

## Applying Integrated Horticultural Therapy and Writing Therapy to Assist Graduate Students in Taiwan

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### Abstract

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*Graduate students are often stressed when dealing with various psycho-social development missions in early adulthood. An integrated horticultural and writing therapy can assist graduate students to write down their observations, feelings, and interactions in the process of gardening. They can reflect their gardening experiences interacting with teachers, peers, and the campus on their past experiences in studying, growth, and changes. Through gardening and writing, graduate students could learn to face themselves honestly, release stress, stabilize emotions, gradually get rid of traumatic experiences, and eventually recover. In a group therapy, members participate, share, discuss, cooperate, and support each other to form identification and a sense of belonging. The gardening materials act as the media for members to deepen their awareness of interaction between plants/people and the nature, reflect the plant growing process on their own life as graduate students, and through writing about the reflection to clarify their thoughts, express feelings, gather insights, transform, recover, and explore the meaning of life.*

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**Key words:** horticultural therapy, writing therapy, graduate student

### Characteristics of Graduate Students in Taiwan

The existing literature support that a high degree of stress has put Taiwanese graduate students at risk of developing physical and mental health problems. Academic stress is viewed as the top stressor among graduate students in Taiwan (Aiou, 2005). Taiwanese graduate students consider self-development and academic achievement as the most stressful aspect of graduate school (Hsu, 2003; Lin & Huang, 2008) and suffer considerable stress from the expectations placed upon them (Lin, 2005; Lin, 2014). They often employ problem-solving coping strategies (Aiou, 2005) and/or emotion-relief strategies (Lin, 2005) to reduce stress during their graduate career. Friends and peers are considered as the most important sources of support (Chang, 2005). Existing research has shown that half of the graduate students in the samples were in poor health near the end of the semester (Hsu, 2003). In one study, approximately 40% of graduate students in Taiwan self-evaluated as being in poor health and rated anxiety as their severest psychological problem (Huang, 2005).

Graduate students in Taiwan, in general, range in age from 22 to 25 years old for master's degree and from 23 to 30 years old for doctoral. Taiwan is reaching a point in its economic development that the society allows a prolonged period of exploration and freedom from roles that constitute emerging adulthood.

Instead of assuming traditional adult roles, the emerging adults—from roughly 18 to 29 years of age reflects an extended transition period from adolescence to adult life in contemporary industrialized societies—focus on pursuing higher education, exploring themselves, and shaping a future that best suits their personal goals and desires (Arnett, 2000, 2007). The six major challenges they faced are: (1) developing a mature view of self, (2) making choices about education or employment, (3) leaving the parental home, (4) establishing intimate romantic relationships, (5) making independent decisions, and (6) learning to accept responsibility for themselves (Eccles, Templeton, Barber, & Stone, 2003).

Arnett (2007) highlighted the five main features of emerging adults: identity exploration, trying out possibilities in life and work, instability, self-focus, and feeling in between (adolescence and adulthood). Moreover, there are three individualistic criteria emphasized by emerging adults: accepting responsibility for one's self, making independent decisions, and becoming financially independent (Tanner, 2006). Forging friendships and setting goals in academic and conduct are also the salient tasks for emerging adults; those will, in turn, give way to occupational, romantic, and worldview goals as they reach young adulthood (Tanner, 2006). Emerging adults go through stages of self-definition and construct a set of goals, activating them, evaluating the goals and achievements, and reflecting on their progress.

### **Horticultural Therapy**

Horticultural therapy is a process of promoting physical and psychological well-being through gardening, plant-based activities, and natural environment (Chen, 2010; Chen & Huang, 2005; Chen, Tu, & Ho, 2010). It emphasizes the engagement of a person in gardening and plant-based activities to achieve the adaptation of body, education, society, and mind (AHTA, 2018). The sensory stimulations of sight, sound, taste, touch, and smell in a horticultural therapy are the essentials. Colors and fragrance of plants and natural environment are therapeutic in releasing stress, boosting positive emotions, controlling high blood pressure, relieving muscle tension, reducing fear, and promoting positive development in body, mind, and spirit.

Horticultural therapy has been applied to assist children, adolescents, undergraduates, adults, patients and/or people with disabilities and/or psychiatric syndrome. Kuo (2018) noted that, after seven weeks of horticultural therapy, undergraduates have significant improvement in gardening skills, confidence and social skills, and have effectively alleviated stress and emotional problems. Chen (2007) shown that undergraduates were less stressful and emotional and were able to practice gardening in everyday life after they had several weeks of periodical exploration of a specific therapeutic garden. The positive effect of horticultural therapy can be found in other studies (e.g., Kuo, 2018; Lin et al., 2017).

Plants need to be taken care of so they can grow strongly. The process is helpful to train care takers for responsibility, time management, and discipline in life. By observing the plant growth carefully, they learn to conquer problems along the way. Through gardening, students observe seasonal changes of plants and reflect these growing rhythms on their own academic pursuance. Attentiveness, patience, and proper environment are essential to grow plants; the process will foster persistence, patience, and vision of the care takers. Meanwhile, gardeners could release stress and enhance well-being as they immerse in the natural landscape and appreciate the plants' growth.

