

THERAPEUTIC GARDENING IN A LONG-TERM DETENTION SETTING

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Therapeutic horticulture, the cultivation of plants as part of a strategy for personal change, has long been seen as an effective rehabilitation tool. It has been demonstrated to have a beneficial effect with a wide variety of people, with an array of physical, psychological, and addictive problems and disabilities. A long-term juvenile detention facility in Texas instituted a therapeutic horticultural program, at very little cost, and the initial impact of the program looks promising. This article briefly reviews the literature on therapeutic gardening and horticultural therapy, and describes the implementation of therapeutic horticulture as a component of a long-term residential program for youthful offenders.

The juveniles file out of the facility and into the warm and sunny garden area, splitting into pairs. Some begin watering with buckets, others prepare compost and soil, and others fill containers in preparation for planting and transplanting. One pair picks peppers and tomatoes while several more weed. Throughout the garden, there is a constant flow of quiet observations. “Hey, look at these spiders ‘they’ve built a web’”. “My jalapeno plant is going to survive”. “These tomatoes are starting to turn red”. “Man, these strawberries are good”. “Check out all these lady bugs ‘they’re hatching out’”. There are no harsh words, no arguments, and no competition. The youth work collaboratively and report that gardening is the highlight of their day.

As any suburban gardener can attest, working with flowers, vegetables, and other plants can be a relaxing and calming activity. Gardeners feel pride in what they produce, and they must use patience, planning, and perseverance in order to succeed. These positive aspects of gardening have proven to be of significant benefit to a variety of people with difficulties and hardships in their lives. Therapeutic gardening has come to be seen as a legitimate and worthwhile strategy for bringing about positive change in people’s lives, and is currently being used with a variety of populations with a host of life challenges. It may prove beneficial in working with juveniles in a long-term detention setting as well.

Therapeutic gardening was introduced into a Texas Post Adjudication Secure Treatment Facility in an attempt to reduce aggression and provide residents with a productive, enjoyable, and therapeutic activity. The program, according to the staff

and administrators, far exceeded expectations after its first year. Initiated with no expenditures of public money, the gardening effort seems to have had positive effects for staff, administrators, and residents. Aggressive incidents declined and overall levels of civility rose as satisfaction with the program increased.

This paper will explore the concepts of therapeutic gardening and horticultural therapy in an attempt to identify relevance to the field of juvenile justice. A pilot therapeutic gardening program in a long-term detention facility in Texas will be described, with special emphasis on implementation, costs, and initial outcomes. A case will then be made for the inclusion of therapeutic gardening in other facilities.

Therapeutic Gardening

Gardening seems to have a curative effect on people experiencing a wide range of illnesses, disabilities, injuries, and emotional difficulties. Gardening activities may have a physiological effect as well as psychological, resulting in actual neurological and hormonal changes in the body (Michaud, 2003).

Therapeutic gardening describes a range of purposeful gardening activities with varying formal therapeutic components. At the formal end of the continuum, horticultural therapy (HT) has evolved into a specialized discipline of counseling where trained professionals use gardening as a tool for the enhancement of therapy. At the less structured end of the continuum, therapeutic gardening may simply involve basic gardening activities, without the participation and oversight of a professional therapist.

The intentional use of gardening for therapeutic outcomes is not a new idea. The term "horticultural therapy" (HT) was first used in 1948 (Olszowy, 1978, p. 5). In the early days of formal HT, the primary beneficiaries were people in physical rehabilitation. The use of therapeutic gardening with disabled veterans was implemented following World War I, and the Red Cross began similar work with wounded military troops soon after (Brooks, H.D. & Oppenheim, C.J., 1973, pp. 4-5).

Therapeutic gardening has been found to be effective with many diverse rehabilitative populations. Children with cerebral palsy (Ackley & Cole, 1987), Alzheimer's patients (Ellis, 1995), people with mental illness (Canadian Horticultural Therapy Association, 2003; Smith, 1998) and developmental disabilities (Airhart, Willis, & Westrick, 1987), and the elderly (Hill & Relf, 1982; Haas, Simpson, & Stevenson, 1998) have been shown to benefit from gardening activities. Therapeutic gardening impacts the physical by stimulating all five senses and, the mental, as a positive means of self-gratification (Sullivan, 1979).

