

This article appeared in a journal published by Elsevier. The attached copy is furnished to the author for internal non-commercial research and education use, including for instruction at the authors institution and sharing with colleagues.

Other uses, including reproduction and distribution, or selling or licensing copies, or posting to personal, institutional or third party websites are prohibited.

In most cases authors are permitted to post their version of the article (e.g. in Word or Tex form) to their personal website or institutional repository. Authors requiring further information regarding Elsevier's archiving and manuscript policies are encouraged to visit:

<http://www.elsevier.com/copyright>



## The effects of art therapy on male and female inmates: Advancing the research base

David Gussak (PhD, ATR-BC)\*

The Florida State University, Department of Art Education-Art Therapy Program, 034 WJB, Tallahassee, FL 32306-1232, United States

### ARTICLE INFO

#### Keywords:

Art therapy  
BDI-II  
ANS  
FEATS  
Corrections  
Depression  
Locus of control  
Female inmates  
Male inmates  
Prison

### ABSTRACT

Since the summer of 2003, several studies have been conducted to quantify the benefits of art therapy with prison inmates. These studies demonstrated a marked improvement in mood, behavior, and problem-solving [Gussak, D. (2007). The effectiveness of art therapy in reducing depression in prison populations. *International Journal of Offender Therapy and Comparative Criminology*, 5(4), 444–460; Gussak, D. (2006). The effects of art therapy with prison inmates: A follow-up study. *Arts in Psychotherapy*, 33, 188–198; Gussak, D. (2004). A pilot research study on the efficacy of art therapy with prison inmates. *The Arts in Psychotherapy*, 31(4), 245–259]. The results of this study encouraged an ongoing quantitative study to ascertain improvement in depression, locus of control, and behavior in both a men and women's prison population. The Formal Elements Art Therapy Scale (FEATS), the Beck Depression Inventory-Short Form (BDI-II), and the Adult Nowicki-Strickland Locus of Control Scale (ANS) were administered as pre- and post-test assessments. A control group pre-test/post-test design was implemented for this study. Although the results from the FEATS did not yield supportive data, the results of the BDI-II and ANS supported the assumption that art therapy was effective in reducing depression and improving locus of control in the adult male and female inmates. Despite the results of the FEATS, it was concluded that art therapy was effective. This article concludes with a brief discussion of how the research has been instrumental in developing a statewide Florida Arts in Corrections program.

© 2008 Elsevier Inc. All rights reserved.

### Introduction

Since the summer of 2003, several studies have been conducted to quantify the benefits of art therapy with prison inmates. The initial pilot study (Gussak, 2004) yielded data that supported its effectiveness with this population. The quasi-experimental study used the Formal Elements Art Therapy Scale (FEATS) (Gantt & Tabone, 1998), and a pre-test–post-test behavioral observation tool designed by the prison counselor and primary researcher as the measurement tools. The results indicated that over 4 weeks, two sessions a week, the inmates who participated in the pilot study demonstrated significant improvement in mood, attitude, and interactions with peers and staff. These results warranted an experimental follow-up study (Gussak, 2006).

The pre-test–post-test control group follow-up study used the FEATS and the Beck Depression Inventory-Short Form (BDI-II) to quantify the effectiveness of art therapy in reducing depression, and increase problem solving and socialization. The results indicated

that over 8 weeks, one session a week, although the FEATS yielded no significant results, the BDI-II indicated significant decrease in depression in the experimental group as compared to the control group. The results of these two studies justified continuing these studies over the next 2 years. The subsequent research focused on both female and male prison populations, and evaluated the effectiveness of art therapy with not only reducing depression but also its effect on locus of control. This report will present the research methodology used, the results, and a discussion of these results. The article will conclude with a brief overview of future research goals and plans for art therapy in the Florida prison system.

### Literature review

The prior study publications (Gussak, 2004, 2006, 2007) found support from the literature for art therapy in men's correctional settings. The responses published in these previous studies suggested that future research should also investigate the benefits of art therapy with female inmates as well.

One of the earliest articles that presented the benefits of art therapy with prisoners focused on a case study conducted with a female inmate (Levy, 1978). Day and Onorato (1997) stressed

\* Tel.: +1 850 645 5663; fax: +1 850 644 5067.  
E-mail address: dgussak@mailers.fsu.edu.

that art therapy helped the female inmates in their groups address the trauma that they were more prone to experience. However, no study quantitatively ascertains any benefits that art therapy has on a women's prison population. Until recently, studies that focused on the female inmate were rare (Harris, 1993), and yet the rate of female incarceration has been steadily increasing.

Although a minority of the entire prison population in 2004 – 12% of the total prison population was women – the population had actually increased since 1993 when the female population was 7%. The number of women incarcerated in local jails also increased in the same period by 468% (Elias, 2007). As the numbers increased, the initial observations within the correctional arena were that female inmates have different issues than male inmates, and diverse techniques need to be developed to address gender differences (Chesney-Lind, 2006; Elias, 2007; Sydney, 2005; Whitaker, 2000). Thus, although there has been a tendency to consider the female inmate similar in disposition and criminal intent to the male inmate, in other words an inclination to “masculinize” the female criminal, the rationale behind the women's illicit actions are believed to be quite different (Chesney-Lind, 2006). Women are more likely to offend in response to domestic or sexual abuse, trauma or drug dependence. They may be provoked to violence by a loved one or simply for feeling disenfranchised (Bloom, 2000; Chesney-Lind, 2000; Whitaker, 2000). Similar to the men's population, however, is the susceptibility to mental illness, such as depression.

