

EXPLORING THE IMPACT OF ONLINE TRAINING DESIGN ON
VOLUNTEER MOTIVATION AND INTENTION TO ACT

By

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ABSTRACT

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Prior research on volunteer training suggests that in-person options are the best way to support volunteer skill development and motivation. Until fairly recently, face-to-face training was the only choice for volunteer training beyond individual self-study through books and manuals. Due to lack of resources and an increased accessibility of technology-mediated options, volunteer organizations have begun to adopt fully online and blended approaches borrowed from the field of education with little attention paid to the motivational differences between adult volunteers and students. Little was known about how different training formats and varying levels of synchronicity including face-to-face, self-paced online modules, and blended approaches that include technology and in-person experiences affect volunteer motivation. This study used observations and reflections of volunteers in face-to-face, fully online, and blended environments to explore if and how computer-mediated communication and synchronicity influenced volunteers' sense of connection, confidence to act, and perceived sense of behavioral control. Volunteers in three conditions participated in training experiences focused on cultural awareness and increasing their skills around issues of sensitivity and inclusion. Face-to-face and synchromodal conditions which used interaction with peers and a facilitator showed volunteers experienced richer levels of both relatedness and competence. The opportunity to brainstorm with peers and explore complex scenarios where cultural awareness content was applied influenced volunteers' engagement in the training and had some effect on a volunteer changing his or her behavior relative to the training.

This dissertation is dedicated to all people who doubt themselves
and their ability to accomplish what seems impossible.

In the words of St. Francis of Assisi:

*“Start by doing what’s necessary; then do what’s possible;
and suddenly you are doing the impossible.”*

Stay strong, be brave, and find a community where you belong.

Never give up on your dreams or yourself.

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CHAPTER 1: INTRODUCTION

Many of the United States' biggest service organizations such as 4-H, Big Brothers Big Sisters of America, and the American Red Cross have always relied on dedicated volunteers to meet their service demands. Best practices in volunteer management have historically taken place in person: face-to-face recruitment pitches, supervision and coaching while catching up over coffee, awards offered at recognition ceremonies, and training workshops after work or on weekends. For instance, Minnesota 4-H Youth Development holds an annual in-person training each fall to share important topics for volunteers who work with youth. As resources become increasingly scarce, however, administrators have pushed volunteer managers to re-examine their practices to better utilize increasingly sophisticated and affordable technology to expand capacity.

In the economic downturn of the past decade, these organizations have faced increased financial difficulty and rely now more than ever on volunteers to provide critical services. But fewer staff remain to manage the systems critical to utilizing volunteers and, as a result, volunteers experience weak support and tend to leave their roles (Eisner, Grimm, Maynard & Washburn, 2009). In an environment where technology proliferates, busyness reigns, and resources continue to be scarce, volunteer program managers are increasingly pushed towards technology infused models where individuals can learn on their own time and from any location. Volunteer managers have the role of ensuring that volunteers have the opportunity to progress through the stages of increased responsibility and receive the training and support they need to be successful. According to a 2004 report by the Urban Institute, only a quarter of nonprofits say they offer volunteer training to a large degree, while half say that they offer these

opportunities to some degree. The final quarter offer no volunteer training at all. In fact, approximately one-third of volunteers choose to stop volunteering, which corresponds with an estimated \$38 billion of lost labor, a number which does not even account for the additional expense of the staff time needed to recruit, screen, orient, and train replacement volunteers. Articles on best practices in volunteer retention underscore the importance of training and urge managers to offer more training in both in-person and technology mediated formats (Eisner et. al, 2009). While program evaluation data from Minnesota 4-H Youth Development indicate that training model does not impact educational outcomes, research indicates that training does so much more than simply build the skill sets and knowledge of volunteers.

Wilson (1976) found that new volunteers start with a job of least responsibility and as they develop, take on increasingly greater responsibility. Training and orientation are a volunteer's first substantive opportunity to build a connection with volunteer program administrators; training sets the foundation on which the remainder of their service will be built. Through this experience, volunteers begin to understand the organization in which they are serving, comprehend its policies and vision, and gain skills needed to be successful in their roles. Research on andragogy indicates that adult learners must have the opportunity to understand why something they are learning is important based on their own experiences (Knowles, 1980). Further, they must have some element of choice in their learning and their learning experiences should be applicable to their everyday lives.

Training design that allows volunteers to connect new practices with relevant situations, provides an opportunity to map content to their unique experiences, and is flexible enough to accommodate existing knowledge is most successful. Depending on the medium, this might be established through interactive discussions using scenarios offered by volunteers, sample videos

showing volunteers demonstrating skills, or an unlocked navigation system on an asynchronous module to allow participants to visit only content relevant to their interest or role. Volunteers experience the most satisfaction when they have the opportunity to grow their skills through their work (Gidron, 1983). Training allows them to not only build their knowledge and skills, but also begin to connect with like-minded individuals and establish rapport with the volunteer manager providing support to them. Research indicates that a strong sense of belonging and feeling part of the volunteer community is vital to volunteer retention (Gidron, 1985; Lammers, 1991).

While there are no surveys to provide an accurate count of how many nonprofit organizations currently provide online learning experiences for volunteers, messages from the field show that many organizations are choosing to go in this direction. Not only is it more cost effective but it also fits better within the busy lives of volunteers. Changing trends in volunteerism indicate that individuals are choosing to volunteer for shorter periods of time, are more mobile with less stability in their lives, and are more interested in volunteer experiences that align with their availability and skills-based interests (McKee & McKee, 2012). Promising practices for providing volunteer development in online settings have emerged from the field of education or human resources. At present, little to no research exists that describes the experiences of training volunteers in online settings or that differentiates the motivations of students and adult volunteers in virtual environments.

Theoretical Framework

At present, no research exists to connect computer-mediated training and support for volunteers as it relates to motivation, retention, or intention to act on behavioral change. As a result, a qualitative study is needed to fully understand how volunteers frame their training experiences and are inspired to act upon them to change their practice. Creswell posited that

qualitative research is necessary when the goal is to achieve, to the best of one's ability, an understanding or deep awareness of a particular social setting (1998). Research from the field of education show that online and synchromodal learning experiences can be equally engaging for students and provide similar levels of learning (Butz, Stupinsky, Peterson, & Majerus, 2014), and initial evaluation data from the field of volunteer administration shows promising results. However, researchers have not directly observed volunteers in different computer-mediated environments nor asked about their reactions, feelings and experiences following the experience. This data is needed to better understand what happens during volunteer training to support volunteer motivation and intention to change behavior as a result of training. While there is no existing literature to fully connect the fields of volunteer motivation, computer-mediated learning, and behavioral change, three existing theoretical frameworks inform this study: Self Determination Theory, the Theory of Planned Behavior, and Adult Learning Theory. They are outlined in sections to follow.

A helpful lens through which to understand volunteer motivation is Deci and Ryan's (2000) Self Determination Theory (SDT). SDT posits that individuals have three core needs that are universal: competence, relatedness, and autonomy. Competence is defined as a person's perceived ability and effectiveness related to a particular skill set. Humans' tendency towards competence leads them to move beyond skills necessary for survival; rather, they are inspired to learn for the satisfaction of learning something new and being more effective (Ryan & Deci, 2000b). Relatedness refers to having a sense of connectedness with others, to belonging to a community, and to caring for and being cared for by others (Baumeister & Leary, 1995). Mutual trust between individuals is critical for building strong relationships; a willingness to be vulnerable and open about oneself is critical to establishing trust (Brown, 2012). People have a

tendency to integrate themselves with others; as such, they want to be seen as an integral part of a relationship or group and be accepted. Ryan and Deci (2000a) described relatedness as more closely connected to the desire for a communal union with other people. Autonomy is best described as the ability to decide one's own behavior and make one's own decisions.

Autonomous behavior takes the form of actions that embody self-expression, personal initiative, and agency. Ryan and Deci (2000a) noted that while autonomy is often equated with independence, it is quite possible for an individual to autonomously act in a manner requested by others as long as that individual actively chooses to do so.

In addition to understanding the psychological needs that support motivation, this study also sought to understand how training design impacts volunteers' desire and intention to integrate the knowledge and skills gained during training into their volunteer roles. SDT helps us to better understand why individuals may continue in their roles; however, SDT does not explain or predict whether or not that motivation to continue to serve will translate into motivation to improve their volunteer practice. For instance, consider a volunteer who must attend a required training event but has the choice of a face-to-face offering, a fully online module that can be done at his or her convenience, or connecting virtually to a face-to-face option in another location. Though each training model may support an individual's need for competence and relatedness and therefore sustain their motivation, continued motivation to serve does not necessarily translate into a motivation to integrate new knowledge from training into one's practice. While the use of SDT in this study examined motivational support, satisfaction of psychological needs was insufficient in predicting specific behavior across different contexts. The Theory of Planned Behavior (Ajzen, 1991) goes beyond motivation to include individual ability to control one's behavior including access to resources and opportunities as well as the

intention to act. Intention to act is predicted by an individual's perception that he or she has control over his or her behavior, the subjective norms associated with a behavior, and that individual's attitude toward the behavior. Believing a behavior can be accomplished with little difficulty and few obstacles while also personally valuing the behavior in question and having a supportive social network leads to a greater intention to act.

Attitude, subjective norms, and perceived control are three direct factors influencing an individual's intention to act. The direct determinants are influenced by indirect determinants drawn from Expectancy Value Theory (Fishbein & Ajzen, 1975). Expectancy Value Theory suggests that an individual's attitudes are developed and revised according to his or her calculation about values and beliefs. Wigfield and Eccles (2000) explained that beliefs about ability and expectations for success are essential to Expectancy Value Theory including importance, intrinsic value, how useful the task is perceived to be, and individual personal cost. Expectancy Value Theory is widely noted in the educational psychology literature (Brophy, 2008; Graham, Taylor, & Hudley, 1998; Wigfield & Eccles, 2000). The Theory of Planned Behavior extends this work into social psychology by adding in the notion of subjective norms. According to Fishbein & Ajzen (1975), a person's subjective norm "is his belief that important others think he or she should or should not perform a given behavior. A belief of this kind can be attacked either by providing information that most important others hold a given expectation or indirectly by changing some other beliefs" (p. 401). Expectancy Value Theory focuses on the individual's value of the task, while TPB includes the social influence or pressure from other important people. For instance, if a volunteer holds his relationship with his volunteer colleagues in high esteem and it appears to be important to them to integrate new knowledge gained at a training into his service, the Theory of Planned Behavior would predict that this additional

influence from important others would lead to a greater likelihood that he would change his practice.

The theories of adult education have guided the development of programming with adult volunteers and audiences across the Cooperative Extension System (Franz, 2007). Malcom Knowles' argued that adults and youth learn differently; his work has been foundational to how Extension has developed and presented learning opportunities for adults (1973). Adult learners need to know why what they are learning is necessary and have a sense of control in when and how they learn. They seek the opportunities to integrate their new knowledge into earlier experiences and want assurance that what they are learning will be relevant to them in the near future. Adult learners want to practice solving problems in real-world settings and learn best when they are more intrinsically motivated (Knowles, 1973).

Extension professionals are most comfortable delivering high quality learning for adults in face-to-face formats because they have been doing it the longest; further, staff feel most comfortable when they can visibly see the learners in front of them to use cues to assess their engagement and understanding of the content. Distance learning technology has opened up a new world of opportunity to serve the busy schedules of adult volunteers better; however, technology disrupts these foundational practices. As training for adult volunteers within Extension has ventured beyond the face-to-face classroom, educators have faced some challenges in continuing to meet the needs of adult learners through technology. Online learning for adults is most engaging when three types of interaction are present: peer-to-peer, learner-to-instructor, and learner-to-content (Jung, Choi, Lim, & Leem, 2002; Moore, 1993). Much of the literature for adult learners indicates that discussion and interaction are essential to building the knowledge of adults and persisting in the learning environment. However, some studies have found that self-

paced modules without interaction can also be effective at building knowledge that contributes to behavioral change. (Blondy, 2007; Cercone, 2008; Christensen, Griffiths, & Korten, 2002; Rovai, 2001, 2002; Russell, Kleinman, Carey, & Douglas, 2009; Ruelhman, Karoly, & Enders, 2012). Thus it remains open whether or not interaction between peers and with an instructor is essential to the acquisition of knowledge and skills for adult volunteers.

Problem Statement

As outlined above, both Self Determination Theory and the Theory of Planned Behavior have been applied with varying consistency and in various contexts in computer-mediated environments. Online training may save time and resources in the short term but may potentially come with the cost of increased rate of turnover due to lack of connection developed through face-to-face interaction. When mediated through technology, the training experience of individuals fundamentally changes. Further, the contexts (e.g., completing a constructive controversy assignment using instant messaging in an online course) are socially and motivationally different from the context of computer-mediated volunteer training. As previously noted, volunteer motivation adds an additional complexity due to the context of helping others. While the extant literature indicates the importance of competence, autonomy, and relatedness in supporting volunteer motivation and the importance of training in satisfying those needs, it was unclear if training experiences were qualitatively similar enough that theory will apply similarly in all contexts. Based on existing studies (Roseth, Saltarelli, & Glass, 2011; Saltarelli & Roseth, 2014), a lack of synchronicity can cause significant declines in relatedness and, ultimately, motivation. The Theory of Planned Behavior makes explicit the importance of subjective norms in behavioral intentions; significant differences in peer interactions could potentially lead to contrasting experiences. This study assessed the applicability of Self Determination Theory, the

Theory of Planned Behavior, and Adult Learning Theory within the context of computer-mediated volunteer training.

Though face-to-face training may be increasingly difficult to achieve, volunteers still need access to meaningful learning experiences and the opportunity to develop positive relationships with other volunteers and program staff. Beyond face-to-face interactions, Minnesota 4-H Youth Development has explored different types of technology-mediated approaches with volunteers which offer various affordances and constraints. These approaches are rooted in best practices in supporting the motivation of online learners. Three methodologies for training volunteers as well as their affordances and constraints are outlined in the table below. The first two are relatively common and established methods. The third, synchromodal, is defined by Bell, Sawaya, and Cain (2014) as “classes in which online and face-to-face students interact during shared synchronous sessions” (p. 68). Synchromodal learning transcends other models such as hybrid or blended where aspects of both in-person and virtual learning take place. Rather, this model simultaneously engages learners who may be either face-to-face or virtual; as they describe it, in the “middle space” (p. 81).

Table 1

Affordances and Constraints of Different Volunteer Training Approaches

Approach	Affordances	Constraints
Type I: Face-to-face (Fall Volunteer Training)	Felt to establish strong interpersonal connections between staff and volunteers (Gidron, 1983) Easily connects volunteers with one another for group learning and sharing Builds the relationship with staff and the organization Connects volunteers to local experts	Costly in terms of time and resources needed Limited to number of participants who can fit in the space and amount of people who can be accommodated by the instructor

Table 1 (cont'd)

Type II: Fully online, asynchronous (Creating a Welcoming Environment)	Volunteers can participate from anywhere, 24/7 Relatively inexpensive to post online Expertise can be recorded and shared for posterity Can be transferred to DVD for access offline Can be made available to as many individuals as possible	Lack of interaction with others has shown a decrease in persistence (Rovai & Wighting, 2005) Labor intensive for staff to create high-quality training videos Inaccessible for those without Internet
Type III; Synchromodal (North Central Region Volunteer e- Forum)	Offers high levels of immediacy and social presence in multiple modalities which can support belonging (Swan, 2002) If technology fails, local site facilitator can continue the session with available materials Connects volunteers to a network of local and/or regional/national experts	Can be challenging to schedule because it requires synchronicity locally and across distance Inaccessible for those without Internet

As shown by Table 1, different approaches to volunteer training offer different affordances and constraints for volunteer's development of skills needed to do one's job successfully, a sense of connection to the program and its members, feeling as though the experience has meaning, and a seamless management of the program, which are key predictors of volunteer retention (Eisner et al., 2009; Gidron, 1985; Lammers, 1991; Prouteau & Wolff, 2008). It would seem that the simplest answer to this "any time, any place" learning is to offer pre-recorded asynchronous learning modules for volunteers (Type II above). While asynchronous online modules are the most cost-effective and least laborious approach to volunteer development, initial reports from Minnesota 4-H show that though volunteers say they want opportunities offered asynchronously; they do not choose to take advantage of them to the extent that one would expect. Program evaluation data found that 60% of individuals completing asynchronous training modules viewed them as they were designed. The remaining 40% of volunteers whose records reflect

asynchronous module completion did so during face-to-face viewing sessions where the online module was watched like a pre-recorded training with the addition of discussion. More needed to be learned about the discrepancy between what volunteers say they want and what they actually enjoy and are willing to complete.

In my role as the State Program Director for Volunteer Systems at the University of Minnesota Extension, we engage adult volunteers in a variety of training models including fully face-to-face, fully online asynchronous, and synchromodal. These different models are meant to meet the different needs of adult volunteers in terms of available time, interest in the subject, and volunteer role. After each training experience, volunteers complete a survey to rate whether or not the training is successful in meeting learning outcomes and providing meaningful opportunities for volunteers to gain skills needed to be successful in their roles. Initial comparison across the three conditions found comparable results. Details are outlined below in Table 2.

Table 2

Comparison of Training Types Across Conditions

Training Type	Year	Results
<i>Face-to-face</i> (Type I) Topic: Making 4-H more fun Length of training: 90 minutes	2014	90% of volunteers believed the training met the stated learning objectives 97% of volunteers found the content relevant in their role
<i>Fully online, asynchronous</i> (Type II) Topic: Varied – one of eight modules selected Length of training: 15-30 minutes	2014	Over 90% of volunteers shared they gained useable knowledge and skills in the module
<i>Synchromodal</i> (Type III) Topic: Engaging 4-H parents Length of training: 90 minutes	2011	99% of participants believed the information would help them fulfill their role as a 4-H volunteer

The three training models compared above are different in important ways. Not only did the subject matter vary, but length and model of training are different as well. The previous table is useful not because it provides a comparison of three equal experiences; rather, it is useful in telling a story about volunteer training. Volunteers are hungry for training and validate the belief that technology-mediated approaches can equally meet educational outcomes found in face-to-face settings.

Program evaluation data suggested that all three models met the intended learning objectives, provide resources, and build skills that volunteers can implement within their 4-H clubs. While the data showed similar results for educational outcomes, it was unclear how the synchronicity and technology affected volunteer motivation. Further data was needed to better understand how volunteers experience these training models in terms of supporting competence and relatedness. Additional conversation was also needed to understand the role of environment in a volunteer's intent to change his or her behavior by integrating training content into his or her service practice. Before statistical comparisons could be drawn between training models, it was necessary to describe how volunteer experiences within training conditions differed in both learning and motivational outcomes.

Purpose of Study

The purpose of this study was to examine the experiences of volunteers in these training models beyond the initial evaluation results. Volunteers in face-to-face, synchromodal, and fully online conditions were asked to describe their level of engagement during training, how well the training met their relatedness and competence needs, and gauge their intentions to change their behavior based on new knowledge. Follow up interviews were conducted after one month to determine whether or not volunteers followed through with their planned behavioral change.

This study aimed to both generate testable hypotheses about volunteers' experience receiving training in different modes of delivery as well as practical guidance for 4-H staff charged with providing volunteer training around the country.

Research Questions

Given the evaluation reports from the various training models discussed above, one could assume that the learning experiences of volunteers are the same across training model. While these reports indicate that volunteers confirm that the content was relevant and useful, previously described research indicates that the knowledge development is only one goal of several when asking volunteers to participate in training. Training also develops a sense of connection between the volunteer and the volunteer manager, the volunteer and the organization, and the volunteers themselves. Previous evaluations did not ask participants to describe their experiences, especially the motivational aspects of those experiences as outlined in Self Determination Theory. Rather, they were focused on educational outcomes.

Further, volunteers who completed previous evaluations were not given the opportunity to provide in-depth insight about their experiences. Surface level questions focused on whether or not they enjoyed the learning experience or if the learning outcomes were met. The evaluations did not focus on whether or not individuals planned to or actually implemented any changes to their practice as a result of the training. It is unclear if there are qualitative differences between training conditions in supporting factors related to prosocial motivation including a sense of connection to the organization or in what volunteers do with the learning in their roles after training is over. The study used the constructs of the Theory of Planned Behavior to explore the connection between training experience and motivation and volunteers' planned and actual work subsequent to the training. This study explored the following questions:

RQ1: How do volunteers in different technology-mediated settings describe aspects of their training experience that relate to basic need satisfaction (autonomy, competency, and relatedness), such as their engagement in the training, felt relationship to organization and other volunteers, their sense of success as a volunteer, and their specific learning from the training?

By asking volunteers in face-to-face, fully online asynchronous, and synchromodal conditions to describe their experiences, the environmental factors that contributed to favorable or undesirable conditions became clear. Through interview responses and observations, volunteers mapped how mode of delivery shaped their experiences relative to relatedness, competence, and autonomy.

The Theory of Planned Behavior states that subjective norms, attitude, and perceived behavioral controls are essential elements in predicted successful behavioral change. The second research question focused on how the training orients volunteers to future action in their service area. Volunteer managers provide training to adult learners for a variety of reasons, but perhaps most of all to help them build the skills needed to be successful in their roles. In addition to understanding the nature of their motivation in training, it was equally important to understand how (if at all) their motivation orients them to action in their volunteer work—that is, how they hope to use their new knowledge and skills in their volunteer roles.

RQ2: How do volunteers in different conditions describe their goals for themselves, their confidence to integrate new knowledge into their work, and the support they perceive/expect to do so?

Volunteers may have the best intentions to incorporate new practices into their roles after training but may get sidetracked or change their minds when it comes to actual implementation. Nonprofit organizations train volunteers for a number of reasons, including helping them to feel

more connected and supported and developing their knowledge and skills around a particular subject area. The first research question asks how the training experience supported a volunteer's motivation, while the second examines how the training experience translated into action. The third research question focuses on how motivation related to volunteer's intention to change their behavior. The purpose of this question was to understand factors contributing to volunteers' follow-through (or not) in making changes in their volunteer work based on their experience of the cultural awareness training. The final research question in this study was:

RQ3: When they revisit their previous plans for action one month later, how do volunteers in different conditions describe what they have done (or not done), the real or perceived barriers to their action, and their real or perceived successes?

