THE USE OF HORTICULTURAL THERAPY AT A PUBLIC GARDEN, PARK DISTRICT, OR COUNTY EXTENSION AGENCY

by

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B.S., Pennsylvania State University, 1974

A MASTER'S THESIS

submitted in partial fulfillment of the requirements for the degree

MASTER OF SCIENCE

Department of Horticulture

KANSAS STATE UNIVERSITY

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1981

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Major Professor
THIS BOOK CONTAINS NUMEROUS PAGES THAT ARE CUT OFF

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ACKNOWLEDGEMENTS

I would like to offer special thanks to the Chicago Community Trust and the Chicago Botanic Garden for giving me the opportunity to make this work possible. I would like to acknowledge the many people who contributed to this work, among them are Cindy McIntyre, Gene Rothert, and Brooks Cullman for their ideas and content contributions, and to the Board of Directors of the Chicago Botanic Garden for their support of horticultural therapy at the Chicago Botanic Garden. Other people helped guide the work; these include Charles Lewis, Sandra Nierenburg, Merele Cohn, Holly Utrata-Halcomb, Mary Mandeville, Jim Fizzell, Francis Olsberg, and Catherine Painter.

Lastly, I would like to give special thanks to Dr. Richard H. Mattson for his efforts to coordinate the thesis over a geographical distance, to Dr. Charles W. Marr, Extension Vegetable Crops Specialist, Department of Horticulture, and to Dr. Henry Camp, Department of Sociology, Social Work, and Anthropology, for their assistance in preparation of this thesis.
INTRODUCTION

Public gardens, park districts, and county extension agencies dedicated to public service have the challenge to bring the wonders and beauty of plants and nature through educational programs, and/or to provide an aesthetic experience for all people in the community. All people includes the elderly, physically disabled, mentally and emotionally impaired, as well as those nondisabled people living in the community. People in nursing homes, psychiatric hospitals, sheltered workshops, special education programs, rehabilitation facilities, and the disabled living in their own homes can all value from the use of horticultural therapy. Often institutions need someone with the knowledge and background in horticulture to guide them into its therapeutic applications. An ideal candidate to perform this function is a horticultural therapist working through a public garden, park district, or county extension agency.

To date, eight public gardens in the United States and Canada have implemented a horticultural therapy program. Two such horticultural therapy programs have been implemented at the Holden Arboretum and at the Matthaei Botanical Gardens. Horticultural therapy has been an integral part of the Holden Arboretum's educational program for over 25 years. To date, three grants have been secured from a Cleveland based family foundation, the George Gund Foundation. These grants have allowed the horticultural therapy program to provide training in the use of gardening as a therapeutic tool to professionals and volunteers of social service agencies in a 3-county area surrounding Cleveland. A horticultural therapy program was begun at the Matthaei
Botanical Garden in 1976 and is affiliated with the University of Michigan. The Matthaei Botanical Garden publishes a quarterly horticultural therapy newsletter and is affiliated with the Michigan Chapter of the National Council for Therapy and Rehabilitation through Horticulture.

Horticultural therapy services that can be provided by a public garden, park district, or county extension agency include direct services to patients/clients, and services that train the therapists and volunteers. Direct services to patients/clients can further be divided into those programs at the public garden or park. Services to train leaders can be either through workshops and seminars or through consultation or extension services. In providing these various services, it is important to know the effectiveness of each service and the determining factors to successfully implement a community extension horticultural therapy program. It is the intent of this thesis to do just this.
MATERIALS AND METHODS

This thesis is based on the experiences of 3½ years of horticultural therapy programs implemented and evaluated at the Chicago Botanic Garden. The Chicago Botanic Garden is a 300-acre public garden owned by the Forest Preserve of Cook County, Illinois, and is managed by the Chicago Horticultural Society. Horticultural therapy is a vital part of the Botanic Garden's educational program, having a 25-year history with an intensified program the last 3 years due to a grant from the Chicago Community Trust. Community involvement leading to the acquisition of a grant, the writing of the grant, and the various programs undertaken due to the grant were all parts of this thesis.

Community assessment of the need for horticultural therapy in the Chicago area was the first step. A survey questionnaire was written to determine how much interest there was in horticultural therapy, what type of agencies have this interest, and what type of horticultural therapy program(s) facilities wanted. The questionnaires were sent to directors and activity therapists of county community mental health centers, general hospitals, geriatric agencies, special education schools, state psychiatric hospitals, sheltered workshops and rehabilitation agencies, special recreational associations, and activity, physical, occupational, and recreational therapy associations. A cover letter and a written description of horticultural therapy accompanied the questionnaire.

Shortly after the questionnaire was mailed, an introductory seminar was held to further assess interest and the types of programs
that could be implemented. This introductory seminar was publicized by utilizing media resources in the newspaper, radio and television, and by placing announcements in local activity and occupational therapy newsletters. One hundred therapists and administrators were able to attend this seminar.