Female inmates are believed to be more prone towards mental illness than their male counterparts (Butterfield, 2003). According to the Bureau of Justice statistics, 16% of the men's population and 20% of the women's population have been treated for various mental disorders (Blitz, Wolff, Pan, & Pogorzelski, 2005). While the stressors that exacerbate poor mental health may be similar in both genders, some have argued that female inmates may be even more disposed towards depression or stress-related illnesses than male inmates. This may be due to “the struggle to maintain intact families, the effort to sustain the parental role and care for children, and the need to deal with unresolved conflictual marriages or relationships. . . all from the confines of prison” (Negy, Woods, & Carlson, 1997, p. 225). This may result in a search for empathy and affiliation among women inmates. Thus, how the two genders respond to the prison environ differ.

Whereas survival of the fittest is the truism for the men's facility, and individual power is what is desired, the female inmates have a tendency to work together and develop strong associations. “Incarcerated women openly demonstrate needs for affiliation and support. . . [P]lay mother, sisters and aunts are identified within the group. . . Sometimes several ‘families’ combine to form a large extended family. . . [they] treat their cell or dormitory like a home” (Day & Onorato, 1997, p. 134). Developing familial-like relationships inside the prison may be the inmate's way to cope with the loss of outside affiliations.

Along with mental illness, both genders have exhibited difficulties with locus of control (LOC). Locus of control is the term assigned to the degree of control that someone feels he or she has over their environment. External LOC indicates more of a tendency to believe that outside forces controls one's behavior, whereas internal LOC indicates a sense that one can control his or her own destiny (Bayse, Allgood, & van Wyk, 1992). In general, it is believed that prison inmates have more of a tendency towards external LOC than an internal LOC (Griffith, Pennington-Averett, & Bryan, 1981; Hunter, 1994; Love, 1991). A strong internal LOC is a deterrent to criminal behavior, and indicates an acceptance of one's responsibility for his or her actions. There is a direct relationship associated between LOC and depression—the more internal LOC that an inmate has, the less depressed they are (Reitzel & Harju, 2000).

The previous art therapy studies indicated positive change in behavior and depression for those who have participated. The intention of this study is to determine if art therapy can be instrumental in reducing depression in not only another men's prison population, but also with female inmates as well. Previous theories indicated that art therapy enabled participants to increase their sense of control, problem-solving and socialization skills (Gussak, 1997; Gussak & Cohen-Liebman, 2001). This study will determine if art therapy will help improve mood, socialization, problem-solving, and internal locus of control in both the male and female inmates.

## Method

A pre-test–post-test control group design was implemented for this study. To address the question of the effectiveness of art therapy with prison inmates, two hypotheses were developed:

- If male inmates receive art therapy services, then they will exhibit marked improvement in mood, socialization, problem-solving abilities, and locus of control within the correctional environment.
- If female inmates receive art therapy services, then they will exhibit marked improvement in mood, socialization, problem-solving abilities, and locus of control within the correctional environment.

## Participants

This study was conducted in two medium to maximum adult correctional facilities – one female and one male – in rural sections of Florida's panhandle. The men's facility was managed by the state's Department of Corrections, whereas the women's institution was managed by a privately owned corporation, yet was contracted by the state Department of Corrections to house female inmates. After approval was received from the University and the prison institutions' internal review boards, an announcement was made on all of the units in both facilities for volunteers to participate in these studies. Participants who volunteered for this study were randomly assigned to either a control group or the experimental group by the psychology and correctional staff of the respective facilities. Although the majority of the inmates have received Axis I diagnoses by the chief psychologists of both facilities, specifically depression, not all of the participants received medication. Table 1 presents a breakdown of the demographics of these four groups. As the table reflects, there was consistent distribution of those who received medication between the experimental and control groups. The crimes for all of these inmates ranged from narcotic possession to murder.

Two graduate art therapy internship students offered sessions in the women and men's facility during both research periods, with supervision from the primary researcher and staff psychologist. The control group participants continued their regularly scheduled daily activities without art therapy treatment. They were placed in art therapy treatment sessions the semester following the end of the study.

## Measures

This research project used three measurement tools. After completing the informed consent forms and requisite paperwork, each client completed a drawing using standardized materials of a person picking an apple from a tree (PPAT) the first day and last day of the sessions. These drawings were compared as pre- and post-project, and were evaluated using the Formal Elements Art Therapy

**Table 1**

Demographics of the four participant groups. W = women; M = men.

Sample size	Age	Race	Education	Psych medication
W: <i>Experimental</i> 98 (76)	25–51	70% White 26% Black 4% Hispanic	46% HS or GED 15% some college	56% received medication
W: <i>Control</i> 29 (20)	20–47	65% White 12% Black 12% Hispanic 12% Other	20% HS or GED 33% some college	43% received medication
M: <i>Experimental</i> 75 (37)	22–50	61% White 31% Black 8% Hispanic	39% HS or GED 11% some college	77% received medication
M: <i>Control</i> 45 (25)	24–51	61% White 28% Black 11% Hispanic	48% HS or GED 24% some college	69% received medication

Scale rating guide (Gantt & Tabone, 1998). The Beck Depression Inventory-Short Form (BDI-II) (Beck, Rial, & Rickets, 1974; Beck & Steer, 1993) were also administered to measure for change in depression and the Adult Nowicki-Strickland Locus of Control Scale (ANS) (Nowicki & Duke, 1974) to measure for change in locus of control.