CHAPTER 2: REVIEW OF LITERATURE

As described in previous sections, research indicates that training does so much more for volunteers beyond preparing them for their roles. Not only does it give them knowledge and skills needed to achieve their duties, but it also builds relationships with other volunteers and program staff vital to their sustained motivation. To date, existing research on training's role in supporting motivation has focused only on face-to-face contexts. As detailed earlier, Self Determination Theory (Deci & Ryan, 2000) provides a theoretical basis for understanding the basic psychological needs that must be supported in order for an individual to remain motivated. Ajzen's Theory of Planned Behavior (1991) lists the requisite factors leading to individuals following through on intentional behavioral changes. It is important to note that these theories have, to date, only been applied to volunteerism within context of in-person situations. As detailed by Walther (2009), "boundary conditions stipulate the contextual conditions in which different theoretical chains-of-events are expected to occur. Boundary specifications will help us understand when one theoretical process applies, or when a different one applies, or even [. . .] precisely when communicators shift from one type of process to another" (p. 748). That is to say, it was unclear the application of Self Determination Theory and the Theory of Planned Behavior apply within the context of computer-mediated volunteer training. The work of Walther called us to determine the circumstances under which technology mediates certain outcomes and processes. The essential premise of this study was to better understand if volunteers' descriptions of psychological need support and intention to follow through on behavioral changes are conceptually similar or different depending on the context of technology mediation and synchronicity.

Media richness theory and media synchronicity theory (Daft & Lengel, 1986; Maruping & Agarwal, 2004) are two theories which underscore the importance of theoretical boundary conditions and the need for further descriptive and empirical study. Media richness theory posits that the more opportunities a medium provides to reduce ambiguity and increase communication between two or more individuals, the richer and more similar to face-to-face interaction it is. Similar to media richness theory, media synchronicity theory tries to balance the communication goal with the affordances of the medium. Two key tenets of media synchronicity theory are conveyance and convergence; that is, conveyance is the sharing of information and convergence is the creation of a shared meaning within the computer-mediated communication. One may assume that a volunteer training with greater media richness and synchronicity would inspire greater feelings of social support and trust between volunteers and staff and result in volunteers feeling more prepared for their role. However, this is an assumption and further research is needed in order to begin to understand if different models of volunteer trainings align similarly with the chosen theoretical frameworks.

As outlined in Chapter 1, SDT is a theory of motivation comprised of three factors: relatedness, competence, and autonomy. The more satisfied an individual feels these basic needs are, the greater degree their intrinsic level of motivation. SDT has been applied in a variety of contexts; for the purpose of this literature review, I examined its application to both volunteer engagement and online environments.

Within the SDT literature, competence satisfaction is described predominantly as self-efficacy (Ryan & Deci, 2000b). Competence is satisfied if an individual believes in his or her own knowledge, skills, and ability to be successful at a given task. Autonomy is best described as the ability to decide one's own behavior and make one's own decisions. Autonomous

behavior takes the form of actions that embody self-expression, personal initiative, and agency. Ryan and Deci (2000a) noted that while autonomy is often equated with independence, it is quite possible for an individual to autonomously act in a manner requested by others as long as that individual actively chooses to do so. Research has found that autonomy support and autonomy orientation mediate prosocial motivation (Gagné, 2003; Millette & Gagné, 2008). Weinstein and Ryan (2010) found that autonomous opportunities to engage in prosocial motivation not only improved the well-being of the volunteer but also provided the clients receiving help with a more positive experience.

Within the volunteerism literature, support for autonomy and competence are often lumped together. For instance, Gidron (1983) found that volunteers found the most satisfaction when provided with meaningful work that allowed them to grow their skills through tasks that were challenging and utilized their existing competencies. His study of volunteers who indicated satisfaction with their roles revealed that factors relating directly to a volunteer's assigned task accounted for 42% of the overall variance in satisfaction: volunteers needed to perceive their work as interesting, the work reflected use of their existing skill set, clients receiving service indicated positive change, and obstacles were removed. Interestingly, the opportunity to work independently and be responsible for outcomes was also included in Gidron's measure of the 'task itself' being rewarding (as compared to context being rewarding). This encompasses both competence as well as autonomy. A later study by Gidron (1985) revealed similar findings. In identifying predictors of retention of volunteers in the service sector, those pertaining to content were more apparent than those related to the situational context of the volunteer's work: "It seems that it is the task itself, the actual work that the volunteer is doing and the opportunity through this work to express himself, that keeps him on his job" (p. 13). Within the volunteer

literature, competence is described as volunteers possessing the information and skill set needed to be successful in their role. Volunteer managers typically help them gain this knowledge and competency through training and orientation.

For those not familiar with the research and practice of volunteer management, one may easily assume that volunteer training is solely about providing the knowledge and building the skills needed to be successful in one's role. While skill and knowledge development are essential tasks involved in training, so too is the development of relationships between volunteers and their managers conducting the training. It is during this volunteer training where volunteers begin to see their manager as someone who not only oversees the structure in which they are volunteering but also as someone who is there to provide support and recognition in their role. Volunteers look for opportunities to help them make new friends and build their social networks (Proteau & Wolff, 2008). Additionally, volunteer retention is directly related to the ongoing prospect of positive interactions and connection to clients, other volunteers, and supervising staff. Lammers (1991) found that strong teamwork, team building, and collaborative problem solving contributed positively to volunteer retention. Volunteer friendship within programs better facilitates how well they perform their assignments (Gidron, 1985). Similarly, several studies found that being deeply enmeshed within the social network of the volunteer experience contributed positively to volunteer retention (Dean & Goodlad, 1998; Knapp & Smith, 1995; Stebbins, 1996).

As I found in my research practicum, the ability to be vulnerable and freely process the more difficult or less rewarding aspects of their volunteer service with someone in a position to help or provide encouragement is essential to volunteer retention. Keeping a volunteer through the recruitment, screening, orientation, training, and placement experience is labor- and cost-

intensive for volunteer programs; therefore, retaining the volunteers who make it through all of the steps occurring prior to placement is critical for a balanced return on investment. Volunteers need both competence (described as knowledge and skills) and relatedness (positive relationships within the program) to feel as though their experience has been a positive one. Training is one way of accomplishing this task. The development of competence may well be equal across all three proposed models; however, the ability to establish meaningful human connection may not be.

In addition to serving as a useful framework for understanding volunteer motivation and retention, SDT helps to conceptualize effective online learning environments. Research has found that competency, relatedness, and autonomy influence online learner motivation and learning outcomes. Sim, Cheung, and Hew (2011) examined graduate students' motivation to log in, read, and post in an online discussion forum through the lens of SDT. Findings indicated that student motivation shifted from external regulation to internal regulation as the semester progressed. Sim et al., (2011) found that students' progress on the SDT continuum from extrinsic motivation towards intrinsic and believe this to be true because students realize what is to be gained through the reflection opportunities of a discussion board. LaPointe and Reisetter (2008) utilized SDT to better understand the role of a virtual community in student learning, focusing on the belongingness element of SDT within online learning communities. Quantitative findings indicated that students placed a high value on interacting with the *instructor* online; however, students did not place an equally high value on peer-to-peer interactions. Chen, Jang, and Branch (2010) found that SDT helped to explain the persistence of online students in a special education degree program. The authors found that perceived autonomy was the most significant factor that predicted students' intrinsic and extrinsic motivation; alternately, perceived ability served as a

salient predictor of amotivation. That is, a lack of ability to effectively navigate the learning management system and technology of the online learning environment negatively impacted student motivation. Furthermore, students' perceived affiliation was the second most salient factor that positively predicted intrinsic motivation. When students felt a higher sense of social and instructor presence within the learning community, they were more likely to indicate that they were intrinsically motivated.

SDT applies in virtual environments, as shown by the previously described studies. It does not, however, always hold true. Alternately, some research has shown that the boundary condition of computer-mediated communication can produce different results. In a 2014 study, Saltarelli and Roseth compared cooperative behaviors of students through the use of a pedagogical technique called constructive controversy in face-to-face and online asynchronous and synchronous environments. Those students in more media rich (i.e., face-to-face and synchronous) conditions experienced increased cooperation, motivation, achievement, and feelings of acceptance. Those individuals in asynchronous environments experienced greater feelings of competition and conflict and therefore decreased motivation and achievement. Interestingly, when students in various conditions experienced mild rejection, outcomes were consistent. Results of this study show that, in the context of the constructive controversy activity where cooperation was critical to successful outcomes, synchronicity was critical to belonging and therefore motivation. Even the additional component of minor rebuking across conditions did not offset the damage of asynchronicity. Similarly, an earlier study by Roseth, Saltarelli, and Glass (2011) found that asynchronous learning mediated declines in motivation and cooperation during constructive controversy activities. In this experiment, students completed the activity through various media including face-to-face, video, audio, and text, testing the boundaries of

media richness theory. In the end, however, only synchronicity proved critical to sustained motivation and achievement.

As outlined in the previous chapter, TPB indicates that an individual is more likely to change his or her behavior when the following three criteria are met: First, the individual must believe the change is important; second, the individual must feel that the change is important to other individuals whose acceptance and opinions matter; and finally, the individual needs to feel capable of making the change. TPB has been applied in a variety of contexts; for the purpose of this literature review, I examined its application to both volunteer engagement and online environments.

The Theory of Planned Behavior has commonly been used to bring to light what motivates individuals to volunteer. Okun and Sloane (2002) found that college students' intent to volunteer was consistent with TPB, while Greenslade and White (2005) found that TPB was helpful in predicting volunteerism behavior of older adults. Other research articles examining volunteer behavior utilized TPB and found it a helpful framework (Harrison, 1995; Hidalgo & Moreno, 2002; Vecina, Chacon, Sueiro, & Barron, 2012; Warburton & Terry, 2000). TPB functions well as a companion to Self Determination Theory because its basic tenets are similar. Subjective norms points to the influence of peer relationships, just as relatedness is highlights the importance of belonging in social groups. Intention to act speaks to competence, as both are about the individual's confidence in the behavioral action as well as his or her access to resources. Finally, control speaks to an individual's choice to perform a given behavior; that is, his or her sense of agency to act autonomously. SDT posits that self-determination exists on a continuum. Within this continuum, there are three types of motivation: amotivation, extrinsic motivation, and intrinsic motivation. Amotivation is understood as the lack of desire or intent to

act. Deci and Ryan (2000) posited that extrinsic motivation, defined as doing something because it will ultimately lead to a reward, is a less self-determined kind of motivation. Alternately, intrinsic motivation is understood as the most self-determined form of motivation because it is rooted in the desire to act because that action brings joy, growth, or pleasure.

Each type of motivation is further categorized by the level at which an individual regulates that behavior. Amotivation is non-regulated, while intrinsic motivation is fully intrinsically regulated. There are four stages of extrinsic motivation: (a) external regulation, (b) introjected regulation, (c) identified regulation, and (d) integrated regulation. Within the confines of external regulation, an individual responds based on a desire to avoid punishment or obtain rewards. Introjected regulation causes individuals to internalize motives for tasks, forcing them to act out of guilt or anxiety. In identified regulation, an individual views the tasks as personally important while still being ultimately motivated by external rewards. Finally, integrated regulation causes an individual to integrate information related to the task into his or her self-schema (Deci & Ryan, 2000). Integrated regulation is the most autonomous form of extrinsic motivation and is the result of personally selected goals, values, and beliefs being assimilated into the self. Individuals do not necessarily move across the self-determination continuum in a linear fashion; rather, people move through various forms of regulation depending on the environment and their personal histories. In trying to place behavioral change within the context of sustained motivation to volunteer, The Theory of Planned Behavior's focus on attitude, subjective norms, and perception of control connects with Deci and Ryan's description of self-determined motivation as existing on a spectrum. This includes the desire to challenge oneself, gain social rewards, and consider the likelihood of successfully changing one's behavior.

Similar to Self Determination Theory, the Theory of Planned behavior has been applied with varying consistency in computer-mediated environments. In a study on the readiness of college students to utilize mobile devices in education, Cheon, Lee, Crooks, and Song (2012) found that TPB accurately predicted the intention of college students to use mobile devices through the factors of attitude, subjective norms, and behavioral control. Results indicated that all three were important, though behavioral control was an especially salient predictor (particularly in the form of self-efficacy) and subjective norms was somewhat weaker. Similarly, Lu, Zhou, and Wang (2009) found that subjective norms, perceived behavioral control, and attitude all predicted the planned behavioral intentions of Chinese citizens to engage in electronic instant messenger use. Follow up surveys indicated that those users who had high levels of behavioral intentions were more likely to actually use the tool for communication. Interestingly, perceived behavioral control had no direct effect on actual behavior. Finally, in a study of cyberloafing behaviors in the workplace, Askew et al., (2014) found that social (descriptive) norms, attitudes, and the ability to hide (e.g., control) one's cyberloafing behaviors accounted for 32% and 37% of the variance in two different models examining computer-based slacking in the workplace. The authors found that cyberloafing was a form of withdrawal behavior, noting empirical connections to other negative workplace indicators like absenteeism, tardiness, and wasting time. When considering the subjective norms from the prescriptive (that is, what people think they should do) and the descriptive (what individuals think they can get away with) perspectives, individuals cyberloaf to the degree that they think no one will notice their behavior and to the extent that they think that behavior will be approved by their peers.

Not all studies found TPB to apply consistently within the confines of computer-mediated environments, however. Carswell and Venkatesh (2002) found that both attitude and subjective

norms (but not perceived behavioral control) were significant predictors of how accepting students were of asynchronous environments for learning including involvement in the course shell, engagement in the course, and use of synchronous media. When looking at future use outcomes, only attitude was a significant predictor of future intention to choose an asynchronous learning environment. How a student responds to the use of technology was highly influential in this study. Baker and White (2010) found that TPB predicted both the intention and the predicted behavior of adolescents to use social networking sites. Together, all three TPB variables accounted for 35% of the variance in the regression model with perceived behavioral control and attitude coming forward as significant. However, once the researchers differentiated between subjective norms and group norms, subjective norms were no longer significant. Group norms are more focused on making explicit the differences between those who are within the group and those who are outside of it.

As the largest provider of nonformal adult learning, the Cooperative Extension Service utilizes principles of adult education theories to guide the development of its programming with adult volunteers (Franz, 2007). Malcom Knowles' (1973) seminal work on the differences between the needs of youth and adult learners has directed the work of Extension Educators since its onset. Knowles' work posits that educational opportunities for adults must incorporate the following: (a) a clear rationale for why the content they are learning is necessary, (b) the opportunity to direct and be responsible for their own learning, (c) the chance to integrate their new knowledge into the context of their past experiences, (d) a clear opportunity to use the information in their present circumstances rather than some distant future, (e) problem-based learning where adults may practice arriving at solutions for real-life encounters they may face, and (f) the understanding that adults learn best when training addresses more intrinsic factors.

Extension professionals employ a variety of techniques beyond lecture to address Knowles' assumptions, including group discussion, problem-solving, case methods, simulation exercises, games, and role-play (Ota, DiCarlo, Burts, Laird, & Gio, 2006). These techniques assume that adult learners are in a face-to-face environment and rely on peer-to-peer and learner-to-instructor interaction to fully achieve their objectives.

As training for adult volunteers within Extension has ventured beyond the face-to-face classroom, Educators have faced some challenges in continuing to meet the needs of adult learners through technology. To some extent, asynchronous online training modules fall well within the context of the needs of adult learners; individuals can access them when the information is needed and determine when they will learn. Skilled instructional designers and evolving authoring tools can further meet adults' needs by presenting problem-based learning opportunities within the module, providing real-world examples and solutions to improve their practice, and building upon their previous knowledge. Nonetheless, without the opportunity to build in interaction with an expert or with peers, asynchronous online learning misses the opportunity for deep learning created by more experiential, interactive methods. Research indicates that adult learners experience the most engagement when three types of interaction are present in the online learning environment: peer-to-peer, learner-to-instructor, and learner-to-content (Jung, et al., 2002; Moore, 1993). When designing online education for adult learning environments, best practice indicates the importance of having the opportunity to discuss learning objectives with peer groups, receive feedback from the instructor, engage in a variety of interactive simulations that provide for greater levels of application, and choose assignments based on the learner's personal goals (Cercione, 2008). Further, research indicates that learners

who feel a strong sense of community in asynchronous learning networks are more likely to persist (Blondy, 2007; Rovai, 2000, 2002).

Despite the majority of research indicating that interactive asynchronous learning networks provide a more engaging environment for adult learners, some contrasting studies show that self-paced, non-interactive formats can be equally motivating for adults. In a study comparing a cohort model with a self-paced one, Russell, Kleinman, Carey, and Douglas (2009) found no significant differences in the satisfaction, learning, and persistence of mathematics teachers in an online professional development course. They argue that individuals may be motivated without interaction if the instructor carefully selects quality reading assignments and highly engaging activities. Similarly, self-paced online learning modules have been successful at influencing behavioral change in the context of health (Christensen et al., 2002; Ruelhman et al., 2012). Thus, interactivity may be more of a “nice but not necessary” component of designing online learning opportunities for busy adults who may only have a small window of time to dedicate to develop the skills needed to improve their volunteer work.

CHAPTER 3: METHOD

I conducted qualitative interviews with 30 4-H volunteers in Minnesota who participated in at least one in-person and one technology-mediated training models offered to understand how their learning experience affected their sense of connection to the program and their knowledge and skills in their role. Additionally, I observed volunteers in different training models to find evidence of their basic needs satisfaction during the different experiences. By comparing the lived experiences of volunteers in each of the models, I sought to determine if there were differences in how volunteers experience and describe training that are systemic, particularly in terms of engagement and motivational factors. Further, I hoped to understand how volunteers described the acquisition and utilization of new skills and knowledge across training conditions. Because there was no existing research to compare the effects of medium and synchronicity in training on volunteer motivation, this problem was well suited to a qualitative design. Creswell (1994) noted that such a design is relevant when the issues are relatively unexamined. Further, as explained by Morse (1994), elements of a problem best addressed through qualitative research include a notion that the available theory may be inaccurate or inappropriate. As explained in earlier sections, there are theories that explain the role of technology and computer-mediated communication in supporting motivation but not within the context of volunteerism. The key addition of prosocial motivation makes the applicability of existing research unclear.

At the time of data collection, I served as the State Program Director for Volunteer Systems within the Minnesota 4-H program. My role was to create resources for volunteers, provide staff development for local volunteer managers, and make policy decisions affecting volunteers within the program. As a result, I was aware my role might influence the answers of

4-H volunteers by making them feel like they should tell me what they thought I hoped to hear rather than responding more truthfully. I made every effort to assure participating volunteers that I needed their honest feedback in order to understand their experiences and that all answers would remain confidential. Volunteers received three reminders of this: once when they were solicited to participate in the research and at the opening of each of the interviews. No consequences resulted from them sharing their experience.

Given my extensive role in designing these various training experiences, I did have some pre-existing ideas of how participants may experience each format and may respond to my questions. I anticipated that participants would be more actively engaged in the face-to-face sessions where interaction with others is higher. Previous experience taught me that we often have to cajole volunteers into participating in our online modules or offer a reward to entice them to complete a module. We often have had better completion rates when we offer online module viewing in a group setting. The online modules were been designed to be highly interactive and written from the perspective of one volunteer talking to another volunteer. I worked hard to be aware of my prior expectations and actively controlled my subjectivity. For example, the interview was designed and carried out with the intention of avoiding affirmation bias. I explored the experience of each volunteer with same level of descriptive detail in each interview.

I piloted the interview questions with volunteers before using them with participants. Volunteers and colleagues provided feedback to ensure the questions were clear without being leading. The interview questions were open-ended and framed in neutral language that ensured they were free from bias toward positive or negative experiences of the training. I created interview tools that allowed volunteers to describe their own experience during the training relative to their own engagement.

As part of the Cooperative Extension Service, my role connects closely with 11 other individuals who play roles similar to mine in their North Central Region states. The North Central Region is comprised of Minnesota, North Dakota, South Dakota, Kansas, Nebraska, Iowa, Illinois, Indiana, Michigan, Ohio, Missouri, and Wisconsin. We frequently collaborate on projects, including the North Central Volunteer e-Forum, which was one source of data for this project. I used the context and resources of the North Central Region Volunteer e-Forum in this study. Content is delivered synchronously via the Internet, while volunteers gather locally in small groups within their county to view the webinar and participate in discussion and hands-on activities facilitated by their county 4-H program coordinator (Type III, synchromodal). The e-Forum was intentionally designed to connect volunteers with one another at a local level as well as with resources available through the county office while also giving them the experience of learning from and seeing the contributions of other volunteers around the country. Theoretically, this model aligned with best practices in volunteer motivation and retention. The existing structure aims to build a local sense of connection to other volunteers and program staff while allowing volunteers to appreciate their role as part of a national organizational mission towards positive youth development.

Training Conditions

I observed volunteers as they participated in one of three different training conditions. Afterwards, they were interviewed to corroborate their answers. A description of the three conditions follows in the section below. Every fall, Minnesota 4-H program coordinators strive to have at least one adult volunteer per 4-H club attend an annual face-to-face training. In 2014, 88% of counties met this goal. Many counties had more than one volunteer per club in attendance. This particular training lasts between 90-120 minutes and includes lecture, small

group discussion, and hands-on learning. Previous topics include science literacy for youth and creating welcoming environments that support youth retention in 4-H club programs. For fall 2015, the topic was on cultural awareness and building the inclusion skills of 4-H volunteers. Local 4-H program coordinators determine when during the fall they will offer training depending on when it works best in their local community.

Minnesota 4-H volunteers have access to eight online modules through a data management system called 4HOnline. They can watch these half hour modules at any time. These modules focus on the general knowledge and skills that 4-H volunteers need to be successful in their roles. This can include an understanding of positive youth development, experiential learning, club and financial management practices of 4-H, and creating youth-adult partnerships. A team of Center for Youth Development content experts wrote the content; educational designers developed the modules developed for interactive online viewing. For the purposes of this study, volunteers viewed the online module in creating welcoming environments since this content was most similar to the face-to-face content.

Every other year, the 4-H volunteer specialists in the North Central region offer an e-Forum training for volunteers across the region. Small groups of volunteers gather together, typically at local Extension offices, to participate in e-Forum sessions. Content was delivered via webinar with the additional aspect of group discussion and activities facilitated by a local staff person. Though individual sites did not have video or audio interactivity with other sites across the region due to technology limitations, they were able to communicate with one another through synchronous chat pods. Volunteers participated in discussion via chat pods throughout the sessions in order to encourage cross-state sharing. Sessions lasted approximately 90 minutes. In 2015, three different sessions were offered a total of two times each in order to accommodate

the three different time zones in the North Central region. One session entitled “The Heart of Belonging” focused on diversity and inclusion in 4-H clubs. I selected this session because the content was similar to the other conditions; however, because the session only happens live twice, I recruited my colleagues to observe volunteers when I was unable to be present at their sites. A summary of the similarities and differences between the three conditions is provided in Table 3 below.

