administered the pre- and posttests. The age range for the control group was from 21 to 59 years. For 23% of the participants, this was their first prison sentence. Of the members of the control group, 27% received psychotropic medication. Of the 17 members of the control group, 13 completed all of the assessment procedures.

### **Measures**

The FEATS was used again for the follow-up study and was administered to participants of the experimental and the control groups. The Beck Depression Inventory—Short Form (Beck, Rial, & Rickets, 1974) was used to measure change in mood.

**BDI-II.** The Beck Depression Inventory–Short Form (BDI-II) is a standardized psychological assessment (Beck et al., 1974; Beck & Steer, 1993) and was administered by the unit psychologist. It consists of 21 statements, and responses are weighed with a score between 0 and 3, based on emotional content of the response: 0 indicating a *bright mood or lack of depressive feelings* and 3 indicates *highly depressive reaction*. The scores from the 21 statements are added together for one final score. Total scores can range from 0 to 63, with a range from minimal depression (0 to 9) to severe depression (30 to 63; Beck & Steer, 1993; Boothby & Durham, 1999). Previously, the BDI-II has been used successfully to evaluate depression in prisoners (Boothby & Durham, 1999).

For the follow-up study, the BDI-II was not used to measure the intensity of depression of those participating in the study but rather as means to measure outcome. Specifically, the goal was to see if there was a greater decrease in scores for those that participated in the art therapy sessions compared to those that did not. The pre- and postscores were compared to ascertain change.

### Procedure

The follow-up study group sessions were conducted once a week for 8 weeks. Although 27 inmates were divided into four groups, only 16 consistently attended all eight sessions. However, because the art therapist who provided the sessions for the follow-up study was not aware of all of the participants in the pilot, and because of the confidentiality of the data sets, several of the participants who were chosen attended art therapy sessions during both studies. Each of the treatment groups met once a week. One art therapist led the groups.

On the first day of the sessions, each participant was asked to draw a PPAT (Gantt & Tabone, 1998) and to complete the BDI-II. Similar art therapy interventions used during the pilot study sessions were implemented in this follow-up. During the last session, the participants completed another PPAT and the BDI-II. Control group members completed a pre- and posttest PPAT drawing and BDI-II tests.

### Results

**Pre- and post-BDI-II.** Sixteen members of the experimental group and 13 members of the control group completed a pre- and post-BDI-II assessment. The change in BDI-II scores from pretest to posttest (i.e., posttest score – pretest score) was calculated, and the differences were analyzed using independent-sample *t* tests to find differences between the experimental and control groups. The results were  $t(26) = -2.58, p < .05$ . The experimental group ( $M = -7.81, SD = 9.81$ ) had significantly greater decrease from pretest to posttest than the control group ( $M = 1.00, SD = 7.59$ ). The effect size of .15 was calculated using Cohen's *d* equation.

**FEATS.** Sixteen members of the experimental group and 13 members of the control group completed a post-FEATS drawing. The drawings were blindly rated using the

FEATS by two investigators. The interrater reliability was determined using kappa statistic. This formula resulted in a score of .87, indicating a robust interrater reliability.

The changes in FEATS scores from pretest to posttest (i.e., posttest score – pretest score) were calculated for each of the 14 scales, and the differences were analyzed separately using independent-sample *t* tests to find differences between the experimental and control groups. The only significant result was for Rotation,  $t(30) = 2.42$ ,  $p < .05$ . The effect size of .88 was calculated using Cohen's *d* equation. The experimental group's rotation ( $M = .40$ ,  $SD = 1.05$ ) was greater than the control group's rotation ( $M = -.42$ ,  $SD = .67$ ).

Overall, the hypothesis, that if inmates receive art therapy services, then they will exhibit marked improvement in their mood, was supported by the BDI-II results; improvement in the inmates' socialization and problem-solving abilities was supported through anecdotal feedback from the correctional staff and through observation. The results from the FEATS, however, did not support the hypothesis. Thus, although it seems as if the art therapy was effective with the experimental population, the results are mixed.

## Discussion

Notwithstanding the changes reflected in the pilot study, and the follow-up BDI-II results, which support the hypothesis, the FEATS for the follow-up did not seem to indicate much change. Several factors may have caused this. For one thing, unbeknownst to the researchers, because of the confidentiality of the data and the different art therapist for this project, several of the participants for the follow-up had also participated in the pilot study. It was not until the project had already proceeded that this was brought to the researcher's attention. Thus, they were already familiar with the drawing procedure, as they had completed two PPATs already. Thus familiarity with the procedure may have resulted in a practice effect. As it was, several of the participants joked about having to do "yet another person and apple tree drawing."