Each participant was asked to complete a person picking an apple from a tree drawing using standardized materials the first day and the last day of sessions. The drawings were used for a pre-test–post-test comparison, and were assessed using the Formal Elements Art Therapy Scale. The FEATS is comprised of a 14-point scale with a possible score of 0 through 5, focusing on such formal elements as prominence of color and color fit, implied energy, space, integration, logic, realism, problem-solving, developmental level, details, line quality, person, rotation, and perseveration.

According to Gantt and Tabone (1998), the diagnostic categories are assessed based on the ratings of a combination of several scales. 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). Change in the scores between the two drawings may indicate change in the participants.

For the sake of this study, eight of the 14 scales were measured. The seven scales that indicate depression were measured to assess for change in mood, and an additional scale, problem solving, was calculated. Independent raters were trained and used to evaluate the PPAT drawings. The PPATs were assessed by independent raters, graduate students, who were trained by the primary researcher to rate the drawings using the FEATS manual (Gantt & Tabone, 1998). These assessments were conducted through a blind review; the raters were not aware which prison group member completed the drawing, whether the drawings were completed pre- or post-session results, or if the resulting image was done by a member of the experimental or control group. Although not effective in the follow-up study (Gussak, 2006, 2007), this tool proved an effective measurement of change in the pilot study (Gussak, 2004), and thus was used again for this study.

To ascertain change in their mood, the participants were asked to complete the Beck Depression Inventory-Short Form, a standardized psychological assessment (Beck & Steer, 1993), used to ascertain the intensity of depression. It consists of a questionnaire of 21 groups of statements. The 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, 3 indicates highly depressive reaction. For example, the first group of statements reads as: 1. *Sadness: 0 = "I do not feel sad"; 1 = "I feel sad much of the time"; 2 = "I am sad all of the time"; and 3 = "I am so sad or unhappy I can't stand it."* The scored responses from all 21 state-

ments are added together for a final score. Total scores can range from 0 to 63. Previously, the BDI-II has been used successfully to evaluate depression in prisoners (Boothby & Durham, 1999) and was used as an effective measurement of change in the previous study (Gussak, 2005, 2006).

For this study, the BDI-II was not used to measure the intensity of depression of those participating in the study. Rather, it was used to measure outcome, 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-test and post-test scores of the two groups were compared to ascertain change.

To determine change in the participants' locus of control, the Adult Nowicki-Strickland Locus of Control Scale was added, and administered to the experimental and control groups of the men and women's prison populations. This scale was provided by the Department of Corrections, and had been used successfully with several facilities as a means to determine the LOC of those tested. Originally used with children (Nowicki & Strickland, 1973), the assessment was later adapted for adults (Lindbloom & Faw, 1982; Nowicki & Duke, 1974), and has been used to assess adult inmates (Watt, Frausin, Dixon, & Nimmo, 2000). The ANS uses a "yes" or "no" pencil and paper questionnaire to assess interpersonal and motivational areas. Each question has a previous assumption towards yes or no. Based on the yes or no response for each question the participant is administered a point. The scores range from 0 to 40, in which the higher the score, the greater the external locus of control. The addition of this assessment reflected the change of the focus of the hypotheses to include change in locus of control within the correctional environment.

## Procedure

This ongoing study was made up of two research periods. Each art therapy group session met once a week; fifteen sessions over 15 weeks comprised each research period. The group size generally remained around eight participants per group. The procedures for the studies remained consistent. The art therapy interns placed in the men and women's facilities provided the art therapy sessions; all interns were paired to co-lead the sessions. The interns received on-site supervision from the facilities' senior psychologists and the primary researcher. The initial session consisted of introductions and completing the informed consent forms, demographic sheets, and the pre-test PPAT, BDI-II and ANS. The art directives began the following session.

Overall, the sessions followed similar formats as they did for the previous studies (Gussak, 2004, 2006, 2007), but did not necessarily use the same directives. Although sessions were suggested





Fig. 1. Name embellishment drawing of female inmate.

by the facility and faculty supervisor, general format was recommended rather than designating tasks that must be completed. This provided flexibility within the structure of the program, allowing the students to develop their own administration style. Thus, although the overall format remained consistent, the directives varied between the settings and research periods.

The overall framework for these sessions remained the same. The sessions began simple in instruction, and became increasingly more difficult (defined as more steps necessary to complete the art directive). They started as individual tasks, and became increasingly more group-oriented. Such a format facilitated problem solving and socialization skills. For example, a typical early session, which was to be simple and individually focused, was the name embellishment. In this directive the participants were asked to write their name on a piece of paper, and then adorn the name in such a way that would tell the other members of the group something new about themselves, i.e. a hobby or occupation (see Fig. 1).

To continue with these goals in the following session, the group members were asked to create a self-symbol using drawing media and Model Magic™, or a self-box, a box adorned with collage and drawn images. One woman created one with images on the outside displaying what she shows the world and an image inside to indicate what she hides. They are then allowed to take the box with them to use to store their personal belongings. This project became especially important in that it reinforced a need for a private space, a rare commodity in prison (see Fig. 2). This project,



Fig. 2. Self-box of female inmate.