Table 3

Similarities and Differences Between Cultural Awareness Training Conditions

Element of Training	Face-to-Face	Asynchronous	Synchromodal
Title	“All Together, Yet Not All the Same”	“Creating a Welcoming 4-H Environment”	“The Heart of Belonging”
Length of time	90 minutes	30 minutes	90 minutes
Content focus	Diversity, inclusion and cultural competency	Inclusion and the importance of creating an environment where youth belong	Inclusion and the importance of creating an environment where youth belong
Proposed activities	Ice breaker, lecture, discussing various volunteer scenarios, sharing of resources	Lecture, viewing possible scenarios, moving and clicking on content	Lecture, small group discussion, sharing of resources
Interactive elements	Small group discussion	Interacting with content	Small group discussion locally, chat and poll pods with others across the region
Writer	University of Minnesota staff	University of Minnesota staff	North Central Region 4-H staff

Sample

Volunteers were placed into one of three training conditions: face-to-face, fully online asynchronous, and synchromodal. These three conditions were described in previous sections in greater detail. Individuals eligible to participate in the study included Minnesota 4-H volunteers who completed at least one face-to-face and one form of computer-mediated training (either asynchronous module or synchromodal training) during the 2014 program year. In order to identify individuals eligible for inclusion, all training participation data was pulled from the Minnesota 4HOnline database for the 2014 year. Data were sorted to exclude individuals who did not meet the selection criteria. Eligibility requirements were put in place to ensure comparison of assigned condition to past volunteer training experiences and establish a common frame of reference for all participants. Table 4 describes how the sample population fits within the overall population of 4-H volunteers.

Table 4

Breakdown of 2014 MN 4-H Volunteer Participation in Training

Training Participation	Percentage
Volunteers completing any type of training	43.6
Volunteers completing at least one asynchronous training	17.9
Volunteers participating in face-to-face training	12.7
Volunteers participating in synchromodal training	13.0
Volunteers participating in more than one kind of training	10.2
Total number of volunteers in Minnesota 4-H in 2014 ($n = 6,520$)	100.0

Though the pool of eligible participants was very small in comparison to the entire population, having previous experience in both traditional (e.g., face-to-face) and computer-mediated

training (e.g., either synchromodal or asynchronous) was important in order to allow volunteers to share their experiences across condition and place their experiences in their assigned condition in an appropriate context.

As a whole, the sample group was somewhat representative of the entire population of Minnesota 4-H volunteers in 2014. Federal reporting data for 2014 indicated that 68% of 4-H volunteers were female; 99% of all volunteers identified as white. Overall, the sample for this study was 100% white and 80% female. Demographics for the sample group are outlined below in Table 5. The face-to-face condition consisted of nine women and one man. The asynchronous condition consisted of eight women and two men, and the synchromodal condition consisted of seven women and three men.

Table 5

Demographic Data of Sample

Condition	Mean Number of Years as a Volunteer	Median Number of Years as a Volunteer	Gender Make Up
Face-to-face	7.5	6	F = 9 M = 1
Synchromodal	5.5	4.5	F = 7 M = 3
Asynchronous	7.6	4.5	F = 8 M = 2

The study was designed to deeply examine the nature of the experience in various training conditions. Further, given that volunteers are not necessarily required to participate in any training, those individuals who participate in multiple formats of training may be considered to be the most committed and fully engaged volunteers in the Minnesota 4-H program. As I found in my research practicum, those volunteers who were identified as “super users” of the

online community encouraged those less engaged individuals to participate. Ten individuals in each condition were interviewed and observed during volunteer training (n=30). Leech and Onwuegbuzie (2005) conducted a literature review of qualitative methods and found no consistent recommendations for sample size in qualitative research; rather, they recommended a reflective process that is inclusive of the context in which the data are collected, the methodologies for collecting data, and the anticipated generalizability of the data. Morse (1994) suggested as few as six individuals for phenomenological qualitative studies while Creswell (1998) indicated that 10 individuals were sufficient.

Once the pool of potential participants was determined, individuals were grouped by county. Counties with multiple volunteers who met the inclusion criteria were selected for participation, which allowed for a consistency in observational data in conditions with a synchronous component. County 4-H program coordinators with multiple volunteers who met inclusion criteria were contacted for their help in recruiting volunteers to participate in the study. Staff were provided with a list of individuals who met the inclusion criteria and a sample script to share via email or phone to explain the nature of the study, requirements and parameters for participation, and potential risks and benefits of participating. By engaging local program staff who had strong relationships with volunteers, I was able to successfully fill all 10 participant slots available in each of the three conditions.

Due to the time-limited nature of the synchromodal and face-to-face conditions, those conditions were scheduled first. The synchromodal data was collected during the North Central Region 4-H Volunteer e-Forum, an event that happens every two years as an offering of the 12 states comprising the North Central Region of the United States. The corresponding session focused on cultural competency and inclusion would happen only two times; therefore, it was

essential to ensure that all observations could be completed on those two dates when the sessions occurred. Three observations took place for the synchromodal condition. Face-to-face volunteer training observational data was collected during the 2015 fall volunteer training for Minnesota 4-H. These annual fall training events happen once in each of Minnesota's 87 counties; therefore, scheduling observations was somewhat more flexible as I determined which counties had volunteers eligible and willing to participate in the training and ensured their training dates did not overlap. Asynchronous training was completely flexible, and as a result, this data was collected last. I selected counties where there were several eligible volunteers and observed them as they viewed the asynchronous module. In all conditions, volunteer interviews were conducted as soon as possible after the training experience. For most volunteers, this was within 24 hours of completing the training; however, a small number of individuals were unable to schedule their interviews until four to five days after their training experience. In this case, I asked volunteers to write down their initial thoughts on factors like engagement, feeling like they were a part of the group, etc. immediately after training in order to capture the data while it was freshest in their mind.

Content taught in each of the three conditions focused generally on cultural competency and creating a welcoming environment for all youth. Inclusivity in 4-H programming comprises race and ethnicity, emotional, physical, and cognitive disabilities, diversity in gender and sexual orientation, varying economic statuses, and more. While the general theme was the same across each condition, the specific content taught varied slightly because it was developed by different groups of people with best practices for each model kept in mind. The face-to-face condition included lecture, hands-on activities, and small group discussion. In some instances, both adult volunteers and youth were present. The synchromodal condition included lecture delivered via

webinar as well as hands-on activities facilitated by a local 4-H program coordinator, small group discussion with the local site as well as virtual communication through the chat functionalities of the webinar platform. While individuals viewed the asynchronous sessions independently, content was designed with several learning activities which served to make a more interactive, engaging experience. For instance, a viewer was expected to click on content on the screen in order to move through a process, asked to use checkboxes to assess him or herself as a volunteer leader, and listen to audio vignettes written from a first-person perspective to simulate a volunteer's own club.

Length of training also varied by condition. The face-to-face training condition was 90 minutes. Similarly, the synchromodal session was approximately 90 minutes; however, local host sites were also encouraged to offer a meal with some team-building activities in the half an hour prior to the start of content delivery. Asynchronous training sessions were approximately 20 minutes long. Training times and activities were adjusted in order to most effectively engage participants using the affordances and constraints of the technology and pedagogy they utilized. For instance, both the face-to-face and synchromodal conditions provided opportunity for small group activities that encouraged dialogue amongst participants. Because discussion by nature takes longer, these sessions were extended in time. In contrast, the asynchronous condition was designed for participants to experience alone; therefore, the module asked participants to engage in self-reflection and knowledge checks that utilized multiple choice questioning within the educational design software.

Before any data collection began, the study was determined exempt by the human subjects review board at both Michigan State University and the University of Minnesota because it posed minimal risk to the adult participants it engaged. As the individual carrying out

this study, I played two roles. First, I completed this study to fulfill the requirements of my doctoral dissertation. Second, I am an academic faculty member at the University of Minnesota Extension Center for Youth Development. Because participants knew me in the context of my paid employee role and the data collected would be used for program improvement purposes, I completed human subjects approval at both institutions. The approved protocols were followed for recruiting and interviewing participants, maintaining confidentiality, and storage of data.

As explored in greater detail throughout this manuscript, I played a dual role during this study: first, as the researcher interviewing individuals to better understand the effects of computer-mediated training on their motivation to volunteer. The second role I played was as state program director of volunteer systems for Minnesota 4-H. Playing both the role of researcher as well as program staff proved to have both challenges and benefits. Great care was taken to ensure that I stayed within the role of researcher despite participants seeing me first as an employee of the University of Minnesota. For instance, if a participant had a question related to the policies of the University or asked for my advice related to a challenge they faced, I tried to acknowledge their request by writing down their question and assuring them we would discuss it after the conclusion of the interview. It was challenging at times to stay within the role of researcher. During one of the face-to-face observations, the trainer was struggling to effectively deliver the curriculum provided and it was difficult to not provide support as an observer when I otherwise would have stepped in for assistance. In another instance, one of the volunteers cried several times during her interview because of ongoing mistreatment by another volunteer. Under normal circumstances, I would have shared the information about the dispute with the local 4-H staff person; however, I had promised that individual confidentiality as a condition of her participation. The two of us spoke at length about the conflict and I encouraged her to share her

difficulties with her local 4-H program coordinator or an experienced volunteer. She was not ready to get staff involved in the conflict.

Despite the challenges, I also believe that I got better information from participants because of my role as an employee. Many of them expressed great appreciation that someone from the campus staff was interested in hearing about their experiences and planned to use the information to help improve the program. 4-H is an organization where individuals express a great deal of investment in history, tradition, and longstanding relationships; it is also a complex organization that takes a great deal of time to fully understand. Being interviewed by someone who needed to be provided with less information to put participants' experiences into context allowed for a deeper coverage in the amount of time a volunteer was willing and able to commit to the interview process.

Data Collection

The researcher or a trained designee produced field notes during observations conducted in training sessions. Behavior of subjects was noted as it related to the research questions, for instance, indication of engagement in the content through body language, interactions between volunteers when applicable, and declaration of the perceived utility of content being delivered. Creswell (1994) suggested a process of taking notes where the page is divided in half: one half is reserved for descriptive notes including details of the physical environment, processing of activities, notes from conversations while the other half is reserved for the reflective notes of the researcher. These reflections served as an opportunity for the researcher to note personal observations, biases and prejudices that he or she might have, ideas and impressions of what might be happening, or feelings. The descriptive notes were utilized during the interview to make a comparison between researcher observation and participant experience.

All observations were conducted directly by me with the exception of half of the synchromodal condition. The synchromodal training happened only twice, which forced me to train additional colleagues on how to collect and record observational data according to a protocol I provided. These colleagues were experienced youth development professionals with graduate degrees, decades of experience in working with volunteers, and extensive experience in conducting evaluation and training for Extension programming. They were trained to identify behaviors, comments, and characteristics that might exhibit signs of autonomy, competency, relatedness, and engagement. They were also provided with a form and process for noting the behavior and comments of research participants. My colleagues discussed their observations with me at length and provided me with a copy of their field notes.

Observational data was used not only to corroborate a volunteer's experience and to point out specific reflections from the point of the observer, but to also describe each setting to look for common themes by format. For instance, a high level of disengagement was noted during the opening of the synchromodal format and then further explored during the interview. These observations were used to connect with statements provided during the interview to paint the most descriptive picture possible of the volunteer experience in each setting.

The interview questions were piloted with volunteers before they were used with participants. Additionally, my colleagues across the North Central region provided their feedback in order to ensure that questions were clear and direct rather than leading. The interview questions were open-ended and framed in neutral language that was neither biased toward positive or negative experiences of the training. An engagement timeline of level of attention and interest during training was used to allow volunteers to describe their experience in

their own words; from their own description, I expounded upon their words and asked for further information.

The following table outlined the interview questions used and my intended goal in asking them. All participants were assured of their anonymity during the reporting of the results and that no rewards or repercussions would be offered from their honest responses; they were also provided with the opportunity to opt out of any questions for any reason they desired. The first two sections focused specifically on RQ1 in two different themes: engagement during the training and support of basic needs satisfaction. The final section looked at RQ2 and RQ3. Throughout the course of the research design, I was in conversation with individuals who are volunteers in 4-H in Minnesota or elsewhere in the region. They reviewed the interview questions, providing feedback on their clarity and intention. Interview questions for the first interview appear in Table 6 below.

Table 6

Initial Interview Questions

Question	Goal
<i>Thank you again for participating in my project and for making time to talk with me after your training session on [title of the training session]. Tell me a little about why you became a 4-H volunteer and what you do in your role with Minnesota 4-H.</i>	Set the context of the study and make the interviewee feel comfortable
<i>How many years have you been a 4-H volunteer? Have you volunteered anywhere else? If so, where? At best you can remember, please describe your previous volunteer training experiences with Minnesota 4-H. How have those different formats worked out for you?</i>	Hear each participant's recent experience in their own words with volunteer training within the program in terms of both content and delivery format.

Table 6 (cont'd)

Now I would like to have you think about today's training. What was the overall focus?

What do you understand the purpose of today's training to be?

If you were to describe today's training for someone who wasn't there and you wanted to give a clear picture of what it was like, what would you say? How would you describe it?

How did you feel about the overall focus and purpose of today's training?

What did you like the most about it? What was it about that aspect that you appreciated the most?

What did you like the least about it? What was it about that aspect that you disliked?

Can you describe some of the activities that you were asked to engage in during this training?

What did you like most about these activities?

What did you like the least?

I am interested in knowing how easy it was for you to be attentive during the training. On this graph, you'll see that the bottom line indicates the beginning, middle, and end of the training. The left line indicates low, medium, and high levels of attentiveness. Please draw a graph indicating your level of attention during the session. After you're done, I'll ask you to please describe the story the graph tells.

What does your graph reflect or say about your level of attention during the training? [Where the height of the graph changes] What can you tell me about this period of the training where your graph [rises/falls]?

[If the response to the above question focuses on "external" events (e.g., aspects of the training)] How did you feel during those moments?

Enter the volunteer's experience of the target training. The questions are intentionally framed in both general and broad terms.

Understand the volunteer's engagement and how they took shape over the session.

Table 6 (cont'd)

<i>How would you describe your relationship with Minnesota 4-H as an organization?</i> <i>To what extent do you feel valued by the organization?</i> <i>If I were to ask you to assign a numerical ranking from 1-10 (with 10 as the highest value), what would you say?</i> <i>What does it mean to you to feel valued as a 4-H volunteer?</i> <i>What is it like for you to be a part of 4-H?</i> <i>What do you like about being a Minnesota 4-H volunteer?</i> <i>What is going well for you?</i> <i>What would you like to see changed or improved about your relationship to the organization?</i> <i>How did today's training contribute to or take away from your relationship with the organization?</i>	Understand the volunteer's relationship and perception of Minnesota 4-H and how the present training session connected with that relationship/view.
<i>How would you describe your relationship with other 4-H volunteers?</i> <i>How important are these relationships to you? Why are they important?</i> <i>To what extent did today's training make you feel connected to other volunteers? In what ways did it help you to establish a connection?</i> <i>How could the training have contributed more to your relationship with other volunteers?</i>	Understand the role of other volunteers in the interviewee's experience.
<i>What does it mean to you to be successful in your role as a 4-H volunteer?</i> <i>When you are successful as a 4-H volunteer, what does it look like?</i> <i>What is your greatest contribution or an aspect of your work as a volunteer that makes you feel most successful?</i> <i>In what ways does the organization help you to be successful?</i> <i>What sorts of obstacles get in the way of your success as a 4-H volunteer?</i> <i>What do you think the organization could do (or do more of) to help you to be more successful in your role?</i>	Understand how the volunteer describes success as a volunteer.

Table 6 (cont'd)

<i>What, if anything, was new for you in this training? Was there nothing, one thing, or more than one?</i> <i>[For each named element] Can you tell me how that was “new” for you?</i> <i>Do you think any of these may be useful in your practice as a 4-H volunteer? [Probe as needed to understand perceived usefulness]</i> <i>What do you think will influence whether and how you will or will not apply the information you learned today?</i> <i>What parts of the training are you less likely to use in your role as a 4-H volunteer?</i>	Understand what the volunteer took away as “new” from the training.
<i>As a result of today’s training, what is one thing you will want to change in your role as a 4-H volunteer? What’s the one thing you’ll do in the next month?</i> <i>How well prepared do you feel to make that change?</i> <i>Did today’s training make you feel more prepared? Why or why not?</i> <i>What features were important to prepare you?</i> <i>Do you think the training could have prepared you better to make this change? How?</i>	Understand how the volunteer looks ahead to work in their role and whether the training experience is connected to those hopes and plans.
<i>I know that I have asked you a lot of questions today. Is there anything else you want to tell me or that you think I should know about today’s training or your role as a 4-H volunteer?</i>	Give the volunteer a chance to voice any unaddressed issues.
<i>Thank you so much for your time and thoughtful responses to my questions today. Your input is really valuable. One thing that often happens in interviews and conversations is that we think of things that we wished we would have said after the interaction is over. If this happens and you have anything else you’d like to share with me, you can call me at (612) 626-8327 or email me at mefrendo@umn.edu. I will be back in touch with you in about a month. Good luck with your work and thank you for everything you do on behalf of Minnesota 4-H Youth Development.</i>	Express appreciation for the volunteer’s time and provide them with a way to share additional thoughts.

Whenever possible, initial interviews were conducted in person. Due to scheduling conflicts, eight primary interviews were conducted over the phone. All follow-up interviews were conducted over the phone. The interviews were transcribed verbatim using an external service,

Rev.com. Once the transcripts were returned, they were loaded into a qualitative software tool, Dedoose.

In the follow up interview, I reminded individuals of their responses for application and behavioral change and asked how successful they were in implementing these changes. As with the first interviews, participants were assured of the confidentiality of their responses. Initially follow up interviews were scheduled for one month following the initial interviews; however, the first follow up interviews indicated that one month was not long enough (especially during the winter holiday season) to allow volunteers the time needed to make the changes. The timeframe was expanded to roughly three to six months allow for more time. In two out of the three conditions, interviews happened in this time frame; however, the synchromodal condition follow-up interviews proved to be more difficult to schedule with volunteers. The range is represented in Table 7 below.

Table 7

Timing of Follow-Up Interviews by Condition

Condition	Follow-up Respondents	Minimum length of time between interviews	Maximum length of time between interviews	Mean time between interviews
Face-to-face	7	8.9 weeks	22.4 weeks	14.1 weeks
Synchromodal	6	14.4 weeks	29.7 weeks	17.8 weeks
Asynchronous	5	24.8 weeks	31.7 weeks	28.2 weeks

Volunteers were contacted initially by the researcher to schedule follow up calls; when there was a lack of response, the local 4-H program coordinator often stepped in to help encourage participants to contact me to schedule their follow up interview. In some instances, the follow up interviews were conducted well beyond the ideal timeframe because of a lack of initial

response. Each participant was emailed twice and called once to schedule a second interview; however, the response rate was nonetheless lacking. Both the face-to-face and synchromodal conditions had a 70% response rate; the asynchronous condition had a 50% response rate. Table 8 lists the follow-up questions used for participants after their training experience and initial interview.

Table 8

Follow-Up Interview Questions

Question	Goal
<i>Thank you again for agreeing to meet with me again to discuss your volunteer training experience. As a reminder, your responses will kept anonymous and you're free to stop the interview at any time.</i>	Set the context of the study and make the interviewee feel comfortable
<i>When we talked the first time in [when, where], I asked you about you hoped to use the information from the training on [topic name] in your volunteer work. Do you remember what you said at that time? I am not giving you a memory test, but I am interested in the ideas that remained with you. [If needed], do your best to recall where you were on this issue at the end of the training. Did you feel that the training made you feel you wanted to change some part of your volunteer work? What part of the training had the significant effect on you personally?</i> Share a summary of their previous response.	See what the volunteer says about the objectives they stated in the first interview, both before and after your reminder.
<i>Do you see those two descriptions as pretty much the same [no real change] or do you see important differences? [If differences] What do you think led to those differences?</i>	See if the volunteer sees any important difference in what they initially said [that you played back to them] and what they remembered.

Table 8 (cont'd)

<i>Do you feel you were able to successfully implement what you hoped you would? Were there things going on in your area of service that made it hard to implement your goals? Were there supportive things going relative to your goals? When we met last time, you indicated that you wanted to change _____ about your practice as a 4-H volunteer. At the time, you shared that you felt (prepared, unprepared, etc.) to make that change. Were you able to make the changes you desired? Why or why not?</i>	Explore the reasons for the shift, specifically whether “obstacles” led to the shift.
<i>Has your relationship with other 4-H volunteers changed since the training? [If so, how?] Has your relationship with the organization changed since the training? [If so, how?]</i>	Understand any shifts in the relationship dynamic between/amongst volunteers and the organization.
<i>I know that I have asked you a lot of questions today. Is there anything else you want to tell me or that you think I should know about your training experience or your role as a 4-H volunteer?</i>	Give the volunteer a chance to voice any unaddressed issues.
<i>Thank you so much for your time and thoughtful responses to my questions today. Your input is really valuable. One thing that often happens in interviews and conversations is that we think of things that we wished we would have said after the interaction is over. If this happens and you have anything else you'd like to share with me, you can call me at (612) 626-8327 or email me at mefrendo@umn.edu. Our learnings from this study will be shared with our stakeholders as appropriate. Good luck with your work and thank you for everything you do on behalf of Minnesota 4-H Youth Development.</i>	Express appreciation for the volunteer's time and provide them with a way to share additional thoughts.

At the end of each initial post-training interview, volunteers were asked to identify something from the training that they wanted to do differently in their role as a volunteer as a result of content learned during the session. These changes were highlighted; as a part of RQ2; commonalities and differences were noted to produce categories of changes.

Data Analysis

As laid out by Merriam (1998), qualitative data analysis occurs in three phases. During the *intensive analysis* phase, interviews were reviewed several times. According to Merriam, data from the initial scan was used to *develop categories*. Interviews were coded first on a broad scale, attempting to identify excerpts of data relevant to the research questions. The following were themes used during the initial scan: level of engagement during volunteer training experience, support of basic need satisfaction including autonomy, competency, and relatedness, and evidence of likelihood to follow through on planned behavior including the presence of subjective norms, a positive attitude, and a belief that he or she has the skills needed to do it. The following table (9) shows examples of quotes from qualitative interview data that correspond with the research questions:

Table 9

Top Level Coding

Variable	Examples of Possible Identifying Phrases	RQ
Level of engagement	"I felt like there wasn't any time in there where I was bored, or ... I felt pretty focused. It was very enjoyable to me."	RQ1
Autonomy	"I like [the online training], you can do it when you have time and that's nice."	RQ1
Competence	"There's always some training that goes along with that and just different activities to get us thinking about how we can improve our clubs. Things like that are really valuable to me and I always enjoy it because I'm not proactive enough to do that kind of thing on my own."	RQ1
Relatedness	"It was fun. It made you laugh and smile, and it wasn't so serious [...] You didn't feel isolated, it was a group."	RQ1
Subjective norms	"[Other volunteers are] very important to me and my family. None of my family lives in town or even in the state and so they are like my second family some of them are."	RQ2, RQ3

Table 9 (cont'd)

Feeling Supported	“I feel highly valued. Especially when meet as organizational leaders on this. I feel we have a good rapport with the county other leaders going on. I've been in it for a while so I feel comfortable with the people and with what we're doing.”	RQ2, RQ3
Perceived Behavioral Control	“Based on the activity ... We were actually doing that last night to talk about what we are going to do.”	RQ2, RQ3

Using the process outlined in the following sections, I explored common themes related to these variables in order to draw conclusions about how computer-mediated communication affects the motivational support of volunteers and their intention to incorporate new knowledge into their volunteering.

