Volunteer and Staff Perceptions of a Public Garden Adopt-a-Spot Volunteer Program: A Qualitative Inquiry

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This one’s for you Papa. Thanks for inspiring me to be a horticulturist.

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ABSTRACT

‘Adopt-a-Spot’ is not a new term or idea. However, no known study has focused on an Adopt-a-Spot (AAS) Volunteer Program in a public garden. The purpose of this study was to understand both volunteer and staff perception of the AAS Volunteer Program at the University of Tennessee Gardens, Knoxville, (UTG) so that other gardens can use the information for their volunteer program.

AAS volunteers who participated in this study could participate in one of three focus groups; or an online, open-ended survey to record their experiences, thoughts, and ideas about the program. Garden staff could participate in an online, open-ended survey to record their experiences and perceptions of the program. The UTG director participated in a one-on-one interview. Thematic analysis for both volunteer and staff perceptions were used. Eleven themes from the volunteers’ data and three themes from the staff’s feedback were identified.

Overall, volunteers identified with the program through altruism, cognitive interest, social interaction, and autonomy. Volunteers liked that the program provided flexibility in when and where they wanted to volunteer. They described their communication with staff and other volunteers; and how communications could be improved. Volunteers also expressed that the program gave them a sense of emotional fulfillment, added structure to their lives, and strengthened their connection to the UTG.

AAS study participants reported that they had a positive impact on aesthetics of the UTG and its staff. They were positive about the AAS Program Leader and the leadership skills but thought the program’s orientation process for new volunteers needed improvement. Participants felt accountable for their adopted areas and described themselves as ambassadors for UTG. Some

expressed positive feelings about working with other volunteers as a team and making friends. They also reported that the program was educational for them.

UTG's staff reported that they spent more time interacting with AAS volunteers. This interaction fostered better relationships with volunteers, and new opportunities for engagement were created. Staff also thought the AAS Volunteer Program helped UTG fulfill its mission by improving garden inspiration and education through enhanced garden aesthetics and creating an enhanced visitor experience.

TABLE OF CONTENTS

Chapter 1: Introduction 1
Research Study 3
Research Questions. 3
Significance of Study 4
Chapter 2: Literature Review 5
Theoretical Perspective 5
Altruism 7
Volunteerism 9
Public Gardens 12
Volunteerism in Public Gardens 13
"Adopt-a-Spot" Concept 14
Chapter 3: Methodology 18
Place of Research 18
Research Subjectivity 19
Research Design 19
Study Participants. 21
Data Collection and Instrumentation 21
Demographic Survey. 21
Focus Groups. 22
Focus Group Questions. 23
Open-ended Survey. 23
Interview with Director. 25
Data Analyses 26
Chapter 4: Findings 29
Volunteer Findings 29
Identifying with the Program 31
Altruism/Affective/Emotion. 31
Cognitive/Education. 34
Social/Connecting with Like-Minded People. 35
Autonomy. 35
Accessibility 37
Flexibility of Work Schedules. 37
Ability to Work in an Area Based on Personal Interest. 38
Communication 40
Appreciation for Staff/Needing More Volunteers. 40
Appreciation from Staff. 41
Relationships between Volunteers and Staff. 42
Needing Expectations. 43
Fulfillment 44
Emotional/Confidence. 44
Providing Structure. 46
Feeling More Connected. 46
Perceived Tangible Impact 47

Enhanced Garden Aesthetics. 47
Volunteer Time Spent Frees Up Staff. 48
Leadership 49
Communication from Program Leader is Valued. 49
Accountability 50
Feeling Responsible/Accountable/Ownership. 50
Education 51
Self-Learning. 51
Learning from Staff. 52
Educating Visitors. 52
Learning from Each Other. 53
Public Relations 53
Being an Ambassador. 53
Volunteer Presence Promotes Conversation with Public. 54
Social Aspect 55
Working as a Team. 55
Making Friends and Meeting other Volunteers. 56
Orientation 57
Value of Initial Orientation. 57
Availability of Resources. 58
Training. 58
Staff Findings 59
Communication 59
Staff Time Spent. 60
Fostering Relationships. 60
Adopt-a-Spot Helps the Gardens 61
Perceived Aesthetic and Intangible Differences. 61
Fulfilling the UT Gardens Mission. 62
Creating a Better Visitor Experience. 63
Community Support. 64
Creating Opportunity for Volunteers 64
Ownership/Flexible Work Hours. 64
Educational Experiences. 65
Chapter 5: Conclusions and Recommendations 66
Volunteers: Demographics 66
Volunteers: Recruitment 67
Volunteers: Overall Perceptions 68
Staff: Overall Conclusions 74
Recommendations for Future Studies 76
Conceptual Model 76
References 78
Appendix 91
Appendix A - UT Gardens, Knoxville Adopt-a-Spot Volunteer Program Application and Terms and Conditions Form Page 1 92

Appendix B - UT Gardens, Knoxville Adopt-a-Spot Volunteer Program Application and Terms and Conditions Form Page 2 93
Appendix C - Institutional Review Board Approval Letter Page 1 94
Appendix D - Institutional Review Board Approval Letter Page 2 95
Appendix E - Sample Consent Form Page 1 96
Appendix F - Sample Consent Form Page 2 97
Appendix G - Sample Consent Form Page 3 98
Appendix H - Sample Email to Research Participants 99
Appendix I - Demographic Questionnaire 100
Appendix J - Transcription Template 101
Appendix K - Adopt-a-Spot Sign 102
Appendix L - Conceptual Model 103
Vita 104

CHAPTER 1: INTRODUCTION

Volunteers bring a variety of talents, skills, ideas, and altruistic actions to the organizations in which they are involved and contribute to the success of those organizations (Ferris, 2011). Volunteers choose to give their time, efforts, and skills for many reasons including community involvement, socialization, service learning, and personal values (Stukas, Snyder, & Gil Clary, 2016). Without volunteers many organizations, including nonprofits, would not grow or thrive to the extent they do. This is true of public gardens, as most across the United States rely on volunteer support to complete daily operations such as educational programming, tours, garden maintenance, event execution, and plant collections management (Ferris, 2011). Additionally, some public gardens rely solely on volunteers to operate (Haynes & Trexler, 2003). In both cases, public garden volunteers help achieve the gardens' mission and for some, on a limited budget (Haynes & Trexler, 2003).

Individuals choose to volunteer at public gardens for a variety of different reasons. Haynes and Trexler (2003) and Ferris (2011) suggested people volunteer at public gardens to: 1) acquire horticultural knowledge; 2) experience a social connection with others who have similar interest; and 3) participate in a program important to them, such as education for children, managing a plant collection, or for experience. Volunteering in a garden can also provide volunteers the opportunity to see immediate results from their work such as mulching, weeding, and so forth. Because volunteers are crucial for many public gardens' success, their "recruitment, training, supervisions and retention" are highly important (Haynes & Trexler, 2003, p. 552). Haynes and Trexler (2003) also stated successful volunteer programs at public gardens need flexible work schedules for volunteers, along with good recognition for the work. The Adopt-a-

Spot (AAS) Volunteer Program at the University of Tennessee Gardens (UTG) is an example of a program that can help overcome some of the challenges public gardens face with their volunteer programs.

The UTG is a statewide organization consisting of three different public gardens with locations in Knoxville, Crossville, and Jackson, Tennessee. All three gardens combined make up the State Botanical Garden of Tennessee. The UTG mission is to inspire, educate, and cultivate an appreciation of plants through horticultural displays, educational programs, and research (Mission, n.d.). This study focuses on the AAS Volunteer Program at the Knoxville garden location.

The UTG AAS Volunteer Program is a garden spot adoption program that provides volunteers the opportunity to work in the garden on their own schedules, rather than traditionally adhering to the structured bi-weekly sessions that have existed in the UTG volunteer program for over 15 years. The AAS Volunteer Program relies on the program director to divide the 10-acre garden into adoptable spots or areas. Volunteers are able to choose from these spots which they would like to 'adopt' and take ownership. Volunteers provide the overall maintenance and care of the spot using UTG resources such as plants, mulch, and tools.

The AAS Volunteer Program was implemented in February 2018 as part of the Gardens' original Volunteer Program specifically to help staff improve and keep the gardens appearance aesthetically pleasing. The program was also implemented to provide volunteers flexible work hours and to increase participation output of the Gardens' volunteer program. Since implementation, over 50 active volunteers have participated in the AAS Volunteer Program.

While there are some public gardens with AAS type programs, (e.g., The Western Kentucky Botanical Garden, Yew Dell Botanical Garden), there is no scholarly publications on

why volunteers participate in these programs or the impact these programs have on participants and the public gardens who offer them. The purpose of this study was to discover both the volunteers and garden staff experiences and perceptions of the UTG's AAS Volunteer Program.

Research Study

Human behavior and perception were the main focuses of this study so a qualitative research paradigm was used. Qualitative data were collected from a variety of sources. All AAS volunteers at the time of this study were invited to participate in this study and were given the option to be in a focus group interview or an emailed open-ended survey. Demographics of study participants were recorded. UTG staff provided feedback about their perceptions of the program through an online, open-ended survey except for the director of the garden who participated in a one-on-one interview.

Research Questions.

1. Why do volunteers participate in the AAS Volunteer Program?
2. What are program participant's perceptions of the AAS Volunteer Program?
3. What are the UTG staff perceptions of the AAS Volunteer Program?

The purpose of question one was to determine why volunteers chose to participate in the program. Responses to this question will be helpful to those who implement an AAS Volunteer Program at their public gardens. The purposes of question two and three was to capture study participant perceptions of the AAS Volunteer Program. Responses to these questions will help AAS program leaders adapt the program to better support their garden's mission. Research questions one, two and three were answered using the focus group interviews and the open-

ended surveys given to study participants, along with the UTG staff surveys and an interview with the director.

Significance of Study

Currently, little scholarly literature is available on AAS programs, specifically in a public garden setting. Public gardens rely heavily on volunteer support to complete daily operational tasks, and without volunteers, many public gardens would not thrive as they do (Ferris, 2011). The findings of this study are significant to public gardens and their volunteer programs. Additionally, this study is significant to those organizations similar to public gardens, such as community gardens and parks that have volunteer programs.

This study added to the literature in that there is now a broader understanding and description of what an AAS Volunteer Program is in a public garden, along with the perceptions of volunteers and staff of such a program. Organizations that apply the findings and recommendations derived from this study may enhance their volunteer programs by increased participation, improved garden aesthetics, stronger relationships between staff and volunteers, and a greater visitor experience.

This thesis begins by introducing the theoretical perspective guiding the study, followed by a review of literature relating to altruism, volunteerism, public gardens and volunteerism, economic impact of volunteers, and the AAS concept. Following the literature review, the methodology of the study is explained, followed by the analysis of the study data. Findings from the data and recommendations for future studies conclude this thesis.

CHAPTER 2: LITERATURE REVIEW

Why do people volunteer? Why do people volunteer in public gardens? While there are several generally known reasons why people volunteer, and why people volunteer specifically in public gardens, a literature review exploring why people choose to give their time for the betterment of another person or organization is important. Additionally, investigating the impact of public garden volunteers and their various contributions is central to the purpose of this study.

This chapter begins with an introduction to the theoretical perceptions guiding this study. This continues with a section on altruism, common theories, and how it relates to the overall research questions. An introduction to what defines a volunteer, why people choose to volunteer, and how it may benefit themselves is presented. Public gardens are introduced, along with how volunteerism is important in the public garden sector. Volunteers' economic impact is discussed. Finally, an AAS concept is brought forth, along with programs that exist with similar goals.

Theoretical Perspective

There are several different epistemological perspectives associated with qualitative inquiry (Lincoln, Lynham, & Guba, 2011). Constructivism, or the idea that humans construct knowledge based on experience, along with the belief reality is shaped by the different cultures, social environments, and the geographical areas that exist, was the theoretical perspective that guided this study (Given, 2016; Schunk, 2016). This perspective allowed the research team to analyze the generated data and interpret specific ideas, thoughts, or repeated phrases and create themes from the participant's transcripts, notes and online surveys, believing they gained their knowledge of the AAS Volunteer Program based on their experiences.

Along with constructivism, the Social Learning Theory (Bandura, 1977) and the Social Cognitive Theory (Bandura, 1986) helped guide this study. The Social Learning Theory explains ways in which behaviors are exhibited through modeling (i.e., if a parent shows altruistic behaviors, such as volunteering or being charitable, the child may grow up to have similar altruistic behaviors) (Bandura, 1977). Stemming from the Social Learning Theory, the Social Cognitive Theory encompasses the framework of triadic reciprocity (Bandura, 1986; Schunk, 2016). Triadic reciprocity, or the reciprocal interactions between behaviors, environmental variables, and personal factors (self-efficacy) all influence an individual's ability to learn or behave a certain way (Bandura, 1986, 1997; Schunk, 2016).

While this study investigated both staff and volunteer perspective, volunteerism was the primary focus. People give their time for the betterment of others for different reasons. One perspective that guided this study is that people gave their time altruistically through volunteering because of empathetic reasons and moral norms (Piliavan & Charng, 1990). Granted, there are several other reasons why someone may want to volunteer, which are explained in the next section, but volunteerism is considered an altruistic action, therefore altruistic theories were focused on as the theoretical perspective (Wilson, 2000).

Empathy, or the "ability to understand and share feelings of another," (Dictionary.com, 2019), has been considered as a non-personality trait (i.e., not hereditary) (Davis, 1983), but rather a value obtained over time or through training (Persson & Kajonius, 2016). The Empathy-Altruism Hypothesis is the thought that empathy is the driving force behind altruism (Batson, Lishner & Stocks, 2015). Persson and Kajonius (2016) explained that "empathy entails emotions of concern for other people, and altruism is comprised of genuine (not egoistic) pro-social values and behaviors." (p. 610). This implies that when an empathetic emotion arises from observing an

outside human dilemma, an altruistic motivation is activated (Dovidio, 1991; Persson & Kajonius, 2016).

Batson (2011) explained that empathetic emotion only produces altruistic motivation if another person "is perceived to be in need" (p. 11). The term 'empathic emotion' can have more than one meaning or foster more than one emotion and "includes the feelings of sympathy, compassion, softheartedness, tenderness, sorrow, sadness, upset, distress, concern, and grief" (Batson, 2011, p.11). One perspective driving this study was that AAS volunteers had empathetic emotion towards UTG and therefore were motivated altruistically to volunteer their time.

In addition to empathy, moral norms are also reasons people exhibit altruistic actions. Moral norms are "feelings of strong moral obligations that people experience" (Bamburg & Möser, 2007, p. 15), which can influence them to participate in pro-social behavior (Schwartz, 1977). Along with empathy and moral norms, altruistic actions can be the result of self-interest (Bamburg & Moser, 2007). Researchers typically use the Theory of Planned Behavior (Ajzen, 1991) to justify actions based on an individual's self-interest (Bamburg & Möser, 2007). This theory goes beyond self-interest and explains that people exhibit a particular behavior on intent, motivation, and past behaviors (Ajzen, 1991; Sanok, 2015). From the literature presented above, empathy, moral norms, and self-interest were all contributing factors to this study.

Altruism

Altruism can be either a human or animal act (Batson, 2011). In humans, altruism is "unselfish regard for or devotion to the welfare of others" (Merriam-Webster Online Dictionary, 2019). Altruism has been debated for centuries whether or not it existed in humans. While humans may seem selfness or noble, they unassumingly may do these self-effacing actions for

the benefit of themselves (Batson, 2011; Piliavin & Charng, 1990), this is known as the altruism paradox (Midlarsky & Kahana, 1994).

Can humans exhibit *pure* altruism? *Pure* altruism is "motivated by concern for well-being of another" while being purely selfless (Midlarsky & Kahana, 1994, p. 56). Most evolutionary psychologists believe altruism is a basic aspect of human nature (Stangor, 2014), while others believe *pure* altruism is a rare phenomenon (Batson & Powell, 2003; Midlarsky, 1968; Midlarsky & Kahana, 1994). Lemos (1960) described ethical altruism as the common ground between *normal* altruism and *pure* altruism; they suggest ethical altruism as the idea that humans exhibit acts to

> promote the interests of others as well as our own and…when there is a conflict between promoting our own interests and those of others, sometimes we ought to sacrifice our own so as to promote those of others. (p. 541).