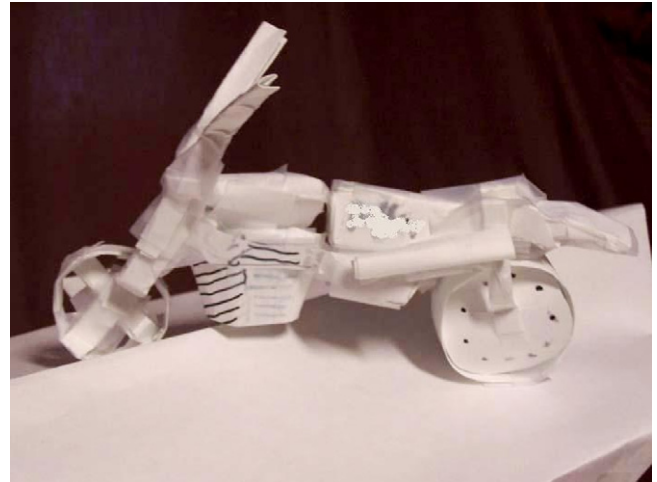


Fig. 3. Self-symbol sculpture made of white paper by male inmate.

although reinforcing the individual identity, is a bit more complicated.

The next directive focused on making the most from the least. The participants were asked to construct three-dimensional forms, white paper sculpture, with few supplies (paper, glue, and safety scissors). In the prison system, most of the inmates needed to learn to adapt given very little resources. This project emphasized this shortcoming, and taught the inmates the strength of turning the detriment into an asset. This also provided an apt metaphor for the participants; in an environment where identity is removed and conformity is the norm, each person can create extremely different forms using exactly the same materials. This stressed the concept of individual identity, while addressing problem-solving abilities.

As the sessions progressed, the participants moved slowly towards group tasks. In order to provide a transition, the draw and pass directive was suggested; each participant drew an image within a few minutes. Once the time was up, they passed the drawing to the person sitting next to them, and worked on the drawing in front of them for a few more minutes. This continued until all of the participants added something to each drawing.

The first group-oriented tasks encompassed small group work, such as the small group bridge paper sculptures. The participants were placed in small groups of around 3–4 members, and asked to construct a bridge together out of paper. They were allowed more than one session to complete this project; some of the participants used three weeks to complete their project. This project required more complex thinking. In some of the more sophisticated groups, the participants were asked to develop a bridge by combining the personal symbols they conceived earlier in the sessions (see Fig. 3). Some of these bridges became quite elaborate, and required much more refined problem solving and socialization skills (see Fig. 4).

As the groups proceeded, the tasks began to focus on whole group participation. One women's group spent several weeks completing a large group mandala. One of the men's groups was asked to design and construct a three-dimensional model of their ideal or dream environment. This project took several weeks to complete. Several members might have worked on individual components, but they all worked together to construct the final sculpture. Ultimately, this was considered more complex and group-oriented (see Fig. 5).

During the final session, the participants were asked to complete the post-test assessments that corresponded with their study and a questionnaire about the art therapy program for additional input.



Fig. 4. Group bridge sculpture by male inmates.

The respective control group participants completed their consent forms, demographic information and pre-test assessments the same week as the experimental group completed their paperwork. The paperwork was administered to the members of the control groups by the art therapy interns and the staff psychologist. During the same time that the experimental groups received art therapy sessions, the control group members continued their regularly scheduled activities. The control group participants completed the post-test assessments the same week that the experimental group members completed their respective post-test assessments.

## Results

These studies used a pre-test–post-test control group design. There were several men and women's experimental groups, and each experimental group met once a week for 15-weeks, or one research period. The results from the experimental groups emerged over the span of two research periods. One women and one men's control group was formed for comparison data.

Thirty-seven members of the men's experimental group completed the pre- and post-ANS and 35 members of the men's experimental group completed the pre- and post-BDI-II assess-

ment. Twenty-five members of the men's control group completed a pre- and post-ANS and BDI-II assessment. The changes in ANS scores and BDI-II scores from pre-test to post-test (i.e., post-test score–pre-test score) were calculated and the differences were analyzed using independent-sample *t* tests to find differences between the experimental and control groups.

The results for the change in ANS scores for the men were  $t(60) = -2.249$ ,  $p < .05$ . The experimental group ( $M = -1.22$ ,  $S.D. = 4.04$ ) had a significantly greater decrease in external locus of control from pretest to posttest than the control group ( $M = 1.04$ ,  $S.D. = 3.61$ ). The effect size of .59 was calculated using Cohen's *d* equation.

The results for the change in BDI-II for the men were  $t(58) = 2.475$ ,  $p < .05$ . The experimental group ( $M = -6.69$ ,  $S.D. = 10.38$ ) had a significantly greater decrease in depression from pretest to posttest than the control group ( $M = .12$ ,  $S.D. = 9.80$ ). The effect size of .66 was calculated using Cohen's *d* equation. Since the *p* values fall below .05, the null hypothesis—that there was no change overall in the pre and post-BDI-II and the ANS for the men—can be confidently rejected.

Seventy-one members of the women's experimental group completed the pre- and post-ANS and 76 members of the women's experimental group completed the pre- and post-BDI-II assessment. Twenty members of the control group completed a pre- and post-ANS and BDI-II assessment. The changes in ANS scores and BDI-II scores from pre-test to post-test (i.e., post-test score–pre-test score) were calculated and the differences were analyzed using independent-sample *t* tests to find differences between the experimental and control groups.