These variables directly connect to the research questions of this study. Revisiting the research questions, they are as follows. **RQ1:** How do volunteers in different technology-mediated settings describe aspects of their training experience that relate to basic need satisfaction (autonomy, competency, and relatedness), such as their engagement in the training, felt relationship to organization and other volunteers, their sense of success as a volunteer, and their specific learning from the training? **RQ2:** How do volunteers in different conditions describe their goals for themselves, their confidence to integrate new knowledge into their work, and the support they perceive/expect to do so? **RQ3:** When they revisit their previous plans for action one month later, how do volunteers in different conditions describe what they have done (or not done), the real or perceived barriers to their action, and their real or perceived successes?

After completing the top-level coding of the transcripts, a second coder examined the data set. The second coder selected was a graduate of Michigan State University's doctoral program in Educational Psychology and Educational Technology. She received training from me

to understand the role of SDT and TPB in the study and be able to identify the motivational constructs within the data. Additionally, she received a definition of each of the codes I found and reviewed three examples of items I had coded under each category. In our first attempt to establish inter-rater reliability, we tried to use the technology available for such purposes in the Dedoose coding software. However, understanding the technology proved to be a substantial barrier and we instead reverted to manual methods for establishing agreement. The second coder received approximately one third of each of the passages from the transcripts I coded in the major categories of relatedness, competency, and autonomy developed during the cultural awareness training. Her data was selected by random and did not include any of the examples provided in the code book. The passages were intermingled randomly with passages belonging to other categories. She highlighted passages she identified as meeting the code definition criterion and returned them to me. I compared her responses to mine and utilized the results to establish my inter-rater reliability.

I entered the comparison between the first and second coders for relatedness, competence, and autonomy developed as a result of the cultural awareness training in Excel. A ‘yes’ response was coded as a 1; a ‘no’ response as a 0. SPSS (24) was used to calculate the Cohen’s Kappa coefficient. Cohen’s Kappa is a statistical measure for inter-rater agreement commonly used in qualitative data. The Cohen’s Kappa was determined separately for each discussion board as well as for the data set as a whole. Results are listed in the table below.

Table 10

Cohen’s Kappa for Relatedness, Competence, and Autonomy

Variable	Relatedness	Competence	Autonomy	Total
Cohen’s Kappa:	.757	.802	.753	.770

According to Jeong (2003), a Cohen's Kappa coefficient of .40 to .60 indicates fair reliability, while .60 to .75 is moderate and over .75 is high.

RQs 2 and 3 focused on understanding the types of changes volunteers wished implement in their practice after having participated in the training. Across all three conditions, the types of anticipated behavioral changes volunteers set for themselves varied. Some were closely linked to the cultural awareness topics covered in the curriculum, while others were only tangentially related to the content. At least one individual in each condition determined that the training did not inspire them to do anything differently in their practice as a volunteer. Others set personal intentions that could be easily accomplished without much effort, the so-called 'low-hanging fruit' of behavioral changes. Still others set more robust anticipated behavioral changes which would require them to incorporate new ways of thinking and acting into their volunteer role. The section that follows characterizes the different types of anticipated behavioral changes volunteers in each condition set for themselves, their confidence in accomplishing their behavioral changes, the degree to which the training helped them to feel more competent in achieving the task at hand, and the social support they felt as they strived to change their behavior.

Each behavioral change was entered into a table by condition to better determine the similarities and differences between them. The content of the training was taken into consideration to better put into context the kinds of behavioral changes that would fall on the spectrum from tangentially related and easily accomplishable to directly connected and requiring significant effort. Once removing volunteers who did not anticipate changing their behaviors, intentions were examined by condition to determine their relevancy to the content, their relative difficulty to achieve, and the individual's ability to clearly outline a path to accomplish their behavioral change. Coding revealed three tiers of behavioral changes: low, medium, and high.

Table 11

Volunteers Behavioral Change Intentions by Condition

Training Condition	No intended change	Low-Level change	Mid-Level Change	Higher-level change
Face-to-face	1	2	4	3
Synchromodal	2	0	5	3
Asynchronous	1	2	2	5
Total	4	4	11	12

In coding the data relevant to RQ2, I gave volunteers a ranking in terms of both their confidence and level of social support, in addition to categorizing their behavioral changes in terms of difficulty to attain and direct connection to the content of their assigned cultural awareness training. In the follow-up interviews, I first asked if they remembered the anticipated changes they set for themselves and if not, I reminded them of their words from the first interview. I then asked if they had been able to follow through on the changes they wanted to make.

I coded participant responses by comparing their responses in the first interview to the responses provided in the second interview. If the volunteer was able to clearly explain how he or she was able to implement the changes they wanted to make, I coded it as “yes, behaviors changed.” Volunteers who did not attempt (for a variety of reasons) to make progress towards their goal clearly and said as much were coded as “no.” Some responses were less obvious, due to either partial success, vaguely defined initial goals, or loosely connected descriptions of progress. In these cases, I made an effort to use other context clues provided in the interview to make a determination. In two instances, volunteers indicated making an effort but did not fully accomplish what they set out to do. These responses were coded as partial successes and will be explained more in-depth in later chapters. Volunteers who attempted but did not complete

changes were categorized as partially successful, while those individuals who were unable to make any progress for a variety of reasons were classified as unsuccessful. Examples of each category of response can be found within the analysis chapter for RQ3.

Once responses were coded, I placed them into an Excel document along with each volunteer's ranking results for RQ2. I attempted to determine if there were any patterns among those who had changed their behaviors and those who had not by sorting the data by ranking in several different ways. Though the full sample for the first portion of the study included 30 volunteers, the overall response rate to follow-up interviews was 60% ($n = 18$). However, two individuals who did not state any behaviors they wanted to change following the training are included in this number. The analysis was conducted only using volunteers who anticipated making changes.

Attention to the validity of data is critical throughout the many stages of research. In order to ensure internal validity, I followed the recommendations outlined by Creswell as appropriate (1994). He recommends the triangulation of data, including interviews with participants, observations collected, and documents, an ongoing exchange between the interviewer and the study participants to verify how the researcher interprets and makes meaning of the thoughts and actions of the individual being interviewed, repeated interactions between the interviewer and the participants, participant involvement with study design, and acknowledgement of researcher bias. Elements of Creswell's triangulation I utilized during my study included conducting more than one interview with participants, using observational data to give credibility to claims made during the interview, sharing my observations of participants with them during their interviews and providing them with the opportunity to give their own insights, and regular reflection of the complex nature of my own role as both researcher and

program staff. During the interview, I would comment on my observation of a volunteer's behavior and share my interpretation of it; this exchange provided the volunteer with the opportunity to correct or add to my interpretation. I interacted with most participants on two occasions, asking them to share how they followed through with their initial intentions and discuss further what they thought influenced their results.

CHAPTER 4: RESULTS, RESEARCH QUESTION 1

One of the purposes of this study was to better understand how the 4-H volunteers in specific technology-mediated settings described aspects of their training experience related to basic need satisfaction including autonomy, competency, and relatedness (RQ1).

Inclusion criterion for the study dictated that volunteers have previous experience in both face-to-face and computer mediated volunteer training. As a result, volunteers came in with prior notions about the affordances and constraints of different types of training. Nearly all ($n = 29$) indicated a preference for face-to-face training despite noting the format being difficult for scheduling and travel. Volunteers most frequently cited a preference for the format because it offered an opportunity to interact with other volunteers and learn from them ($n = 11$). Several other individuals noted that they were far less distracted when they were in a dedicated space without the temptation of multitasking ($n = 7$). The constraints of the condition included the amount of time one needed to commit in order to attend and difficulty with traveling from one end of the county to another ($n = 4$).

While face-to-face training was the standard for judging volunteer training, volunteers still appreciated having online training as an option. In fact, nearly half of volunteers across all conditions ($n = 14$) directly stated that they thought both forms (face-to-face and online) of training should continue to be offered because they each had distinct roles within the program. Volunteers preferred face-to-face; however, several indicated that they were only willing to attend a limited number of in-person trainings annually ($n = 3$). When asked to describe what they liked about online trainings, volunteers most appreciated the flexibility of the format ($n = 8$). Many agreed that they were high quality ($n = 13$) and nearly all volunteers who mentioned

the format described the information as important and foundational to their roles (n = 15). Nonetheless, over two thirds of volunteers (n = 21) were less than enthusiastic about online training. Reasons for their distaste ranged from trouble with Internet connection at home (n = 4), lack of skill with technology (n = 7), and online training being somehow less engaging, thereby causing more distractibility (n = 14). Though they described the content as interesting and well-done, it was more rudimentary and lacked the person-to-person interaction they preferred in the in-person settings. Further, the removal of polite social conventions present when in a physical learning environment with peers made it much easier for volunteers to multitask while viewing a training. Several of them confessed to turning trainings on while folding laundry, making dinner, or supervising their children's homework.

Overall, the majority of volunteers found the theme of cultural awareness and inclusion to be both timely and relevant (n = 27). A few volunteers recognized that their communities were evolving to be more diverse and that they needed to feel more prepared to include more diverse youth if they should want to be involved (n = 2). Several others felt as though the organization was pushing for the program to evolve and saw the training as a way to help volunteers to feel more prepared (n = 5). One volunteer described it well, sharing:

I think we've had a lot of changes in how 4-H looks. There's been a huge push for it not to be the traditional 4-H that like myself grew up in, or my mother grew up in. I think there's been more of a push to kind of morph it into something different, and I think there's been a lot of division in how people view that. Some are for it. Some are against it and I think that this has kind of been another one of those pushes to try to get everyone on the same page or understanding why we're doing some of the different programs that we do.

Of those volunteers who felt the growing pains of a long-standing organization trying to evolve with the time, most seemed supportive of those changes. Two of them struggled with the push to change, noting that the organization seemed to be investing a good deal of resources to include cultural groups disinterested in participating in 4-H programming.

Still more volunteers (n = 8) indicated that the resources and content covered in the training was helpful because it supported them through challenges they already faced in their clubs. For instance, a couple of volunteers noted having cognitively challenged youth in their club including autism, ADHD, or fetal alcohol spectrum disorder. For these volunteers, the training proved very valuable by offering them concrete suggestions for adjusting their approach to be more inclusive. Similarly, other volunteers (n = 3) noted that their children were going to move to larger cities for college where they would encounter others from diverse backgrounds. They liked the idea of a more diverse and inclusive 4-H. For instance, one volunteer explained:

I would say that last night's training is a start to open up the discussion about diversity. I'll tell you for those of us in our little rural area here in [. . .] County. It's a 99% Scandinavian, light people. Our kids our going to leave this community and go away to college and they're going to run into people that are people of color, and maybe from a different nation, and instructors that aren't necessarily from the United States. I think they need to be aware and prepared for that.

These volunteers recognized that while there was little diversity in their communities, appreciation for all cultures is a valuable 21st century skill their children needed to develop in order to be contributing members of society. Though their communities may not look diverse, their children will come of age in the most multicultural America to date.

Only three individuals (interestingly, all Caucasian, heterosexual males) indicated that they felt a training emphasizing cultural awareness and competency was unnecessary. These men, all of whom were white and heterosexual, felt that the topic of diversity was not of concern to them in rural Minnesota. All three of them felt equipped to make accommodations for youth from diverse backgrounds in the event that it was something that they experienced in their club. As one stated:

We don't see a lot of that up here. In the [metropolitan area of the state], I'm sure it is a lot more. . . . You have kids in a different language or something. The race up here for white people has got to be like 95% at least. I don't know. I assume that somewhere there was a need for it.

Even among volunteers who saw a need for the topic, the idea that diversity was somewhat of an anomaly outside of the metropolitan area of Minnesota was common. Diversity was generally seen in terms of race despite the training content covering a wide range of identity categories explored. Another volunteer offered:

They talked about the scenarios as like the situation that you build in the guidelines. There were no barriers here to learn from. I would feel that everyone in that room as a leader, would do everything possible to ensure that the county would adapt to support that individual. I don't know if anything was really learned, maybe more written for us.

Of the three scenarios experienced by the volunteer in the synchromodal condition, only one of them had anything to do with a youth from a different racial or ethnic background. While rural Minnesota may not be racially diverse, young people in rural communities are not less likely to need accommodations or be from economically struggling families. Elsewhere in the interview,

this volunteer described the need to teach ‘common sense’ skills like including everyone as equals and adjusting programming accordingly as somewhat sad.

Analysis of the interview data proved somewhat challenging as volunteers often spent a good deal of time talking about their overall experience in volunteer trainings rather than within the specific cultural awareness context. Though interview questions focused predominantly on what happened during the cultural awareness (CA training), volunteers often referred to portions of their experiences in the program in general. Often, they made comparisons to past circumstances in order to make sense of their present situation; this comingling of past and present data sometimes made murky the details of their experiences. For instance, when one volunteer in the asynchronous condition was asked to describe her experience in the training, she barely mentioned her current experience.

I think when we did the more hands-on training, we interacted a lot more as a group.

Now that we’ve been doing the online ones, [the 4-H program coordinator] has either ran through them for us, then we do them in a big group. I think last fall’s, we got into smaller groups and did fake role play things. I kind of liked it when it was the bigger, everyone’s here and this is . . . I don’t know. I like the interacting better than the online because the online has that same monotone talking.

Though the volunteer did mention the asynchronous online modules, she used her past experiences as a comparison to describe what it is she prefers about other forms of training: the group experience, the opportunity to practice in role play scenarios, and the engaging presence of a live facilitator. To address this challenge, I made an effort to ask clarifying questions that redirected the volunteer back to the CA training in question in an effort to better articulate what it was he or she liked or disliked about their assigned condition.

Self Determination Theory does not provide any distinctions or stipulations over how an individual's basic needs must be satisfied (Deci & Ryan, 2000). Rather, the theory posits that the myriad social contexts an individual experiences provide varying degrees of satisfaction of basic needs. SDT relies on a global-level view of basic needs satisfaction (Hagger et. al, 2006). Other research (Vallerand, 1997; Vallerand & Ratelle, 2002) describes a relationship between global, contextual, and situational needs satisfaction; that is, an individual may be intrinsically motivated in a more general context based on global needs satisfaction but may require or seek extrinsic rewards depending on specific situations or within certain contexts. Conceptually, basic needs satisfaction is difficult to discern in independent situations. For instance, if a volunteer feels competent at work or within the home, that competency is likely to accompany her into her volunteer experience. Training may certainly augment that sense of competency, but it may also not be necessary in order to sustain that individual's need to feel competent as a volunteer. Further, a volunteer may feel other things her volunteer program manager does help her to feel competent. Training is likely only one part of the equation of basic needs satisfaction within the context of volunteering. Due to the exploratory nature of this study, it was not possible to fully examine the role of global motivational orientations and the role of contextual and situational factors on satisfying volunteers' basic needs.

One may argue that the more an individual feels satisfaction of basic needs within a specific context like volunteer work, the more likely it is that their motivation will be sustained within that context. This is especially true because volunteering differs from work or familial obligations as one may choose freely to opt out of volunteering at any given time with little to no consequence (Millette & Gagné, 2008). Volunteers spoke at length about the ways that the general structure of the 4-H program supported and thwarted their basic need satisfaction; these

data were analyzed and written about in the first draft of this chapter. However, the generalized experience of 4-H volunteers did not directly connect to Research Question One. Therefore, I summarized the generalized data to provide context for the reader but details are not included. The following sections will explore how the different training conditions supported or thwarted basic need satisfaction beginning with relatedness, followed by competence and finally, autonomy.

Development of Relatedness

Independent of assigned training condition, all volunteers spoke at length about the importance of the relationships they developed through their role with Minnesota 4-H. These instances of general relatedness were roughly equal in each training condition. Interview data showed training as a potential avenue for developing and strengthening relatedness in volunteer-supported programs; however, it is not the only way of doing so. Volunteers typically spoke about the different groups of individuals with whom they felt a connection. In this case, youth, other volunteers, 4-H staff, and the community as a whole. Overall, individuals interviewed spoke at great lengths about feeling very connected and supported through their volunteer experience. Some mentioned minor frustrations with other adults or staff that seemed like typical challenges between adults who have divergent viewpoints; however, a small number ($n = 2$) spoke at length about experiences that caused them to feel what could best be described as negative relatedness or a loss of connection.

When they described relatedness generally, volunteers reflected on the role of connection to others in their experience and how important relationships were in their roles. In the specific context of cultural awareness training, volunteers spoke of training as an important vehicle for building relationships. Much of the data characterized as satisfying relatedness needs through the

training experience referred to face-to-face volunteer training regardless of condition (n = 30). Volunteers in the face-to-face condition provided the richest description of how their training created a sense of belonging and connection to others. Those in the synchromodal condition typically highlighted the synchronous components with both volunteers in the room and connected virtually as being the aspect of the experience that helped them feel a sense of relatedness (n = 10). They described activities in the training room that helped them to develop relationships with one another as well as small group virtual discussions that helped them get additional ideas and perspective on their volunteer roles. Nearly every comment from volunteers in the asynchronous condition indicated a preference for the face-to-face training because of the affordances it provided in terms of relatedness.

Face-to-face volunteer training seemed to be the lens through which volunteers saw and compared all other forms of volunteer training, for two main reasons. First, face-to-face interaction is the most commonly utilized method of engaging volunteers in a learning experience. Second, it was the format they not only found most enjoyable, but also the method they felt most contributed to their learning. When volunteers described how face-to-face training addressed their relatedness needs, they talked about three things. The first, and perhaps most obvious, is the opportunity to build a sense of community and strengthen relationships with other people present in the room (n = 9). The second was the opportunity to diversify their perspective through building a communal knowledge (n = 8); a third theme was the opportunity to create a shared vision for the 4-H program (n = 3).

Volunteers in this condition discussed the cultural awareness training as an opportunity to build community and peer connections between volunteers. The experience allowed them to feel

more closely connected to other volunteers by growing their friendship in a volunteer community. One volunteer said,

When I leave [the training], I always feel like we're not the only one dealing with a situation [. . .] then we play a game, a mixer game, and we got to talk to other people and it was very interesting because I didn't know much about certain people so that was really cool.

In describing how the CA activities supported her relationship development with other volunteers, one individual stated,

The name game [during training] was really fun, just to hear everybody's story and you kind of get to know them a little bit more. Like where the mom was named after her great grandmother and the daughter was after her mom. It was kind of neat to see some of those traditions [it will] help me remember their names more when I see them at the fair this summer.

Of the same activity, another volunteer said, "It was a good ice breaker. It made me feel more comfortable with people. I thought it opened up the group to being more accepting of listening to other people. [. . .] People laughed and [. . .] that put people in a good mood." The opportunity to laugh with one another, share details about their personal lives and histories, and build common ground independent from the volunteer work itself was essential to volunteers having a strong sense of relatedness.

The second major theme of the role of face-to-face training in satisfying a volunteer's sense of relatedness centered on how the experience of being together in the same place at the same time allowed volunteers to create a shared knowledge and generate new ideas that they might not have otherwise considered (n = 8). These diverse perspectives helped to increase their

engagement in the session (n = 7). Volunteers described the communal experience of training with other people present as a way to get new ideas, hear a variety of perspectives, and learn from the experiences of others. They noted that this communal experience was more engaging than learning alone. When asked what she enjoyed about the experience of her face-to-face CA training, one volunteer articulated,

I think what I liked most is going around and listening to the scenarios, and seeing how different groups would handle that. There may not be just one particular way to do it, but there might be good input from other people who had experience.

Similarly, another volunteer shared that she felt most connected to other volunteers through the experience of hearing their ideas even though she didn't know the volunteers in her group:

I didn't even know who they were; I didn't know where they were from. I don't know if I'll ever come across them again. It was great that we were all able to speak, to add to the discussion. I don't think anyone felt shut down and I think I if I run into them as the chaperone [at a statewide event] I will be able to talk to them.

Though the volunteer did not know the people in her group, she appreciated that they were able to share in a common experience and learn from one another. Through the opportunity to process a scenario together and exchange ideas, the volunteer felt that she was able to form a connection with strangers that would last past the evening's event.

Part of what volunteers appreciated most about these diverse perspectives was the fact that they came from individuals whose circumstances were like their own. Volunteers liked hearing from one another, seemingly even more than they liked learning from staff. They often gave the impression that this perspective was even more valid (n =8). Part of what volunteers appreciated most about these diverse perspectives was the fact that they came from individuals

whose circumstances were like their own. Volunteers liked hearing from one another because of the authenticity of the advice shared. When asked what she liked about the face-to-face CA training, one individual expressed,

The ones in person, it's a different experience because you can hear other's experience. I think sometimes when you come into something new you just assume you know things, or don't realize how much is still out there that we haven't even explored. And somethings getting together with groups you are just exposed to more. More information. Another offered, "I would say the in-person one [. . .] is most effective because even last night, when we were doing our leader training, we bounced ideas off other people and you learned a lot more. You're much more engaged than watching something online."

The final major theme present in the face-to-face condition data regarding relatedness was the role of training in building a common vision for both volunteers and staff to work for together ($n = 3$). Volunteers in all training conditions spoke about training as an opportunity to create a sense of working towards a common goal with other volunteers. Volunteer-led programs require training to build knowledge and skills, but also to help set an organizational tone and provide the guiding framework for the direction of the mission and vision of the program. Training provides an opportunity to present the vision and engage individuals in a multi-way exchange wherein the organizational vision is something they come to adopt as their own. The face-to-face training experience allowed volunteers to process together their role of creating a more diverse and welcoming program. One participant reflected that "there's probably more out there, there's more opportunity to reach more kids with that kind of thought process of who we have." When asked how the training contributed to her sense of connection to the organization, one volunteer offered,

It helped open my mind to the people at the office; they're not just there for our views, or for the traditional 4-Her, but how much more they do through the afterschool programs and the outreach they do. So, it helped me to understand that we do need to open our eyes to differences in people, and how to help those people feel welcome as well.