Altruistic behavior involves tasks or behaviors benefiting another individual, rather than personal benefit (Batson, 2011). Altruistic actions include being charitable, benevolent, kind, compassionate, or just helping another human being (Post, 2007; Stangor, 2014). Altruism features can be influenced by subconscious kinship or human gene survival, reciprocal altruism (i.e. karma), social exchange, social norms, and empathy (Farsides, 2007; Stagnor, 2014).

Additionally, Heider (1958) and Kelley (1967) explained that role identities play a factor in adopting altruistic actions. An example of this is when an individual donates to a certain cause overtime, the individual may feel more obligated to keep donating due to the perceived expectations of others (Callero, 1985, 1985-1986; Charng, Piliavin, & Callero, 1988; Piliavin & Callero, in press; Piliavin & Charng, 1990).

Finally, altruism was important in regards to this study to understand why people choose to carry out altruistic behaviors because altruism is a contributing motivation for those who volunteer (Chapman, 1980; Gittman 1975; Henderson, 1981; Howarth, 1976; Jenner 1981; Moskos, 1971; Unger, 1991).

Volunteerism

Volunteers are unpaid and participate in non-obligatory work for the benefit of another individual or an organization, while generally committing their time and effort (Dekker & Halman, 2003; Wilson, 2000). Volunteering is considered an altruistic act; altruism gives individuals the ability to have a self-validating experience and may also provide an opportunity for people to feel they are making a difference in the world (Wilson, 2000). While volunteerism is an act of altruism, there is a difference between activism and volunteerism. Activists are more associated with social change, rather than the improvement of an organization or an individual problem (Wilson, 2000).

According to The Corporation for National and Community Service (CNCS), over 77.34 million American adults (30.3% of the adult population) volunteered their time in 2018 (CNCS, 2018). This was a substantial increase from the Bureau of Labor Statistic's data of 62.6 million people published in 2015 (BLS, 2015). The value of the CNCS reported volunteered time in 2018 is estimated at over a $167 billion saved labor cost. Nearly 70% of those that volunteered chose to do so at nonprofit organizations (McCurley & Lynch, 2006).

The value of volunteers is difficult to pinpoint because these unique individuals bring a variety of talents, skills and ideas to their organizations (Ferris, 2011). Monetarily, the average value of volunteer work in the U.S. is estimated at $25.53 per hour (Independent Sector, 2019).

This number is calculated based on the "hourly earnings of all production and non-supervisory workers on private non-farm payrolls average" and is provided by the Bureau of Labor Statistics (Independent Sector, 2019, p. 1). This national average is then "increased by 12% to estimate for fringe benefits" (Independent Sector, 2019, p.1).

Who volunteers? Wilson (2000) provided an overview of known factors of volunteerism, stating those who volunteer generally have a higher level of education, that age participation is curvilinear, women volunteer more than men in North America, married people volunteer more than non-married individuals, and people in better health are more likely to give their time (Niebuur, van Lentem, Liefbroer, Steverink, and Smidt, 2018). Niebuur et al., (2018) sought to update this information through a systematic review of longitudinal cohort studies published from developed countries with factors associated with volunteering adults. They found volunteer work tends to decline "with age from middle-age onwards" (Nieburr et al., 2018, p. 20). Along with age, this study also found that functional limitations emerge with age, and becoming parents inhibited volunteerism. They concluded "socioeconomic status, income, social network size, church attendance, and previous volunteer experiences are positively associated with volunteering" (Nieburr et al., 2018, p. 1).

Volunteerism can be intrinsic or extrinsic, but for most people, volunteering brings forth a combination of both intrinsic motivation and extrinsic reward (Meier & Stutzer, 2007). Meier and Stutzer (2007) stated people may volunteer for a variety of reasons: 1) seeing results from their work; 2) enjoyment of the task they are doing, along with the social interaction it usually brings; 3) helping other people fosters happiness; 4) maintain employment skills when not working; 5) make valuable social contacts; or 6) to get social approval from peers. Although volunteers use their time to benefit others or another organization, this does not preclude these

individuals from benefiting from their work (Wilson, 2000). Other reasons motivating people to volunteer their time include socialization, community involvement, to gain experience in a topic or field, and as a service-learning requirement (Stukas et al., 2016). Studies have shown volunteerism arises because of an individual's values, but the amount of contribution is based on self-motivation (Wilson, 2012).

Argyle (1999) surveyed volunteers about the benefits of volunteering and found that 67% of the interviewees stated seeing results from their work brought forth great satisfaction. Meier and Stutzer (2007) surveyed individuals who volunteered between 1985-1989 to seek "the relationship between volunteering and life satisfaction" (p. 40) and found there was a positive correlation between those who volunteer compared to those who do not. Wilson and Musick (1999) suggested those who volunteer are less likely to suffer from depression, and in elderly adults, volunteering has been directly correlated with better life satisfaction (Wheeler, Gorey, & Greenblatt, 1998), along with having a lower risk of early death (correlates with having better physical health from volunteering) (Musick, Herzog, & House, 1999; Oman, Thoresen, & McMahon, 1999).

Retaining volunteers is important, especially to nonprofits (Haynes & Trexler, 2003). Volunteers help bring success to the many nonprofits, institutions or other entities that they can be involved with, and without volunteers, many of these organizations would not be able to function as they do (Ferris, 2011). Volunteer retention involves the commitment a volunteer has to the organization and also the attachment a volunteer has to a particular role over time (Wilson, 2000). Mason (2016) performed a mixed-methods study investigating volunteer retention at a public garden in Wyoming. Volunteers in this study explained their motivators for returning to the public garden to volunteer were from 1) developing friendships; 2) having a sense of

accomplishment; 3) new educational opportunities; and 4) the enjoyment of working with plants, staff, and other volunteers (Mason, 2016). Additionally, Lynch (2000) explained volunteers need to have a sense of connection with the organizations they are involved with. They also state that volunteers need to have positive relationships with the staff and other volunteers in order desire their volunteer continuation (Lynch, 2000).

Wilson (2000) explained, generally, when volunteers stop volunteering, they rarely do so because of low job satisfaction, but instead, volunteers choose to leave a volunteer activity because of lack of recognition (Gora & Nemerowicz, 1985) and freedom (Harris, 1996; Holden, 1997; Perkins, 1987; Wharton, 1991). Other studies suggested volunteers leave their organization because of burnout, or too much stress from an intense work environment (Allen & Mueller, 2013; Maslach & Schaufeli, 1993).

Public Gardens

This study took place in a public garden; therefore, it was important to understand what a public garden is to better understand the context of this research. Public gardens encompass a variety of organizations, including: botanical gardens, arboreta, conservatories, university gardens, historic landscapes, and some zoos (Rakow, 2011), although botanical gardens and arboreta make up the majority of public gardens (Pulte, 2008). In particular, botanical gardens maintain diverse collections of both herbaceous and woody plants while arboreta mainly focus on the display of woody plants, such as trees and shrubs (Rakow, 2011).

The essential criteria separating public gardens from other organizations is that they are open to the public, maintain collections of plants through active curation, and have a mission statement that drives their efforts (Rakow, 2011). Public gardens have different missions,

visions, and goals that help drive their organizations. Depending on their mission, some may participate in education, research, conservation, or higher learning, (APGA, 2019). Visitors find a public garden environment as inspiring, a stress reducer, a place of relaxation and education (Bennett, 1995).

Volunteerism in Public Gardens

Horticultural activities are good for mental well-being, physical health, and self-esteem (Gauvin & Spence, 1996). In addition, stress reduction, better productivity, and satisfaction have also been suggested (Doxey, Waliczek, & Zajicek, 2009; Kaplan, 1993, 2001; Lohr, Pearson Mims, & Goodwin, 1996; Myers, 1998; Plante, 2014; Zimmerman, 2000). But why do individuals volunteer specifically in a public garden?

Volunteers contribute a variety of resources, ideas, talents, and skills to public gardens (Ferris, 2011), while some public gardens rely only on volunteers to operate (Haynes & Trexler, 2003). Public garden volunteers help their organization achieve their mission by being involved in variety of tasks, such as event execution, collections management, administration tasks, and non-surprisingly, horticulture (Ferris, 2011).

Individuals may choose to volunteer in a public garden because they can acquire horticultural knowledge (Haynes & Trexler, 2003). Additionally, public garden volunteers can experience a social connection with other people that have similar interests, participate in programs that are important to them, such as educating children, managing a plant collection, or for exercise (Ferris, 2011). Public garden volunteers also have the ability to see immediate results from work such as mulching, weeding, or planting.

In public gardens, volunteers assist with horticultural displays, administration, outreach, creativity, education, in-kind goods, community relations, and much more (Haynes & Trexler, 2003). Expense for public gardens to operate a volunteer program include staff time (labor), supplies (i.e., computer software), materials (such as t-shirts, nametags, and signage), and recognition events (Haynes & Trexler, 2003; Ferris, 2011).

Volunteers are crucial to the success of many public gardens, therefore the importance of retaining and recruiting volunteers should be understood. Recruiting garden volunteers can be challenging and often depend on the location of the garden, the amount of people who enjoy gardening in the area, and the number of individuals who have the time availability (Ferris, 2011). To recruit volunteers, public gardens need to continually advertise volunteer opportunities through special events, social media, or recruitment campaigns (Ferris, 2011).

Helping to retain public garden volunteers can come from simple courtesies such as sincerely thanking volunteers, hosting recognition events, volunteer newsletters, and through the garden's magazine (Ferris, 2011). For nonprofit public gardens, it is even more important volunteers feel supported and have an outlet for their ideas to be heard (Garner & Garner, 2011). Results from a study at a public garden at Iowa State University concluded that public gardens need to provide better training programs for their volunteers, more flexible work hours, and additional recognition ceremonies to retain volunteers (Haynes & Trexler, 2003).

"Adopt-a-Spot" Concept

AAS-like programs exist at many difference institutions and organizations across the United States. These include highway clean-up programs, park maintenance, community garden upkeep, and public garden care. While there are a multitude of organizations that have some sort

of AAS program, there is no scholarly literature that has been academically published specifically on the AAS program concept and why such programs seem to work. Literature found for such programs includes assorted published materials, such as brochures and online news-related articles. Multiple search engines and search terms were used to come to the aforementioned conclusion. Search terms used included: "Adopt-a-Road, Adopt-a-Spot, Adopt-a-Garden, and Garden Adoption Program," all of which gave no academic usable results in regard to this study. "Adopt-a-Park" was also used and that led to one published article that spoke about the popularity and success of an Adopt-a-Park program in New Jersey (Boysen, 2018). "Adopt-a-Highway" gave results of an economic model for such program. The conclusion of the model was that there is an economic rationale for the Adopt-a-Highway program (Auld & Hoy, 2014).

One comparable piece of literature was published by Herbert Schroeder in 1998. Schroeder (1998) identified reasons why volunteers are motivated to dedicate their time in an environmental Volunteer Stewardship Network (VSN). The VSN is part of The Nature Conservancy (Volunteer for Nature) and these volunteers work with a trained land steward at specific times in a part of Illinois of their choice (Volunteers for Nature). This can be related to public garden volunteers because these individuals also put in hours of labor-intensive work and usually persevere even though they be in uncomfortable weather conditions (Schroeder, 1998). Through his analysis of newsletters published by VSN volunteers, Schroeder (1998) concluded that these individual's liked "making friends and socializing," they "value opportunities to gain and share knowledge, enjoy the outdoors…and appreciate the aesthetic qualities and beauty of natural places" (Schroeder, 1998, p. 67).

A community garden, as a loose definition, consists of an area of food and or flower cultivation which is managed and operated by members of the local community (Holland, 2004; Pudup, 2008; Kingsley, Townsend, & Henderson-Wilson, 2009). Community gardening volunteer programs can be considered similar to an AAS Volunteer Program in a public garden since specific plots or beds are often adopted by individuals or small programs. Community gardens can differ from AAS Volunteer Programs in public gardens because community gardens usually focus on food and food production, rather than nature, horticulture, or other type of maintenance. Additionally, community gardens do not actively curate pant collections or are driven by a mission (Rakow, 2011). Like AAS-type Volunteer Programs, community gardening provides individuals health and education benefits, along with a sense of community and perhaps food security (Guitart, Pickering, & Byrne, 2012; Rosol, 2011).

Unlike the more specific AAS search term, there has been an abundant amount of scholarly literature published on community gardening. A result can be from the general push for promoting health among individuals and community-well-being, (Diaz, Webb, Warner & Monoghan, 2018). Guitart et al. (2012) concluded that most community gardening publications took place at non-profit organizations.

At a University-based community garden in Australia, volunteer participants were invited to a focus group to determine the enablers and barriers of engaging in volunteerism, along with the perceived benefits of volunteering (Anderson, Maher, & Wright, 2018). Overall, the study mostly consisted of student volunteers. Participants identified several different enabling factors that influenced their volunteerism with the community garden, such as personal motivations, regular communication, and socialization among peers (Anderson et al., 2018). Barriers that were determined included competing priorities and lack of information or awareness about the

project (Anderson et al., 2018). Benefits of volunteering at the University-community garden were also determined through the focus groups. Participants concluded that they felt a sense of belonging, gained education, and experienced personal satisfaction from being a part of the program (Anderson et al., 2018).

Rosol (2011) investigated how volunteers can 'unburden the local state by taking over responsibility' in a local community gardening in Berlin. Community residents were called upon to 'adopt their parks' in order to, most importantly as the article suggests, assist the parks department, create a bond with the residents in the community, and to beautify the public spaces of Berlin (Rosol, 2011). Unlike in the U.S., this community garden consisted of cultivating trees, shrubs, and flowers, rather than focusing on food production.

This study can be comparable to AAS Volunteer Programs in American public gardens, as this particular community garden mostly focused on ornamental horticulture, and less on food production, while also often being under financial constraints. Volunteers that participated in this urban green space garden were interviewed to determine why they participate in community gardening. Answers were similar to volunteer motives of other organizations outside of gardening, such as socialization and the feeling of responsibility, while other feedback described the enjoyment of gardening, improving the situation of their neighborhood, creating a safe place, education and exercise (Rosol, 2011).

In summary, volunteers tend to participate in these AAS-type programs because of the educational benefits, enjoyment of the outdoors, socialization, physical activity and improvement of the community as a whole.

CHAPTER 3: METHODOLOGY

This chapter discusses the methods used in this study. The place the research took place is described, followed by subjectivity, research design, study participants, and concluding with analysis.

Place of Research

Knowing the context of the organization for this particular research project is important because no two public gardens have the same size, volunteer program, mission, goals, and funding. This study took place at the Knoxville location, and is approximately 10-acres. Less than 40% of the operating budget comes from the UT, (S. Hamilton, personal communication, December 11, 2018), meaning the Gardens must procure the additional 60% to fund soft-funded positions. Therefore, the UTG has a small staff and at the time of this study, had only one full-time horticulturist, making volunteer support highly valuable.

Before the AAS Volunteer Program existed, volunteers only had the opportunity to volunteer on Tuesday and Thursday from nine o'clock in the morning until noon, and during special events. The UTG Volunteer Program was considered successful by staff before the AAS Volunteer Program was implemented. In 2017, the volunteer newsletter reached 419 volunteers on a monthly basis. Volunteers gave 2,913.65 hours of their time which generated to $68,485.59 of complimentary labor. The monetary value of the volunteer's work was determined by the Independent Sector (Independent Sector, 2017).

The AAS Volunteer Program was implemented by the researcher at the UTG in February 2018 as a way to encourage volunteers to become more involved with the Gardens horticulturally

by promoting more flexible work hours, ownership and autonomy. The program was also implemented to help staff keep the UTG well-maintained and highly aesthetic.

At the time of this thesis completion, the AAS Volunteer Program had over 50 active volunteers maintaining 20 different areas. Volunteers abide by certain terms and conditions, such as tracking hours served, not using any chemicals, and fulfilling their time commitment. The complete Terms and Conditions and Application form can be found in Appendix (A) and (B).