### **Writing Therapy**

Writing therapy, which is a form of expressive therapy, utilizes the act of writing to enhance self-understanding and release emotions (Chien, Chan, & Lih, 2005; Lee, 2012). In the process of writing, one's trauma and negative emotions can be transformed and erased; hence, insights, self-perception, and well-being can be enhanced. Literary output is the medium for recovery. The writer can look back his/her life and certain life experiences through writings, especially those traumatic, conflicting, and stressful events; subsequently, he/she can explore feelings, think thoroughly, gain insights, unburden feelings, stabilize emotions, gain comfort, and enhance confidence in oneself, others, and the future. Furthermore, he/she can learn how to shoulder, feel, and express his/her authentic emotions via writing through clarifying the confusions, causes/effects, as well as events' details and impacts.

Women who were victims of domestic violence, after being participated in a writing group, can release emotions, re-establish self-values, feel empowered, establish sisterhood and support system, and heal from trauma through self-cure, reconstruction, creation and voicing out (Chieh, 2004; Lih & Chan, 2009).

Through writing therapy, the domestic abuse victims can develop ability of self-accompany and self-listening, release emotions, clarify thoughts, improve sense of observation and perception, increase capability of expression, and re-connect with the society (Chien, 2004).

Undergraduates who write narrative autobiography have also experienced positive changes of self-identity (Lin, 2006). Those who have written over five years and with published works said that writing is good for emotional and perceptual transformation, healing, self-transformation, establishment of writing principles, and pursuance of life goals (Chung, 2017). The literature in Taiwan supports writing therapy is effective in healing.

### **Assisting Graduate Students with Integrated Horticultural Therapy and Writing Therapy**

Graduate students are under stress from various aspects—study, research, thesis, and interpersonal relations. Some of them need to take part-time jobs or work as research assistants or teaching assistants for financial supports. They are struggling between academic performance and busy schedule. Furthermore, they, as in early adulthood, are establishing self-concept, self-identity, independence, self-control, positive behaviors and lifestyle, and enhancing stable emotions, social skills, and physical and psychological well-being. Horticultural therapy is multifaceted and can be used to assist graduate students to observe and appreciate changes and growth of plants, embrace the nature, and acquire energy. Through gardening, graduate students learn how to grow plants and ways to conquer problems along the way. They can also develop cognitive and operative capabilities, experience the beauty and life cycle of plants, stabilize emotions, improve interpersonal relations through outdoor activities, enrich life experience, and explore meaning of life.

Combining horticultural therapy with writing therapy, graduate students can express what they observe from plants and gardening, explore observed feelings related people and events, in the process of writing; meanwhile, they can release pressure, clarify and deal with complicated issues, gain insights, and heal from trauma. Through writing, one gets to face one's inner self, reach out for diverse viewpoints, observe with more objectivity, understand oneself and others, clarify thoughts and feelings, release emotions, and calm oneself.

Graduate students can attend an integrated horticultural and writing therapy group to share with other members about their experiences in gardening and writing. In such a group, they can freely express their discovery, connect with others, establish trust and interpersonal relations, perceive and express their inner experience, extend creativity, and facilitate growth and development of members. In the beginning phase, group members can focus on the discussion of knowledge and how of growing plants, practicing writing, expressing feelings, and sharing their writing experiences. After several sessions, the focus can be shifted to sharing planting experiences, writings, and life, and expanding their plant caring to caring for individuals, family members, group members, friends and others. They can write down these sharing contents and compare plant caring with their life as graduate students. Participants are gradually able to gain deeper insights in their writings as the interpersonal interaction in the group. In the process of gardening and writing, graduate students could feel their inner selves, trigger changes in thoughts and emotions, and facilitate individual introspection and growth.

### **Implications**

Counselors and teachers can make good use of horticultural therapy and writing therapy to help graduate students release stress, overcome difficulties, and facilitate introspection and growth. Graduate students can take part in gardening activities individually to observe, record, and express changes of plant growth, feelings, and emotions. They can also participate in a therapy group to share their experiences with members and establish interpersonal interaction and relationships. Counselors can design gardening activities and writing programs based on the physical and psychological characteristics, issues, and needs of the participants. If counselors have expertise in counseling, gardening, writing, and group therapy, they can then integrate the above domains in the design and facilitation of the horticultural therapy and writing therapy group. Counselors can also invite co-facilitators with gardening or writing specialties to conduct the group therapy in a cross-disciplinary mode. Easy-to-grow plant varieties, affordable gardening activities, and a gardening venue suitable for growing plants and for graduate students should be all considered.

## Conclusions

An integrated horticultural and writing therapy allows graduate students to grow and appreciate flowers and plants in a garden setting, record and express their feelings, compare their life experiences with plants, and explore their inner selves and changes in behaviors. Through such activities, they have opportunities to combine experiences in gardening and expressive writing and think about challenges in life, explore their perception and discovery in life, reach out for deeper interpersonal relations, enhance perception, express feelings, establish trust and intimate relationship, develop self-identity and a sense of belonging, and facilitate growth and development.

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