Observational data indicated that volunteers in this individual's training spent a significant portion of the evening discussing their realization that the afterschool programming delivered by their 4-H program coordinator was "real" 4-H programming. Several of them had previously assumed that it was just 'something nice that [she] did.' By processing a specific scenario addressing how demographic and community data affects the look and feel of the 4-H program, volunteers appeared to become more aware of the types of programming offered. This volunteer was able to move from seeing her own club as the standard or norm and instead realized that 4-H was malleable depending on cultural needs.

The inclusion of youth is a common practice in 4-H's face-to-face trainings due to its role as a youth development organization. Though not explicitly connected to the topic of cultural awareness, several (n = 4) volunteers noted that they appreciated an opportunity to train alongside youth participants. One offered, "Youth leaders and adult leaders are put in the same training. We can work as a team and hear the same things. Then, as we reflect on some of those things we have that common ground." All 4-H volunteers in the study showed passion for the work they do with young people; training provided them with the opportunity to unite under a common cause and hear how others are working towards a common goal. As one volunteer explained, "I like to go to the training because, even though it's the same stuff every year, how to fill out the forms and stuff, it kind of gives you that rah-rah spirit mode to be more enthusiastic about it. That's kind of nice about the face-to-face. It gets you back into the groove." Training in

the fall provides a renewed sense of purpose and commitment to the organizational vision and mission.

As noted in the previous section, volunteers in the synchromodal condition specifically highlighted the synchronous components of their experience when asked about establishing relationships and connectedness within the program. Volunteers in this condition discussed how training satisfied their relatedness needs through allowing them to have opportunity for in-person discussion and small group activities as well as synchronous discussion with individuals in other states across the region.

Similar to the face-to-face training, volunteers in the synchromodal condition participated in small group discussion and in-person activities. The in-person experiences with others in the room helped volunteers in this condition to feel as though the training helped to build their sense of collegiality (n = 7). For instance, when describing an activity in the cultural awareness (CA) synchromodal training, one volunteer explained,

One of the activities that we did in the beginning when we got there, our coordinator had us write down four things that we felt that we all had in common with the room and then four things that we didn't have in common. When we read those, we all kind of laughed because clearly we were thinking some of the things we all had in common weren't exactly what we all had in common [. . .] so getting to know each other more was nice. The activity got volunteers sharing information about themselves, laughing, and establishing commonality. It served as an icebreaker to segue into a more difficult topic by helping them to build rapport with one another. Another volunteer from the CA synchromodal condition said,

When we go to volunteer training, there are people from all these different clubs and that's really the only time you see them. I enjoy visiting with them and talking with them

all. And it's fun because we see each other at other places. It's just that connection with a lot of different people instead of your little hole at work and your little hole at home. You bring us out and we get to meet more people in the county and we see them up at state fair and other places too. That's what I like about it.

For this particular volunteer, one of the highlights of training is not what she learns or is able to take back to her club; rather training serves as the convergence point where she and her 4-H friends come together to reunite and get outside the limited scope of their day-to-day lives.

Seeing the ideas of volunteers from other states in real time during the synchronous chatting sessions of the CA synchromodal sessions was a highlight for volunteers in the synchromodal condition. The majority of volunteers in that condition noted the ideas from other states as their favorite part of the training. As one volunteer asserted,

The [cultural awareness] e-Forum was very interesting because we did get to interact with volunteers from other states [. . .] I liked being able to read what other states ideas had. There were a lot of times we went, 'Oh, we forgot about that.' Yet, I could still interact with the people I was sitting with without disturbing what was going on online. Another offered, "The live chatting [during the CA training was my favorite]. It wasn't probably the most productive [due to the amount of time it took to do] . . . it's what I enjoyed the most."

Like the face-to-face setting, the synchromodal condition offered the interaction needed for volunteers to share ideas. Unlike the face-to-face setting, volunteers were actually afforded greater opportunity for connecting via shared ideas because they were simultaneously conversing with those present in the physical room as well as those in the virtual room. The set-up of the synchromodal training offered both in-person conversation as well as online conversation. Observational data showed the best ideas from small, in-person groups were shared with a

facilitator who typed them into a virtual discussion space. Often, individuals would see their ideas on screen and feel the need not to repeat them; as a result, the conversation was streamlined and curated for a more diverse, comprehensive brainstorm. One person stated,

It was really cool to see what other people are thinking and you get so many more ideas with the number of people [. . .] It can get loud get loud and annoying if you have everybody in the same room because you'll always have chitter chatter and stuff, but to see all of the ideas weeded out and put up where you're able to read it, you don't have to worry about [. . .] the stuff going on. You're able to understand everything clearly. I really did enjoy that.

The combination of audio and visual learning offered through the synchromodal webinar platform supported this volunteer's learning better than just the conversation alone. She was able to use the visual chat pods to narrow her focus to the important information. Similarly, another volunteer expressed:

The [CA] e-Forum was very interesting because we did get to interact with volunteers from other states. There was a small number of us that were in [. . .] County but we were able to talk amongst ourselves yet interact with a group. I thought just getting different and ideas and seeing what other states are doing, [. . .] you get used to hearing what other counties are doing in the state, but seeing what are other states are doing [was helpful].

This volunteer appreciated having both conversations happening simultaneously. Another volunteer liked the freedom the format offered. She articulated, "I could still interact with the people that I was sitting with without disturbing what was going on online." The opportunity to process one's own scenario as well as the best points from other groups' conversations seemed

especially stimulating to volunteers in this condition. It helped to keep them fully engaged as they experienced connections simultaneously in two mediums.

The synchromodal training offered twice the opportunity to diversify perspectives and generate a communal knowledge than the face-to-face alone; volunteers had the benefit of talking to those people from their local program who were in the room, but also gained insight from individuals from twelve other states who offered perspective on how things worked in their communities. One individual offered,

I liked the way we did the webinar because we were interacting with different [states] and whatnot. We were able to see other people's ideas on top of what we came up with in our own county. That was nice because in our club personally we haven't run into these situations yet, but I know that we are going to and I don't deal with those different things on a daily basis, so it was very, very helpful to find out, I guess, how to handle them.

Participants in this condition described the dual perspective as a highlight, something that not only helped them to appreciate what they had but also gave them a glimpse of how the 4-H program operated in other states (n = 6). When asked what he thought was most engaging about the format, one volunteer replied,

The more states are involved, and you can see their answers, and it kind of makes you think about their area of the state, how it's more different than our area of the state where they think of other things. Whereas they may see more disabilities or ethnic cultures down there versus up here in the northern woods, we don't see or we're not into all that, we don't see as much of it.

This broader perspective was appreciated, particularly in communities where volunteers saw the demographic structure of their communities changing. As one volunteer said,

[People from other cultures are] becoming more and more prominent. You are getting kids that are from other countries. You're getting kids that don't feel those barriers physically and mentally and they can be out in mainstream things. It was an eye opener for me because I looked at it and said there is no way that as a club, county and things, we have tools in place at all.

Hearing a new perspective helped volunteers feel more prepared to handle change in their community. While both the face-to-face and synchromodal conditions offered opportunities for volunteers to share ideas with one another, the synchromodal condition exclusively offered the chance to learn from those whose perspective was broader than volunteers' local or state connections. This affordance was highlighted as the one most appreciated by volunteers in both conditions. The chance to hear what other volunteers' challenges and ideas were helped volunteers feel more prepared and informed; the synchromodal condition offered a broader pool with whom volunteers could connect.

The responses of the synchromodal participants on this issue were similar to those in the face-to-face condition ($n = 3$); however, they focused on vision on an even larger scale. Face-to-face participants saw the experience as an opportunity to create a shared vision within their county or state 4-H program; synchromodal participants appreciated the opportunity to build a common goal with other volunteers across the north central region. When asked what he saw as the role of the training, one volunteer said,

We all have the same goal of wanting to see 4-H grow and be strong and be welcoming to all sorts of diversity, and in order to do that we need to be educated and open to all of the diversity. Some have seen it, more with the children aspect not so much with the ethnic.

We all have the same goal and when you are working toward the same goal then these types of training are really important.

Just as interacting with other volunteers both in-person and through computer-mediated conversation helped to increase volunteer knowledge, so too did it help volunteers in this condition feel more connected to a common purpose. Meeting with individuals from 12 other states (as one volunteer put it) “help[s] you feel more connected” because you have a shared experience. The shared experience of discussing goals of inclusion across multiple states allowed volunteers to see that other states were dealing with similar challenges or had perspectives that could support their own. The e-Forum experience provided volunteers with an opportunity to locate their own local experiences within a regional perspective.

Volunteers in the asynchronous condition also valued relationships and connection with other volunteers. They talked about other volunteers being important to them to the same degree of other volunteers. However, their descriptions of how the asynchronous condition supported their sense of connection and belonging starkly contrasted with volunteers in the face-to-face and synchromodal conditions. Most of the discussion of relatedness in this condition was to point out that this mode of training was *not* successful in helping volunteers to build a sense of connection with one another or with program staff by directly comparing it to face-to-face training.

In the asynchronous CA condition, volunteers talked about training helping them to make friendships with other adults in their past experiences with face-to-face training; however, they were clear that watching an online module on creating welcoming environments was not a mechanism for helping them build those relationships. Most of them were clear that they did not expect an asynchronous module to build their connection to other volunteers ($n = 7$). There was a general sentiment that the asynchronous modules were really intended to offer a focused lesson

that needed to be consistently across the state in a format that was easily accessible to volunteers. The online modules are much shorter in length and general in content, thus leaving volunteers with the understanding that they were meant for the basic information needed for 4-H volunteers. One volunteer expressed, “I don’t feel it [the CA online module] should [make me feel more connected to other volunteers]. This is one of the better ones that I’ve actually watched. I did not get bored, like I said, considering that I worked an eight hour day.” Another initially thought that she felt somewhat connected to other volunteers through the asynchronous CA experience, but when pressed to describe what it was that helped her feel more connected, she couldn’t come up with any examples. As discussed in later sections, one may speculate she felt a communal sense of learning the same information as other volunteers. However, this is, at best, a weak sense of connection.

In the asynchronous condition, volunteers generally discussed the lack of interaction as something missing from their experience. Without interaction, volunteers heard one perspective which was the one offered by the organization. As noted previously, volunteers have a tendency to give greater validity to perspectives offered by individuals in roles similar to their own. Without the opportunity to hear from other people, the experience is less engaging and valuable. As one female volunteer bluntly offered,

I think face-to-face gives you more chance to share ideas among volunteers and even do some of the things that they encourage as far as the large group, the small group, the icebreakers. Quite honestly, when you’re doing it online, if you’re home you’re not going to sit and necessarily watch. Or you could have somebody else do it and you could toggle between them.

Despite being asked to comment on the online module she just viewed, this volunteer framed her experience in the asynchronous condition as opposite of her face-to-face experiences. When watching at home, she felt tempted to multitask while watching or have her husband or child advance the slides. The volunteer described the temptation to turn the training on while distracted by household tasks, asking someone else to advance the slides or to have another Internet window open where she toggles back and forth between the two browsers. Another stated, “I like the interacting better than the online because the online has that same, monotone voice talking.” Not only does a diversity of ideas seem to matter for volunteers, but also a diversity in speaking voices. Several ($n = 4$) volunteers noted that, though pleasant, the narrator of the online module often sounded scripted and the lull of her voice caused their attention to wane.

Though some volunteers enjoyed the content, they still indicated a preference for the face-to-face because of the interaction. As one person said,

I have a tendency, if I sit and watch it at home, it's like ‘Okay, let's get going with this.’ I also have slow internet at my house, too. This one was not bad, this one was pretty good. I like to have other people around [. . . because . . .] when you do it by yourself, who are you going to discuss this stuff with?

Interaction not only seems to offer increased knowledge from a diverse set of experiences, but also additional engagement. The ability to get distracted when viewing at home or during a break at work was commonly mentioned by volunteers in multiple conditions. One volunteer admitted to skipping several slides when she watched other online modules because she thought the information was redundant. Another volunteer said that the interactive components built into the

CA asynchronous module were helpful because they forced her to stay engaged with the content rather than turning the module on and leaving the room:

I wouldn't call it engaging, but I would say that [the knowledge checks keep] people from turning it on and listening to it while they're doing dishes and then they're like half-listening to it. They have to stick with it; otherwise, it stops. That's a really good thing. If you're going to do online training, you don't want to lose their eyeballs, and you will if they turn it on and can clean the house.

Having other people in the room holds individuals accountable to some degree to pay attention and not get distracted by unrelated tasks.

Interestingly, the asynchronous CA training seemed especially successful in helping some volunteers develop a sense of being part of a greater goal. Five volunteers in this condition described the module as helping them to better understand the organizational mission and their specific role within it as related to creating a welcoming, inclusive environment. Only three volunteers each in both the face-to-face and synchromodal conditions noted that the training helped them feel like they were partaking in creating a shared vision. When asked if the online module helped him feel more connected to other volunteers, one male volunteer shared, “I think [the training] is kind of putting us all in the same boat, the same direction.” Another offered,

I think [the trainings] show you where you need to be connected. I think that we have some room to grow, even by watching this. I'm more committed now than I was earlier, but I think each year I grow into my commitment.

While these comments were sparse in this particular condition, they did occur. As will be discussed in greater depth in the competency section, volunteers in this condition described the training content as providing background information rather than new knowledge or skills. The

foundational nature of the content may serve a role in helping volunteers to feel part of a shared vision.

The asynchronous module seemed to offer volunteers the opportunity to hear about an organizational goal through a series of engagement techniques like showing realistic video of young people, asking volunteers to assess themselves according to an ideal standard, and showcasing a volunteer in action. One volunteer explained how he enjoyed the mix of audio in the training denoting a volunteer voice, a narrator voice, and a youth voice: “The new kid was talking, the youngster. And I like the fact you had the older boy developing his leadership.” The different voices made the experience more authentic for him. Volunteers suggested that the quizzes and checklists within the modules asked them to consider how they were doing in their individual club setting, which they enjoyed:

I liked the little quizzes in between that you click on and it tells you, you should work on this more or you're doing a good job at this. Just how they ask you kind of breaks down what's going on in your club itself versus just a wide area of: did this happen or would you do this.

Individual volunteers in this condition all noted that these were techniques that brought the content to life for them. One said, “There was interaction in between, where you had to click and answer questions [. . .] and also look at other videos. You were involved in it, you weren't just sitting the whole time.”

Summary of Relatedness

In their interviews, volunteers discussed the importance of relatedness in their roles both within the context of training and outside of it. The roles of computer-mediated learning and synchronicity on motivation are central to this study; all volunteers experienced relatedness

satisfaction to varying degrees in their training condition. Nearly all volunteers (n = 29) indicated a preference for the face-to-face training. One of the most commonly cited reasons for this preference was the quality of the interactions they had with other volunteers and the opportunity to see other volunteers with whom they had made close, personal connections. The face-to-face sessions had the richest data to describe satisfaction of relatedness in the true sense of Deci and Ryan's use of the word; that is, volunteers spoke of the condition truly allowing them to feel a closer personal connection to others in the program (2000). However, volunteers in the synchromodal condition also experienced the relatedness benefits of small group discussion and activities as well as broad-based discussion with other 4-H volunteers across the country. The individuals in this condition appreciated the opportunity to learn from others whose experiences differed from their own and also felt like they were part of a larger mission by being connected to others outside of their local program. Volunteers in the asynchronous condition primarily noted that the learning experience did not fully meet their relatedness needs despite helping them to feel a larger sense of connection to the organizational mission.

Development of Competence

As a basic need, competence is supported if an individual believes in his or her own knowledge, skills, and ability to be successful at a given task. Competency is best understood as self-efficacy and a perceived ability to persevere through potential challenges (Ryan & Deci, 2000b). SDT views basic need satisfaction in a global, not context or situational, sense; however, both the contextual and situational levels are also important when determining motivational orientation within a specific setting. It is important to note that an individual only needs to personally feel confident in their ability to achieve; it matters less that another person may objectively determine he or she is not competent to carry out a task. Within the context of

volunteer systems administration, managers provide volunteers with an orientation to help them understand how their work connects to the mission of the organization. Training is provided to ensure that volunteers have the knowledge and skills to perform their roles in the way envisioned by the organization and that they feel they are able to effectively achieve the organizational outcome. In that sense, the objective of training is to build competence. As previously stated, Gidron (1985) found that it was the work itself and satisfaction with their performance in the role that best predicted volunteer retention. As a whole, 4-H volunteers interviewed for this study reported feeling generally competent in their role.

When mapping Deci and Ryan's (2000) basic need satisfaction on to volunteer training, the goal of increased competency is the clearest objective. When volunteer managers invite volunteers to participate in a training, the intention is typically to build their knowledge and skills in a particular category. In examining the various ways in which volunteers described the development of competence during their cultural awareness training experiences four major themes surfaced in each of the three conditions. First, volunteers gained *new knowledge and ideas* through their training experiences. Second, volunteers felt the training experience provided them with access to new or additional *material resources* that would support their work. But only volunteers in the face-to-face and synchromodal conditions mentioned access to material resources as a critical part of their experience. Third, the training provided volunteers with the necessary *confidence* needed to implement newly gained skills into actionable steps. Finally, volunteers noted various ways in which their training experiences created obstacles to reaching their desired levels of competency. Each issue will be explored for each training condition in greater detail in the paragraphs to follow.

All volunteers in the face-to-face condition indicated that the experience helped them to feel more prepared to employ inclusion techniques in their 4-H club (n = 10). They described the opportunity to gain new ideas, discovered the opportunity to learn a new activity that they could use with youth in their 4-H club, processed scenarios with other volunteers to be more equipped to handle situations where cultural competence was a necessary skill, and gained access to resources to support them through any issues that may arise in the future. As with relatedness, comments about competence from volunteers in this condition provided a robust portrait of the diverse ways in which face-to-face interactions can build an individual's confidence to achieve their goals. As detailed further in the analysis, some of the activities that best supported relatedness functioned at times to hinder development of competence by causing major time constraints in adequately covering the evening's content.

In the cultural awareness (CA) training, volunteers noted that the opportunity to learn in a group setting contributed to their increased understanding (n = 7). Additionally, they noted that material resources provided in the session contributed to their perception that the training increased their preparedness (n=4). Face-to-face volunteers spoke primarily about new knowledge around two things: An increased understanding of how culture may affect the youth in the programs in which they serve (n = 5), and access to new ideas from the training itself for activities to do with young people in their 4-H club (n = 5). The first theme focuses on an attitude and approach of inclusion in their responsibilities as a 4-H volunteer; the second describes concrete ideas to be used within their club. When asked to reflect on her experience and share what she learned, one volunteer offered:

I guess just realizing that different cultures have different practices and how they do things, too. Even like the one lady in my small group was saying when she goes and does

stuff on the reservation, they don't look you in the eye because they think that is disrespectful. Trying to remember those kinds of things [instead of believing] 'Oh, this maybe, they're not trying to be mean to me.'

The training provided a space for volunteers to recognize that their worldview and experiences in life were different from other cultural groups. This realization could prove to be very valuable in an organization that is predominantly comprised of white, female volunteers while also actively trying to engage minority audiences. Similarly, volunteers also were able to recognize how some of their existing practices may be exclusionary to young people in their clubs with special needs. One volunteer described how the content on inclusion was helpful for her as she thought about two children in her club with vision disabilities. She conveyed,

If we have a kid who would have something like that, it will be good just to kind of understand and have a better understanding how we can make everything work for them. I know we have some kids that have a hard time with visual stuff, so it wasn't until the third or fourth meeting [that I noticed]. They would always kind of sit off to the side and I didn't realize that they couldn't [participate]. When kids were running past them, and that was too hard for them. [After today's training, I realized] 'Okay, now let's not play tag every time; let's try to do something where they can play.' I didn't realize that, so just looking for those things and trying to make myself more aware of, 'hey, this kid hasn't played for three times in a row, why is that?'

Through the training experience, the volunteer began to reflect on her practice and take note of the ways in which some youth were excluded from program activities. Instead of dismissing the children who chose not to participate in the games with the others as disengaged, she learned to think critically and ask questions of the parents. Later in the interview, she noted that she was

planning to talk with the children's father to see how she and the other leader in the club could better accommodate his children's needs in their group.

Volunteers in the face-to-face condition also talked about their enjoyment of the opening activity meant to serve as an icebreaker and introduction to the notion of cultural identities. The activity, entitled "What's in a Name?" asks participants to create a name tent for themselves on a piece of cardstock and write words and draw pictures associated with the personal meaning and history behind their names. For instance, one youth member discussed how she was named for her maternal grandmother; another volunteer discussed her surname and what it meant in the small community in which she grew up. Volunteers enjoyed the activity because it allowed them an opportunity to get to know one another better and find common ground. From the perspective of competence, many volunteers discussed their intention to take the activity back to their 4-H club and implement it with youth. One articulated, "I took away ideas like the name plate thing. I think that would be great to do at a club level." Five volunteers in this condition said it was something that they would want to try to do with youth in their club. From this perspective, competency was gained as volunteers described their intention to put into action the activity that they learned during 4-H training.

Volunteers in the face-to-face condition were provided with a substantial packet of resources which included a variety of handouts covering ways to make accommodations for youth with different physical, cognitive, and behavioral challenges as well as materials covered in the training. Many of these resources were not covered during the training itself; rather they were intended to serve as reference materials in the event that the volunteer found him or herself with a youth with special needs in the club in the future. The material resources provided were

one of the most commonly cited benefits of the training for volunteers who were interviewed.

When asked what she appreciated most about the training, one volunteer shared:

The tools out there are phenomenal. They really are. To put that much energy into offering up that much stuff, it's just on whether it comes back to the same topic of how much time do I have to go after it? How much time do I have to apply it? How much time do I have to rally another parent to get engaged and say, 'Go online and do that. See how you want to help.'

The volunteer appreciated that all the tools were gathered and provided in one packet, which saved her time in the event that a situation arose where she might need them. As she noted, volunteers have limited time not only to go through information provided, but also to make changes and apply the information. The materials provided were appreciated; nonetheless, the volunteer still seemed slightly overwhelmed by the prospect of moving from the stack of resources towards implementation.

Similarly, as previously noted, a few other volunteers also found the volume of resources provided slightly overwhelming. One expressed,

Maybe all the handouts were overwhelming. I just think because I didn't have time there to flip through it and take much of it in. Again, I know it was a time thing, but sometimes I feel when we have a training and we don't have time to dig into some of the paperwork that it gets filed and then I don't make time later to do it.