Research Subjectivity

The researchers involved with this study were: (a) the author of this thesis, Alice Kimbrell, a plant science Master's candidate, (b) one associate professor of agriculture education, Dr. Christopher Stripling, (c) one professor in agriculture education, Dr. Carrie Stephens and (d) one professor of plant science and director of the UTG, Dr. Susan Hamilton. Alice completed her Bachelor's degree in 2016 with a degree in Plant Science and a concentration in Public Horticulture. Throughout her experiences in the public horticulture field, she continued to work with volunteers on a daily basis.

Both Dr. Striping and Dr. Stephens have published several articles in the Agricultural Education field. Additionally, they both have been involved with several qualitative research studies and are familiar with focus group protocol. Dr. Hamilton was also familiar with qualitative inquiry. Dr. Hamilton and Dr. Stripling helped with analysis of data recorded by the study participants. However, Dr. Hamilton did not analyze her own interview.

Research Design

All documents were approved by the Institutional Review Board at the UT. The approval letter and documents can be found in Appendix (C) and (D) ("UTK IRB," n.d.). Human behavior

and perceptions were the main focus of this study so a qualitative research paradigm was used in addition to a demographic survey. Qualitative inquiry typically addresses the "why" questions arise during various experiences throughout human lives and is based on how people perceive the world around them and seeks to understand human-lived experiences (Denzin & Lincoln, 1994; Given, 2016, p. 2; Stake, 2010).

This qualitative inquiry used a general interpretivist paradigm. Having an interpretivist lens allowed the research team to focus "on particular issues, activities, or experiences evident in the dataset" (Given, 2016, p. 141). Denzin and Lincoln (1994) suggested all qualitative inquiry is interpretive and "is guided by the researcher's beliefs and feelings about the world" (p. 22). Given (2016) proposed qualitative researchers should continually look through their ontological and epistemological lenses to "guide one's choice of an appropriate research design" for the inquiry they are seeking to understand (p. 11).

Qualitative data is generally generated by the participants in their natural settings and is captured through individuals' direct quotations reflecting their experiences and from descriptions of their activities, actions, and/or behaviors (Denzin & Lincoln, 1994; Merriam, 1998; Patton, 1990). Qualitative data can be collected in a variety of ways, such as participant observation, interviews, and documents (Ary, Jacobs, Sorensen, & Walker, 2014).

Qualitative data from several sources was used in this study. The option to participate in a focus group interview or an online, open-ended survey was available for all AAS volunteer study participants. The UTG staff other than the director provided feedback about their perceptions of the program through an online, open-ended survey. Additionally, the researcher face-to-faced interviewed the director of the UTG to gather their perceptions of the program.

Study Participants.

Participants in this study include: (a) AAS volunteers; (b) the UTG staff; (c) and the UTG director. All volunteers in the AAS Volunteer Program as of February 2019 were invited to participate in one of three focus group interviews to provide feedback about the AAS Volunteer Program. If AAS study participants wished to provide feedback about the program but were unable or chose not to participate in the focus group interviews, they had the option to participate in an online, open-ended survey via QuestionPro. Out of 32 volunteers in the AAS Volunteer Program at the time of the study, 24 participated in a focus group, and three participated in the online survey. All staff at the UTG in February 2019 were invited to participate in this study and were given an online, open-ended survey via QuestionPro. Out of the seven staff members working at the time of the study, four chose to participate. One participant, the director of the garden, participated in a one-on-one interview.

Data Collection and Instrumentation

Data were collected in several different ways: (a) demographic survey given to AAS participants; (b) three focus group interviews; (c) an online, open-ended survey for AAS study participants that wanted to provide feedback but couldn't participate or chose not to take part in the focus group interviews; (d) an online, open-ended survey given to current UTG staff; and (e) a one-on-one interview with the director of the UTG.

Demographic Survey.

All AAS volunteer study participants in the focus groups were given a paper copy of the demographic survey, while the survey research participants had the demographic survey integrated into the QuestionPro survey questions (Appendix I). The purpose of the survey was to

determine who the AAS study participants were. The research team wanted this information to capture the diversity of participants.

Focus Groups.

Focus groups interviews are involved with a distinct group of people to gather information from a clearly defined audience (Rennekamp & Nall, n.d.). Focus groups provide the participants a better opportunity to express their viewpoints compared to a questionnaire or a standardized interview (Flick, 2009). Focus groups also provide researchers a way to view the participant's perspective by asking questions specific to their experiences (Merriam, 1998).

A semi-structured interview guide was created by the research team and was given during the focus group interviews. A semi-structured guide provides a list of questions to be investigated by the researchers, but also provides flexibility of responses from the participants (Merriam, 1998). This type of interview also gives the researchers the ability to respond and/or ask follow-up questions to the research participants without having predetermined dispositions (Merriam, 1998).

Generally, focus groups are led by a facilitator and a moderator (Dooley, 2007). A facilitator will ask the questions from the interview guide, while the moderator may write descriptive field notes on participant behavior or repeating themes that are present throughout the focus group (Dooley, 2007). The focus group interviews were led by Dr. Christopher Stripling, (the moderator) and Dr. Carrie Ann Stephens (the facilitator).

AAS study participants were emailed a recruitment letter to determine whether or not they would like to participate in a focus group interview (Appendix H). If they chose to be in a focus group, they were given a consent form to review and sign the day of the focus group (Appendix E, F, & G). Prior to the start of each focus group, participants were given a consent

form clearly stating their confidentiality. The first focus group had ten people, the second had six, and the third had eight. All focus groups lasted between 45-60 minutes.

Focus Group Questions.

1. Please think back and explain how you found out about the Adopt-a-Spot Volunteer Program.
2. Please explain the reasons you chose to participate in the program.
3. Describe your experiences with the program – both positively and negatively.
4. Suppose that you were in charge and could make changes that would make the program better. What would you do?
5. What aspects of the program would you leave unchanged?
6. Will you continue volunteering for the Adopt-a-Spot Volunteer Program after your commitment period ends? Please describe how you reached this decision.
7. If you were inviting a friend to participate in the Adopt-a-Spot Volunteer Program, what would you say in the invitation?
8. How do you feel your participation impacts the UT Gardens' mission to inspire, educate, and cultivate an appreciation of plants?
9. How do you feel your participation has personally impacted you?
10. Is there anything else you would like to share about the Adopt-a-Spot Volunteer Program?

Open-ended Survey.

In some situations, closed ended surveys, or surveys that are considered quantitative data, are less reliable or less valid because they only provide predetermined response options and assume these options are applicable to all study participants (Vissr, Krosnick, & Lavrakas, 2000;

Asah, Lenentine, & Blahna, 2013). When compared to close-ended surveys, open-ended surveys avoid bias by not providing suggested responses from which participants must choose (Reja, Manfreda, Hlebec, & Vehovar, 2003).

For AAS Study Participants:

If AAS study participants were unable or chose not to participate in the focus group interviews, but would have liked to be in the study, they were emailed a recruitment letter with a link to the survey to determine if they would have liked to participate in the study via an open-ended survey to solicit feedback regarding the AAS Volunteer Program. The survey included a page for the participants to consent to participate in the study, followed by the demographic questions, and then survey questions. Both demographic and survey questions were the same for the open-ended survey participants and those used in the focus group interviews for AAS study participants.

For UTG Staff:

Current UTG staff were emailed a recruitment letter to solicit their feedback about the AAS Volunteer Program. If they chose to be in the research study, they clicked a link within the recruitment email directing them to an online, open-ended survey. The survey had the participants consent for being in the study, followed by the survey questions.

Staff Survey Questions:

1. Please reflect on your experience with the Adopt-a-Spot Volunteer Program.
2. How do you feel the program impacts the UT Gardens' mission to inspire, educate, and cultivate an appreciation of plants?
3. How has your participation in the program professionally impacted you?
4. How has your participation in this program personally impacted you?

5. If you were inviting a friend to participate in the Adopt-a-Spot Volunteer Program, what would you say in the invitation?
6. What changes need to be made to the program? How would you improve the program?
7. What aspects of the program would you leave unchanged?
8. Is there anything else you would like to share about the Adopt-a-Spot Volunteer Program?

Interview with Director.

The director of UTG was sent recruitment letter requesting their participation. The researcher chose to interview them because of the particular leadership position they had at UTG at the time of the study. This individual gave permission to use their job title in this thesis. The researcher facilitated the interview with the director and used a semi-structured interview guide to help direct the interview. The interview lasted approximately 45 minutes.

Director Interview Questions:

1. Please describe your leadership role at the UT Gardens, Knoxville.
2. Tell me about your opinions of a successful volunteer program at a nonprofit public garden.
3. Please reflect on your experience with the Adopt-a-Spot Volunteer Program.
4. How has the Adopt-a-Spot Volunteer Program contributed to the Gardens' mission statement? ("to inspire, educate, and cultivate an appreciation of plants")
5. Tell me about a time when the Adopt-a-Spot Volunteer Program influenced your profession as a director of a public garden.
6. From your perspective, what changes need to be made to the program?
7. What aspects of the program need to remain unchanged?

8. Is there anything else you would like to share about the Adopt-a-Spot Volunteer Program that we haven't already talked about?

Data Analyses

The focus group interviews and the interview with the director were audio-recorded and then transcribed verbatim into Microsoft Word. Transcription is a key part of qualitative analysis when using interviews as a method, and when typed verbatim can be a vital part to the overall authenticity of the research (MacLean, Meyer & Estable, 2004). Verbatim transcription includes utterances or noises that the co-researcher makes, how individuals said a specific word or phrase, and pauses in the recording (Bailey, 2008). Moret (2019) provided the transcription conventions the researcher used to show these noises, pauses, and tones within the transcripts (Appendix J). Upon transcription, each participant in the interviews had the opportunity to member check the data. This let the participants ensure that what they said during the interview was accurate, while also providing the opportunity for study participants to choose what information they did not want to be published (Dooley, 2007).

The focus group participants were given an identification code (P1, P2, etc.) to ensure confidentiality. AAS study participants and UTG staff study participants who were given an open-ended survey were also given identification codes to protect their identities (P1, P2, S1, S2, etc).

The focus group recordings and notes and the online survey component for volunteers and staff were analyzed by the researcher and two research team members. The interview with the director, who is part of the research team, was analyzed by the researcher only. Braun and Clark (2006) reminded the qualitative researchers to keep the epistemological perspective, in this

case constructivism, in mind when analyzing data. As constructivist qualitative researchers, the research team's goal was to analyze the data from the viewpoint that the study participants were telling us their knowledge that was created from their experience. The research team continually went back to the phrase "what are they telling us?"

Patton (1990) proposed that "the purpose of qualitative inquiry is to produce findings" (p. 371). To analyze the data from the focus groups, the interview with the director, and both sets of open-ended surveys, a thematic analysis approach was used. As the name suggest, thematic analysis looks for themes within the data (Braun & Clark, 2006). Additionally, thematic analysis "focuses on repeated words or phrases…or evidence of answers to the research questions(s)" (Grbich, 2007, p. 32; Sanok, 2015, p. 38). This type of analysis is appropriate for this project because the goal was to identify patterns throughout the transcript that could be categorized into themes that would answer the study's research questions ("About Thematic Analysis," n.d.).

Creswell (2013) described qualitative analysis as a "bottom up" (p. 45) process in that researchers are building up from codes or patterns to categories then themes. This process connects data that has been collected and the "explanation of meaning" (Charmaz & Belgrave, 2012; Saldaña, 2016, p. 4). Braun and Clark (2006) suggested six phases of thematic analysis: (1) familiarizing the data; (2) generating initial codes; (3) searching for themes; (4) reviewing themes; (5) defining and naming themes; and (6) producing the report (pp. 87-93).

As the research team began analyzing the data, we familiarized ourselves with the transcripts, notes, and survey responses by reading them multiple times. This was an opportunity to pre-code the data (Saldaña, 2016). Continuing to read through the data, the research team began recognizing specific phrases, quotes, ideas and patterns that could answer the research questions. Each of these components are considered a "code," or a "short word or phrase that

symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language or visual based data" (Saldaña, 2016, p. 4).

There are several different types of coding that exist in qualitative research (Saldaña, 2016). In this study, in vivo coding, or "short words or phrases from the participant's own language," process coding, or a method that "uses gerunds (- "ing" words) to connote observable and conceptual action in the data," and values coding which "reflects the participants values, attitude and beliefs…that represent his or her world view," were all used (Miles, Huberman, & Saldaña, 2014, p. 74-76).

Saldana (2016) explained there are several cycles of coding, and that the secondary and tertiary passes "filter, highlights, and focuses" on the generated data (p. 9). After initial codes were discovered, they were organized by similarities into categories. Categories are the grouping of codes "used to highlight the complexities of themes" (Given, 2016, p. 144). Braun and Clark's (2006) phase three was then followed in that the data were sorted through the categories and formed "overarching themes" (p. 89). Saldana (2016) explains that themes are an "outcome of coding, categorization, or analytic reflection" (p. 15). Categories were then morphed into eleven different themes for volunteer perception and three themes for staff perception, which will be discussed in detail in the next section of this paper.

We discussed the themes once again, and named and defined themes throughout the various sources of data. Finally, the data were examined by the last member of our research team. They followed the same steps that the rest of the research team followed when analyzing the data. This, along with along with member-checking, and presenting the findings to the study participants helped triangulate the data.

CHAPTER 4: FINDINGS

This chapter describes the findings that came from the volunteers: demographic survey, three focus groups, and the online survey component. It also describes the findings from the staff: the online survey component and the interview with the director.

Volunteer Findings

There were 24 individuals who participated in one of three focus groups. Three individuals participated in the online survey component in lieu of a focus group. The findings of the online surveys complimented those of the focus groups. Of all participants, 25 identified as female, and two identified as male. One participant completed high school, three had completed some college, nine had completed a bachelor's degree, two had some graduate school experience, and thirteen had completed graduate school. Two identified as employed, working 1-19 hours a week. Two identified as employed, working 20-39 hours a week. Three identified has employed, working 40+ hours a week. One identified as not employed, while 20 identified as retired. All 27 participants identified as Caucasian. The youngest participant was 30, followed by three participants that were 50-59, thirteen that were 60-69, ten that were 70-79, and one individual was 80+. The demographic questionnaire concluded that most of the volunteer research participants were female, had a higher education, were retired, and over the age of 60. Additionally, participants were asked if they were a Master Gardener. 24 identified as a Master Gardener, while three did not.

AAS study participants were specifically asked how they found out about the AAS Volunteer Program. This information was sought after so it could be used for potential recruiting purposes as the program progresses. Seven methods were identified as being effective in

recruiting AAS volunteers. These include: (a) being a previous volunteer; (b) from program leader; (c) the UTG annual volunteer luncheon; (d) through the county Master Gardener program; (e) by the AAS signage; (f) through UTG newsletters; and (g) the UTG website.

The number one method in which study participants found out about the AAS Volunteer Program was through their involvement with UTG Tuesday/Thursday volunteer program and through casual conversation with the leader of program. Participant 21 stated, "one thing led to another talking to Alice and I said why don't I keep working on it and once I got it cleaned out which took 2, 3 or 4 sessions." Participant 4 likewise stated, "I had volunteered in the kitchen garden in a trial garden and then it became an Adopt-a-Spot." Participant 7 mentioned they had the same experience. Additionally, Participant 10 had a similar experience to Participant 4: "I was volunteering here just in general you just whatever was on the plate that day and after having the opportunity to actually adopt a garden uhm I decided to adopt a garden here."

Participant 17 stated, "I've been a volunteer at the UT Gardens for about seven years and I've been a Master Gardener for a little bit over five years, so I heard about it though volunteering here." Others also explained that they had heard about the AAS Volunteer Program directly from the program leader (P14, P15, P16).

Two other methods identified were 1) through the annual volunteer luncheon and 2) through the Master Gardener program. Several participants found out about the program through the annual Volunteer Luncheon in February 2018, just as the program was launching (P1, P3, P6, P11, P17, P19, P25, P27). The county Master Gardener program also facilitated reaching new AAS recruits. Some participants found out about the program through the county Master Gardener program (P8, P5, P13, P23).