The positive results experienced in the survey and the introductory seminar provided a sound basis to secure a grant. A proposal was written to develop a demonstration garden for other botanic gardens and allied institutions to promote the use of therapeutic horticulture. This proposal was awarded a 3-year grant by the Chicago Community Trust to institute a wide range of programs to reach both therapists and their patients/clients. Brochures and notices describing seminars and workshops for therapists, and classes and tours for patients/clients were sent out to therapeutic and rehabilitation institutions, and to special education schools. This helped structure efforts along the following areas:

1. To provide classes and tours for clients and patients at the Chicago Botanic Garden. Classes were offered in plant propagation, terrariums, desert dish gardens, hanging baskets, dried flower arrangements, nature collages, vegetable and flower gardening, corn crafts, and container gardening.

2. To conduct workshops for therapists providing them with the information to implement a horticultural therapy program. Workshops were offered in vegetable and flower gardening, and with indoor plants and container gardening.

3. To serve on a consulting basis to institutions requesting
gardening information.

Pilot programs were implemented at five institutions. These were Winchester House, the Illinois State Psychiatric Institute, the Rehabilitation Institute of Chicago, the Maine-Niles Special Recreation Association, and the Lawrence Hall School for Boys. These pilot programs were a means to explore and test new ideas for the effective use of horticultural therapy and to stimulate interest and awareness in horticultural therapy in the Chicago area.

The information and experiences that were obtained with the pilot programs allowed the Chicago Botanic Garden to disseminate information and to develop horticultural therapy programs on a larger scale. Special training programs were offered that combined on-site consultation and a series of 6 weekly classes to enable the therapists to participate in all of the steps involved in the development of vegetable, flower, and herb gardening, both indoors and in outdoor container gardens. A one-day workshop outlined the mechanics of developing a horticultural therapy program and oriented therapists to the special training program. In a one-year period, 52 institutions participated in these special training workshops.

A full description of the observations and experiences of these horticultural therapy programs undertaken at the Chicago Botanic Garden will be published in a booklet entitled, "Horticultural Therapy at a Public Garden, Park, or County Extension Agency."
RESULTS AND DISCUSSION

From the 254 institutions that received the horticultural therapy survey questionnaire, 59 or 23% returned information. Of these, 93% stated that interest existed in horticultural therapy at their sites. (See Table 1).

During the third year of the grant project, a program evaluation questionnaire was written and distributed to staff from institutions who had participated in the Chicago Botanic Garden horticultural therapy programs.

Analysis of the questionnaire replies indicated that of all the programs offered, the special training programs were most effective with over 95% of those participants continuing horticultural therapy programs. Shortage of available staff and budget limitations were considered to be the most common difficulty in operating programs. Eighty-two institutions replied with the following results:

1. Results of the workshops:

   One method of determining the success of workshops was to assess the number of new programs. The following measurements might indicate success of workshops:

   a. 89% of the therapists who attended the vegetable and flower gardening workshop had a vegetable garden.
   b. 70% of the therapists who attended the container gardening workshop had container gardens.
   c. 76% of the therapists who attended the indoor plant workshop had an indoor plant program.
2. Results of the special training programs:

Over 95% of the 52 institutions that participated in the six week special training program are continuing a horticultural therapy program as a part of their overall program.

3. Problems encountered by institutions:
   a. limited budget 38%
   b. shortage of staff time 38%
   c. difficulty in motivating clients 33%
   d. insufficient technical information 24%
   e. client turnout too irregular 21%
   f. difficulty finding proper supplies 16%
   g. inadequate support from administration 10%

4. Evaluation of plant programs compared to other activity programs:
   a. horticultural therapy has a definite place in overall program. 43%
   b. horticultural therapy is one of the best programs. 41%
   c. horticultural therapy is equal with other programs. 8%
   d. horticultural therapy did not measure up to other programs. 8%

These results show that horticultural therapy has a definite place at most institutions. The four major problems encountered by the institutions can be partially solved with the help of the public gardens, park district, or county extension agency through:

1. Ordering supplies in bulk and passing on the savings to the institutions, or by showing the institutions how to obtain plant materials and supplies at reduced rates.
2. The problem of shortage of staff time can be solved by training volunteers to assist in the horticultural therapy program.
3. Clients can better be motivated by professional presentations by horticultural experts from outside the institution.
4. Workshops and seminars, consultation services, and literature can provide technical information to therapists.