There are three types of horticultural therapy programs, with different objectives, intended to serve distinct population needs: vocational, therapeutic, and social (Haller, 1998). The first, vocational programs, are designed to help participants develop skills or characteristics that will ultimately lead to employment. All vocational horticulture programs are rooted in a rehabilitation model. This model is designed to help people recover from injury, illness, or disability in order to secure employment and participate in society as contributing members. These programs typically provide services to a) help people adjust to new physical disabilities, b) regain functionality while living with psychiatric disabilities, or c)

develop basic work related skills in people with developmental disabilities. While many populations may benefit from vocational horticultural programs, the expected outcome is always employment.

Therapeutic horticultural programs, like their vocational program counterparts, are designed to help with the recovery process. The goal of therapeutic programs, however, is not employment, but wholeness; healing and curative effects are commonly seen in these programs. Therapeutic horticultural programs have been shown to be helpful to a variety of populations, including people with mental illness, people with head injuries, physical injuries, older adults, and others. Participants benefit in several ways, including raised levels of confidence, better social skills, and higher self esteem. The three most common types of facilities in which therapeutic programs are found are long term care facilities for the elderly, rehabilitation centers, and psychiatric hospitals.

The third type of horticultural therapy program is a social program that is intended to offer gardening as a leisure activity in order to contribute to the individual's general well being. Rather than being seen as a medical or rehabilitative tool, gardening is seen as recreational, and as a means to contribute to overall wellness. Commonly found in residential group homes, retirement communities, and senior centers, the benefits of a social program include "exercise and fresh air, healthy food production, a chance to belong to a community, having an object of focus and a rewarding hobby, reducing stress, and connecting with the land" (Haller, 1998, p. 63). Goals associated with social gardening are generally not directed at individuals, but at the larger group. As a result of the gardening activity, a sense of community pride may develop, and members often gain better communication and overall social skills.

The program described below was not intended to be a vocational program, although such programs have been utilized in detention facilities with some success (McGuinn & Reff, 2001). Rather, it was designed as a social program with some therapeutic elements; staff therapists, while not trained as horticultural therapists, were active participants and found many themes and metaphors in the activities to bring into group and individual counseling sessions.

The Pilot Program

The Denton (TX) Post Adjudication Secure Treatment Facility provides residential services to approximately 25 adjudicated youth at a time. The facility accepts both males and females, and the average length of stay is 9 months, with a 6 month minimum. The program includes a strong substance abuse treatment component, and individual, group, and family sessions are included in the treatment regimen.

Bobbie Hanford, the director of the facility, is a life-long gardener, and began taking courses in 2002 to achieve certification as a Master Gardener. One of the requirements for the certificate is that participants complete a community project that involves gardening. Ms. Hanford chose to take this opportunity to set up a gardening program at the facility in order to meet the certification requirement. Her idea for this type of program in a juvenile setting actually began years earlier in a Texas Youth Commission facility, where she observed a particularly troubled

juvenile plant, water, and nurture watermelon seeds scavenged from a Fourth of July picnic. She observed that his behavior improved as his plants thrived, and they became a source of great pride for him. He began complying with all the program rules because he did not want to lose privileges that might keep him from tending his plants.

From the beginning, top administrators in the Texas facility lent full support to the project, but there was no room in the budget for any garden-related expenses. To minimize costs, a decision was made to implement a container garden on a secure outdoor basketball court. The basketball court had come to be seen as problematic anyway, due to history of minor aggressive incidents that occurred during basketball games.

Staff and community members donated a number of containers, seeds, and potting soil, and the garden was first planted in spring, 2002. Additional donations of supplies, including lumber and live plants arrived, and volunteers helped to construct a gazebo and storage shed. The Denton program was begun with literally no expenditures of public money, however, the initial start up costs of a similar project would only be a few hundred dollars.

All residents were allowed to participate, and a policy was initiated that granted 'immunity' to gardeners; residents would not lose points for behavior while in the garden. Instead of providing negative consequences (such as lost points and subsequent loss of privileges) for garden-related behavioral problems, all problems that arose in the garden would be dealt with in the garden.

Almost immediately, staff began observing positive changes with the residents. The juveniles genuinely seemed to enjoy the daily trip to the garden, where they watered, weeded, and worked for 30 minutes to an hour each day.