At the time of the study, one participant who was not involved with the UTG in any manner, but only as a visitor, inquired about the AAS sign and wanted to know more. P9 stated, "I first started out walking my dog over here and then I saw the Adopt-a-Spot sign and I just happened to find Alice that day." Other ways participants found out about the AAS Volunteer Program was through UTG newsletters (P12, P20) and through the UTG website (P21).

Through data analysis, eleven themes were identified explaining why volunteers were participating in the program. Data was categorized by similarities and themes emerged from categories which resonated the most, although there was some overlap between themes. The 11 themes include: 1) Identifying with the Program; 2) Accessibility; 3) Communication; 4) Fulfillment; 5) Perceived Tangible Impact; 6) Leadership; 7) Accountability; 8) Education; 9) Public Relations; 10) Social Aspect; and 11) Orientation.

Identifying with the Program

The first theme that was identified was 'Identifying with the Program.' This theme encompasses why volunteers may want to participate in the Adopt-a-Spot Volunteer Program at the UTG. There were four categories we identified that stood out in the data: (a) Altruism/Affective/Emotion; (b) Cognitive/Education; (c) Social/Connecting with Like-Minded People; and (d) Autonomy.

Altruism/Affective/Emotion.

This category was broken up into three elements, simply because this category was so large: (a) Engagement and Involvement; (b) Promote and Advance; and (c) Satisfaction and Reward.

Engagement and Involvement:

It was clear that many of the participants simply wanted to be involved with UTG and that the AAS Volunteer Program gave them the opportunity (P1, P4, P10, P13, P14, P15, P16, P17, P24). Participant 4 explained, "I want to keep making the garden as, as you know, as successful as it can be, and I am happy to be a part of that process." Similarly, Participant 17 stated, "I love [the AAS Program] and I want to be involved too. I love the gardens… This is a very good way to spend your time." Participant 15 and Participant 16, who chose to volunteer as part of a team, expressed, "We just like the gardens (P16). That's a good reason to be down there (P15). We're gonna be volunteering doing something in these gardens anyway" (P16). P18 had a similar experience:

> I just like being here. I just enjoy being out here in the garden and when I got into the Adopt-a-Spot it was still pretty new, and it was just one more way to help out and do something and a good excuse to be here.

Additionally, Participant 14 mentioned,

> Not everybody is able to become a member or able to volunteer when the staff are here or are able to donate and this is just a way for all of us, you know, who care about the gardens to make an impression on it.

Participant 13 commented that this program gave them the ability to come out to the Gardens more: "I had been intending to volunteer more at the gardens and hadn't doing it and I needed something to solidify what I was doing."

Promote and Advance:

In addition to wanting to be engaged and involved with UTG, some participants specifically wanted to promote and advance the organization (P4, P5, P7, P10). In particular, Participant 5 stated,

> I think it's important that Knoxville know more about our gardens. Do you know how many people don't come; they don't come here they don't know anything about it? I think it's an opportunity to be an ambassador for this beautiful garden.

Participant 10 also felt similarly suggesting, "It's good to give back to the community, the garden." Participant 4 commented on their experience in the program thus far and determined how this feeling would influence their decision to continue in the program: "I enjoyed it so much last year and I want to keep making the garden as, as you know, as successful as it can be and I am happy to be a part of that process."

Satisfaction and Reward:

Although feeling personal satisfaction and reward is not pure altruism, this element is part of the emotion or affective feelings that AAS study participants shared. Several participants also explained they participated in the AAS Volunteer Program because they felt the program was satisfying and brought on personal reward (P1, P4, P6, P9, P10, P15, P18). Participant 1 stated, "I think it rewarding on many levels. Personally rewarding." Several participants described that the program was fun and enjoyable and that's part of why they were involved with the program (P4, P8, P10, P15, P18, P25, P26, P27). Participant 10 exclaimed that,

> I think it's fun, I just think it's fun. I mean I know people have different ideas of what fun is, but to me it's just enjoyable and I feel good afterwards and I know people feel good walking through the garden…no matter how sometimes when you feel in the morning when you get up and you're like ugh, but when I leave here I feel like a million bucks.

Participant 9 mentioned they had a particularly therapeutic experience as being a part of the program: "I love to be outside and it <u>so</u> therapeutic for me to come and pull weeds…I just love it over here, I told Alice I said I'm just going to pitch a tent and live here." Additionally, all

participants in focus group one concluded thy thought gardening was therapeutic for them as well (P1-P10). Some participants specifically pinpointed an altruistic feeling they had as being a part of the program (P1, P4, P10, P14, P24). Participant 1 stated, “It’s a great way to give yourself.” Similarly, Participant 24 commented, “We are all responsible for the entire gardens and just being able to be a part of something bigger than you.” Likewise, Participant 10 said, “I think it just you give, and you get on so many different levels.

Cognitive/Education.

The second category in the ‘Identifying with the Program’ theme was *Cognitive/Education*. There were two underlying elements that arose from this category: (a) wanting to learn and (b) wanting to teach.

Want to Learn:

A couple of participants stated they participated in the AAS Volunteer Program because they wanted to learn (P4, P5, P9). In particular, Participant 9 stated, “I don’t know a lot about gardening or about various plants you know it a good opportunity to learn because I have that interest now.” Similarly, Participant 5 stated,

> I mean, there are so many opportunities to learn more while you sit there and share with others and have a staff that does wander around the gardens …I am learning how to manage my home garden. By having this learning opportunity here, I know I have improved in my home garden.

Want to Teach:

Two participants specifically stated they wanted to educate the public (P2, P4). Participant 2 explained,

> [I have an] opportunity to work with the public. Because you are in an area that they are interested in and they have questions about what you are doing and so that you get a lot

of interacting with people that visit the gardens so it's a good opportunity to have Master Gardeners educate.

Participant 4 had felt similarly: "We do have opportunities to educate both adults and children."

Social/Connecting with Like-Minded People.

The third category under the 'Identifying with the Program' theme was *Social/Connecting with Like Minded People*. Other ways participants identified with the AAS Volunteer Program is through socialization and connecting with other program participants (P6, P10, P15, P17, P20, P23, P24, P26).

Participant 6 specifically mentioned they liked interacting with other volunteers around their designated spot: "A lot of us see each other like at Master Gardener meetings and I really never know the person's name… but if they're working in in a spot next to my spot, you know, they give you valuable tips." Other research participants spoke about their positive experience as working in a team (P6, P10, P26). Participant 6 stated, "I like what I'm doing. I like the group I work with; they all want to continue doing it. And I want to continue doing it." Similarly, Participant 10 commented, "I do have a partner which is my husband, so I just tell him what to do and he does it."

Autonomy.

The final category under 'Identifying with the Program' was *Autonomy*. There were two elements that we pulled from the data: (a) Likes sense of control (b) Likes freedom, self-determination.

Likes Sense of Control:

Some participants alluded to wanting to have control of their AAS areas (P1, P4, P22). They gave their opinion on other volunteers, staff and/or visitors coming into their areas and

altering their area. For example, Participant 4 stated, “It’s that, you know, if you have your name on an Adopt-a-Spot then other people shouldn’t really do things in your spot…sometimes volunteers doing things like it goes back to doing something that they didn’t ask permission to do.” Participant 1 had a similar experience: “There are times I have come, and the regular volunteers have planted annuals in my perennial bed. If I had known they were gonna do that I would have made sure the weeds were pulled first.”

Likes Freedom, Self-determination:

Many volunteers expressed that they enjoyed the autonomy, freedom, and focus of a particular area in the AAS Volunteer Program (P6, P12, P13, P16, P22, P23, P24). Participant 12 stated, “I usually come down on Sunday and being able to select an area; I’m a member of the Hosta Society ok and worked in the hosta garden…and I guess this is a plus, the autonomy too.” Similarly, Participant 22 explained, “I think I just like the uhm autonomy. I’m in the kitchen garden and I’m getting to plan a whole bed for what I want to do.”

Several participants mentioned the freedom aspect of the program (P6, P12, P16, P17 P24). Participant 6 stated, “If we want to put in a plant or something if we talk to her about it we can put in a plant.” They went on to say, “I know were not supposed to take anything major out, but we have been given some le way with annuals and I like being able to do that.” Participant 12 had a similar experience: “From time to time we plant plants, I mean, certainty you know get Alice to approve it but we have planted plants.” Participant 24 explained that they too experienced freedom while being in the AAS Volunteer Program:

> Alice has said to if we want to do something different in our specific spot check it with her and were pretty much free to do that and I think that is not only our flexibility, but, and its ownership, but it’s helping to design and put your own idea into a spot of land.

Along with autonomy and freedom, by focusing on a specific area, some participants explained they simply wanted the UTG to look good, and the AAS Volunteer Program let them be a part of that process (P6, P11, P12, P14, P16, P17). The research team believe these comments exhibit self-determination. Participant 12 stated, "I want the gardens to look good and you know if I can help in some way, I want to do that. I want it to look good for the public." They added, "You really have an attachment to the garden and you want to see it looking good." Participant 21 had a similar experience: "I want to keep it looking good, I mean, going back to the ownership… I spent a lot of time getting it cleaned up last year and I don't want it to look like it did."

Accessibility

The second theme we found in the data was 'Accessibility'. Accessibility for volunteers to come on their own schedules was one of the most evident themes throughout the data. This theme is divided into two categories: (a) Flexibility of Work Schedules and (b) Ability to Work in an Area Based on Personal Interest.

Flexibility of Work Schedules.

Nearly half of the research participants specifically mentioned they liked the flexibility that the program provided (P1, P7, P15, P16, P1, P12, P20, P22, P24, P18, P25, P26, P27). Participant 1 stated, "I could not be here on the days when they had the volunteer hours." Similarly, Participant 20 commented, "I like the flexibility because I can't always come on Tuesday and Thursday mornings so this way whenever I can come when it works with my schedule." Additionally, Participant 11 stated, "I work about a 50-hour week normally at my regular job and Adopt-a-Spot gives me the opportunity to come over here anytime I want."

Along with being able to volunteer around their work hours, some participants pinpointed that they enjoy the flexibility because of issues with the heat (P15, P16, P17). Participant 17 vocalized,

> A Master Gardener friend and I both had problems working in the heat, and of course that's the majority of when you'd hit the regular volunteer times so we partnered and adopted [an area in the Gardens] …So this has given me and my friend an opportunity to come and have a place we love.

Similarly, Participant 16 commented, "We, the Garden's, have two sessions to volunteer 9-12 on Tuesday and Thursday uhm but sometimes we like to come in at 7:30…[P15] has a hard time working in the sun. Were much better off working in the shady area. That's one reason why we come in the morning." As a follow-up question, participants in the first focus group were asked if they volunteer outside of the UTG staff work hours and several people agreed to this comment.

Ability to Work in an Area Based on Personal Interest.

Along with being able to come volunteer on their own schedules, many research participants commented they enjoy the accessibility and ability to work in an area they are interested in (P5, P10, P12, P13, P14, P15, P16, P19, P23). Participant 10 commented,

> I decided to adopt a garden here, actually the Children's Garden…when I was younger I loved being in the garden with my grandmother, it was such a beautiful place to be and so rewarding and so I thought this is a great place... and it gives me an opportunity to participate in that portion of it and just keep the Children's Garden really beautiful and unique and do some different things there.

Likewise, Participant 5 stated, "I'm just for the vegetable part. I love working in the vegetable garden." Participant 13 had a similar experience, "The herb spiral was open and that

would have been one of the only one I would have been interested in so it was open and me and [another AAS volunteer] and I took it." Participant 19 also had a relatable experience: "I got the rock garden and I had been a member of the North American Rock Garden Society and that particular part of the garden had seemed to be kind of ignored."

Participant 6 and Participant 16 specifically mentioned focusing on a particular area: "I liked uhm just having one spot that I always focused on and watching it change and just learning different things about it (P6)." "It's nice to have an area a specific area in the gardens you can focus on… we know this is our area and were gonna take care of it and make sure it looks good (P16)." Participant 17 believed that if the gardens looked better aesthetically, that it may attract more visitors: **"**You also think that if it's well-kept and weeded and that sort of thing then that's more attractive to people so people will come back and more people will come. Other participants mentioned enjoying the ability to focus on an area but gave no specific area during the focus groups. Participant 23 stated,

> I like the focus part of it uh you know I may not be in the same focus area all the time…I might want to pick [a new area] if it's an area I want to learn more about for my own garden.

Similarly, Participant 14 vocalized, "The area we worked in was one of my favorite areas and I come back and visit see how things are doing." When asked if participants would leave anything unchanged, Participant 16 stated, "I'd leave unchanged letting people pick an area and volunteer for that area cause that's, you know, if your assigned areas it has to be part of your interest."

Communication

The third theme we identified in the data was 'Communication'. It became clear throughout the data that communication between staff and volunteers played a large part of the overall AAS Volunteer Program. This theme is divided into four categories: (a) Appreciation for Staff/Needing More Volunteers; (b) Appreciation from Staff; (c) Relationships Between Volunteers and Staff; and (d) Needing Expectations.

Appreciation for Staff/Needing More Volunteers.

Some of the participants mentioned the lack of staff, and how much the Gardens depends on volunteers. Because of this, many of the participants expressed a greater appreciation for the staff. (P5, P6, P10, P18, P19, P24). Participant 5 stated, "I know they are a skeleton's crew. I mean we definitely outnumber the staff. So. That's hard on them you know?" Participant 6 had a similar comment,

> I first started coming [to the Gardens] in 1996 and it seems like there are fewer paid people here. Keeping an attractive land this large you need a lot of help so I feel like I have a greater appreciation not just for what we do, but for what they do and just <u>how much</u> they do have to do. I mean it's huge.

Participant 10 stated, "After you volunteer here for a while, you realize that so much of the thigs that are done here are done by volunteers." Participant 24 also mentioned, "I know this group is absolutely critical for maintaining the gardens period."

When asked how participants would invite a friend to the program, Participant 14 stated, "You get to make the UT gardens look better you get to help the staff." Participant 19 felt similarly, but specifically mentioned the program leader: "There is just so much time that she has got to do what she's doing and I appreciate everything she does."

Participants also spoke about needing more volunteers throughout the UTG (P15, P21), while some participants specifically mentioned needing more volunteers in their area (P11, P12, P19). Participant 15 vocalized, “It would just be great to get enough recruits to cover all of the areas because it makes it more consistent.” Participant 19 stated, “I think were gonna need somebody to help us this year…I’m getting to where I am not much help…it will probably be a good idea for us to have another volunteer. Somebody younger.” Participant 11 similarly stated, “I mean if there were 3 of us it would even be better.”

Appreciation from Staff.

Many participants expressed they felt appreciated by the UTG staff (P1, P4, P5, P7, P10, P18, P19). Participant 1 stated, “I would like to say the fact they always say thank you…It makes you feel appreciated.” With this comment, several participants from the same focus group agreed. Participant 4 spoke about an appreciation luncheon organized by the program leader: “Alice did a, I guess in the middle of the summer when we were winding down, she did an appreciation lunch, and that was nice to be appreciated.” Participant 18 also experienced appreciation by the program leader: “Alice has come down a few times while I’m working and I really appreciate that.”

Other participants spoke about their experiences being appreciated by other staff. Participant 7 stated, “I have had Dr. Hamilton walking around and she says hey every time she sees me.” Participant 19 spoke about their experience: “I remember one day I had a pile of weeds that I was working on at the path, and Andy Pulte came by with the class and…he said good job that meant so much to me.”

Relationships between Volunteers and Staff.

Overall, the participants had positive experiences with many members of the staff (P13, P16, P17, P18, P19, P21). Participant 13 stated, "I had good communication with Holly…so I really have enjoyed that." Participant 21 had a similar experience, "I have also enjoyed several times interacting with Andy." Participant 18 mentioned, "Alice has to stay," followed by Participant 17's comment, "Alex helps some too." When asked as a follow up question in the second focus group if the participants had many any friends whilst being in the program Participant 16 stated, "Oh yeah definitely. The staff and the volunteers both."

Participant 17 spoke specifically about their experience before and after the implementation of a monthly AAS newsletter:

> I was one of the early original people and Alice met with us a lot, but it still felt like you were out of pocket or didn't know exactly what was going on, and so we suggested to her about the newsletter and that has made a huge difference.