In developing a horticultural therapy program at a public garden, park district, or extension agency, it is best to start small with workshops and seminars. As interest and demand builds, develop other programs to meet special needs. Some experiences of the 3-year program at the Chicago Botanic Garden were as follows:

1. Pilot programs are successful in motivating institutions to implement horticultural therapy programs.
2. Workshops should provide hands-on horticultural activities.
3. Staff time and materials expense increase in the following order:
   a. workshops and seminars.
   b. consultation and extension programs
   c. classes and tours of the garden
   d. special training programs
   e. pilot programs
4. A planning group composed of professionals and service group representatives from the community will insure success.
5. Administrative support and willing therapists will insure that a horticultural therapy program once started will continue.
BIBLIOGRAPHY


Daubert, J.R. 1981. The use of horticultural therapy at a public garden, park district, or county extension agency. Chicago Botanic Garden, Glencoe, IL.


Table 1. Summary of answers received from the horticultural therapy questionnaire.

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>Psychiatric</th>
<th>Geriatric Nursing Homes</th>
<th>Developmental Disabilities</th>
<th>Substance Abusers and Youthful Offenders</th>
<th>Residential Treatment Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Do you have any type of horticultural therapy program?</td>
<td>15</td>
<td>14</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Are you interested in starting a program?</td>
<td>23</td>
<td>6</td>
<td>7</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Would you be interested in attending a meeting at our facilities explaining the use of horticultural therapy?</td>
<td>27</td>
<td>3</td>
<td>6</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Would you be interested in having a class at our facilities for your clients/patients?</td>
<td>14</td>
<td>10</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Do you have the facilities at your institution to start a horticultural program?</td>
<td>28</td>
<td>3</td>
<td>7</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Do you feel that your administration would support a horticultural therapy program?</td>
<td>25</td>
<td>2</td>
<td>6</td>
<td>0</td>
<td>10</td>
</tr>
</tbody>
</table>
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SURVEY QUESTIONNAIRE COVER LETTER

The Chicago Horticultural Society is in the process of developing its educational program to reach special populations—geriatric, mentally ill, mentally retarded, physically and visually handicapped, drug and alcohol abusers, and youthful offenders. We are currently trying to determine the extent of interest that lies with using plant-oriented programs in rehabilitation and geriatric facilities. To make our program effective, we need your help. We would appreciate your filling out the enclosed questionnaire and returning it to us. Please feel free to make suggestions.

If interest warrants, we could serve as consultants and/or conduct workshops to train volunteers or therapy staff in using plant-oriented programs. There is also the possibility for us to conduct classes at the Chicago Botanic Garden for these special populations.

Sincerely,

James Daubert
Director of Horticultural Therapy
SAMPLE SURVEY QUESTIONNAIRE

Name of Facility __________________________________________

Address ________________________________________________

_______________________________________________________

Person Filling out Form __________________________ Telephone ______

Number and Type of Clients ______________________________________

1. Do you have any type of horticultural therapy program?
   ______ Yes ______ No If yes, please describe your program.

2. Do you have any other related programs or projects?
   ______ Yes ______ No If yes, please give examples.

3. Are you interested in starting a horticultural therapy program?
   ______ Yes ______ No If no, what are the reasons?

4. Would you be interested in becoming familiar with the facilities and programs of the Chicago Botanic Garden?
   ______ Yes ______ No

5. Would you be interested in attending a meeting at our facility that would explain the uses of horticultural therapy?
   ______ Yes ______ No
6. What phases of horticultural therapy would you be interested in learning?

7. Would you be interested in having a class at our facilities for your clients?
   _____ Yes _____ No If yes, what type of things would you like to try? (vegetable gardening, indoor plants, nature study)

8. Do you have the facilities at your institution to have an indoor garden, a vegetable garden, a herb garden, a container garden?
   _____ Yes _____ No Please describe.

9. Do you feel that the administration at your institution would back a horticultural therapy program?
   _____ Yes _____ No

10. Any further suggestions or comments.

11. Please list names of interested staff members:

    ______________________  ______________________

    ______________________  ______________________

    ______________________  ______________________

Your cooperation is appreciated. Please call me concerning any questions at 635-5440.
James Daubert, Director of Horticultural Therapy
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Public gardens, park districts, and county extension agencies are beginning to use horticultural therapy as a part of their educational community service program. Numerous special population groups can be assisted by these horticultural agencies.

This thesis assessed the need for horticultural therapy programs in the greater Chicago area. Through a three-year grant from the Chicago Community Trust, horticultural therapy programs were implemented and evaluated at the Chicago Botanic Garden for several client groups. Considerations were made for planning horticultural programs, surveying community needs, obtaining funds, developing public relations, and using volunteers. Specific information on how to develop different types of horticultural therapy programs and activities geared for disabled groups, seminars and workshops for therapists, special training programs, and pilot programs at therapeutic and rehabilitation institutions were prepared for publication through the Chicago Botanic Garden.

The effective utilization or adaptation of information in these written publications will allow public gardens, park districts, or extension agencies to bring the beauty and wonders of horticulture to the disabled as well as the nondisabled person.