Though volunteers appreciated all of the resources, several of them expressed disappointment in the lost opportunity to highlight what was there for future reference. Managing time in the training sessions proved to be a challenge, which meant that the chance to review materials provided was missed. Individuals appreciated receiving the resources; however, many of them

noted that unless they had the chance to really understand how they might apply those materials, they were likely to forget that those resources existed when needed.

Volunteers in the face-to-face condition also noted a feeling of confidence in putting skills and knowledge into actionable steps as they moved forward, in particular the opportunity to work as a team with young people in their clubs. In two thirds of the observed trainings, volunteers participated with youth in the training. The majority of volunteers in those settings noted that the chance to learn alongside young people because it helped them to develop a shared foundational knowledge to move forward in their club environment. For instance, one volunteer offered:

I think it's nice how the youth leaders and adult leaders are put in the same training. We can work as a team and hear the same things. Then as we reflect on some of those things, we have that common ground. It helps build that common knowledge.

Another volunteer stated that the opportunity to attend with her son and hear his perspective helped make the experience more worthwhile for her. Because youth development is at the center of adult volunteers' work in 4-H, many adults appreciate the opportunity to have a common space where they work together with young people to bring information back to their club. One volunteer did note, however, that she was concerned that there was some information in the setting that was too advanced for youth. Her daughter did not understand some of the vocabulary shared and also felt somewhat uncomfortable when some of the exchanges between the adults felt heated. Though the conversation was polite, it did include two different adults who had different perspectives. She explained,

I love the idea of team training youth and adults. I think maybe what I would have done with this type of training is maybe adults only at first until people feel a little more

comfortable with the subject and then bring in the youth. We're struggling with adults accepting this and I think maybe kids aren't as ingrained with their prejudices as adults are. I think this is an emotionally charged area. I was reading through the 10 scenarios, in the preparation here. I was like 'Holy man, we're going to talk about transgender children and refugees coming into our community?' That's a lot of, like I said, emotionally charged topics.

From this volunteer's perspective, some of the content may not have been age appropriate given the various ages of young people there. For many adults in the program, the training was the first time they had really delved into a conversation about such an emotionally charged topic and their ability to fully grapple with the subject matter might have been hindered with the presence of youth in the room.

I observed the frequency with which presenters in both conditions actually adhered to the suggested scripts and timelines. Both conditions were observed twice each; in all instances the face-to-face sessions had to either cut topics or abbreviate discussion because time ran out. A key difference between the sessions was the physical presence of the facilitator during the sessions. In the face-to-face sessions, an instructor led individuals through activities and discussion.

The opening activity of the face-to-face session asked individuals to discuss the history and cultural significance of their name as an icebreaker and introduction to the cultural competency topic. While this was by far the most frequently cited activity enjoyed in this condition (n= 6), it was clearly difficult for facilitators to maintain strict control over the allotted time once individuals were given the opportunity to share their personal stories. Because this opening session always ran longer than it was intended to, other remaining content was rushed. Though this activity was an experience many 4-H volunteers said they would enact in their own

youth groups, they did note that they felt rushed or shortchanged in other areas of the training (n=5). For instance, one individual shared, “It took a long time to go through the names and it didn’t get down to really what I thought was the meat and potatoes of the diversity.” Another lamented the fact that there was not an opportunity to go through the packet of resources provided as a takeaway for participants. She articulated,

Maybe all the handouts were overwhelming. I think just because I didn’t have time there to flip through it and take much of it in. Again I know it was a time thing but sometimes I feel when we have a training and we don’t have time to dig into some of the paperwork that it gets filed and then I don’t make time later to do it.

Several volunteers mentioned that time felt too short for such a valuable topic. Further, a few volunteers felt as though their discussion time, while valuable, was too short to fully delve into the scenario. They lamented the missed opportunity to share their small group response to their unique scenario with the other groups and benefit from the knowledge and ideas generated by other small groups in processing their own scenario.

Several face-to-face volunteers mentioned feeling as though there was too much content in the time allotted or that they felt the experience was too rushed to fully provide the level of discussion they wanted for the issue. For instance, one volunteer shared:

I think this topic deserves more time, in a smaller group, to really. You pointed out that this is an issue to be aware of but where are the tools, what do you do about it? Leaving feeling prepared. I don’t know that you can do that even in a four hour class. I think this kind of thing takes practice.

With such an emotionally charged topic, this volunteer wanted a chance to discuss in greater detail with a more intimate group. She felt as though the topic was only introduced on the surface

but did not really feel fully prepared to implement a club experience that was culturally competent. Another volunteer noted that she did not like “that there wasn’t really an application portion to it. What are some effective strategies in your club that we can do that? [. . .] What are you going to do in the next year, in your club?” When time is so rushed for reasons previously detailed in earlier sections, the application and reflection portion of the training can get missed.

Many of the same factors supporting competence in the face-to-face session were similar to those supporting competence in the synchromodal session. However, the content for the synchromodal sessions was delivered by facilitators who were not physically present in the room. Facilitators taught content via web conference. Activities were facilitated by a local instructor in the timeframe provided by the online facilitators. As a result, the timeline for delivering the synchromodal session was closely adhered to due to the structure of the model of online facilitators working in partnership with in-person instructors. It was impossible to know if local sites had four volunteers present or forty. Obviously, it takes more time to engage forty individuals in small group discussion than it does four. As a result, in-person activities were timed using an on-screen timer; once the time was over, the online facilitators proceeded with the instruction. In one observation, the local group was large and not yet finished by the time the facilitators moved on; in another, the local group was small and the full time allotted was too long and left some individuals somewhat disengaged as they waited for time to be over. For instance, when asked what she liked least about the training, one synchromodal volunteer offered,

We had a very small group that night so they gave us seven minutes to meet in our own little group or whatever and we needed two or three. They have no idea how many people

are there, and sometimes the timing of how they have the different sections set up seems to be off.

The timing for discussion was somewhat of a challenge for this volunteer who noted some wasted time because of the small nature of her in-person group. Observational data indicated an element of frustration with waiting for the time to be up or the potential for the conversation to move away from the topic at hand. However, the volunteers did resume talking about the content when the timer was up and the facilitation resumed.

On the other hand, the careful management of time provided for greater opportunity to meet all the educational objectives established for the synchromodal training. Because the timing of the training was well maintained, volunteers were able to experience all content as it was intended. As a result, synchromodal volunteers talked very positively about the knowledge and skills gained during the session without mentioning the feeling of being rushed. While half of the face-to-face volunteers noted feeling that there was not enough time to go through the materials provided, none of the synchromodal volunteers echoed that sentiment. For example, one shared,

The biggest thing that I probably learned was inclusion and what we need to do. . . . The different things to look at as far as what we can do for different scenarios whether it's someone from a different culture that can't speak our language, a language barrier to someone that has a physical limitation that we can still do something different for them. Just the resources and tools were probably the biggest thing for me.

This volunteer described the opportunity to practice scenarios as having contributed to her confidence in creating inclusive 4-H programming. She better knew what to do if she encountered a young person from a different cultural background as well as a young person with a physical disability.

As indicated previously in the analysis of relatedness, the most commonly noted benefit of the synchromodal setting was the opportunity to experience a wide array of perspectives and ideas in the training condition. One volunteer noted, “When we were talking about things, [. . .] everyone had good ideas about how to make people feel welcome and how to positively handle kids with maybe some emotional disabilities.” When asked elaborate on why she liked meeting with volunteers both locally and online across the region, another volunteer mused:

We all have the same goal of wanting to see 4-H to grow and be strong and be welcoming to all sorts of diversity. And in order to do that, we need to be educated and open to all of the diversity. Some have seen it, some with the children aspect not so much with the ethnic. We all have the same goal and when you are working towards the same goal, then these types of training are really important. . . . I think just the bringing more awareness and the fact that if I stay active in 4-H I need to be able to recognize and help recognize those situations of different ethnic backgrounds or different [special needs]. It's a little overwhelming because, like we talked about in our small groups there's for example autistic children they don't. . . . What works for one doesn't work for another and what works for one this time won't work next time so it's a little overwhelming when you're not used to those situations. I think to bring awareness, more than anything, is really beneficial to everyone.

All three of the basic needs within SDT are inherently connected; this comment is evidence that relatedness and competence frequently coexist with one another. The experience gave the volunteer not only an increased awareness of the issues in the organization relevant to cultural diversity, but also the general feeling that she was part of a group across the country with a vested interest in improving the situation together. The opportunity to process in her small group

and then again on the screen with the full group about engaging youth on the autism spectrum allowed her to have more ideas about what different approaches to try. Inclusion and cultural competence are complex and often emotionally charged topics. To bring awareness of the issues others are facing in different states and learning more together about what can be achieved as a group was beneficial to this individual volunteer. Volunteers in this condition ($n = 5$) seemed to appreciate the perspective that someone so far removed from their local perspective could offer them in terms of divergent viewpoints. As one shared,

I like that more states are involved and you can see their answers, and it kind of makes you think about their area of the state, how it's more different than our area of the state where they think of other things; whereas they may see more disabilities or ethnic cultures down in there versus up here in the northern woods, we don't see or we're not into all that, we don't see as much of it.

Both the face-to-face and synchromodal conditions used small group discussion of inclusion scenarios to have volunteers think through how to approach a potential scenario they may face. Though both conditions were intended to have all small groups report back to the full group their response to their group's unique scenario in order to maximize learning, there was only time to do this consistently in the synchromodal condition. In most of the face-to-face conditions, volunteers only were able to talk through their scenario and did not hear how others would have approached their scenario nor how other groups proposed to handle the scenario they were assigned. In the synchromodal condition, three scenarios were presented. Four states each were assigned to each scenario to discuss in small groups in person; after the time was up, those four states were asked to report their responses in a series of chat pods. Each scenario was presented and as a result, all participants benefitted from thinking through their response to three scenarios

rather than the one they discussed in their small group. Volunteers in the synchromodal condition talked about the opportunity to learn from so many people at once as being especially valuable (n=5). As one volunteer described it,

It was an interactive experience with other states. We learned about different scenarios, we talked about different scenarios and answered questions pertaining to what we have in place to deal with these situations. Things that we need to think about, may have to change, tweak, things like that. You come away with a sense of what steps you do need to take next in order to accommodate different scenarios.

Volunteers were able to discuss their assigned scenarios at a deep level but also had the opportunity to hear how others answered their assigned scenario. In contrast to the face-to-face session where volunteers typically processed and heard only one scenario, volunteers in the synchromodal condition processed one and heard two more scenarios resulting in a chance to think through three unique situations.

Like the face-to-face condition, volunteers appreciated all of the handouts provided during the synchromodal training. Unlike the face-to-face condition, however, the resources provided during the synchromodal training were pared down to a smaller packet and the online facilitators highlighted what was in that packet. Volunteers in the synchromodal condition spoke just as highly of the resources provided; however, they did not mention feeling overwhelmed by the volume or frustrated with not having a chance to discuss the resources during the training.

When asked what was most valuable about her experience, one volunteer articulated,

All of the sheets with information about what [the physical, cognitive, emotional disability] is and then on the back the recommendations and ideas. All of that information was really good. It's nice and it's packed really nice so you can read it and it's easy to

understand. It's helpful. Things that are tangible that you can look at, read, and understand within just a few minutes are really valuable.

By giving the volunteers an edited packet of resources and making the time to highlight what was available, the synchromodal session offered a less overwhelming and therefore more accessible set of material resources. Interestingly, more volunteers by comparison in the synchromodal group said that it was the resource packets that they were most likely to use as they looked towards behavioral change. As one individual proclaimed,

[The resources are] going to my meeting tonight and I'm sharing them with my co-leaders. Just the awareness of it. Just the thought that it opened it up and it said hey, you need to start thinking about this and how your club, county, whatever, appears to other people. Definitely passing that information on to other adults.

This volunteer found the resources so helpful that she planned to share them with other adult volunteers who had been unable to attend the training. The chance to concretely envision what accommodations would need to be made in a given situation was valuable and helped her to realize that this was a critical issue they faced as youth development volunteers. Another volunteer said he was planning to hold on to those resources and use them for reference in the event that the opportunity arose. Some noted that they were already helpful during the training.

Volunteers in the synchromodal condition also had the opportunity to review the material resources provided during their session, unlike volunteers in the face-to-face condition who were provided with a packet to take home. Six of ten volunteers in this condition noted the resources as being especially valuable to their sense of preparedness and competency. One volunteer described it especially well when he noted that the "hot sheets" (as they were called in the training) gave him "a better understanding of the different disabilities that are out there. There's

not just the two or three of them that I knew about, there's more of an awareness now about other disabilities.” Four of the ten volunteers in this condition described the packet of resources as the most valuable takeaway of the training. Of the process they learned during the session to think through inclusion in 4-H club settings, one volunteer explained, “It really simplifies it to think of it in that order, but like I said I think we resolve all of those things before they become a problem. I think we are aware of things our kids need.”

The synchromodal session offered volunteers the experience of thinking through scenarios and practicing processes that might support their efforts to create a more inclusive environment. Volunteers were provided with scenarios that helped them to consider in advance how they might approach a real situation. These scenarios were processed in small group settings and then small groups reported their ideas back to the online chat pods for all participants to see. Individuals in this condition enjoyed the chance to see a variety of perspectives and felt that experience of hearing all of the different scenarios was valuable in helping them fully understand the scope of cultural competency and inclusion. When asked to describe her experience, one volunteer articulated:

It was an interactive experience with other states. We learned about different scenarios, we talked about different scenarios and answered questions pertaining to what we have in place to deal with these situations. Things that we need to think about, may have to change, tweak, things like that. You come away with a sense of what steps you do need to take next in order to accommodate different scenarios.

Several volunteers in this condition noted that the processing of scenarios as a group was the most useful part of the experience for them. Learning about what others in the United States would do, perhaps people whose local demographics were different from their own, gave them a

sense of preparedness that they would not have gotten if the conversation had not included participants from different places. As one volunteer described what he liked best, he shared,

I think it was kind of neat that it was in different states. I like that more states are involved and you can see their answers, and it kind of makes you think about their area of the state, how it's more different than our area of the state where they think of other things; whereas they may see more disabilities or ethnic cultures down there versus up here in the northern woods, we don't see or we're not into all that, we don't see as much of it.

Volunteers in other states helped provide insights that did not occur locally to volunteers in the synchromodal condition because they faced unique challenges based on the demographics of their community. Beyond hearing new ideas, volunteers had the opportunity to critically think through situations they may not encounter in their local community but which offered them a better perspective on inclusion on a broader scale. Similarly, another volunteer noted that he did not feel the scenarios offered reflected their local experience because they did not have much diversity in their area; however, he felt that the scenarios were useful even though he would have preferred ones more suited toward their county.

In addition to practicing as a group and hearing various perspectives, the way in which the scenarios were processed proved valuable to the participants. Small groups were given a scenario and then asked to respond to three questions: (a) what were the potential barriers of the 4-H member described in the situation? Barriers could be physical, emotional, behavioral, etc. (b) what adaptations could be made to make the situation more inclusive and allow the 4-H member to participate? and (c) what rules (explicit or unspoken) might exist in your county that might make participation difficult for the 4-H member in the scenario? The scenarios presented

inclusion in a variety of settings from a youth with a terminal illness, to a young person whose parents did not speak English, to a boy with autism and specific sensory issues. By presenting a variety of issues, volunteers were able to see that diversity was more than just race or ethnicity. Volunteers remembered this process and noted that the questions were something that they would remember if they encountered a youth with different circumstances. One volunteer described it well when she said,

[The scenarios] got everybody thinking, put people in the situation to think what are the challenges, what changes can we make? You make it real instead of just talking about it. You make it real so that you have examples to go off of if you find yourself in that situation.

Another volunteer noted that it really simplified the process of inclusion to think of it in terms of those questions. To break a complicated issue like inclusion into simple terms that volunteers can remember and implement helps them to build confidence in their ability to effectively integrate youth with perceived barriers into their club. Rather than getting too mired down in the small details, volunteers felt as though the process helped them think about concrete solutions they could enact if the situation came up. Though the face-to-face condition also used scenarios in small group settings, the processing sheets had far more questions that the groups were expected to discuss. Some volunteers in that condition noted that they were slightly overwhelmed by the volume of questions. In comparison to the face-to-face scenario processing questions, the synchromodal scenarios were simpler and got to the central point, which was how to see one's club setting from the perspective of a youth who needed accommodations and practice thinking through how to adjust their approach to make their environment more accessible.

Technological challenges and difficulty with the model itself were commonly cited as obstacles to competency in the synchromodal setting. Some volunteers were more understanding than others about technical issues like poor sound quality (n = 4); for a few individuals, the difficulties were enough to turn them off of the model altogether (n = 2). These challenges affected competency but did not seem to affect relatedness perhaps because of the presence of others in the physical room; had the volunteers participated in the training as individuals, the challenges might have created an even larger barrier that could have impacted his or her ability to persevere to access the online conversations between volunteers. As one participant offered when asked what he liked least about the experience:

Production values. We've got the one woman who's got a microphone right here [motioned to directly against his mouth] and . . . there's stuff like that that is irritating to deal with. [Our 4-H program coordinator] was fine getting up and doing the speaker. If I had been doing that all night I would have been pretty like, 'Move your mic!' Again, it started out that really dry script PowerPoint thing. I was just like, 'Another one of these.' [Rolled eyes]

Several other volunteers mentioned the poor quality of the microphone of one of the online presenters as well as the sometimes scripted or dry nature of the content. When preparing for an online session, scripting can be a useful pedagogical approach in the event of technology failure; if one presenter loses his or her connection, another can easily take over in his or her absence. Further, scripting online presentations forces facilitators to be more mindful of the time that can be spent on each subject. As noted previously, strong time management was an affordance of this condition. However, scripting can be sometimes challenging. Oftentimes, when presenters are provided with a script, they feel compelled to read the script instead of imagining themselves

teaching in front of a room full of students. This can be especially true if the online instructors are inexperienced with teaching at a distance and have anxiety over the potential for the technology to fail.

Further, as noted in earlier sections, there were some very small groups in the synchromodal observations. When the small group discussion at local sites happened, the time seemed to be too much for the group present. One volunteer discussed this challenge along with some technological difficulties. When asked what she liked least about the experience, she explained:

It was the format that they used. Like I said, sometimes it's hard to hear and sometimes we had a very small group that night so they give us seven minutes to meet in our own little group or whatever and we needed two or three. They have no idea how many people are there, and sometimes the timing of how they have the different sections set up seems to be off.

Though she recognized that this was a challenge of the model rather than a failure of the online facilitators, the volunteer felt frustrated to be just sitting there as she waited to move on from one section to the next. She was eager to get as many new ideas from other volunteers as the limited time frame allowed. Another volunteer offered, “A lot of times we were just sitting there waiting and waiting. Just because of time and what not, as far as the webinar goes, but I wasn't mad.”

Though she did not describe being annoyed, the time that volunteers are able to dedicate to training is limited and to not effectively capitalize on that time for learning purposes results in wasted opportunity. Similarly, when asked to describe her level of engagement during the evening, one volunteer described the sometimes laborious and slow processing of scenarios as disengaging. She conveyed:

We were doing these different scenarios and we each responded to different ones. That was where the timing of things was little off and they gave like three minutes for everybody to type in their answers from this one group. Then they had to do like four different [questions]. I'm sitting here going, 'Oh my gosh. We're going to be here until midnight.' So at that point I was pretty low on the attention span but then they must have realized that, because then they went from giving about seven minutes to giving the next group about three minutes. Then they were doing all three [questions] at the same time [rather than asking people to type in their responses one question at a time]. Which was much more in line with . . . because we can read all three different ones and that's what we were talking about with all of them at the same time anyway. It went back up, I thought it did keep my attention.

The questions small groups were asked to discuss were in individual chat pods on the screen. The online facilitators asked sites to respond to one question at a time by typing in their responses. The sites had to sit and watch as responses were being typed in and wait for all answers to be shared until the facilitators started to process the answers from all of the sites. Eventually, the sites themselves found the process of answering one question at a time to be too slow and began typing in their responses to all three questions as they were waiting for the facilitators to allow everyone to finish typing. Three volunteers directly described this as a much more engaging use of time for participants both from how individuals responded to the evening. My observational data corroborated their description as I witnessed a change in participants' level of engagement as they watched their local facilitator type in the group's answers.

Volunteers' experience of competency in the asynchronous condition was quite different from the face-to-face or synchromodal conditions. Interestingly, nearly all volunteers in this condition framed their experience in the context of what it was not ($n = 9$); that is, they referenced a preference for live training with a group present. For example, one person offered, "[The online modules] are good. For one thing, you can go back, you can go back and click on something, but you don't have the sharing part that you do when it's one-on-one. You can't ask questions." Another offered, "Since I'm not computer savvy, I like the interaction with people, because you can get the feedback from them and you can shoot ideas off." Similarly, another shared that her preferred form of training was,

Hands-on, the more face to face, that's where you get most of the information, where I have gotten most of the information for actually doing things with kids: the projects, the different ideas, the get acquainted games, all this stuff. That is where you can actually do it so you know how it happens.

From volunteers' descriptions, it was clear that they held face-to-face training as their preferred mode of delivery for a variety of reasons. Many were concerned about their technology competency getting in the way of their learning ($n = 4$). Still more individuals missed the opportunity to discuss content with others, learning from alternate perspectives as well as having a chance to practice a skill under the guidance of a facilitator able to give them feedback on their performance ($n = 7$). The absence of interaction negatively affected volunteers' ability to gain new skills and increase their levels of confidence.

Overall, volunteers in the asynchronous condition did not describe the training as offering them new information. There were no brand-new volunteers in this condition. Their level of experience resulted in them feeling as though the training served as a good resource for

individuals just beginning their volunteer roles or as a refresher course for those who needed reminding of some of the best practices (n = 8). But it did not offer them new ideas. For instance, one volunteer described the training as “a refresher [. . .] it’s all good information and it’s all good to see again, but I could have probably answered [the quiz questions] without going through it.” Another offered,

If I was new and looking at it for the first time, I would probably say I learned a lot. If I thought about this way back when, I would have learned a whole lot. Today watching it, I’m doing pretty much all of those things expect that reflection piece [at the end].

Despite feeling as though the information they learned in the asynchronous session was more of a reminder of best practices than an opportunity to learn something new, six of ten volunteers noted appreciating the chance to be reminded of things that were important in positive youth development programming relative to inclusion and creating a sense of belonging for youth. As one individual noted of the training, “it refreshes; it emphasizes something that you may have forgotten or taken for granted.” Another described her thoughts during training, explaining, “the questions make you stop and think about what you just saw. I’m going through there and I’m thinking, ‘Oh, wow, we do that. We’ve done that.’” Competency does not necessarily need to come in the form of learning new information.