Additionally, a couple of participants spoke about having independence and trust from the staff (P2, P12). Participant 2 stated, "I think by and large gardeners are self-starters we don't need to be someone over our should all the time…the fact that we can be trusted makes it a very attractive program to me." Similarly, Participant 2 said, "I am pretty much a self-starter so if I have a problem I take care of it."

Participants also spoke about how communication could be better between AAS volunteers and staff. Volunteers expressed wanting to know staff schedule and when they were going to be performing specific tasks that may affect their areas (P1, P5). Participant 1 stated, "I think knowing the schedule of what's gonna be done; that would be really helpful and then maybe I can maybe could come out a little more." Participant 5 also mentioned, "Yeah and

there's so many times they tear up a spot, and I'm like woah I didn't know that was going to happen."

Needing Expectations.

Needing Expectations was the fourth category under the 'Communication' theme. A couple of participants mentioned they needed expectations or a scope of what to do whilst they were volunteering in their area (P8, P10, P12, P13, P15, P24).

Participant 10 stated,

> It would be nice to know what even though we are volunteers what is the scope of our volunteerism? When is too much too much? And is not enough? you know cause there is a small staff here. You know my assumption is that they are depending on the people in their areas that have adopted that you are primary kind of caring for that area.

Participant 8 had a similar comment: "Expectations. You know, about what to do cause I would get here and I was like, I'm not sure what I'm supposed to do today." Participant 13 stated,

> I don't know if this is an issue with every garden but the herb spiral doesn't necessarily have a solid mission in the garden so it was sort of hard to know as I'm talking to holly what plants to put in it and things to do you know what are we what to do.

Additionally, a couple of participants weren't sure exactly who to communicate with (P22, P23). Participant 22 stated,

> When you're in the kitchen garden where is the hierarchy, and that's a bad word but it's kinda like kitchen garden people, I felt, a little out of the Adopt-a-Spot flow because Holly runs the kitchen garden… but she doesn't run Adopt-a-Spot.

Participant 23 had a similar experience, “Do we ask Alice for permission to do that or Holly or is there something else we should we should be doing in the kitchen garden before we work in the herb spiral?”

Fulfillment

The fourth theme that was pronounced throughout the data was ‘Fulfillment.’ This theme was divided into three categories: (a) Emotional/Confidence; (b) Providing Structure; and (c) Feeling More Connected.

Emotional/Confidence.

Participants spoke about feeling pride and having better self-esteem from volunteering in the AAS Volunteer Program (P1, P4, P5, P6, P9, P10, P11, P12). Participant 10 had a particularly positive experience:

> People say, you know, I went to UT Gardens and it was just beautiful that day like you just feel like yes, yes! And it just makes, it just rewarding for the not only the volunteers and for the staff, for the general public [and] for the events that they have here.

They went on to say,

> I just think it’s fun. I mean, I know people have different ideas of what fun is but to me it’s just enjoyable and I feel good afterwards and I know people feel good walking through the garden and I feel this way…but when I leave here I feel like a million bucks… and it motivates me to go do stuff in my own yard.

Other participants specifically spoke about pride. Participant 4 explained, “Pride, you know, in our area you I thought that my area looked better than anyone else’s.” Participant 12 similarly

stated, “I think it makes me a little more proud of the area I worked in…you know of people coming by and the interaction.” Participant 9 vocalized,

> When I get the weeds pulled and maybe the area cleared out, to me that is a huge sense of accomplishment and it’s something that I can look at and say hey look what I did look at how clean it is you know what I mean?...You’re dealing with a lot of people who have a lot of pride in what we do...if it’s got my name on it I want it to be the very best it can be.”

Participant 5 additionally commented,

> It is just a visible garden and when others see it but you know that you worked there…I am very proud of the garden and I think the university needs to own it as much as they own the football team.

Participant 11 and 12, who volunteered as a team, pointed out that their area was too large, and which led to a lack of pride for their area. Participant 11 stated, “The whole year prayed that we would have another person to help us. Participant 12 responded with, “It’s a very large area like with at least 5 different beds in it…so you could never feel like you had accomplished a whole lot.”

Two participants spoke about feeling peace while volunteering. Participant 1 stated, “[I have a] sense of peace when I work in the garden it just makes me feel good inside.” Similarly, Participant 6 said, “I am just here for the peace part.”

Additional emotions participants spoke about were confidence and improved self-esteem. Participant 1 stated, “I feel more confident now than I did a year ago.” Participant 4 mentioned, “I have a bit better self-esteem.”

Providing Structure.

Along with emotional fulfillment, participants also mentioned how the AAS Volunteer Program was helping fulfill their lives in other ways (P2, P4, P9, P15, P16, P20, P24). Some spoke about how it provided structure to their lives as retirees. Participant 16 stated, "We've been retired for seven years so it does kinda create some additional structure." Similarly, Participant 4 mentioned,

> I was retired and I wasn't doin' much for a couple of years and now I have something I feel good about participating in and a good way to spend my time. That is has an impact and that makes me feel better about myself.

Others spoke about using UTG as 'their' garden. Participant 2 stated, "I don't have a house anymore. I live downtown so now this is my garden." Similarly, Participant 20 mentioned,

> I downsized to a smaller area where I have a little garden instead of my big garden so this is like my big garden so I think for anybody that likes gardening but doesn't have a place that they, you know where they are living, you know this is a good opportunity to still play in the dirt.

Additionally, Participant 24 had a similar comment: "Master Gardeners have big personal gardens, but a lot of them have moved because we're getting older… and for many of them this is their backyard in many ways."

Feeling More Connected.

The last subcategory of the 'Fulfillment' theme is *Feeling More Connected*. Several participants mentioned they come out to the gardens more and feel more connected to the UTG (P12, P13, P14, P17, P19). Participant 17 stated, "I really like the ownership of a certain area. It makes me feel like more a part of the gardens instead of just weeding one day… so we enjoyed

taking over that area and making it something special." Participant 19 had a similar experience: "People have mentioned the word 'ownership' and you know it does make you feel like part of things." Participant 13 mentioned,

> I personally come out to the gardens more. I feel a lot more connected to UT Gardens even though I intended to do it and it was on my list of things to do for a couple of years I wasn't doing it until I committed to my spot.

Participant 14 also felt more connected to the Gardens,

> I guess for me you know it was a good way to stay connected to the gardens… able to go in and keep working in there was really nice and you know it is one step closer to being connected to the gardens than just visiting …You get to help and you kinda make your mark a little bit.

Similarly, Participant 12 stated, "You really have an attachment to the garden and you want to see it looking good."

Perceived Tangible Impact

The fifth theme that we found throughout the data was 'Perceived Tangible Impact.' We divided this theme into two categories (a) Enhanced Garden Aesthetics and (b) Volunteer Time Frees Up Staff. Some participants felt they made an aesthetic difference at the Gardens and other felt that their time spent in the gardens freed up staff to do other tasks.

Enhanced Garden Aesthetics.

Several participants mentioned the garden looked better from their and other AAS volunteer efforts (P1, P4, P5, P12, P13, P16, P18). Participant 1 explained, "When I was a regular volunteer you would go to this area and it would look horrible so I think with us and

regularly maintaining it, it just looks so much better on a regular basis." Participant 18 similarly stated, "I would guess having the extra help that we are all doing is just a big help to the garden. It just always looks absolutely gorgeous." Additionally, Participant 13 had a similar experience: "I took a neglected spot and it's looking a lot better now than it did a year ago." Participant 4 and 5 went back and forth commenting on the state of the garden after the AAS Volunteer Program was implemented. Participant 5 stated, "The garden looks better…The garden looks better overall," followed by "You can tell, you can definitely look around you and see how much better those Adopt-a-Spots were than other areas because they got more attention." When asked how they would invite others to the program, Participant 12 stated, "You get to help the gardens looking better…and add to the overall impression of the garden."

Volunteer Time Spent Frees Up Staff.

Participants also spoke about how their time in the garden frees up staff to complete other necessary tasks (P4, P5, P10, P11). Specifically, Participant 10 stated,

> I think having uhm volunteers assigned to particular gardens frees up staff people and other people to hit up some of the bigger areas that need work…but the volunteers help free up labor and man hours for the small staff to focus on the bigger picture here, you know?

Participant 11 had a similar comment,

> I think this is a great program and I think that because this program it has put more volunteers into the garden. People that cannot commit to coming on a Tuesday or Thursday from 9 am to 12 in the afternoon so…it helps the staff, it just frees them up.

Leadership

The sixth theme that was present throughout the data was 'Leadership.' There was only one category: Communication from Program Leader is Valued.

Communication from Program Leader is Valued.

Participants described the Program Leader as responsive and had good communication with the volunteers (P7, P10, P11, P12, P14, P17, P19). Participant 7 stated, "She's very responsive …when you email her you don't wait two or three days and she's very, very responsive." Participant 12 had a similar experience,

> I will tell ya, every time I emailed Alice I got a real quick response. I'll have a big pile when I get done down there and I just email Alice and it's gone the next day. I'll let her know where it is and if there's a problem with anything I can tell her during that time.

Along with being responsive, Participant 17 mentioned that they and their partner had met with the Program Leader to discuss options for their spot:

> She has met with us several times and we even went through the greenhouses to see what plants was available for our space, so, and she brought them to us… I love the gardens, and Alice has been great and I think the whole program is wonderful….The only negatively thing I can think of I was real minor I was one of the early original people and Alice met with us a lot but it still felt like you were out of pocket or didn't know exactly what was going on and so we suggested to her about the newsletter and that has made a huge difference.

Participant 12 had a similar comment about their experience on altering their spot, "I'll tell Alice there is way too much of this, you know cause because things spread or take up space."

Other participants also commented on communication between them and the Program Leader. Participant 22 stated, “Keeping it fun…I think Alice is the right personality for that.” Similarly, Participant 14 commented, “Alice is a wonderful communicator and always you know reached far out in advance and…as I had questions I could just ask her and she could answer them.”

Accountability

The seventh theme that we found throughout the data was ‘Accountability.’ This theme only had one category: Feeling Responsible/Accountable/Ownership.

Feeling Responsible/Accountable/Ownership.

Many participants expressed ownership, accountability, and responsibility from being a part of the AAS Volunteer Program (P1, P5, P10, P11, P13, P17, P20, P23). Participant 13 stated, “There’s something about being responsible for a certain area…that’s real different. Before then I would come a couple of different times I have volunteered in the vegetable garden and that was sort of cool but it wasn’t the same.” Similarly, Participant 20 mentioned, “I like the ownership. I like having the, you know, the responsibility.” Additionally, Participant 23 commented, “It’s an ownership thing, but it’s also a motivational thing cause you feel responsible. I want my area to reflect well on me and also on the garden.” Participant 17 also stated, “We want to come cause we are accountable for it.”

Several participants commented that their feelings of accountability, ownership, and responsibility came from the signage that was placed out in their area. Participant 1 stated, “I told Alice then there’s a sign there with your name you feel responsible…and you want to do the very best. Participant 4 had a similar experience,

> I feel that naming it was really just a stroke of genius, in that it including who is taking care of this cause it does it does certainly inspire you and motivate you…to keep it at your very best that you can do.

Other participants commented that their friends outside of the AAS Volunteer Program would see their signs in the gardens. Participant 5 stated, "I have had friends that say hey I saw your name out there; from all across town and say oh you're there too." Participant 23 had a similar experience:

> I like the signs too…I had people who would say ah I was at UT Gardens and saw your sign and you know it kinda of made you feel well I need to make sure I keep up that area.

Education

The eighth theme identified was 'Education.' It was clear throughout the data that there was an education component to the AAS Volunteer Program. This theme was divided into four categories: (a) Self-Learning; (b) Learning from Staff; (c) Learning From Each Other and (d) Educating Visitors.

Self-Learning.

Many participants commented on their experiences of 'learning by doing' or Self-Learning (P2, P4, P5, P6, P13, P14). Participant 6 stated, "Participant 14 commented, "It's also kind of an opportunity to learn more about something that you're interested in." They went on to say, "If you're working with herbs than you're gonna learn a lot more about herbs…I think that's a big benefit of the program." Participant 2 spoke about changing areas after their commitment period ended to learn about a new area: "[I am] changing this year to get a broader experience of the garden."

Learning from Staff.

Many participants spoke about their experiences of learning from other staff (P3, P4, P5, P6). Participant 3 stated, "I was trained very well. I was in the roses. So, didn't have to guess what was a weed and what was not…I didn't have any lack of training." Participant 5 had a similar experience, "I had worked with Holly before; my focus was definitely to work in her kitchen garden…because I always felt like a learned something from her." They went on to say "There are so many opportunities to learn more while you sit there and share with others and have a staff that does wander around the gardens also." Additionally, Participant 6 vocalized their experiences learning from the Program Leader, "I did find that Alice was very good at looking at stuff... And I usually would find her or someone that that could tell me." She went on to say, "I got all excited when about this Indian Pink…because Alice came down and told me what it was."

Educating Visitors.

Participants mentioned experiences of educating visitors when volunteering in the Gardens (P1, P2, P4, P8, P10, P11, P12, P16, P23).

Participant 10 stated, "It's like a jumping point for kids to be interested in gardening and see how beautiful nature is, and it gives me an opportunity to participate in that portion of it." Participant 4 had a similar experience:

> We do have opportunities to educate both adults and children. I was so happy that I, you know, I am not a person who is you know that typically puts myself in a situation where I work with children a lot, but when the camps would come through I was so proud of my area and I'd say come on down. Come over here and look at my peppers! Just being able to educate the future generations is just a real joy.

Participant 1 stated, “I feel like I am helping educate the public in some ways.” Participant 23 had a similar experience:

> People walked by that area a lot and engaged us in conversation and sometimes we knew the answers and sometimes not…One thing I liked about the educational part, it’s not just you know it’s a pretty place. There are functional activities going on and research going on, and being able to explain to people well this is A, B, and C, this is better than this or that, you know.

Additionally, Participant 2 commented, “You learn so much. The opportunity to work with the public…because you are in an area that they are interested in and they have questions about what you are doing.”

Learning from Each Other.

Participants also spoke about learning from other AAS volunteers (P4, P6, P11). Participant 6 stated, “If they’re working in a spot next to my spot you know they give you valuable tips.” Participant 4 had a similar comment, “Getting to know more people and leanring from them and having them learn from you.”

Public Relations

‘Public Relations’ was the ninth theme that we found in the data. This theme is divided into two categories: (a) Being and Ambassador and (b) Volunteer Presence Promotes Conversation with Public.

Being an Ambassador.

A couple of participants specifically said the word ‘ambassador’ to describe themselves while volunteering in the gardens (P1, P5, P11, P19). Participant 19 stated,

> We can all be ambassadors…I mentioned it one time that people will sometimes stop and talk to me…but uhm I think we can be ambassadors too to with this program and I think that is important for us to be friendly with people.

Participant 1 had a similar experience: "When I am working and people come by I always pretty much always say hello so I feel like I am an ambassador." Participant 5 also stated, "I think it's an opportunity to be an ambassador for this beautiful garden so yeah I mean I think UT owes it to the Gardens to have more presence."

When asked as a follow up question in the first focus group if volunteers felt they had an impact on a visitor while working in the garden, several participants said that they did. Additionally, Participant 5 commented, "You would be surprised not only from this area, but people from other states are walking around the gardens. I mean I've met people from Thailand from Washington State, Oregon, [and] China." Participant 5 also spoke about mentioning the UT Gardens to people out in the community: "I'll be like well go to UT Gardens that's a perfect place to check out a landscape scene check out what this plant looks like as a mature plant."

Participant 15 spoke about their experience of bringing people they know to the gardens, "It's fun doing it, but uhm when you take someone down here from out of town it's much better." Participant 7 likewise stated, "Even if you're not into gardening it is relaxing lovely place to be with family or friends."

Volunteer Presence Promotes Conversation with Public.

The second category within the 'Public Relations' theme is *Volunteer Presence Promotes Conversation with Public.* Several participants mentioned that while being in the gardens, visitors would conversate with them (P11, P12, P16, P23). Participant 11 stated,

> At our garden, because in the summer time it is so shaded and there's places to sit down, and you could you could talk about plants if they wanted to you could talk to them you could generate a conversation if they want to and I think it makes me more comfortable.

