## Evidence Based Practice Day Department of Rehabilitation Sciences, Recreation Therapy Program April 26, 2013

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### The Effects of Horticulture Therapy on the Positive Affect of Older Adults with Dementia

Search Terms: Horticulture, Dementia, Affect, Elderly

Years: 2002-2013

Databases: Ageline, Ebscohost, Pubmed

**Number of Articles: 8** 

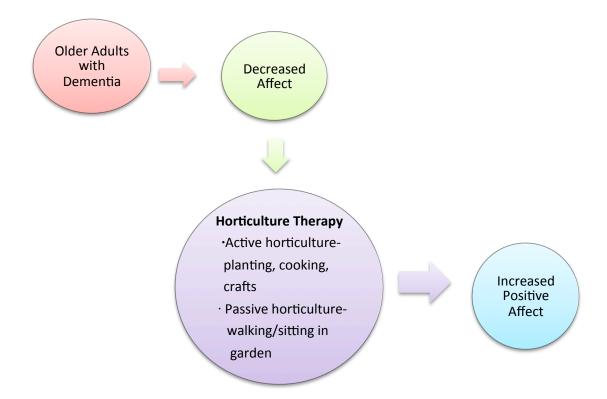
#### **Summary of Research Findings:**

According to the American Horticulture Therapy Association (2013), horticulture therapy is an intervention that uses plants and related materials in either a passive or active format to help improve well-being for participants. Rappe & Kevela (2005) have noted the positive effects of horticulture therapy on the emotional and psychological well-being of older adults with dementia. According to the literature, long-term care facilities often use horticulture therapy as a modality because it can be modified to fit a wide range of abilities and it is developmentally and socially appropriate for older adults with dementia (Jarrott, Kwack & Relf, 2002).

This review included 8 articles that examined the effects of horticulture therapy on the positive affect of older adults with dementia. Four of the eight studies compared horticulture therapy activities (HT) to traditional activities (TA) in a long-term care/adult day service setting. In four studies that compared HT to TA, three studies found that participants showed higher levels of positive affect when they participated in HT as compared to TA. However, there was no difference in affect shown between the different types of HT activities (Gigliotti, & Jarrott, 2005; Gigliotti, Jarrott, & Yorgason, 2004; Jarrott, & Gigliotti, 2010). Although Jarrott and others (2002) found that participants did not experience higher levels of positive affect in horticulture therapy activities than in traditional activities, participants exhibited moderate well-being and no ill-will towards the horticulture activities. Two studies looked how passive horticulture therapy can impact positive affect in older adults with dementia; it was found that the participants experienced a more positive mood and had increased their emotional health after visiting the garden or taking a walk through the garden (Detweiler, et al., 2012; Rappe, & Kivela, 2005). Still the other two articles compared those who participated in a horticulture therapy program to those who maintain their daily routine, and found that those who participated in HT showed increased psychological well-being, including their feelings of happiness and pleasure (Barnicle, & Midden, 2003; Tse, 2010).

#### **Knowledge Translation Plan:**

Horticulture therapy is an intervention that can be modified to meet the physical and cognitive needs of the participants with varying stages of dementia by developing activities in different difficulty levels (Gigliotti, & Jarrott, 2005; Jarrott, Kwack & Relf, 2002). Therefore, RTs should assess the physical and cognitive ability levels of the older adults before they design a horticulture program to make sure it will be appropriate for the individuals. RTs can implement horticulture therapy in either individual or group activities and by using active and/or passive horticulture activities. Active horticulture can be implemented by designing activities that will allow older adults to plant seeds, tend to plants or flowers, weed gardens, pick fresh vegetables and herbs to cook with, or by doing crafts that involve plant materials. Passive horticulture can be implemented by having clients sit in the garden or by taking a walk in the garden. Both types of horticulture have been found to have positive effects on affect in older adults with dementia (Barnicle, & Midden, 2003, Detweiler, et al., 2012; Gigliotti, & Jarrott, 2005; Gigliotti, Jarrott, & Yorgason, 2004; Jarrott, & Gigliotti, 2010; Rappe, & Kivela, 2005, & Tse, 2010). The graphic below summarizes the intervention utilized, activities utilized within the intervention, and resultant outcome of the intervention.



#### References:

Alzheimer's Association What is Dementia. Retreived February 28, 2012 http://www.alz.org/what-is-dementia.asp#causes American Horticulture Therapy Association http://ahta.org/sites/default/files/DefinitionsandPositions.pdf

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