The results for the change in ANS scores for the women were  $t(89) = -2.89$ ,  $p < .05$ . The experimental group ( $M = -3.21$ ,  $S.D. = 5.58$ ) had a significantly greater decrease in external locus of control from pre-test to post-test than the control group ( $M = .70$ ,  $S.D. = 4.37$ ). The effect size of .74 was calculated using Cohen's *d* equation.

The results for the change in BDI-II for the women were BDI-II:  $t(94) = -2.487$ ,  $p < .05$ . The experimental group ( $M = -10.67$ ,  $S.D. = 11.10$ ) had a significantly greater decrease in depression from pre-test to post-test than the control group ( $M = -4.30$ ,  $S.D. = 5.22$ ). The effect size of .63 for the BDI-II were calculated using Cohen's *d* equation. Since the *p* values fall below .05, the null hypothesis—that there was no change overall in the pre and post-BDI-II and the ANS for the women—can be confidently rejected.

Sixty-five members of the women's experimental group and 19 members of the control group completed the pre- and post-PPAT. The change in FEATS scores from pre-test to post-test (i.e., post-test score–pre-test score) were calculated for each of the eight categories and the differences were analyzed using independent-sample *t* tests to find differences between the experimental and control groups for both the male and female inmates.

There was no significant change between the experimental and control group for male participants in six of the eight categories. The only significant results for the women's group were for two of the scales; prominence in color,  $t(82) = -2.61$ ,  $p < .05$ , and color fit,  $t(82) = -2.31$ ,  $p < .05$ . The experimental group ( $M = -.39$ ,  $S.D. = 1.10$ ) had a significantly greater change in prominence of color than the control group ( $M = .42$ ,  $S.D. = 1.44$ ). The experimental group ( $M = -.21$ ,  $S.D. = .73$ ) had a significantly greater change in color fit than the control group ( $M = .24$ ,  $S.D. = .77$ ). The effect sizes of .76 for prominence of color and .61 for color fit were calculated using Cohen's *d* equation.

Since not all of the scales reflected significant change, the null hypothesis cannot be comfortably rejected for this measure. Therefore, the data from the FEATS did not support the hypothesis.



Fig. 5. Group paper and found object sculpture by male inmates.



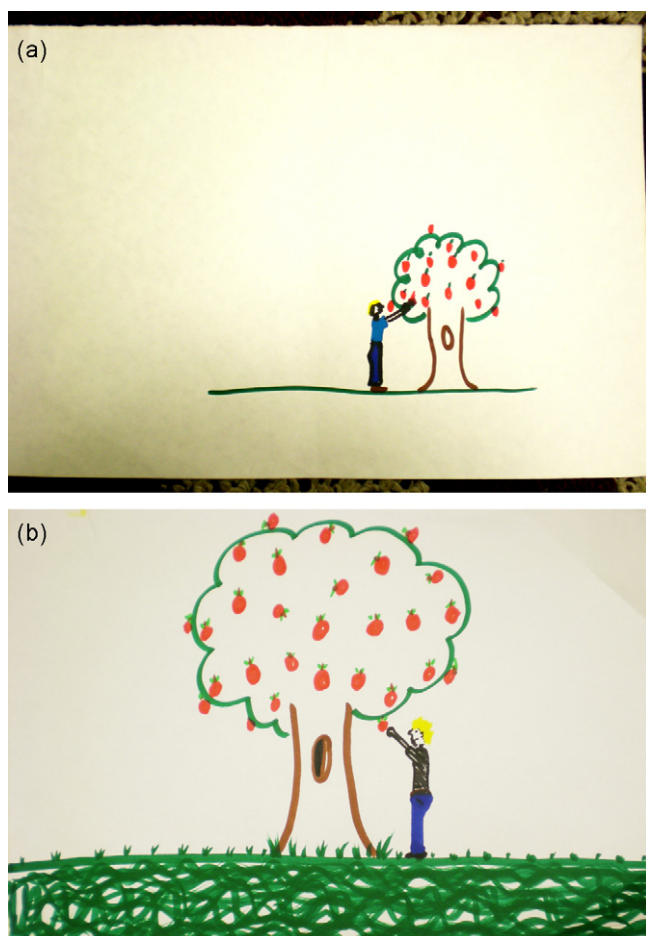


Fig. 6. (a) Pre-PPAT drawing by male inmate. (b) Post-PPAT drawing by male inmate.

## Discussion

Overall, the results of the BDI-II and the ANS supported the hypotheses, while the FEATS did not. One should be cautious in reviewing these results. The sample sizes were relatively small, the data was collected over two separate research periods by various art therapy interns, and the studies were conducted in a geographically specific location. Nevertheless, the overall results continue to support the notion that art therapy sessions were more beneficial for those that participated than those that did not.

The previous studies have systematically assessed whether art therapy may help improve mood. The BDI-II was used as the assessment tool for the follow-up study (Gussak, 2006), and it continues to reveal an improvement in mood in those inmates that participated in the art therapy sessions. A number of factors may have contributed to these changes. Simply changing the routine for the prison inmates may have elicited an improvement in mood. The results may have also been because the work of the participants was validating, or because they gained the mastery of self-expression. Regardless of the reasons, such conclusions support the literature that indicates art therapy is effective in reducing depression and improving mood in participants (Bell & Robbins, 2007).