Similarly, Participant 16 stated, "Plus the other thing as people tour as people walk through tour the gardens while we are there we often get questions from people." Participant 12 had a similar experience:

> I have been down there on the weekend and you know people ask questions and I think that uh the interaction is good, but I think also when they added the little signs that brings forth conversation when people are down there they ask are you so and so.

Social Aspect

The tenth theme that we found was 'Social Aspect.' This theme was divided into two categories: (a) Working as a Team and (b) Making Friends and Meeting other Volunteers.

Working as a Team.

There were a several participants who spoke about working as a team with other AAS volunteers (P2, P4, P5, P6, P8, P10, P23, P24). Participant 6 stated,

> Also, we don't always work together as a team. We will come down together and sometimes we come separately because of our schedules…we did communicate via text a lot you know I did this this this this but there's a spot over there that you need to look at.

Participant 13 had a similar experience, "You're working with other people like me and [P24] sometimes we'd meet here and work together and sometimes only one of us had the time freedom to come in the week." Participant 23 stated, "There were 3 of us working in the pepper

plots and we were kinda excited about that because it was our little pepper plot and we were keeping it weed free." Additionally, Participant 10 commented on their team,

> I do have a partner which is my husband so I just tell him what to do and he does it, and it's really good cause he is very handy he used to be an engineer so he fixes a lot of things down there when they fall apart or break.

Participant 4 spoke about their team: "In the particular spot where we worked in the two of us, we had a third person and sometimes, if we went out of town or something like that we would communicate hey I didn't get to this today can you get it done?" When asked in the first focus group as a follow up question if participants thought that being part of a team should be optional, and letting that decision be up to the individual volunteers (P1, P4, P5).

Making Friends and Meeting other Volunteers.

Participants spoke about their experiences of making friends, or working with their friends while being in the program. Participant 8 stated, "I just moved back here. I have been gone for 20 years so just coming back as an adult and not knowing a lot of people this has provided a source of community." Participant 11 also commented, "You can build friendships too."

Additionally, a couple research participants mentioned they wanted to connect with other AAS volunteers (P17, P20, P23, P24). Participant 24 expressed interest in gathering with other AAS volunteers: "One thing I liked that just was mentioned is, is gathering Adopt-a-Spot people not for a big hullaballoo necessarily but to share what's going on." Participant 17 had a similar comment, "I think what (P24) said was a good idea about maybe having our group meet quarterly or something…to exchange ideas." Participant 23 also agreed, "Just something that we can meet each other and kind of know who's working where."

Orientation

The eleventh and final theme that we found was 'Orientation.' This theme was divided into three categories: (a) Value of Initial Orientation; (b) Availability of Resources; and (c) Training.

Value of Initial Orientation.

There were many participants who indicated that their orientation was either non-existent or inadequate and could have been improved (P5, P7, P8, P11, P12, P13, P14, P17, P20, P22). Participant 8 stated,

> I would like to see more of an orientation… I just sorta happened in it. You know cause we were just finishing up our master gardener program so it just sorta happened. I said yeah, I'll do I'll work in Holly's area there and there was not a, a lot of guidance and stuff.

Participant 20 had a similar experience:

> I would have liked to have was maybe in the beginning a little more direction as far as where, you know what exactly needed I could do and couldn't do and where tools were available and where the compost pile was, things like that…because I was a new volunteer to uhm UT gardens so a lot of people had that background information but I didn't.

Participant 22 had a similar comment: "I kind of echo what [another participant] said; the orientation because I was new as well, and I started out in the Tuesday, Thursday… I didn't even know where the bathrooms were." Additionally, Participant 23 stated,

> I came to my Adopt-a-Spot program a maybe a few days or a few weeks after they had started in my group, so I was kind of playing catch up - didn't really have a clear idea of

what adopt a spot was or what I was supposed to do that was different than the Thursday weeding activity so I was always asking someone's permission to do something or direction or that was a little bit fuzzy.

Availability of Resources.

The second category under 'Orientation' is *Having the Appropriate Resources Available*. Many participants mentioned they needed better access to tools and a gardens map (P1, P5, P7, P14, P18, P20, P23, P24).

Participant 18 stated, "A suggestion I might have is that we had maps…I was too one of the early ones and I think for a while I was doing the wrong place." Participant 1 similarly said, "I think there should be a map of the gardens. My spot is right at the front and I have people ask me all the time where is such and such and I'm like hmm."

Other participants spoke about tool accessibility and having a tool inventory. Participant 14 mentioned, "If there were a tool inventory to help plan that would be helpful." Participant 4 stated, "I knew where certain tools were and then there were other tools that were locked up; there were other tools but they couldn't be gotten to." Participant 24 had a similar comment, "A secure place for tools is also something I have heard is an issue." Additionally, Participant 20 had the idea of creating an identifier for AAS volunteers: "Maybe a t-shirt or an apron or something that identifies you has a volunteer lets people know that a volunteer is doing all of this."

Training.

Other participants spoke about needing training as they come to volunteer, (P12, P13, P22). Participant 12 stated,

I think some people also are kinda of fearful that they're gonna do the wrong thing. They don't know what to do yeah so. If you've got someone showing them…and maybe some kind of preliminary training along with that whatever information you are giving them.

Additionally, Participant 22 stated, "A body is good, but a body need to know a weed from a seedling."

Staff Findings

Of the eight (not including the director or the program leader) full-time employees that were working at UTG at the time of this study, four chose to be research participants via the online survey and provided their perceptions of the AAS Volunteer Program. The data that the director generated, who participated in a one-on-one interview, will be combined with the data generated by the rest of the staff. The researcher, who is also the AAS Volunteer Program Leader will provide their perceptions and recommendations of the program, and this study, in the final chapter of this thesis.

Through data analysis, three themes were found through the data the staff generated describing their overall perceptions of the AAS Volunteer Program. The categories were divided into the one's they resonated with the most, although there was some overlap between themes. Common themes were: (a) Communication; (b) Adopt-a-Spot Helps the Gardens; and (c) Creating Opportunity for Volunteers.

Communication

All staff members spoke about communication and the relationships between the volunteers and themselves. This theme was divided into two categories: (a) Staff Time Spent and (b) Fostering Relationships.

Staff Time Spent.

Some staff pointed out that this program increased their time spent talking to volunteers (S1, S2, S5). In particular, Staff 1 commented,

> My daily workload has been complicated by my participation. AAS vols in my section need guidance and planning meetings in order to be successful in their work. This equals more meetings, more planning and more communication with more people at different times throughout the workweek…It is challenging to give the AAS vols both the autonomy they desire as well as the help and guidance that they need and desire.

Staff 5 had a similar comment, "I know there's a very fine line there of me, you know, welcoming that and engaging with them but at the same time I don't always have the time." Additionally, Staff 2 commented, "I have had to increase time spent talking with people instead of other task related activities."

Fostering Relationships.

Most staff members also spoke about the relationships that have been created between them and AAS volunteers (S1, S2, S4, S5). Staff 2 mentioned, "This [program] has helped build strong relationships with AAS [Volunteer Program] participants that may have not happened otherwise as we are usually too busy to chit chat." Additionally, Staff 5 stated,

> I feel like I have been able to have deeper, more meaningful relationships with members of the gardens, those volunteers than ever before and that's meaningful to me…I have gotten to know more of our volunteers on an individual basis. I know their name, I know the area they are responsible for and so it's been pretty fun to get better acquainted with some of the volunteers and actually talk about their space and what all is going on there.

Staff 2 had a similar experience:

> [The program] has given me the opportunity to get to know some new people a little better. One volunteer is excited about creating a potpourri garden in her 'spot' and I have been spending time with her while she figures it out."

Staff 4 also commented, "It gave me an opportunity to talk with the volunteers and they had opportunities to ask me questions about plants." They went on to say, "I have gotten to know more volunteers due to seeing them in the garden more often."

Adopt-a-Spot Helps the Gardens

All staff study participants agreed the Adopt-a-Spot Volunteer Program helped the Gardens in some way. This theme was divided into three categories: (a) Perceived Aesthetic and Intangible Differences; (b) Fulfilling the UT Gardens Mission; and (c) Community Support.

Perceived Aesthetic and Intangible Differences.

The most common comment was that the program participants helped with overall maintenance in the gardens. Staff 1 commented, "The program has increased volunteer participation and helped to combat weed management challenges." Additionally, Staff 3 had a similar comment: "The program has been very effective in providing much needed maintenance assistance in the Gardens." Staff 2 mentioned, "It is much easier for general horticulture maintenance to be completed in a timely manner and help better represent the University. This has allowed more time for myself to work on other job responsibilities." They went on to say,

> I have noticed a decrease in anxiety and depression as more horticulture activities are able to be completed throughout the gardens. With such a small staff, it can be extremely daunting to have such a low paid position that comes with an extreme amount of responsibility and high expectations.

Similarly, Staff 3 stated,

> It has alleviated some of the stress of thinking that we are chronically behind on maintenance tasks. It is great to have so many pairs of eyes keeping a look out on garden aesthetics and having them have the ability and tools (literally and figuratively) to do something about problems they see."

Staff 4 also said, "[The program allows] volunteers the opportunity to take part in garden maintenance… The garden areas where there is an Adopt-a-Spot volunteer looked well maintained and I often saw that volunteers working in their garden area." Staff 5 also mentioned, "We are a more aesthetically pleasing public garden in our community…we have raised the standard, the level, the caliper of the maintenance and overall all appeal of the gardens." Staff 1 mentioned, "I love seeing the impact on the garden as a whole. I feel a sense of peace and happiness when I see garden beds that are well kept." Additionally, Staff 1 stated, "Professionally, the program impacts me by enhancing the UT Garden as a whole. I benefit professionally by being associated with an organization that functions successfully."

Fulfilling the UT Gardens Mission.

The second category of this theme is *Fulfilling the UT Gardens Mission*. For reference, the mission of UTG is, "to inspire, educate, and cultivate an appreciation of plants through horticultural displays, educational programs, and research." Several staff felt that this program helped achieve the gardens mission (S1, S2, S3).

Staff 3 stated, "Utilizing previously untapped human resources is fiscally beneficial, but also engages a segment that can further advance the mission and goals of the institution." They went on to say, "The AAS program volunteers are themselves gaining experience that the

mission seeks to address and they are helping great and environment in the garden that is conducive to expanding the mission to our visitors."

Staff 2 mentioned, "I think this program helps reinforce the UT Gardens mission by having more people on site that help represent the gardens." Additionally, Staff 1 said, "I feel that the program impacts our mission by enhancing the beauty of our display gardens."

Creating a Better Visitor Experience.

In addition to enhancing the gardens aesthetically and intangibly, and fulfilling the garden's mission, all staff study participants explained the program help the gardens achieve a better visitor experience.

Staff 1 stated, "When the gardens look good, visitors are more likely to appreciate the plants and to be inspired by their visit." Staff 2 similarly commented,

> While I think AAS [Volunteer Program] participants are a product of our mission, I also think they emanate that to garden visitors and those that around them in their daily life - helping to inspire, educate, and cultivate an appreciation of plants outside of the gardens… Participants in this program often talk to garden visitors about their area and various plant related topics.

Staff 5 mentioned, "The community that comes and visits they have got better examples and demonstrations of gardening, garden design, and horticultural practices to learn from than they have ever had before." Additionally, Staff 4 stated, "[Program participants] get to meet garden visitors and have a chance to interact with them, students, and staff."

Community Support.

Staff felt the program was an example of how the community supports the UT Gardens (S2, S3, S5). Staff 3 stated, "It has provided further evidence that the public is often willing to provide assistance in ways that are advantageous to the garden if they are only asked and given good direction…Participants become great ambassadors for the Gardens." Additionally, Staff 2 commented,

> Ultimately, I think this program will be crucial in the future for the gardens to thrive. With so little funding from the University to support their own State Botanic Garden of Tennessee, I think this program makes an incredible statement about our community and the support it is willing to provide…This program has brought people in that I have never seen at the gardens before, ultimately widening our audience.

Staff 5 also had a similar statement:

> We've got more and better ambassadors than ever before working in the gardens that can turn around because of their positive experiences and their involvement and all that go out in the community and speak positive and spread the word.

Creating Opportunity for Volunteers

The third theme that was evident in the staff's responses was that they felt that the Adopt-a-Spot Volunteer Program provided different opportunities for the volunteers. This theme is divided into two categories: (a) Ownership/Flexible Work Hours and (b) Educational Experiences.

Ownership/Flexible Work Hours.

Some staff thought the program gave volunteers an opportunity to have a sense of ownership and the ability to come out on their own schedules (S2, S4, S5). Staff 4 stated, "I

believe it gives volunteers a chance to take more ownership of maintaining the garden and it is a great way to increase volunteer support for the UT Gardens." They went on to say, "[The program] gives you a space to work in a garden even if you don't have a space to garden at home." Staff 5 had a similar comment, "The volunteers have a sense of ownership and pride probably that our volunteers have probably never had before." Staff 2 commented on the flexibility of the program: "Unlike other volunteer programs with scheduled events and sessions, this program gives you the freedom to volunteer on your own schedule."

Educational Experiences.

A couple of staff spoke about how the volunteers in the AAS Volunteer Program are learning as they worked in the gardens. Staff 3 stated, "It is a great way for [the volunteers] to contribute to the success of the Gardens while at the same gaining in their horticultural knowledge." Similarly, Staff 1 commented, "The volunteers also become more educated about the plants in their 'spots' by working with them more closely." Staff 5 thought the volunteers were learning from the staff: "I think that our volunteers are learning a lot from our staff and the individual connection and all, working with you and talking about things or directing them on some things that need to be done."

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study was to understand both volunteer and staff perception of the AAS Volunteer Program at the UTG. Chapter one introduced the study; highlighting who volunteers are and how they contribute to a variety of organizations. It also gave an overview of what the AAS Volunteer Program is at the UTG. Additionally, research questions were stated. Finally, an insightful glance at how a qualitative inquiry would help fulfill this gap in the research was explained.

Chapter two described the theoretical perspective and the relevant literature surrounding this study. Chapter three explained where the study took place, who the research participants were, along with the several methods used to approach the research questions. Chapter four gave the abundant findings that were found throughout the data.

The final phase of this thesis, chapter five, describes the concluding thoughts from the findings, along with recommendations for UTG and other organizations as they move forward with this program, and thoughts for future studies.

Volunteers: Demographics

Volunteer study participants were first asked general demographics questions to gather a better understanding of who they were. The results showed that most of the AAS study participants were female, had a higher education, were retired, and over the age of 60. Wilson (2000) and Neiburr et al. (2018) provided several known factors of those who volunteer, stating that those who volunteer generally have a higher level of education and women volunteer more than men in North America. Additionally, “age is believed to be related to volunteering in a curvilinear way with a peak in middle age” (Neiburr et al. 2018, p.19; Wilson, 2000).

In this study, the AAS study participants fit this description of volunteers that are consistent with other volunteer populations from other organizations and countries. As the AAS Volunteer Program continues, it is recommended to diversify the program by tapping into resources not previously utilized at the time of the study. This may be accomplished by promoting the program across the UT campus to include faculty, staff, and students which would likely diversify the program by race, gender and age.

Volunteers: Recruitment

AAS study participants were asked how they found out about the program. Haynes and Trexler (2003) stated that recruiting volunteers is extremely important for public gardens, while Ferris (2011) declared that recruiting volunteers in public gardens can be challenging due to garden location, amount of people who enjoy gardening in the area, and time availability of those interested. Additionally, Ferris (2011) has suggested recruiting volunteers to public gardens by continually advertising opportunities through special events, social media, or recruitment campaigns.

Out of the seven methods identified in this study as being effective in recruiting AAS volunteers, most of the participants found out through word of mouth from the program leader in conjunction from being an active volunteer in the 'regular' UTG volunteer program. This emphasizes the importance of the program leader in developing interpersonal relationships with program participants. Additionally, as 24 of the 27 study participants were Master Gardeners, the relationship between a public garden and the county Master Gardener program shouldn't be ignored. It is recommended that a good relationship with the county or nearby county Master

Gardener programs be forged as they are a valuable resource in recruiting new program participants.