Competency also can come from the affirmation of what one is already doing well. Deci and Ryan (2000b) describe it as a person’s perceived ability and self-efficacy related to a particular skill set. Asynchronous modules can serve as a reminder of things that are important but so easily forgotten when volunteers are provided with an overwhelming amount of information, particularly at the beginning of their service. They may feel as though they know the information when viewing the training; however, the training serves as a reminder of what

they already believe they know either from having learned it or it being instinctual knowledge. It may be hard for volunteers to prioritize sitting through information they feel they already have a good grasp of. However, nearly all volunteers described the experience as a positive confirmation of what they do well and the few areas of growth they could focus on to improve.

Despite having a preference for the face-to-face trainings, volunteers still identified the experience of learning in the asynchronous condition as beneficial to competency development. Typically, however, volunteers noted that the kind of competency development the asynchronous condition helped manifest was limited to background or foundational knowledge. Six out of the ten volunteers in this condition referred to the content in the asynchronous condition as background information that they already knew. Almost across the board (n=8) volunteers stated that the module they viewed did not provide them with new knowledge. Volunteers identified the online modules (both the cultural competency module as well as others they had done previously) as good for individuals who came to their roles with little background knowledge of the 4-H program or of concepts important in positive youth development. Similarly, they identified the information as a good refresher course for information they knew but maybe needed reminding of different pieces. For instance, one volunteer articulated:

The online ones are what I call the backgrounding that you need in order to operate or what you should know. To me, a lot of it is common knowledge things that I watch. I'm like, oh well, that's just makes sense. It's what everybody should know in order to do their job right. Those I think are fine online.

This volunteer had been in the program for many years and felt like the information provided was not new to her; however, she still identified it as important to others to know in order to be

successful in their roles. She considered herself well versed in these topics and believed that they would be mostly relevant to those new to the program. Similarly, another remarked,

If I was new and looking at it for the first time, I would probably say I learned a lot. If I thought about this way back when, I would have learned a whole lot. Today watching it, I'm doing pretty much all those things except that reflection piece on the weekend.

Several volunteers indicated that they were reminded of things they had forgotten or identified areas of improvement after watching the asynchronous module.

Participants also appreciated the opportunity to have fundamental information critical to the success of their roles available on demand and able to be rewound or repeated if necessary. As one individual offered,

I would say it was a very good training experience because you can go at your own pace, you can go back if you miss something, click back on it and do it again. You can review the whole thing again, and then the questions make you stop and think about what you just saw.

All volunteers interviewed noted the incredible volume of information thrown at them when they began their roles and on an ongoing basis. By having foundational knowledge development available at any time, volunteers can go back and access information on a just-in-time basis when they need it. One may consider this as contributing to competence by proxy; that is, volunteers feel comfort knowing that the information is there when they need to gain confidence in their knowledge and skills.

For volunteers in the asynchronous condition, the use of various voices in recorded audio and photographs of a 'real' club setting provided concrete examples that allowed them to place themselves into that situation (n = 7). They saw what the volunteer in the training did as best

practices in creating a welcoming environment that supported the development of a sense of belonging for youth and were able to compare themselves. Several volunteers in this condition called attention to how they appreciated that the content was designed to feel realistic for the participant viewing it (n = 5). One volunteer said he liked “the fact that [the] new kid was talking, the youngster. And I like the fact you had the older boy developing his leadership” while another volunteer emphasized:

I liked how they used a mock, an actual meeting, to show what was really happening and how a meeting could run, or how it could be run, or how it should look, or the feel of it. That was a pretty small meeting, but I guess you were just using it as an example, because I'm like, ‘We have 20 some kids in our group.’ No, it just truly showed how the person was there and ready and prep, and including people and taking ideas.

Several volunteers in this condition noted that though they felt the content did not teach them anything new, the opportunity to see real examples and be reminded of approaches that they had forgotten about was highly beneficial for them (n = 5). Through the use of realistic examples along with interactive self-assessments on best practices, volunteers were able to think about their own clubs and feel confident in what they were doing well and imagine themselves in the situation of the volunteer on the video module using the practices she implemented.

Additionally, volunteers indicated that the pedagogical engagement approaches used in the asynchronous design were effective in allowing them to assess their own competency development (n = 3). They found value in the self-assessment checklists and the built-in quizzes to check their understanding. As one person described,

Some of the interactive stuff, that kept my attention into it, but at the same time it kind of makes you feel like doing something wrong. . . . It kind of puts you in position, if you're

kind of in your mind, saying, 'I'm not really doing that,' and you have to answer it, it puts, 'Oh, I should have . . . I should be doing that.' It makes you feel like, that you are in a position where you've got to do something because you're a volunteer, you've got to make a difference, and it puts more of an emphasis on you, so . . . in a sense, it makes you want to change, but then it kind of, in another sense, might give you more of a guilt trip because you didn't do something. Not always in a bad way.

As evidenced by the speaker, the cognitive dissonance of realizing one's actions are not the ideal while also feeling as though he or she is performing well in their role can be challenging. Some individuals ($n = 3$) perceived the checklist as helpful as they were identifying areas in which they wanted to improve, while a few others ($n = 2$) felt slightly frustrated or disgruntled by having to make note of their areas for improvement.

To some extent, technology was also a barrier to competency for individuals in the asynchronous condition – or, at least it many of them noted that it would have been if they had been watching the presentation at home on their own computers. Volunteers in this condition all watched the training on the researcher's laptop, which was showing a version of the module recorded to DVD. As one participant complained, "There's internet and then there's *internet*. We seem to have the variable speed. I get tired of waiting. Is this working or not working? If I am by myself I'll click something and screw it all up." Another offered, "I have a tendency, if I sit and watch it at home, it's like, [impatient tone] 'Okay, let's get going with this.' I also have slow internet at my house, too." A few volunteers also admitted to engaging in other household tasks while watching at home or to skipping content they felt was unnecessary or redundant ($n = 3$).

Other barriers to competency in this condition included disengagement during learning which was attributed to several things. Some volunteers relayed that the content was somewhat

repetitive in nature throughout the module (n = 4), while several others noted the scripted nature of the audio bored them (n = 3). One volunteer explained, “I think a lot of it has to do with more of the tone. . . . Because it starts to stretch out in a long time, it almost becomes monotone, or monotonous.” Similarly, another complained that she did not like how scripted it sounded. She explained,

I think the part that it looked too rehearsed to me. I think that to be a better training, yes, you need to know your information, but you don't want it to seem like it's just structured, because we're unstructured.

This volunteer compared the structured nature of the online training to the more free-flowing, off-script nature of in-person trainings. She recognized that a recorded training needed to be structured but felt that it needed to sound more casual in order to keep the viewer’s attention.

Finally, as commonly stated through the analysis, volunteers felt the opportunity to process the content with other volunteers was an essential part of their learning despite appreciating the flexible, on-demand nature of the model (n = 6). One volunteer described this well when she said, “[The trainings] are good. For one thing, you can go back, you can go back and click on something, but you don't have the sharing part that you do when it's one-on-one. You can't ask questions.” In this delivery model, volunteers who not understand something taught in the training must make a note of it and try to remember to bring it to the staff’s attention at a later time. If she or he learns something interesting to share with other leaders or implement into the club setting, it must wait until the next time they are together to discuss it.

Summary of Competence

During their interviews, volunteers discussed the role of competency in their roles both within the context of training and outside of it. Within the cultural awareness training, volunteers

in all conditions spoke about how training offered them new ideas and helped them gain confidence. Further, volunteers in the face-to-face and synchromodal conditions noted an increased sense of competency from having access to new material resources. An unanticipated finding when comparing the face-to-face and synchromodal sessions was a general sense of greater development of competency following the completion of training by volunteers in the synchromodal condition. This may be because of the way the off-site facilitators managed time compared to live, in-person facilitators. Volunteers in the synchromodal condition seemed overall less overwhelmed than those in the face-to-face condition; their session was less rushed and as a result, facilitators talked them through the resources and how to use them. In the asynchronous condition, volunteers noted that the information itself was not new for them; however, they felt it was important information that often reiterated what they already knew or reminded them of practices about which they had forgotten.

Development of Autonomy

Autonomy is the third component of Deci and Ryan's Self Determination Theory (2000). Best understood as a sense of agency and ability to determine one's own goals, autonomous behavior looks like self-expression, individual drive, and independence (Deci and Ryan, 2000). SDT explains that though autonomy is often equated with individuals acting on their own, it need not be as long as an individual feels a sense of control and self-directedness while acting on the actions and behaviors requested of them by another person. Autonomy is the ability to decide one's own behavior and make one's own decisions. In addition to mediating the different types of motivation laid out in SDT, others have found that autonomy support and orientation help to facilitate prosocial motivation, or the drive to help others (Gagné, 2003; Millette & Gagné, 2008). Weinstein and Ryan (2010) found that autonomous opportunities to engage in prosocial

motivation not only improved the well-being of the volunteer but also provided the clients receiving help with a more positive experience.

Autonomy is inherent in many volunteer programs where service takes place off site. This is especially true of 4-H Youth Development programs, which rely on trained, screened volunteers to serve on the primary deliverers of youth programming. When staff deliver youth programming directly, their capacity is limited based on their work load. However, when staff focus instead on preparing other caring adults to deliver programming, their capacity to serve young people is limited only to the number of volunteers he or she can support. For simplicity's sake, imagine one adult can adequately provide quality youth development and experiential learning to ten youth; the capacity of a staff person in a direct programming role is ten youth. If that staff person instead trains and supports ten adults who each manage ten youth, the result is a tenfold increase in the number of youth being served. The structure of the 4-H program depends on a staff person's ability to let go of control of the program and support the autonomy of the individual volunteer.

Autonomy can take many forms in a volunteer program. One example may be a volunteer being provided a set of expectations for program outcomes and guidelines from his or her program manager but being allowed to determine how he or she will meet the goal using his or her talents and skills. Another example of autonomy within a volunteer program could be a volunteer being offered a variety of options for both content and delivery method when requiring training. Research on conditions that support volunteer retention often tie competency and autonomy behaviors, making the two difficult to separate conceptually. For instance, Gidron (1983) found that volunteers must find the 'task itself' rewarding in order to continue in their role; this notion of the task being rewarding included both the ability to work independently and

also achieve objectives assigned by the program manager. Training is one way that volunteer managers can help volunteers gain the skills and build the confidence needed to believe in their ability to act and then actually act independently meet the programmatic goals.

Autonomy support in the program was expressed in two distinct ways. First, volunteers appreciated the opportunity to determine how they would be involved in the program and to what extent. Evidence of this came not only from volunteers saying what helped to support their sense of agency, but also in the form of volunteers saying what kinds of things got in the way of feeling respected as capable adults ($n = 12$). Second, the ability to access the resources offered by the organization in a self-determined manner supported volunteers' sense of autonomy ($n = 7$). Though volunteers were given the opportunity and encouraged to frame their sense of autonomy within the context of their assigned condition, they mostly spoke about it in general terms. For instance, volunteers talked about the different kinds of trainings available along with the resources on the website and in the county Extension office as beneficial. It gave them comfort to know those things were there in the event that they needed them even if they did not choose to take advantage of them.

Autonomy is the ability to decide one's own behavior and make one's own decisions (Ryan & Deci, 2000a). When volunteers did speak specifically about the cultural awareness (CA) training, their discussions of autonomy primarily focused on disengagement in the form of feeling bored or irritated during some part of the training. When volunteers spoke of the experience specifically, they talked about the point in the CA training session where they felt as though they would not have necessarily chosen to sit through the experience if social convention or duty were not present. As a result, volunteers' autonomy was thwarted as they struggled with the cognitive dissonance of deciding one's own behavior and doing what was expected of them.

This was true in all three conditions to varying degrees and for different reasons outlined in the following paragraphs.

In the face-to-face condition, four of ten volunteers described feeling somewhat stuck during the experience either because of the length of the training (particularly at the end of a work day) or the amount of content covered in a short amount of time. Concerning time, one volunteer reflected:

It seemed like some people were checking out during that end part. Like I said, we had been there for a while and people were looking at the clocks more and it was time to get rolling. It was good information, but maybe with the time constraint that we had it was hard to get it all in.

The “end part” that the volunteer was describing was the attempt to quickly cover the outcomes of the scenarios discussed in the small groups. When it was clear that they would not be able to adequately cover all of the conversations that happened in the small group time, she talked about it feeling sort of like a lost cause. People were tired and ready to go home even though they did feel that the experience was valuable. Similarly, another volunteer echoed her experience. He commented:

Not that it was terribly long, but the point was there. I got it and sometimes it seemed to be very . . . I don’t want to make that sound too exaggerated, but it can get repetitious.

You’re talking about the same thing in different situations.

Elsewhere in his interview, this volunteer described the content of the training as good and necessary. However, he noted at several points during the interview that he felt it was somewhat repetitive and that certain lessons went on too long.

A few other volunteers (n = 3) noted feeling overwhelmed by the amount of information that was presented, particularly the number of scenarios presented for practice or the volume of material resources offered. The lack of time towards the end of the training as they rushed to get through remaining content left some volunteers feeling a bit dazed as they were trying to make sense of the lessons delivered. When asked to explain herself after sharing that she “checked out” during the 4-H program coordinator’s effort to move through everyone sharing what their small group talked about as they processed their scenarios, one volunteer commented:

For me, it was just that my brain was already going from all of the rest of the things. So then to try to turn back and sit through and actually read through and analyze it, I would have had, for myself, I would have had better luck doing some of that more towards the middle, and then finishing with more of the get up and get moving type of things.

This particular volunteer described wanting the heavy thinking and processing activities to have been done earlier in the evening before she was too tired or overwhelmed with information to give the exercise her full attention. Elsewhere in the interview, she described herself as antsy and unfocused as she felt the evening went on longer and longer. Further, she felt others in the room experienced the same thing as the training “got to be too much.” If it had been up to her, she would have restructured the evening to better balance the heavy cognitive load when energy and attention were higher. As her anticipation of the evening ending grew more intense, so did her feeling that her autonomy had been thwarted.

Observational data of the face-to-face sessions showed a mostly engaged group where individuals were actively participating in activities and paying attention during lecture times. Intentional efforts were made by the design team to have the training reflect best practices in adult education including ample opportunity for individuals to share their expertise, engage in

realistic experiences that provide practice in integrating new knowledge and skills, and actively participate in discussions regarding the content's relevance and application to their roles. Both the engagement graphs created by volunteers as well as the researcher's notes from the session indicated that the design of the training met its androgogical goals. In one training session, several ($n = 3$) that the room was too hot and crowded once more people than expected showed up; the heat and the length of the training left them feeling somewhat cranky and eager to leave the situation prior to its scheduled end.

While the volunteers in the face-to-face condition described the experience as somewhat repetitive or too long, some volunteers in the synchromodal condition exhibited a sense of frustration and disengagement when they felt there was too much empty time spent not actively learning ($n = 5$). As previously discussed, the small group, in-person discussion time of the synchromodal condition was established using a timer rather than a local facilitator who was able to adjust the time according to the ebb and flow of the conversation. While this structure helped keep larger groups on task and moving forward, it proved to be somewhat challenging for smaller groups of volunteers who met for the training. When asked to map his attention and interest in the training, one volunteer replied:

It was probably that whole waiting time. You had the three groups and they're all building scenarios. When we were talking about our scenario here, [my level of engagement was higher]. Then [my interest and attention] decreased. You're just waiting and anticipating and, quite frankly, waiting for it to get over, because at that point, you had no responsibility.

For this particular individual, the lag time in between processing each scenario in the chat pods of the webinar system was enough to leave him feeling impatient and annoyed. In his interview,

he looked and sounded frustrated as he recounted the experience, visibly rolling his eyes as he spoke of waiting for the process to move from one scenario to another. Another volunteer was not as irritated; however, she did note a definite sense of boredom and disengagement. She commented:

A lot of times we were just sitting there waiting and waiting. Just because of time and what not, as far as the webinar goes, but I wasn't mad. This one was a lot better then one of the other ones I've gone to last fall with a webinar.

The site at which this volunteer experienced the synchromodal training had only five volunteers; as such, their small group conversations went relatively quickly in comparison to sites that might have had more participants. Another participant from her site shared a similar sentiment, noting that “[the presenters would] give us seven minutes to meet in our own little group [. . .] and we needed two or three.” Though these small bits of time seem somewhat trivial in the larger scheme of the training, half of the participants in this condition noted it as something that they liked least about the training. This seemingly small annoyance was enough to stand out in the minds of volunteers as something that ineffectively used one of their most precious resources -- time.

Another challenge within the synchromodal condition was inadequate preparation of the presenters to effectively use the technology. For two individuals who prided themselves on their own use of technology, issues like poor microphone skills or ineffective navigation of the teaching tool were enough to make the entire experience an annoying one. It was difficult at times to get these to focus much on the overall content of the training independent of the technological glitches, indicating that their experience was heavily shaped by these challenges.

For instance, one volunteer got himself totally sidetracked as he started in on his complaints about the technology:

Even last night, I remember thinking the forum stuff was cool but in the very beginning I'm like, 'Why are we doing this live?!' If you didn't tell me it was live I'd have no idea. This is like a PowerPoint presentation. I get it that they don't probably hire people specifically for presentations. There may not be a lot of marketing experiencing in there maybe. I don't know. The one I had to watch, [. . . the online orientation . . .] They would talk, maybe joke a little bit, and then have this video. The production value was so bad. It was actually distracting. Which sounds, maybe, a little snobby. There was really bad feedback noise throughout the whole video. It's like torture.

While he appreciated the concept of the synchromodal format, he did not seem to believe that it was fully executed to the best of its capacity. He critiqued the visual quality of the slides as well; later in the interview he commented on the poor audio quality. The complaints from the synchromodal session served as a launch pad for him to critique several other of the fully online offerings of the organization including the volunteer orientation and, later, the asynchronous modules. He confessed to feeling guilty for being so critical but also felt adamant that an acceptable level of production quality was not very difficult to accomplish.

The other volunteer who was irritated by the technology malfunction described himself as someone who has to go through a lot of ongoing training in his professional life. As a result, he described himself as going to 4-H trainings not because he needed the information but because he wanted to show his support for the organization and his commitment to it. When asked to describe the portion of the evening he liked least, he commented not on the content that he felt could have been more advanced or exciting, but instead on the poor microphone quality and the

dry pre-recorded audio that felt flat and disengaging. He talked about one presenter's "really loud, bad microphone" and the "slow pace" of the training's introductory session which explained the 4-H volunteers' role within the state and federal government as a part of the USDA. Observational data showed him as somewhat disruptive during the portions of the evening where the quality of the production was compromised – sort of like the class clown. He admitted that one of his favorite parts of being together with other volunteers is "teasing people." When observational data was compared to his engagement graph, it was clear that he used the moments he was bored or frustrated to reclaim some of the autonomy that he felt was taken away when he had to sit through an experience he found less than satisfactory. Though volunteers in this condition were overall forgiving of technological challenges, for some individuals (particularly those whose professional roles provide them with regular opportunity to see technology used in training) the mismanagement of time for learning, poor sound quality, and somewhat flat delivery created a disengaging experience that left them eager for the session to end.

Of all three of the conditions in the study, the asynchronous condition was the most supportive of autonomy both conceptually as well as within the specific cultural awareness (CA) session. Conceptually, asynchronous training offers the highest degree of choice; not only can individuals choose when they will view the content, but also which sessions they will watch. Volunteers across all conditions spoke highly of the flexibility this format offered; they appreciated being able to access training when and how they pleased. Nonetheless, as previously stated, nearly all ($n = 29$) participants indicated a preference for face-to-face training. On a statewide level in 2014, roughly half of those who viewed the asynchronous modules did independently. The other half viewed the modules in a way that they were not intended to be

viewed: as part of a group session. Volunteers in this condition liked the *option* of flexibility and the idea of completing training whenever they needed the information; however, two-thirds (n = 20) admitted to only participating in an asynchronous option either when it was required of them or when it was shown in a group setting. Despite offering increased autonomy through its flexible delivery options, the asynchronous condition proved to be somewhat challenging for volunteers from the perspective of keeping their attention.

The CA module, like all of Minnesota 4-H's asynchronous training options, was intentionally designed to support the engagement of adult learners; that is, it provided individuals with the opportunity to interact with content by responding to self-assessments, answering multiple choice questions, and navigating somewhat flexibly through content as they were inclined. The learner him or herself controls the movement of the training and if desired, could fast forward to the end of audio narration on each slide. This intentional design choice did not go unnoticed or unappreciated by volunteers. As one explained, "There was interaction in between, where you had to click and answer questions and see what is, and also look at other videos. You were involved in it, you weren't just sitting the whole time." Similarly, another volunteer offered:

I would say it was a very good training experience because you can go at your own pace, you can go back if you miss something, click back on it and do it again. You can review the whole thing again, and then the questions make you stop and think about what you just saw.

Volunteers appreciated the opportunity to engage with content and direct their own learning experience. It provided them with an increased sense of control rather than assuming they were passive recipients of information. Nonetheless, the inbuilt autonomy was often insufficient in counteracting the somewhat detached nature the volunteers described during the training.

Although most volunteers (n = 9) found the content high quality and the production of the material well done, nearly all (n = 8) agreed that the experience kept their attention only to a moderate degree. Words used to describe the experience included “better than most”, “not too bad”, “repetitive”, “monotone”, “too rehearsed,” and “slow and kind of laborious.” At the beginning of the asynchronous observations sessions, individuals were told to watch the training as though they were not being observed and instructed to watch it as though the researcher was not present watching them complete the task. Efforts were made to assure the volunteer that no judgment would be passed on the choices they made in navigating through the content, though the presence of an individual in a campus-based administrative role no doubt affected their attentiveness to the task during the session. No volunteers skipped any slides; however, two individuals did confess that they would have done so if they had been alone. When probed, they admitted that they would have skipped it because it was either information they had heard before in other asynchronous modules or they found the content to be repetitive.

To further complicate the issue of autonomy in the asynchronous condition, half of the volunteers in this condition commented that they often struggled to access the online modules when they were at home. This often came up when volunteers were instructed to watch as if they were at home; they would share challenges of getting the content to work as it was intended. One volunteer articulated it well:

[The training is good] if you remember to access it. That's the hard part because it's there and you know it's there, but it's remembering to, ‘Okay, let's go on.’ Then I have trouble accessing it; we don't have very good Internet service. Trying to get the good Internet service, or you can come [to the county office], but still, it's kind of nice at home, if I can just pop it up and do it at home, or when I'm doing my [. . .] work and it's my down

time, but it's not always. I had lots of trouble downloading it at the beginning and now it's getting better, but remembering to grab the laptop and pop it open and do it. Typically now our laptops are obsolete because we run everything off of our phones, and you can't do a whole lot on your phone.