It was not until the recent set of studies that a change in LOC in the participants was systematically assessed. The results of the ANS revealed significant change in score from external to internal LOC in the male and female inmates who participated in the art therapy sessions. This may indicate that art therapy may have been instrumental in changing the LOC of the participants from

external to internal. As the participants learned to manipulate the materials to achieve their desired effect, and learned cause and effect through the creative process, it is natural to assume that this knowledge became internalized. What they learned in the art room may in turn have been generalized to their everyday situations. What is more, based on the results, it appears that there is statistical support that the mood and LOC of the women may have been more affected by the treatment than the men's mood and LOC. Although there is some speculation of why, further analysis will be conducted to ascertain plausible reasons for these differences and will be explored in a future publication.

Notwithstanding the positive FEATS results in the pilot study, increased numbers in the sample sizes, and different facilities in which the research was conducted, the FEATS was unsuccessful in the studies that required a control group. Since the score differential on a FEATS scale ranges from 0 to 5, it is unlikely that a difference of means between an experimental group and a control group can be substantial enough to yield statistically pertinent data. If there was a greater possible range (the BDI-II had a possible range from 0 to 63, and the ANS from 0 to 40), the results may have been different.

However, when the drawings were evaluated in individual cases, some positive changes were noted in the drawings. Fig. 6a and b represent the pre and post-PPAT from the men's group and Fig. 7a and b represent those done by a representative from the women's group.

Although the changes seem subtle, both sets of drawings reflect an increase in space, person, detail, and color prominence and fit. Energy seemed to have increased, and there is more of an environment in the post drawings. Fig. 7a and b demonstrate an improvement in realism. Based on these drawings, it seems that

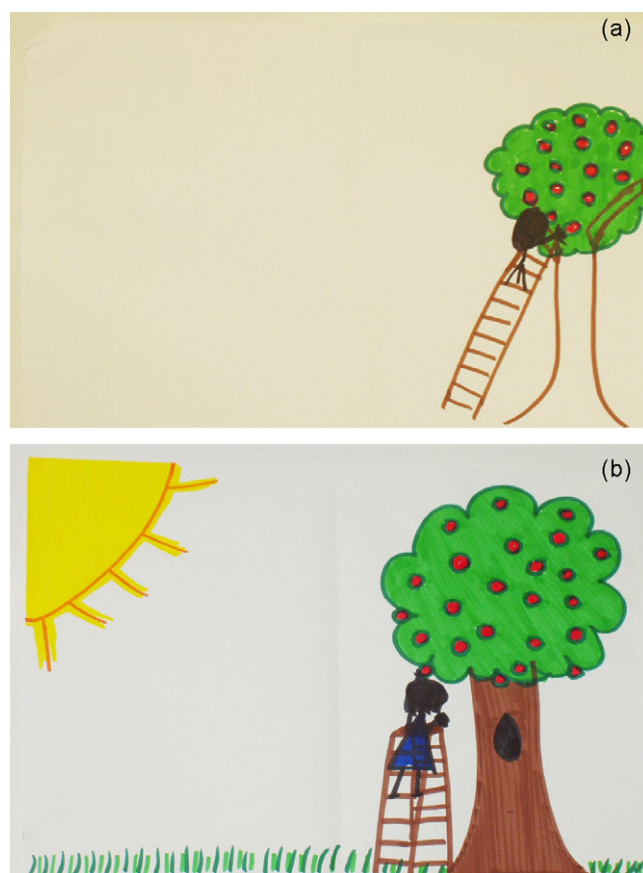


Fig. 7. (a) Pre-PPAT drawing by female inmate. (b) Post-PPAT drawing by female inmate.

these two participants demonstrated a change in mood. Therefore, although it is unlikely that the FEATS will continue to be used as an outcome measure for future prison studies, it may still be used as an assessment for single case comparisons.

#### *Response to the sessions*

Essentially the participants in both the men's and the women's groups responded well to the art tasks. They generally enjoyed the processes, and indicated that they were amazed at the end results. Although there was a general reluctance to begin "art class," ("I'm not good at this"), many warmed up to it, and began to embrace the process. For example, by the time the women's groups began the session that focused on self-symbols they were able to reflect on what the art meant to them. Although some of the responses were somewhat predictable and superficial, such as one person drawing scales because she needed "balance in her life," some of the responses demonstrated insight and disclosure. One indicated that she used blue because "on the inside I am bruised." The men and the women used these sessions to ask questions of each other, and were able to use the drawings as catalysts for discussions.

Although initially reluctant, many of the participants were surprised at the results of the draw and pass. In one women's group, a participant initially refused to draw on someone else's image, stating that she did not want to "mess it up." However, once she saw the others enjoying the process, and realized that it was a safe environment, she joined in, indicating after she was "happy" with the results. Granted, one participant in one of the groups indicated that she "didn't like giving up control" of her artwork. However, most of the participants agreed with the ones who indicated that the process was "a symphony of art," and "all of the pictures are so colorful and beautiful. Everyone added a special, different perspective to each picture."

The transition from individual to group activities was not always smooth. In one group, during the small group white paper sculpture project, several of the women complained that "we always function as a group—in the dorms, med line, chow line, count. We would rather do something alone." Although most of the men may not have verbally complained, they simply worked by themselves on their own paper sculptures, only to figure out unique methods to combine them after. When one particular group was reluctant to engage in a group project, the art therapists uniquely suggested a puzzle mural—that each participant complete an individual puzzle piece, and then at the end of the session they fit the pieces together to develop one large design. Not only did this allow that particular group time to adjust to working together, it also provided an apt metaphor to discuss the importance of maintaining individual identity within the larger group, and that all can make an important contribution. When the participants saw the completed projects, they all indicated surprise and delight.