The basketball court, previously the setting for loud, competitive, and often aggressive competitions, was transformed into a beautiful and tranquil garden, a place of peace in the detention center. The staff were surprised that the residents did not take advantage of the lack of punitive consequences while in the garden area. The juveniles worked as teams, in noncompetitive activities, and were observed by staff to be calmer and more relaxed.

Although this gardening program was not a 'formal' horticultural therapy program, the staff contends that it had a powerful impact on the participants. Ms. Hanford, the director of the facility, believes the lessons learned in the garden were "more powerful than therapy—these were living, growing examples of what it takes to grow and prosper". The residents talked among themselves and with staff about their experiences in the garden, and much of what they shared came as a surprise to the staff. The residents seemed to grasp the metaphorical power of working with, and on behalf of, other living things, and were able to apply these insights to their own lives.

On one occasion, a pepper plant was dying in a pot because of poor drainage, and a staff member suggested to a juvenile that he pull the plant and put it into the compost heap. The young man resisted, and replied that he wanted to try and save his plant. After working patiently and persistently for several weeks, the plant returned to health and thrived. The insight that evolved during and after his 'rescue' of the ailing plant was remarkable; he related that he saw himself and all the other

residents as being similar to that pepper plant. Most everyone had given up on the juveniles and wanted to throw them in the compost heap, too, but the facility saw that they had the potential to get better. The lesson learned? “Never give up on people, especially yourself”.

Another powerful metaphor arose from the fact that the garden is completely organic, with no chemicals or synthetic fertilizers used at any time. The symbolism of a healthy and chemical free garden was not overlooked by the juveniles. The prosperity of the garden, and it did prosper, without chemicals, stimulated many comments about the advantages of a chemical free lifestyle. It was clear that the juveniles really could see the benefits of growing healthy and strong, without the need for chemicals. Organic gardening takes more patience and work than chemical based gardening, and the youth made the connection between this concept and their own lives.

Another unexpected benefit of the garden surfaced during family visits. Staff allowed juveniles to spend time with their families in the garden, sitting in the gazebo or inspecting the plants. Both staff and the families observed that the garden seemed to facilitate more relaxed family meetings, and the juveniles were eager to give tours of the garden to their families. They would explain what they had worked on, and describe the progress and production of individual plants. The staff concluded that the garden served as a significant point of pride to the juveniles.

Many of the juveniles reported that they had not spent a great deal of time observing nature prior to the gardening experience, and they became engrossed by the life cycles they observed. Groups of young people would visit a corner of the garden each day, just to observe two resident spiders and note changes in their webs. On another day, the entire group became excited as they watched thousands of ladybugs hatch on a wall. They soon became attuned to the weather, as they adjusted their watering to temperatures and rainfall.

During the course of the gardening season, Ms. Hanford invited speakers from the local organic gardening society, the agricultural extension office, and other groups to visit with the gardeners about organic gardening methods and techniques. The juveniles were polite, attentive, and reported that they found the talks informative and entertaining.

At the end of the spring growing season, a number of vegetables were entered in a local organic fruit and vegetable show. Three senior residents represented the program at the show, accompanied by several staff members. The program took home 11 Blue Ribbons, one Reserve Champion Ribbon, a Grand Champion Ribbon, and \$55 in prize money. The prize money was set aside after the juveniles voted to spend it on a permanent addition to the garden, rather than on expendable supplies. Later in the summer, the juveniles won another Blue Ribbon at a much larger regional fair. On the Fourth of July, the gardeners put together a “feast” of salad and vegetables for the center and invited the juveniles’ families.

At present, plans are being made to continue the garden another growing season. Donations continue to come in, and the juveniles report an eagerness to resume the garden work. One significant addition to the program will be seen in the next growing season: journaling. The staff believe that the gardening experience will

be even more significant if the participants journal their thoughts and feelings throughout their tenure in the garden.

DISCUSSION

There are many reasons to believe that therapeutic gardening may be well suited for secure juvenile facilities, despite earlier skepticism of its acceptance among youth. Thirty years ago, researchers suggested that, “The most difficult group will be the males from the early teens to the middle twenties. They will reject this form of therapy particularly if they are unfamiliar with gardening. (Brooks and Oppenheimer, p. 32). However, the experiences of this Texas facility indicate that gardening is well received in a detention setting.