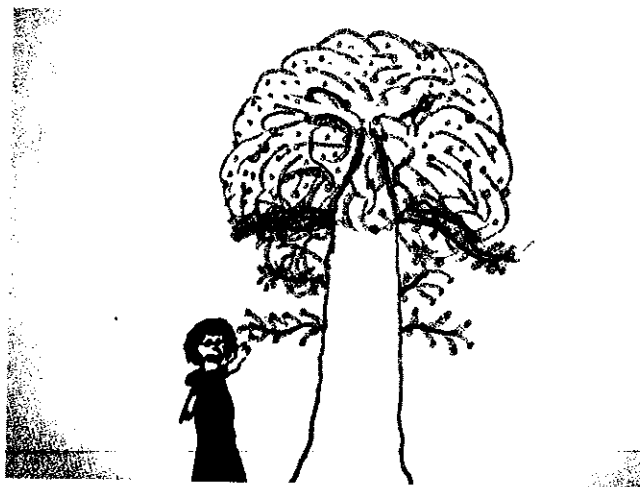
They were unfamiliar with the BDI-II, thus there was no effect on these scores.

Another factor may have been that those who volunteered, and completed the entire procedure, did so because of an overriding interest in art making. Some of this was controlled through the random assignments of the participants into the experimental and control group. Some of them may have already had some skills, which may have resulted in little change between the drawings; developed schemas and style may have prevented much change between the two drawings. Although the randomized assignments to either the control or experimental groups may have lessened some of this effect, it could not eradicate it completely.

Another factor may have been the low participatory numbers. Although there were some paired images that show very little change (Figures 3 and 4), some pre- and postimages reflected more significant differences (Figure 5 and 6).

It seems that the measurement tool may not have been sensitive enough to measure subtle changes in small groups.

**Figure 3**  
**Follow-up Study Example of Little Change, Pretest**  
**Person Picking an Apple From a Tree**



Although the participants were randomly assigned to the experimental and control group, it seemed that the offenders in the experimental group seemed more impaired than in the control group; the experimental group members had slightly higher mean BDI scores and had a higher percentage of those taking psychotropic medication as compared to the control group. This discrepancy may have also been caused by the sample size; it would seem that the more participants there were overall, the more likely there would be greater similarities between the groups. This was an unfortunate discovery as it is possible that the improvement in the BDI-II scores may have been affected by this; it could be expected that by chance the experimental group's mean score would regress more toward the mean than the control group's score. However, it is not clear if this was indeed the case, and there did seem to be change in affect and behavior in the members of the experimental group. Future studies with larger sample sizes are warranted to adjust for these discrepancies.

Despite a lack of significant differences test groups on the FEATS, and the above noted discrepancy, it still seems that the BDI-II scores supported the conclusion that there was a change in mood.

### **Summary: Future Directions**

Art therapy was beneficial to the inmate population of this prison. Both studies supported the hypothesis that those who participated in the art therapy sessions

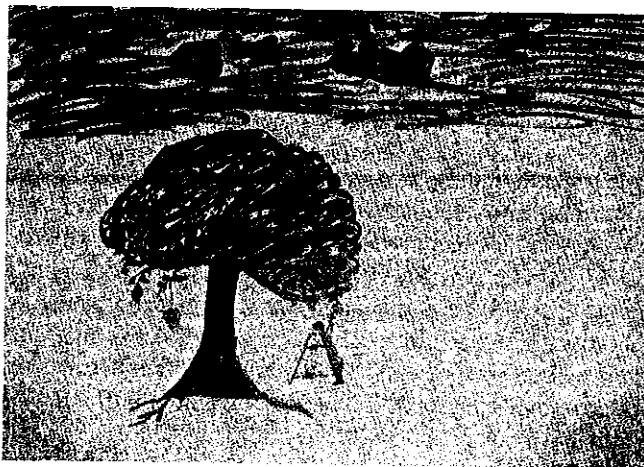
**Figure 4**  
**Follow-up Study Example of Little Change, Posttest**  
**Person Picking an Apple From a Tree**

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**Figure 5**  
**Follow-up Study Example of Some Significant Change,**  
**Pretest Person Picking an Apple From a Tree**

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**Figure 6**  
**Follow-up Study Example of Some Significant Change,**  
**Posttest Person Picking an Apple From a Tree**



elevated their mood, and the anecdotal information from the correctional staff indicated that those who participated in the sessions interacted more appropriately with others in the general population. The studies also indicate that those who received treatment significantly improved in mood more than those who received no treatment during the same period. These studies initially were established to see how art therapy was beneficial with a specific prison population. Following studies will increase the sample size, extend the number of sessions the participants will receive, and broaden the investigation to include locus of control and depression and problem solving.

Based on the strength of these two studies, a long-term research placement for art therapy in prison has been negotiated with the Florida Department of Corrections. The intent is to provide art therapy services in several other Florida prisons. Data collection will be ongoing. The FEATS, the BDI-II, and an additional locus of control measurement tool will be administered to all inmates assigned to art therapy groups. Despite the inadequacy of the FEATS as an effective measurement tool in the follow-up, it will be used again. The assumption is that because studies will be conducted in prisons not yet receiving services, then the FEATS may not be contaminated as an effective outcome assessment through practice.

Along with an experimental and a control group, a third group will also be administered the outcome assessments; a group that receives verbal therapy services during

the same length of time that the art therapy groups will be in effect. This is to ascertain if it was the art therapy that caused a decrease in depressive symptoms, or if it was simply the participants in the experimental group received consistent attention. It is planned that the sessions will be provided over a longer period, and that a larger sample size will be used.

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