By the time the groups were introduced to the large group projects, they seemed ready. They were clear on their various responsibilities, learning when to accept and cede leadership, follow suggestions, and take chances. The final projects invariably were a fine example of complexity and problem-solving.

When the groups ended, all of the remaining participants indicated a reluctance to end the art therapy experience. Their insight also greatly increased; one participant indicated "this has changed me in so many ways." The improvement in behavior and interactions was confirmed by the correctional staff of the facilities.

#### *Limitations*

Although these samples yielded significant results, one factor that needs to be considered is why the attrition rate for the men's

groups was higher than the women's groups. Although speculative at this time, it may be because the men's facilities are more disruptive overall. Many of the men were moved to different institutions, at times without notice. Several of them worked, and would often be refused call-out for the art therapy sessions. As well, a percentage was not allowed to attend certain groups for disciplinary reasons—a few of them were even placed in long-term confinement because of acting out behavior. The women's facility seemed more conducive to programmed events, and treated the art therapy services as more of a valuable program than the men's facility; thus, the women may have been more encouraged to participate. It may also be that the residents of the women's institution were more prone to following a schedule, to follow directions, and were more likely to seek out a community of empathy and care.

It is unclear how such attrition affected the final results. It may be that such attrition in the men's group was an intended process of self-selection; those more likely to benefit from the program fought to stay, and did not receive disciplinary actions. If those who had left, or were not allowed to attend, did in fact remain for the entire study, it is likely the results would have been considerably different. Contrarily, it can be argued that the program did help those that did stay, and that the adage, that therapy only helps those that want to be helped, was applicable in this situation. Further evaluation of this issue will be conducted in future studies.

Geographic limitations may influence the capacity to generalize these results. All of these studies have been conducted within a 60-mile radius of a major Florida university. It is probably safe to generalize these results to facilities in Florida, possibly even the Southeast region of the United States. However, in order for these studies to be viewed as more widely generalizable, these studies need to be replicated in other correctional facilities around the United States.

Regardless of these shortcomings, the art therapy seemed to benefit the male and female inmates that did participate. During the exit surveys, the responses to the art therapy process were generally positive. Many of the participants indicated a desire to continue these sessions, and several of the men voiced aspirations to continue art making during their free time.

#### **Future research**

Based on the results and data from this study, further examination will be conducted to determine any differences between the men and women who took part in the art therapy sessions. As the literature indicated, there is a marked difference in men and women prison populations in their mental health status, rationale for criminal behavior, and their response to the prison environment; additional inspection may reveal the two gender groups responded differently to the art therapy process. It is anticipated that these results will be available for publication submission shortly after completing this study.

A series of research studies is proposed to determine the value of art therapy with prison inmates, specifically examining its effect on anger. This study will begin in 2008–2009 with the aid of a senior psychologist in a different men's facility. Three groups will be created and assessed for change in anger management using an anger management assessment tool. The first group will be the art therapy experimental group; this group will receive both art therapy and cognitive-behavioral anger management sessions from the facility's psychology staff and art therapy intern. The second group will receive just cognitive-behavioral anger management group sessions without art therapy. The final group will be the control group, and will not take part in art therapy or anger management sessions. It is anticipated that those receiving both forms of treat-



ment will demonstrate marked improvement over the other two groups. This will support the notion that not only can art therapy help in strengthening anger management skills, but will also reveal the value of art therapy as part of a treatment team model. Controls will be put in place to try and overcome the high attrition rate. It is expected that since the prison facility where the next study will occur is faith- and character-based, and thus program-driven, the art therapy programming may receive more support and a greater desire by the inmates to remain active in the assigned programming. This, in turn, may result in a greater completion rate.

### Application of research

Overall, data supports that art therapy is beneficial for those prison inmates—male and female—who attend the sessions. The implications for this research on practice are already evident in Florida. The success of these research studies has led to the development and reinstitution of the Florida Arts in Corrections program by the Department of Corrections (DOC). On June 1, 2007, the Arts in Corrections External Workgroup was created to develop and implement evidenced-based arts programming throughout Florida correctional institutions.

In its initial white paper, the workgroup identified that “the purpose of the Arts in Corrections (AIC) program is to enhance offenders’ personal, educational and workforce development while supporting successful community re-entry and institutional safety.” The workgroup has tasked itself to reviewing the programs to identify best practices, and, working in collaboration with these programs, develop a unified, state-wide program. The white paper and executive summary have been accepted by the Secretary of DOC, and the execution of this program has begun. This response demonstrates that the research conducted in the Florida prisons may prove applicable to the programming requests of the Florida prison system. Ultimately, with the anticipated diffusion of this research agenda to a wider audience, art therapy may be seen as an important component in prisons throughout the United States.

### Acknowledgements

The author would like to thank Suzanne Arendt, Amy Bucciarelli, Caroline Cook, Nichole Hall, Merrilee Jorn and Francesca Simmons, the art therapy interns who helped collect the data. The author would also like to thank Amy Bucciarelli and Alyssa McLish for independently rating the PPAT drawings.