It should be mentioned since the time of this study, numerous inquiries regarding the AAS Volunteer Program have resulted by visitors noticing the AAS signs placed at all adopted spots throughout the UTG. The signs have proven to be a significant recruiting tool in attracting new AAS volunteers. As this study ended, several new volunteers in the program who were not study participants, reached out through email that was provided on the signage. It is highly recommended to place contact information on the signage placed out in the gardens to recruit new volunteers.

Results from this study conclude that other methods used by the AAS program leader (newsletter, volunteer luncheon) as well as those suggested by Ferris (2011) (special events, social media, or recruitment campaigns) to recruit volunteers were less effective for the AAS Volunteer Program than by those just described. This suggests that there are additional effective ways to recruit volunteers to public gardens, particularly in AAS Volunteer Programs.

Volunteers: Overall Perceptions

Overall, there were eleven themes that were revealed throughout the data which explained volunteer perceptions about the program and why they were participating in the program. The themes include: 1) Identifying with the Program; 2) Accessibility; 3) Communication; 4) Fulfillment; 5) Perceived Tangible Impact; 6) Leadership; 7) Accountability; 8) Education; 9) Public Relations; 10) Social Aspect; and 11) Orientation.

Identifying with the Program. Study participants chose to volunteer, or identified with the AAS Volunteer Program, for a variety of reasons. The results of this study relate directly to the

notion that altruism is a motivation for volunteering (Chapman, 1980; Gittman 1975; Henderson, 1981; Howarth, 1976; Jenner 1981; Moskos, 1971; Unger, 1991). Batson et al. (2015) explained that empathy drives altruistic actions, and that empathetic emotion only produces altruistic motivation if the concern felt is when another person "is perceived to be in need," (Batson, 2011, p.11). For this study, it is believed that empathetic emotion can produce altruistic motivation for an organization as well. It was clear from the findings that empathy was part of the driving force for the AAS volunteers to participate in the program and exhibit altruism because they felt the need and desire to be involved and help the UTG.

Moral norms and self-interest also drive altruism (Bamburg & Moser, 2007). In this study, some AAS study participants felt they could contribute to the UTG by joining the AAS Volunteer Program. It is unclear whether or not AAS study participants felt a moral obligation to help the UTG, although they did express self-interest. The phenomenon of the altruism paradox was present in this study, in that AAS study participants described feelings of personal satisfaction, reward and comfort through therapeutic experiences, even though they were helping the UTG.

Education. Stukas et al. (2016) stated that one of the reasons people choose to volunteer is to learn about a particular topic. Ferris (2011) and Haynes and Trexler (2003) stated that a reason people choose to volunteer at public gardens is the education factor. In this study, several participants spoke about their experiences in learning from staff as well as from the other volunteers. Learning opportunities for the volunteers led by the staff would be invaluable and appreciated by volunteers. Additionally, providing a time where volunteers can gather and discuss what each other is doing in the program to learn from each other would be valued.

A different aspect of education emerged from study participants in the data. Some participants mentioned satisfaction in answering visitors' questions and educating them during their time volunteering. Many participants specifically described themselves as ambassadors and enjoyed conversing with the public, some of which happened during staff off hours. As a result of this data, it is recommended that staff continually check-in with AAS volunteers to answer questions they may have. Additionally, it is recommended to host special learning opportunities for AAS volunteers so they can better educate garden visitors about a variety of topics.

Social Aspect. Social connections are another common reason people choose to volunteer (Haynes & Trexler, 2003; Ferris, 2011; Stukas et al., 2016; Meier & Strutzer, 2007). While some AAS study participants joined the AAS Volunteer Program specifically to socialize, others experienced a social aspect inadvertently during their time in the program. We suggest providing a time for volunteers to socialize outside of the normal volunteer-work environment. This can be achieved by a facilitated discussion led by the program leader or by organizing other activities such as a picnic or ice cream social for volunteers to partake in.

Accessibility. Haynes and Trexler (2003) concluded that volunteers in public gardens need flexible work schedules to improve retention of volunteers. In this study, nearly half of the participants stated that the accessibility of the AAS Volunteer Program was an attractive feature. AAS study participants liked being able to determine their own volunteer schedules, rather than adhering to the traditional hours that the UTG volunteer program previously only offered. This finding is the same with volunteer qualitative study by Haynes and Trexler (2003). As a result, it is recommended that this aspect of the AAS Volunteer Program not change. Additionally, since the AAS Volunteer Program leader may not physically see each volunteer due to the flexibility of the program, it is recommended that special information sessions be held at designated times,

perhaps once a month, so that volunteers that come outside of staff work hours can have their questions and inquires answered.

Self-interest is a motivator for volunteerism, so it was no surprise that AAS study participants spoke about satisfaction in working in areas they were interested in, rather than working in areas dictated by staff. Ajzen's Theory of Planned Behavior (1991) states that behavior is justified based on the individual's self-interest. Therefore, if AAS study participants were interested in a certain part of the garden or a particular plant collection, this theory explains why they would gravitate towards working in the area of interest. Ajzen (1991) stated behavioral achievement is increased when resources and opportunities are made available (Sanok, 2015). Based upon this, it is recommended that the AAS Volunteer Program leader interview prospective volunteers about their gardening interests.

Communication. AAS study participants felt they had positive relationships with staff and other AAS volunteers. Participants understood that much of the UTG work gets accomplished through volunteers because of the Gardens' small staff. From this fact as well as through their own volunteer work experiences, participants spoke about gaining a greater appreciation for all that the UTG staff do. Participants also felt that they were appreciated by the UTG staff. Several participants mentioned staff members acknowledging appreciation when they were volunteering in the gardens. Some also said they appreciated the friendships which were fostered with staff and other volunteers through their participation in the AAS Volunteer Program.

Ferris (2011) suggested thanking volunteers and hosting recognition events as a way to appreciate volunteers. Mason (2016) concluded that "interactions with staff…influence a volunteer's desire to continue," (p. 64). Additionally, Davis (2000) stated that volunteer recognition can influence volunteer retention (Mason, 2016). Therefore, it is recommended that

staff at public gardens express appreciation and engage with AAS volunteers as much as they can. Highlighting volunteers on social media, in newsletters, hosting recognition events is strongly recommended.

Participants spoke about the value of good communication and how communication regarding volunteer expectation and the scope of volunteer activities could be improved. As a result, it is recommended to take additional time in the future to address the volunteer inquires upfront that your volunteers may have, perhaps during the orientation. Additionally, it is suggested to continually keep the lines of communication open with volunteers through email and face-to-face contact so they can understand expectations. It is suggested to create a volunteer handbook that can include contact information and list the job descriptions for each adoptable area to give volunteers.

Fulfillment. One reason that volunteers choose to give their time is from seeing results from their work (Meier & Strutzer, 2007). Meier & Strutzer (2007) also conclude a positive correlation between volunteering and satisfaction. In this study, AAS study participants described a sense of fulfillment as part of the AAS Volunteer Program. Overall, they had a sense of pride and felt better about themselves through volunteering. Many participants also spoke about feeling more connected to UTG by maintaining 'their garden.' For others, it provided structure to their lives of being a retiree. Additionally, many participants spoke about how they feel they are making a difference aesthetically at UTG. They felt that their work made the gardens look better overall. Volunteers also spoke about how their time in the garden freed up staff go perform other tasks that volunteers typically didn't participate in. Moving forward, it is recommended a study investigating how this program has enhanced garden visitor experience be performed. Has it really impacted the aesthetic quality as much as the volunteer and staff

participants perceive? A pre and post study capturing how visitors perceive a public garden before and after an AAS Volunteer Program is implemented could be done.

Leadership. AAS study participants spoke about the program leader and leadership qualities without prompting from focus group moderators. Overall, participants thought the communication coming from the program leader was positive. They spoke about responsiveness, personality, and a communitive presence of the program leader. Participating in leadership training programs is recommended for volunteer leaders.

Accountability. As previously stated, an AAS sign with the volunteer's name is place out in each adopted spot within the garden. Many participants spoke about feeling accountable because of the signage. Signage caused volunteers to feel responsible and motivated to keep their spot well maintained because it was a reflection of not only themselves, but the gardens. They didn't want to disappoint the garden or themselves. As a result, it is apartment how important the AAS signs are to the success of the program. Signs should be made and placed in the adopted spots as soon as possible. An example of the AAS sign can be found in Appendix (K).

Orientation. Overall, it was very clear from AAS study participants that they either didn't get an orientation, or they thought that it could have been better to improve their volunteering efforts at the Gardens. This was especially important for those who had never volunteered at the UTG before. Some volunteers also spoke about not having the appropriate resources available, such as a map and tools, when they came to volunteer. Others thought that some volunteers may need preliminary training before volunteering. It is recommended that the orientation process be revised and continue to be adapted based on AAS volunteer feedback. The way in which volunteers would like to receive an orientation or training, such as online videos or a digital presentation, should also be considered. Since the time of the study, an orientation sheet was

created by an AAS volunteer and has proven to be very helpful during the orientation process. Additionally, a communal, stocked tool shed specifically for AAS volunteers was implemented. AAS volunteers are given the combination to the shed. This shed has given volunteers the ability to use tools owned by the gardens, rather than brining their own if they wish. Additionally, volunteers deposit their monthly timesheets in the shed. AAS volunteers were also provided t-shirts identifying they were garden volunteers.

Staff: Overall Conclusions

UTG staff were asked several questions to gather their perceptions of the AAS Volunteer Program. From their responses, there were three themes that represented their overall thoughts: 1) Communication; 2) Adopt-a-Spot Helps the Gardens; and 3) Creating Opportunity for Volunteers.

Communication. Many staff mentioned they spent more time talking to volunteers since the AAS Volunteer Program started. Some felt that the increased time spent talking with volunteers hindered them doing their daily work. However, many of the same staff also commented that the AAS Volunteer Program fostered relationships with the volunteers like never before and that this was good. They felt good about the increased opportunities to meet new people and they acknowledged that they saw volunteers throughout the gardens more often than ever before. It is recommended that AAS Volunteer Program leaders establish a training process for staff working with AAS volunteers. It's important for staff to learn about who the AAS volunteers are, why they volunteer, and then what the AAS Volunteer Program leader expects from volunteers as well as the staff. Staff need to know how they are seen from the AAS volunteer perspective and how they are integral to the success of the AAS Volunteer Program.

Adopt-a-Spot Helps the Gardens. The consensus among the staff was that the AAS Volunteer Program enhanced the UTG having a positive impact overall. All staff participants commented on the improved aesthetic appearance of the gardens. Staff also mentioned they felt they had more time to do other job responsibilities since the program started. It is recommended that the program leader consult with staff horticulturists on a regular basis to determine what specific tasks can be completed by AAS volunteers and to further define the scope of the program to help refine the program. A couple of staff study participants additionally stated that their workload stress and anxiety was reduced.

Staff also spoke about how the program was helping to fulfill or reinforce the UTG mission by providing the ability for volunteers to come and learn and be ambassadors for the garden. They also mentioned that volunteers were helping create a better visitor experience by enhancing the aesthetic appearance of the gardens and talking to visitors when they were volunteering. Additionally, most staff felt that the AAS Volunteer Program demonstrated the great support that the UTG has in the community.

Creating Opportunity for Volunteers. Finally, staff felt the program created new opportunities for volunteers because of the flexible work hours and the sense of control and ownership about a particular spot in the UTG. Staff also mentioned that volunteers have opportunities to learn from volunteering at the gardens. It is recommended that after this study's completion, the AAS Program Leader position be integrated into the UTG Volunteer Coordinator's position.

Recommendations for Future Studies

In addition to the recommended studies mentioned above, this study should be replicated several years in a row to look at program participant responses overtime. Many volunteers have become part of the AAS Volunteer Program since this research took place, and it would be valuable to collect their perspective as the program continues. We also suggest studies similar to this one be performed at other public gardens. UTG is a small (in size and funding) university garden, therefore it would be interesting to see how public gardens of different size, funding, and staff size compare to the responses generated from our participants.

It would be a beneficial inquiry to explore whether or not this program could help larger gardens of those in size and funding. What is the opportunity cost of larger gardens to run this program? It takes a staff position to run the program, but what would be the outcome and volunteer participation? Can this program be implemented into organizations outside of public gardens? Can the thought of ownership and flexibility be intriguing to volunteers of other associations, nonprofits, or institutes? We suggest a study that explores the idea of ownership in such organizations. Finally, an economic impact study of the AAS Volunteer Program on the UTG is recommended as well as for any other public garden implanting this program. It would be invaluable to know the cost of the inputs for this program and value of the outcomes.

Conceptual Model

Throughout this study, we continually kept thinking of the AAS Volunteer Program conceptually. How can we create a model to help other public gardens? While there are many dimensions to the AAS Volunteer Program we believe our conceptual model can help public gardens envision how this type of program can fit into their volunteer programs. This model

(Appendix L) represents the variety of themes with the program from both staff and volunteer perspective, and how it fits in with the overall UTG volunteer program.

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APPENDIX

Appendix A - UT Gardens, Knoxville Adopt-a-Spot Volunteer Program Application and Terms and Conditions Form Page 1

UT Gardens Knoxville

Adopt-a-Spot Program Application

Name of Individual, Organization, or Business _____

_____

Mailing Address _____

City _____ **State** _____ **Zip** _____

Phone _____ **Email** _____

Group Coordinator/Contact (if applicable) _____

Phone_____ **Email** _____

Area in the Gardens you would like to adopt: _____

How many years of gardening experience do you have? _____

We (I) have read and understand all of the program guidelines of this application and will abide by them and any other requirements for participation in the Adopt-a-Spot program.

Print name: _____

Applicant Signature: _____

Date: _____

Appendix B - UT Gardens, Knoxville Adopt-a-Spot Volunteer Program Application and Terms and Conditions Form Page 2

UT Garden's Adopt-a-Spot Program Terms:

Any individual (18 years or older) or community, special interest, business, church or other group may become an Adopt-a-Spot volunteer by adopting an approved area within the UT Gardens Knoxville.

Individuals and groups applying for participation in the program will be required to complete an application, sign an adoption agreement, photography consent and waiver & release forms before work begins in designated area. The UT Gardens Knoxville reserves the right to reject sponsors and to determine the appropriateness of locations for spots that are to be adopted.

The adopting individual(s) or organization(s) commit to maintain their adopted area(s) once every two weeks for six months (March-August, September-February). More than one individual or group may also adopt the same area.

Participants must sign in an out each day to track hours.

Adoptees will have a sign made with their name on it and placed at designated area. If adoptees are unable to fulfill their agreement, their signs will be removed from the space and will become adoptable by other individuals or groups. Continuation of sponsorship from term to term will be based on previous work quality and attendance within the adopted area.

Adoptees wanting to plant in their designated area will need to contact a staff member for approval of plant materials and locations chosen for planting. Pruning certain plants must also be approved by staff.

Participants must attend an initial walkthrough with a staff member prior to the first work day in the adopted area to review safety, maintenance requirements and other guidelines. No adoptee may begin working without having attended an initial walkthrough.

All participants must park in designated UT Gardens volunteer parking area with appropriate parking pass.

No chemical pest control measures, including herbicides and pesticides, may be used by the adoptee anywhere in the UT gardens, unless under direction of staff member.

All work in designated adopted areas will be performed during daylight hours and in good weather conditions. Evening and weekend volunteer opportunities are available, but will be without staff present.

If large task is need, for example, mulching, you can ask for assistance from other volunteers during our regular volunteer sessions (T, TR 9am-12pm).

The adoptee must contact UT Gardens staff if they can't come in for two or more weeks at a time, or if they decide to discontinue the Adopt-a-Spot program for the term.

UT Gardens can, upon request, provide participants with general cleanup and common garden tools, such as rakes, shovels, and other hand tools. Participants may also bring their own tools if they wish.

UT Gardens Staff will monitor the designated areas of adoption, and may change or alter areas without notice to the adoptee.