Therapeutic gardening in long-term residential settings offers potential benefits on several levels. In addition to enriching individual residents, it can help establish and maintain the therapeutic communities that most facilities strive for. The potential to reduce aggression and increase the overall level of civility in the facility would help staff and administrators.

Benefits to the Juveniles

Gardening could be a powerful tool in working with juveniles in secure facilities. Horticulture helps people raise their self-esteem, improve their confidence as well as their social skills, and improve their overall quality of life (Hopkins, 2003). Horticultural therapy has been found to be helpful for children with learning disabilities (Doutt, Airhart, & Willis, 1989), and can be of benefit to people with mental illnesses (Shapiro & Kaplan, 1998, p. 158). It may be of particular benefit for people with substance abuse or chemical dependency issues (Rice, Remy, & Whittlesey, 1998; Richards & Kefami, 1999), and Olszowy (1978, pp. 73-77) suggests that it can be a powerful experience for those from disadvantaged backgrounds of poverty and deprivation.

A summary of research articles on school gardens compiled by Virginia Tech University (2003) uncovers a number of significant findings. Students who are exposed to gardening in school settings develop more positive attitudes about health, nutrition, and the consumption of vegetables. They score better on standardized achievement tests, have better attitudes about school, improve their interpersonal skills, and their classroom behaviors improve. Additionally, research on students confirms that gardening leads to higher levels of self-esteem and responsibility, and indications are that group cohesiveness is strengthened when gardening is incorporated into a school setting.

Many of the juveniles involved in the Texas program were dealing with serious substance abuse problems. Horticultural therapy has been demonstrated to significantly strengthen substance abuse treatment programs (Cornville, Roher, Phillips, & Mosier, 1987), and it was felt by the administrators of the program that the gardening activities served as a complimentary addition to the existing substance abuse interventions.

Strengthening the therapeutic community

Gardening may prove beneficial to the community of youth that make up the center. Of course, most residential facilities are structured, to some degree, around the concept of the therapeutic community. Relf suggests that the inclusion and nurturing of plants help to strengthen communities. She points out that there are three primary ways that plants can foster the development of healthy communities (1998, p. 29):

- By providing a physical condition or appearance that makes people proud to be considered part of the community and by enhancing the social condition of the community
- By providing opportunities for the sharing of values, interests, and commitments that open the door to friendly association and lead to further cooperation, which has the impact of demonstrating the individual's ability to have control and responsibility for changes in the community
- By providing a surrounding that is more comfortable physically in which to live and work.

The propagation of plants in a detention setting leads to increased self pride and a sense of belonging, increase cooperation and social skills, and could provide a soothing and relaxing respite to the stresses of institutional living.

Impact on Staff

Therapeutic gardening may help staff and administrators by improving the social context of the facility and reducing both the number and seriousness of conflicts and incidents. In the Texas facility, the number of incidents declined after initiating the gardening project. According to Ms. Hanford, there was a reduction in disruptive incidents of more than 25% after starting the garden. Staff reported that residents seemed calmer and less likely to use aggression with each other or with staff.

An additional, unexpected outcome related to the garden involved the direct staff. Those who participated in actual supervision in the garden reported lower levels of anxiety and stress in their work and professional lives. Time in the garden seemed to have the same stress reducing effect on staff that it did on the residents. According to administrators, personal interactions throughout the center became more civil.

CONCLUSION

In addition to being beneficial to juveniles by improving social skills, raising self-esteem, reducing anxiety, teaching patience and delayed gratification, gardening is easily implemented as a component of a long-term detention program. It may also strengthen the therapeutic community in secure treatment programs, reduce aggressive incidents, and provide stress reducing benefits to staff. Container gardening does not require large expanses of space, expensive tools, or machinery. A program similar to the one developed in Denton, Texas, could easily be replicated in other facilities for little or no cost.

In the last half century, as the juvenile justice field was developing and maturing, the concept of therapeutic gardening was also evolving. It is ironic that therapeutic gardening has not been given the same attention in juvenile justice that it has in other fields. While certainly not a panacea, it may show great promise with juvenile offender populations. Further research is needed to determine the efficacy of therapeutic gardening with youthful offenders, both longitudinally and short term, but the experiences of one Texas facility leads to an optimistic assessment of the concept.

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