### References

- Bayse, D. J., Allgood, S. M., & van Wyk, P. C. (1992). Locus of control, narcissism, and family life education in correctional rehabilitation. *Journal of Offender Rehabilitation*, 17(314), 47–64.
- Beck, A. T., & Steer, R. A. (1993). *Beck depression inventory manual*. New York: Harcourt Brace.
- Beck, A. T., Rial, W. Y., & Rickets, K. (1974). Short form of depression inventory: Cross-validation. *Psychological-Reports*, 34(3), 1184–1186.
- Bell, C. E., & Robbins, S. J. (2007). Effects of art production on negative mood: A randomized, controlled trial. *Art Therapy: Journal of the American Art Therapy Association*, 24(2), 71–75.

- Blitz, C. L., Wolff, N., Pan, K. Y., & Pogorzelski, y. W. (2005). Gender-specific behavioral health and community release patterns among New Jersey prison inmates: Implications for treatment and community reentry. *American Journal of Public Health*, 95(10), 1741–1746.
- Bloom, B. (2000). *Gender-responsive supervision and programming for women offenders in the community*. Topics in Community Corrections. Washington, DC: National Institute of Corrections.
- Boothby, J. L., & Durham, T. W. (1999). Screening for depression in prisoners using the Beck Depression Inventory. *Criminal Justice and Behavior*, 26(1), 107–124.
- Butterfield, F. (2003). Study finds hundreds of thousands of inmates mentally ill. *New York Times*. <<http://query.nytimes.com>> Retrieved 21.04.08.
- Chesney-Lind, M. (2006). Patriarchy, crime, and justice. *Feminist Criminology*, 1(1), 6–26.
- Chesney-Lind, M. (2000). *Women and the criminal justice system: Gender matters. Topics in community corrections*. Washington, DC: National Institute of Corrections.
- Day, E., & Onorato, G. (1997). Surviving one's sentence: Art therapy with incarcerated trauma survivors. In D. Gussak & E. Virshup (Eds.), *Drawing Time: Art Therapy In Prisons and Other Correctional Settings*. (pp. 127–152). Chicago, IL: Magnolia Street Publishers.
- Elias, G. (2007). *Facility planning to meet the needs of female inmates. New jail planning: Bulletin from the Jails Division of the National Institute of Corrections*. Washington, DC: National Institute of Corrections.
- Gantt, L., & Tabone, C. (1998). *The formal elements art therapy scale: The rating manual*. Morgantown, WV: Gargoyle Press.
- Griffith, J. E., Pennington-Averett, A., & Bryan, I. (1981). Women prisoners' multidimensional locus of control. *Criminal Justice and Behavior*, 8(3), 375–389.
- Gussak, D. (1997). Breaking through barriers: Advantages of art therapy in prisons. In D. Gussak & E. Virshup (Eds.), *Drawing Time: Art Therapy In Prisons and Other Correctional Settings* (pp. 1–11). Chicago, IL: Magnolia Street Publishers.
- Gussak, D. (2007). The effectiveness of art therapy in reducing depression in prison populations. *International Journal of Offender Therapy and Comparative Criminology*, 5(4), 444–460.
- Gussak, D. (2006). The effects of art therapy with prison inmates: A follow-up study. *Arts in Psychotherapy*, 33, 188–198.
- Gussak, D. (2004). A pilot research study on the efficacy of art therapy with prison inmates. *The Arts in Psychotherapy*, 31(4), 245–259.
- Gussak, D., & Cohen-Liebman, M. S. (2001). Investigation vs. intervention: Forensic art therapy and art therapy in forensic settings. *The American Journal of Art Therapy*, 40(2), 123–135.
- Harris, J. W. (1993). Comparison of stressors among female vs. male inmates. *Journal of Offender Rehabilitation*, 19(1/2), 43–56.
- Hunter, G. C. (1994). Who's really in charge of my life, anyway? Locus of control and cognitive substance abuse treatment in a Federal prison. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 12(4), 219–227.
- Levy, B. (1978). Art therapy in a women's correctional facility. *Art Psychotherapy*, 5(3), 157–166.
- Lindbloom, G., & Faw, T. T. (1982). Three measures of locus of control: What do they measure? *Journal of Personality Assessment*, 46(1), 70–71.
- Love, G. D. (1991). Consideration of the inmate student's locus of control for effective instructional leadership. *Journal of Correctional Education*, 42(1), 36–41.
- Negy, C., Woods, D. J., & Carlson, R. (1997). The relationship between female inmates' coping and adjustment in a minimum-security prison. *Criminal Justice and Behavior*, 24(2), 224–233.
- Nowicki, S., Jr., & Strickland, B. R. (1973). A locus of control scale for children. *Journal of Consulting and Clinical Psychology*, 40, 148–154.
- Nowicki, S., & Duke, M. (1974). A locus of control scale for noncollege as well as college adults. *Journal of Personality Assessment*, 38, 136–137.
- Reitzel, L. R., & Harju, B. L. (2000). Influence of locus of control and custody level on intake and prison-adjustment depression. *Criminal Justice and Behavior*, 27(5), 625–644.
- Sydney, L. (2005). *Gender responsive strategies for women offenders: Supervision of women defendants and offenders in the community*. Washington, DC: National Institute of Corrections.
- Watt, M. C., Frausin, S., Dixon, J., & Nimmo, S. (2000). Moral intelligence in a sample of incarcerated females. *Criminal Justice and Behavior*, 27(3), 330–355.
- Whitaker, M. S. (2000). *Responding to women offenders: Equitable does not mean identical. Topics in community corrections*. Washington, DC: National Institute of Corrections.