Appendix C - Institutional Review Board Approval Letter Page 1

THE UNIVERSITY OF TENNESSEE KNOXVILLE

Exp201 New Appl Approval (No Provisos)
December 19, 2018

Alice Kimbrell,
UTIA - UTIA - EXT-Plant Science-EXT

Re: UTK IRB-18-04856-XP
Study Title: Adopt-a-Spot Volunteer Survey and Data Analysis

Dear Alice Kimbrell:

The UTK Institutional Review Board (IRB) reviewed your application for the above referenced project. It determined that your application is eligible for expedited review under 45 CFR 46.110(b)(1), Category 5: Research involving materials (data, documents, records, or specimens) that have been collected, or will be collected solely for nonresearch purposes (such as medical treatment or diagnosis); Category 6: Collection of data from voice, video, digital, or image recordings made for research purposes; and Category 7: Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

The IRB has reviewed these materials and determined that they do comply with proper consideration for the rights and welfare of human subjects and the regulatory requirements for the protection of human subjects. Therefore, this letter constitutes full approval by the IRB of your application (version 1.3) as submitted, including:
Kimbrell.OESParticpantEmail1 - Version 1.0
KimbrellOESParticipantEmailFollowup1 - Version 2.0
KimbrellOESParticipantEmailFollowup2 - Version 3.0
Participant Recruitment Email - Version 1.0
Participant Recruitment EmailFollowup1 - Version 2.0
Participant Recruitment EmailFollowup2 - Version 3.0
Staff Recruitment Email - Version 1.0
Staff Recruitment EmailFollowup1 - Version 2.0
Kimbrell.Interview Questions - Version 1.0
Kimbrell.Demographics - Version 1.0
and the consent forms that have been dated and stamped IRB approved. Approval of this study will be valid from December 19, 2018 to 12/18/2019.

The IRB has determined that the focus group informed consent form complies with the federal privacy regulations

Appendix D - Institutional Review Board Approval Letter Page 2

as specified in 45 CFR 160 and 45 CFR 164. Informed consent for the surveys may be altered, with the cover statement used in lieu of an informed consent interview.

In the event that subjects are to be recruited using solicitation materials, such as brochures, posters, web-based advertisements, etc., these materials must receive prior approval of the IRB. Any revisions in the approved application must also be submitted to and approved by the IRB prior to implementation. In addition, you are responsible for reporting any unanticipated serious adverse events or other problems involving risks to subjects or others in the manner required by the local IRB policy.

Finally, re-approval of your project is required by the IRB in accord with the conditions specified above. You may not continue the research study beyond the time or other limits specified unless you obtain prior written approval of the IRB.

Sincerely,

Colleen P. Gilrane

Colleen P. Gilrane, Ph.D.
Chair

Institutional Review Board | Office of Research & Engagement
1534 White Avenue Knoxville, TN 37996-1529
865-974-7697 865-974-7400 fax irb.utk.edu

Appendix E - Sample Consent Form Page 1

Consent for Research Participation

Determining the Impact of the Adopt-a-Spot Volunteer Program at the University of Tennessee (UT), Knoxville Gardens.

Alice Kimbrell, University of Tennessee, Knoxville Gardens, University of Tennessee, Knoxville
Dr. Andrew Pulte and Dr. Susan Hamilton, Department of Plant Sciences, University of Tennessee, Knoxville

INTRODUCTION:

We are asking you to be in this research study because you are a participant of the UT Gardens Adopt-a-Spot (AAS) volunteer program. You must be age 18 or older to participate in the study. The information in this consent form is to help you decide if you want to be in this research study. Please take your time reading this form and contact the researcher(s) to ask questions if there is anything you do not understand.

PURPOSE OF STUDY:

The purpose of the research study is to determine why Adopt-a-Spot volunteers are participating in the program and if the program has any impact on the participants, and/or the UT Gardens, Knoxville.

YOUR INVOLVEMENT:

If you agree to be in the study, it should take between 45 minutes and 1 hour of your time.

The focus groups will be with 6-11 other participants. The focus group interviews will be administered by Dr. Carrie Stephens and Dr. Christopher Stripling of the Agriculture Education Department at the University of Tennessee, Knoxville. The focus groups will be recorded then transcribed.

Being in this study is up to you. You can say no now or leave the study later. Either way, your decision won't affect your relationship with the researchers or the University of Tennessee.

Even if you decide to be in the study now, you can change your mind and stop at any time. If you decide to stop before the study is completed, please contact Alice Kimbrell at **akimbre1@utk.edu**. If information is collected before your withdrawal, such as the focus group interview recording, your data cannot be withdrawn from the study.

RISKS:

It is possible that someone could find out you were in this study or see your study information, but we believe this risk is small because of the procedures we use to protect your information. These procedures are described later in this form.

BENEFITS:

Your participation may help us to learn more about the impact of the Adopt-a-Spot volunteer program. We hope the knowledge gained from this study will benefit other volunteers and botanical gardens in the future.

CONFIDENTIALITY:

Your identity will be kept confidential to the extent provided by law. When the study is completed, and the data has been analyzed, the information will be destroyed. Your name will not be used in any report. The audio files will be stored through OneDrive and will only be accessible by the research team.

About 30 people will take part in this study. Because of the small number of participants in this study, it is possible that someone could identify you based on the information we collected from you. Participants are instructed to maintain the confidentiality of other focus group members, but there is no guarantee they may do so.

If information from this study is published or presented at scientific meetings, your name and other personal information will not be used.

IRB NUMBER: UTK IRB-18-04856-XP
IRB APPROVAL DATE: 12/19/2018
IRB EXPIRATION DATE: 12/18/2019

Appendix F - Sample Consent Form Page 2

We will make every effort to prevent anyone who is not on the research team from knowing that you gave us information or what information came from you. Although it is unlikely, there are times when others may need to see the information we collect about you. These include:

- People at the University of Tennessee, Knoxville who oversee research to make sure it is conducted properly.
- Government agencies (such as the Office for Human Research Protections in the U.S. Department of Health and Human Services), and others responsible for watching over the safety, effectiveness, and conduct of the research.
- If a law or court requires us to share the information, we would have to follow that law or final court ruling.

COST:

If you agree to be in this study, you will need to pay for the transportation cost to travel to the UT Gardens, Knoxville.

OTHER INFORMATION:

We may need to stop your participation in the study without your consent if you do not follow instructions, you no longer meet the study's eligibility requirements or if the study is stopped for any reason.

If we learn about any new information that may change your mind about being in the study, we will tell you. If that happens, you may be asked to sign a new consent form.

CONTACT INFORMATION:

If you have questions or concerns about this study, or have experienced a research related problem or injury, contact the researchers, Alice Kimbrell at **akimbre1@utk.edu**, Dr. Andrew Pulte at **apulte@utk.edu**, or Dr. Susan Hamilton at **sueham@utk.edu** .

For questions or concerns about your rights or to speak with someone other than the research team about the study, please contact:

Institutional Review Board
The University of Tennessee, Knoxville
1534 White Avenue
Blount Hall, Room 408
Knoxville, TN 37996-1529
Phone: 865-974-7697
Email: **utkirb@utk.edu**

STATEMENT OF CONSENT:

I have read this form and the research study has been explained to me. I have been given the chance to ask questions and my questions have been answered. If I have more questions, I have been told who to contact. By signing this document, I am agreeing to be in this study. I will receive a copy of this document after I sign it.

_____	_____	_____
Name of Adult Participant	Signature of Adult Participant	Date

Researcher Signature (to be completed at time of informed consent)

I have explained the study to the participant and answered all of his/her questions. I believe that he/she understands the information described in this consent form and freely consents to be in the study.

IRB NUMBER: UTK IRB-18-04856-XP
IRB APPROVAL DATE: 12/19/2018
IRB EXPIRATION DATE: 12/18/2019

Appendix G - Sample Consent Form Page 3

Name of Research Team Member	Signature of Research Team Member	Date

IRB NUMBER: UTK IRB-18-04856-XP
IRB APPROVAL DATE: 12/19/2018
IRB EXPIRATION DATE: 12/18/2019

Appendix H - Sample Email to Research Participants

11/02/2018

Re: A Model for an Innovative Volunteer Program at a University Botanical Garden by Alice Kimbrell

Greetings,

You are receiving this email because you are a participant of the Adopt-a-Spot volunteer program at the University of Tennessee (UT) Gardens.

I am conducting research regarding the effects that this program has on the UT Gardens Adopt-a-Spot volunteers, UT Gardens staff, and the UT Gardens volunteer program.

You have been invited to participate in proving feedback about your experience with this program. I will be sending out a link to an online open-ended survey via email to collect data in regard to my study in February 2019. As a participant, you will also be asked questions about your participation in the program and the impact the program may have on yourself and/or the UT Gardens, Knoxville. The survey is estimated to take 10-20 minutes. Participation is completely voluntary, and your answers will be kept anonymous.

If you are interested in participating in this feedback opportunity, or have any questions, please email me at akimbre1@utk.edu

Thank you for your time.

Alice Kimbrell
Plant Science Master's Candidate
University of Tennessee, Knoxville

IRB NUMBER: UTK IRB-18-04856-XP
IRB APPROVAL DATE: 12/19/2018

Appendix I - Demographic Questionnaire

Demographic Questions for Adopt-a-Spot (AAS) Feedback Participants

These questions will go to both focus groups, along with any program participant that wants to provide feedback but cannot/declines to participate in focus group interviews.

1. Please enter your age.

2. What is your gender?
   - Male
   - Female
   - Other (please specify)

3. What is the highest level of education you have completed?
   - High school
   - Some college
   - Completed Bachelor's
   - Some graduate school
   - Completed graduate school
4. Which of the following best describes your employment status?
   - Employed, working 1-19 hours a week
   - Employed, working 20-39 hours a week
   - Employed, working 40+ hours a week
   - Not employed
   - Retired
   - Disabled, not able to work
5. Which of the following best describes your race?
   - White
   - Black or African American
   - Hispanic or Latino
   - Asian
   - American Indian or Alaska Native
   - Native Hawaiian or Other Pacific Islander
   - Other (please specify)
6. Are you a Master Gardener?
   - Yes
   - No

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Appendix J - Transcription Template

Interviewer: (I) name or pseudonym
Interviewee: (R) name

Others present: (II) name

Date: September 8, 2017
Time: 12:15 pm- 1:30 pm
Place: Dr. X's office; Hancock County…and any other relevant information…

Transcription conventions used:

(4.0)	Timed pauses, in seconds
Very	Word stressed or emphasized more than surrounding words
(( ))	Transcriber's description
( )	Word's unclear
[ ]	Researcher's insertion
{Laughs}	Description of what was happening – extra sounds

The names of the programs were typed in *italics*
The interviewer's questions and statements are in **bold**

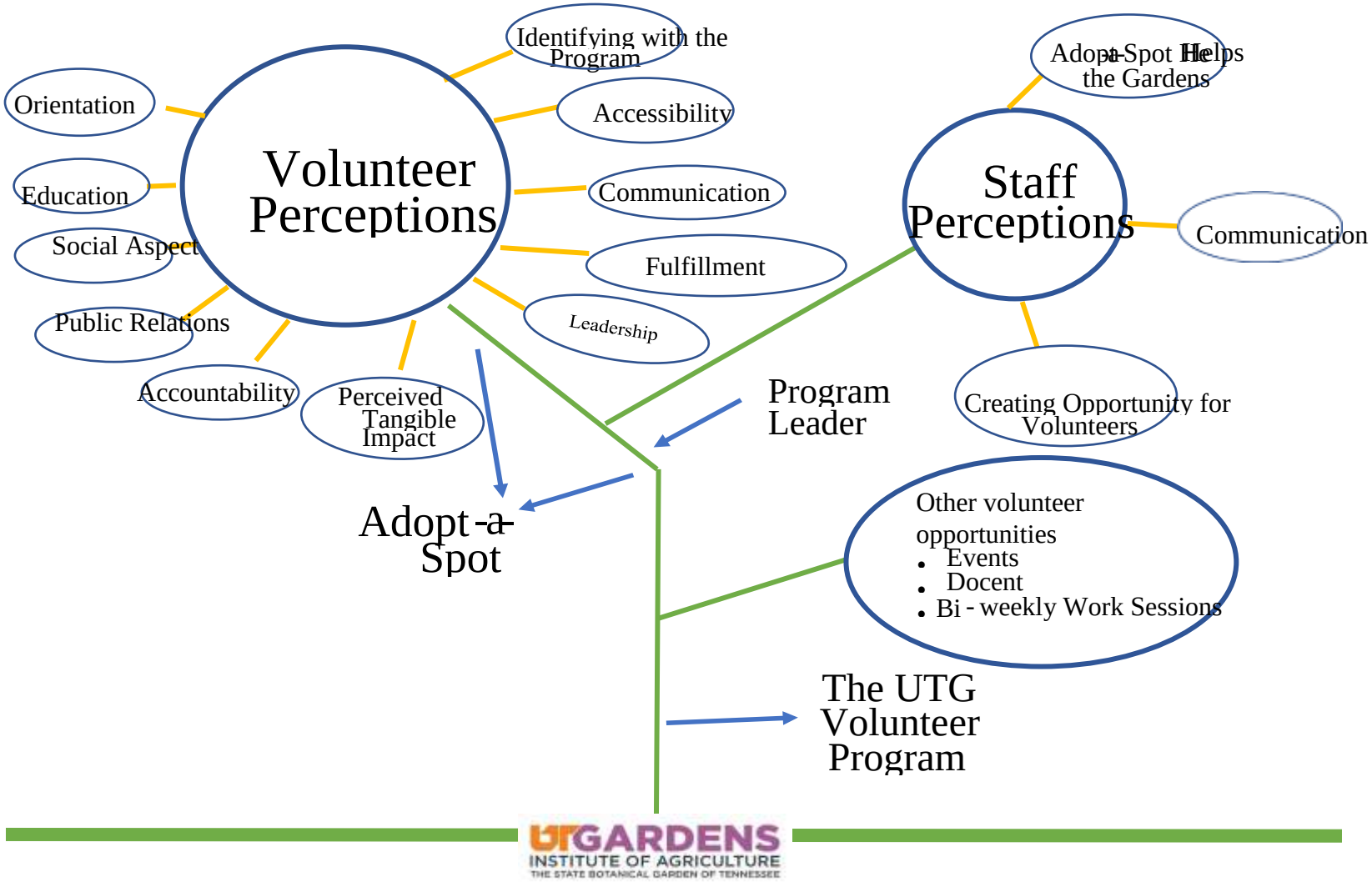
[I didn't wait at all at the front desk upon arrival. I signed my name as a guest to the school and was immediately ushered back to meet the principal. The front desk support, one secretary, was ready for me upon my arrival.]

I: Hey. Thank you so much for sitting down to talk with me today. I really appreciate your time. I know how busy you are since the school year started a week or so ago. Really thanks.

R: Oh, it's my pleasure. I'm so curious to know what transpires here because I'll be doing my own interviews in a year or so. Can't wait to finish this dissertation work. Don't get me wrong, I really like the studies and my cohort and the classes, but I'm tired, and I want to be done.

Appendix K - Adopt-a-Spot Sign

Appendix L - Conceptual Model



VITA

Alice Kimbrell grew up in the mountains of northeast Tennessee and western North Carolina where she spent the majority of her time enjoying the outdoors and gardening with her family. These childhood experiences led her to attend the University of Tennessee to pursue a degree in plant science with a concentration in public horticulture. As an undergraduate, Alice was a public horticulture intern at the University of Tennessee Gardens for over three years.

Upon graduation, she was awarded a horticultural apprenticeship at Yew Dell Botanical Gardens outside of Louisville, Kentucky. Her focus was the kitchen garden area, along with educating garden staff, volunteers and board members about plants. In August 2017, Alice began working at the University of Tennessee Gardens as a staff horticulturist and later the leader and founder of the Adopt-a-Spot Volunteer Program. In August 2018, she started graduate school at the University of Tennessee pursuing a degree in plant science. During her time as a graduate student, she continued to work full-time at the University of Tennessee Gardens to further develop the Adopt-a-Spot Volunteer Program and help with general upkeep of the gardens.

After graduation in December 2019, Alice hopes to continue working with volunteers at public gardens. Additionally, she hopes to become a lecturer at a university or community college and teach adults about plants. Today, Alice enjoys spending time outdoors with her husband Andrew and their dog, Théoden.