First and foremost, the volunteer hits on something profoundly true: knowing a resource exists does not necessarily equate to taking advantage of that resource. Nearly 20% of volunteers in the overall sample indicated that they often did not prioritize viewing the resources provided by the Extension service even if they were interested in the content. They appreciated knowing that these resources were available to them but often just simply did not have time to add one more task to their list. If a resource is inaccessible once an individual finally acts upon his or her desire to use the resources available, the results could be extremely frustrating for the volunteer and change his or her perspective on the value of using those tools. Finally, the volunteer points to an additional challenge: lack of accessibility on her preferred device. The content will not function on a mobile device. For an increasing number of people, mobile devices like smartphones and tablets are the only way that they get online once they are away from the workplace. The primary selling point of this format is its flexibility, but if there are consistent challenges that inhibit an individual from capitalizing on that flexibility it begins to lose its appeal.

Summary of Autonomy

Development of autonomy as a result of the training experience was difficult to identify. One may assume this is true because of the inherent autonomic structure of the 4-H volunteer experience. Volunteers are expected to work independently without much oversight from the 4-H program coordinator. Rather than identify autonomy developed as a result of training, autonomy satisfaction during the training experience was best characterized as engagement – or, lack

thereof. Volunteers in all three conditions experienced various forms of disengagement. In the face-to-face condition, disengagement took the form of volunteers ‘checking out’ before the end of the evening. Volunteers identified portions of the evening where they felt their time had not been effectively utilized in the synchromodal condition, leaving them frustrated. Finally, in the asynchronous condition, volunteers felt bored by what they felt was the monotonous tone or the belaboring of certain key points.

CHAPTER 5: RESULTS, RESEARCH QUESTIONS 2 AND 3

The first question in this study focused on the role of technology and synchronicity in supporting the motivational needs of volunteers. The framework for examining prosocial motivation was Deci and Ryan's (2000) Self Determination Theory. Volunteers were asked about their experiences during the training to create a fuller picture of how the presence of other people (whether those people were physically present or virtually) affects their sense of relatedness, competency, and autonomy. Volunteers also used the interview experience to describe other programmatic factors that supported or thwarted their relatedness, competence, and autonomy. Beyond examining how different formats of computer-mediated training and synchronicity support basic need satisfaction, this study aimed to better understand how training experiences influenced volunteers' behavioral changes as indicated during their initial interview.

This chapter addresses research questions two and three and focuses on how motivation translates into intent to act as well as actual behavioral changes. *First, how do volunteers in different conditions describe their behavioral change for themselves based on information learned during the training, their confidence to integrate new knowledge into their work, and the support they perceive/expect to do so?* Follow-up interviews were conducted with volunteers to better compare intended behavioral changes with actual behavioral changes. These interviews sought to provide insight into the following question: *How do volunteers in different conditions describe the progress towards their stated intention, the real or perceived barriers to their action, and their real or perceived successes?* Questions for the follow-up interview utilized The Theory of Planned Behavior (TPB) as a guiding framework (Ajzen, 1991). I used TPB because it picks up where SDT leaves off as a motivational theory to determine the likelihood of an

individual to follow through on changing behavior in a given setting. TPB's elements are similar to SDT. Where SDT examines relatedness, competence, and autonomy, SDT has subjective norms, self-efficacy, and self-determined action. In the follow-up interviews, volunteers were asked if they recalled their planned behavioral change. If not, I reminded of individual participants of their goal and asked about their ability to implement the changes. Finally, individuals were asked if their relationship both with other volunteers as well as with the organization had changed since the first conversation.

Overview of the Theory of Planned Behavior

Ajzen's (1991) Theory of Planned Behavior provides a useful model to help predict whether or not motivation to continue volunteering translates into actionable steps to improve one's volunteer practices. TPB examines the role of an individual's intention to act autonomously, the perceived subjective norms related to the behavioral change, and the individual's beliefs about their behavioral change. If an individual values the behavioral change and believes it will be accomplished with few accompanying challenges, he or she is more likely to accomplish the task at hand. Further, if the individual feels the behavioral change is supported and expected by important others, he or she is more likely to also prioritize the behavioral change. TPB draws from Expectancy Value Theory (Fishbein & Ajzen, 1975), a motivational theory which suggests that an individual's behavior is both a function of how one expects to do when striving to meet a goal coupled with how much one values that goal. The theory expands upon Expectancy Value Theory by adding in the influence of important others. TPB frames the final two research questions of this study.

The first section of this chapter will explore the various kinds of changes volunteers in each condition set for themselves, their level of confidence in their ability to make the changes

needed, their perspective on how much their training condition prepared them to adjust their behavior, and the level of support they felt as they set forth to change their behavior. The final section utilizes follow-up interview data to compare intended changes with the reality of lived experiences.

In addressing RQ2, it is important to acknowledge that the content of the cultural awareness training was not identical across the three conditions. Content was adjusted based on the affordances and constraints of the technology used. For instance, the asynchronous content was designed as a standalone module that would be accessible to the learner without further discussion required. In contrast, the two conditions with synchronous components covered more complex concepts because the learner was supported by a dedicated facilitator and a community of peers. As a result, the anticipated behavioral changes of volunteers in the asynchronous session differed from the anticipated behavioral changes of volunteers in the face-to-face or synchromodal settings because the content required learners to engage at deeper levels with the subject matter through interaction with their peers. Volunteers' intentions were classified within the context of their condition as relevant to the content their training covered. The following sections further examine to see if different training conditions are more likely to affect aspirations, enthusiasm, and completion of behavioral change.

Overview of Planned Behavioral Changes

At the end of each initial post-training interview, volunteers were asked to identify something from the training that they wanted to do differently in their role as a volunteer as a result of content learned during the session. Across all three conditions, the types of anticipated behavioral changes volunteers set for themselves varied. The breakdown of categories of goals appears in the Methods chapter, Table 11. The section that follows characterizes the different

types of anticipated behavioral changes volunteers in each condition set for themselves, their confidence in accomplishing their behavioral changes, the degree to which the training helped them to feel more competent in achieving the task at hand, and the social support they felt as they strived to change their behavior. Low-level intentions were either not directly related to the content of the training or related on a basic level but requiring very little effort in terms of changing attitudes, values or beliefs. Mid-level intentions showed an understanding of the content of the training and an increased awareness of how culture affected their volunteer experience to some extent. Finally, higher-level intentions indicated a deep understanding and appreciation for the content of the training and a concrete objective to be more inclusive and accepting of diversity within the 4-H club. Examples of these different behavioral changes are shared in the relevant sections.

Volunteers in this condition covered the full spectrum: from no intended changes to changes best identified as higher level. One individual stated she did not anticipate making any changes as a volunteer within her program. When asked to elaborate, she offered, “Actually, I didn’t have anything tangible. How would you take the kids to reach out to one of those [new audiences]? That’s for more of an adult leader, a volunteer thing.” Lower-level changes in this condition ($n = 2$) included making changes to the youth attendance procedures and just generally hoping for more involvement from young people in the club. At the beginning of each club meeting, youth are asked to answer an ice-breaker question as part of the attendance; the volunteer recognized that being put on the spot might be intimidating for younger youth who are new to the group. While this is a valid point and is somewhat mindful of the needs of inexperienced members, it is a basic application of the broader themes of cultural competency and inclusion.

Those individuals with mid-level changes (n = 4) indicated an increased appreciation for cultural awareness and offered a related intention. One volunteer described how the training made her more aware of the wide program offerings beyond the community club and how those program models were utilized in the more heterogeneous parts of the county. As a result, she wanted to make the youth in her club more aware of the fact that their experience was not the only way to participate in 4-H. Another shared that the resources provided in the training had made her think differently about the visually-impaired children in her club and that she wanted to make adjustments to their activities to be more inclusive. The third explained that she better understood the importance of strong, positive relationships among the youth and adults in the club as a result of the training and wanted to make sure that she was not focusing so much on her task list, but instead on being more mindful of the youths' feelings and overall experience. She shared, "That's the piece I want to change, just making sure that every kid in the club feels welcome and supported [. . .] it's more relationship-based than making sure the food is set up." The fourth enjoyed the opening ice breaker done in the training and planned to use it with the youth in her club. Finally, those volunteers with higher-level objectives (n = 3) wanted to internalize the concepts in order to change how they worked with young people in their 4-H club. All three of these volunteers offered a sense of grappling with the concepts of diversity and inclusion within their own personal values system. One shared, "I need to internalize it first and recognizing my own prejudices colored by my life experiences. I think it's a pretty intense subject to bring up and I think that you have different levels of sophistication with this subject." Similarly, another described wanting to work on being more open-minded about new audiences being involved in 4-H. The third volunteer explained how she wanted to work on looking at the individual contributions, talents, and skills offered by each young person according to his or her

unique abilities. She had several young people with special needs in her club and wanted to think about how they learned differently and valued what they brought to the group.

For those volunteers who stated some kind of planned behavioral change ($n = 9$), the majority of them indicated feeling confident in their ability to make the changes they wanted to make ($n = 7$). Their responses ranged from: “Oh, I can do that right away” to “I feel like I’m better prepared to do that” to simply, “I’m ready.” Only two felt less confident in their ability. Of those who felt confident, their intentions fell into all three categories of anticipated changes; both of those who did not feel confident had higher-level changes they wanted to make. The two individuals whose confidence was lacking both shared a sense of needing more time to internally process the information they heard in order to think about how they would make larger shifts in the way they viewed their responsibility as a 4-H volunteer to be inclusive and more appreciative of diversity. When asked how confident she was in her ability to make the change she described, one volunteer responded, “Maybe a little foggy on it. . . . I just need some more time to process it.” The other volunteer felt as though their county 4-H program had made an effort to recruit a more diverse group of youth but that those individuals did not want to be involved with the organization. Her lack of confidence stemmed from the fact that she felt as though she had been part of a group trying to make the change to a more inclusive program but was unsuccessful.

When asked if the content covered during the training provided volunteers with the knowledge and skills needed to make the desired changes, the majority of them affirmed that it had ($n = 5$ of 9). All but one of those individuals had mid- to higher-level behavioral changes ($n = 4$); one had a low-level intention. Of those that felt the training successfully built their skill set, all of them cited that it was processing the scenarios in a group setting that proved to be the most valuable part of the experience ($n = 5$). As one volunteer described,

We covered a bunch of different scenarios in the training. As far as we went around and took different scenarios, and I think that was good. Because I think she also said that these situations actually came up, they're real situations.

When volunteers had the opportunity to practice responding to different scenarios and hear from others in their similar position how they would respond, it provided them with a greater understanding of how to best proceed in an unfamiliar situation. Another volunteer offered,

I guess just realizing that different cultures have different practices and how they do things too. Even like the one lady in my small group was saying when she goes and does stuff on the reservation, they don't look you in the eye because they think that is disrespectful. Trying to remember those kinds of things, 'Oh maybe [this is a cultural difference] they're not trying to be mean to me.'

This volunteer had several group members who were either experienced in working with minority populations or who were themselves from minority groups. She appreciated her experience of discussing practical and appropriate responses to cultural awareness issues amongst a community of peers whose perspectives were broader than her own. The opportunity to hear responses framed from the point of view of the 'other' helped her to navigate some of her negative perceptions.

The four individuals who felt that the training did not contribute to their preparedness to meet their personal objective offered a couple of different reasons. Two individuals in this group had low-level behavioral changes; the others had mid- and higher-level objectives. One individual who set a lower-level change believed that the training served to reiterate best practices he already knew. The other three individuals sought more time and additional resources to feel more prepared. One appreciated the name-based icebreaker activity offered in the training

but wanted additional activities to help her meet her objective. Another sought the time to process and brainstorm with her co-leader of the club to make her change happen. The third felt as though she had tried the things covered in the training to no avail. She said she would rely more on the support of the 4-H staff person in order to make her intention happen.

When asked to describe the sense of social support they felt during the training, the majority of those with behavioral change aspirations felt the experience provided ample opportunity to be connected emotionally to a sympathetic group (n = 7). Some felt that the training helped them to meet new people within the community (n = 2), while still more found comfort in processing their own challenges and potential new challenges with others in a similar situation. As one volunteer shared,

When I leave there, I always feel like we're not the only one dealing with a situation. . . .

And we got to talk to other people, and it was very interesting, because I didn't know much about certain people so that was really cool.

Because 4-H club leaders often operate independently, it can be very helpful for them to be in dialogue with one another. For this volunteer, the experience of training itself left her feeling less isolated in her challenges. Another volunteer stated:

I think [the training] just reinforces those discussions about things, and to actually look and see if someone is struggling with something and if there is something we can do to make that better. It's something that I don't often think about and last night really got me thinking in that sense.

The small group conversations left this volunteer feeling like she was part of a community where the group felt responsible to one another to work together to find solutions for a struggling

member. Another volunteer echoed, “It’s [easier to implement] when there are more people on board.”

For the remainder of the group ($n = 4$), the training did not provide the same degree of social support. One volunteer directly stated that the training did not make them feel more connected to other volunteers. When asked to elaborate, she explained that those present already knew one another well and it did not seem to further connect them. Two individuals described their increase in social support as minimal, though one later went on to explain that it was helpful to have a group of people there to hear the information so that they could move the whole organization forward. Those who stated a minimal increase in social support both explained that they did not feel there was sufficient time to fully develop the level of friendship they would have needed to feel a deeper sense of belonging. As one shared when asked if she felt more connected to other volunteers as a result of the training,

Somewhat more connected in the small group discussions although the time was so short that I didn’t even know who they were. I didn’t know where they were from. I don’t know if I’ll ever come across them again. It was great that we were all able to speak, to add to the discussion.

The training provided her with a surface level sense of connection, rather than a deep bond with the others in her group. Some small groups consisted of volunteers who had known each other for many years; others were filled with individuals who were only meeting one another for the first time on the night of the training. Elsewhere in the interview she described the somewhat intense nature of the topic and noted that it was, at times, difficult to discuss it in a meaningful way with people who felt like they were strangers.

Volunteers in the face-to-face training set a range of different behavioral changes for themselves. One individual did not plan to make any behavioral changes, while two others offered intentions that were tangentially related to the content of the training. The majority of volunteers in this group set mid-to-high level objectives. Four set moderately challenging behavioral changes; three volunteers fully embraced the personal change and concrete strategies needed for a higher-level behavioral change. Most volunteers were confident in their ability to change their behaviors (n = 7 of 9). Processing scenarios as a group with others helped them to feel more confident; in fact, those who did not feel as confident sought more time and resources. As a whole, volunteers reported a strong sense of social support on their pathway toward change (n = 7 of 9).

Anticipated behavioral changes within the synchromodal condition ranged from no change (n = 2), mid-level changes (n = 4), and higher-level changes (n = 4). No individuals offered anticipated behavioral changes that could be classified as lower-level. The two individuals who did not anticipate making any behavioral changes both provided similar reasons: they believed that the likelihood of encountering any of the challenges with inclusion or cultural awareness were low. They both felt as though their community was not especially diverse; further, if they were to encounter someone who needed accommodations to fully participate, they would do so without having needed any of the content delivered in the training. As one of the volunteers explained:

[The facilitators] talked about the scenarios as like the situation that you build in the guidelines. There were no barriers here to learn from. I would feel that everyone in that room as a leader, would do everything possible to ensure that the county would adapt to

support that individual. I don't know if anything was really learned, maybe more written for us.

This volunteer felt the scenarios used in the synchromodal session did not apply in his community; therefore, they did not inspire him to change his behavior. He believed that the act of adjusting one's behavior to include someone who needed differential access, as he described elsewhere in the interview, "common sense."

Four individuals fell into the mid-level category. Of those in this group, two individuals said they planned to keep the resources readily accessible and use them if needed. Volunteers were provided with "hot sheets," which were quick guides to different disabilities or challenges youth might experience with brief tips for inclusion. The other two volunteers planned to focus broadly on topics related to the training, though not specifically having to do with cultural awareness. One volunteer shared her intention of wanting to focus more on creating a more generally welcoming environment for those involved in her club. Another volunteer planned to create a supportive club environment through intentional peer mentoring. She shared,

I think [I'd like] to pair up older members with younger members so the younger members don't . . . they look up to those older members so much that the older members a lot of times group together and talk and then the younger members are over here by themselves. Things that would try to engage all of them together a little more so that the younger members don't get frustrated or feel left out because they don't understand what's going on with meetings necessarily.

Though a valid approach to creating solid relationships amongst youth participants across ages, this volunteer's intention was not directly connected to content covered in the curriculum for the

evening. The theme was broadly connected to creating a welcoming environment; however, the focus was specifically on cultural awareness.

Higher-level behavioral changes were indicative of a deep engagement with the topic and a concrete plan to make changes within one's volunteer role. Four individuals in this condition had intentions that met this definition. Two of the volunteers identified different youth in their club who had disclosed cognitive or emotional impairments. Both of these women made specific intentions directly connected to how they wanted to better support youth with special needs. One explained specifically that she had a young person in her club with Asperger's and felt that she could do a better job by using the materials provided in the training. She went on to describe all of the different ways she felt the training had made her think about being more inclusive: of youth with different dietary restrictions, of those coming from families living in poverty, and more. The other volunteer described a young man in her club with severe anxiety, especially involving public speaking. She wanted to use the strategies to scaffold speaking in front of the group about his 4-H project.

The other two volunteers with higher-level changes were more focused on big picture changes they could make, either within themselves or within their larger county 4-H program. One volunteer felt the training had caused her to look critically at her own behavior, realizing that she often unfairly judged youth members who behaved inappropriately. She explained,

One thing that I will change is how I sometimes prejudge kids. Thinking that they're just misbehaved, they're just naughty or whatever the case may be. When really we need to look and see, maybe they have a learning disability, and what can we do to change what I do to make it a better experience for them?

One key element of cultural awareness is the ability to recognize one's own assumptions and further explore what might be behind them. This volunteer felt she had been quick to label young people as "naughty" without considering what might be the source of that behavior.

Another example of a more complex objective is choosing to tackle the issue of cultural awareness and inclusion on both the micro and macro levels. The other volunteer who fell into this category wanted to not only change her behavior within her 4-H club, but also felt inspired to offer aspirations for improving cross cultural communication at the county program level.

When asked what she wanted to do differently, she offered:

At a club level, [I want to work on] being more open, welcoming, no matter who walks in. At a county level, I would like to see somebody that's a go-to person in case situations do arise. Like, we have a family that I need [access to] an interpreter. It's somebody I can go to and say, 'Hey, this is what I need,' so it's not just on me but it's on the county as a whole.

Not only did she want to make personal changes, she also wanted to see changes at the organizational level that would support inclusion for all 4-H clubs in the county. Though not clear from the quote provided, she described elsewhere in the interview that she felt moved to rally other club leaders who had not attended the training to push for more support at the county level. She was not entirely clear on how she would make it happen, but her enthusiasm for the subject was evident.

The eight volunteers in the synchromodal condition who planned to change their behavior as a result of the training were evenly split between being moderately confident and fully confident in their ability to change their behaviors. Of the four volunteers in each category, half had mid-level aspirations while the others had high. The two individuals whose mid-level

behavioral changes were focused generally on the theme of being more welcoming only described moderate levels of confidence; though both seemed invested in making changes, each also displayed a certain level of apathy towards accomplishing them. For instance, one volunteer explained that she felt as though changing her behavior was a matter of whether or not she remembered to make it a priority. The other wanted to make the change, but felt somewhat discouraged that the others in her group would be supportive. Volunteers with high-level objectives who demonstrated a moderate level of confidence were less forthcoming about how they felt they would change their behavior. One described feeling overwhelmed, while the other simply said very little in response when asked if she felt confident. She confirmed feeling confident, but did not provide more detail when probed.

Those individuals with mid-level behavioral changes who demonstrated high levels of confidence both were focused on utilizing the resources provided in the training if the opportunity came up. Theirs was a relatively easy change to make; if the opportunity came up to use the resources, they planned to do so. Neither felt like there were barriers that could inhibit their success. Those individuals with both high-level behavioral changes as well as high levels of confidence both seemed to have made a personal connection with the topic. One explained,

I thought that it was very good, very useful. Sometimes we don't think about those different things if we have our club and you don't necessarily stop and think, 'Why aren't other people in it? And are we inviting them to be a part of it?' It just kind of opened up my eyes to make sure that we are welcoming to different [groups]. Like I said, mental disabilities, someone with physical disabilities and how we can talk about [including them]. They had a hot sheet which I thought were very useful and coming very handy to have in our resources.

This volunteer seemed especially inspired by the topic, drawing attention elsewhere in the interview to how the topic was relevant “right now,” rather than her other experiences of filing the information away for use some day. It caused her to think differently about how she approached her work as a volunteer.

Similarly, the other high-confidence, difficult behavioral change volunteer described feeling very connected to the subject, though in a different way. Outside of her volunteer role, she had professional experience in both social work and special education. As she put it,

Actually what I liked most about it is the opportunity because I think that a lot of people don't think of those things. I was a school social worker for a couple of years. I've been working in special ed for years and years. I think a lot of people don't realize that there are things that can be done to help that child feel more comfortable and to help your meetings go more smoothly while still incorporating those children in so they can fully participate. Just bringing it to the attention because I was listening and I heard a few people say, ‘We've a lot of accommodating to do,’ or, ‘I didn't even think that we should be accommodating. We know the schools need to, but what about extracurricular activities?’

For this volunteer, her confidence likely stemmed from her professional experience in both social work and special education. Nonetheless, it was evident that her inspiration came from finally having the opportunity to connect with other volunteers on a topic about which she felt passionately. She enthusiastically entered into dialogue with her volunteer community to help them consider ways to be more inclusive in their programming.

As a whole, volunteers in this condition generally believed the training had helped them to feel more prepared to change their behavior. Of the eight who anticipated making behavioral

changes, six responded firmly and positively when asked if the training helped them to feel more prepared. Replies ranged from “Yes, they gave us the tools we needed to do that” to “I can take the information and run. . . . It opened my eyes to ‘oh yeah, this does have to change’ to “I feel very well prepared.” Only two seemed slightly less hesitant in the role the training had played in helping them to feel more prepared. Both planned moderately difficult behavioral changes, and though both enjoyed the experience, neither offered concrete examples for how it supported their skill development. Rather, both suggested that the training brought the concepts to the forefront of their minds. For instance, when asked if the training supported her ability to change her behavior, one shared: “Yes, I think so. It’s not like I think about [cultural awareness]. I don’t really think about those things until they’re . . . they’re not obvious to me.” The other countered, “Did it teach me anything? Probably not, but it just brought it to the front of my head. Made me more aware of it.” Rather than describing a training experience that left them feeling more prepared, these individuals described a training experience that left them feeling more aware. While awareness is important, it is a less concrete demonstration of competence.

Of the eight volunteers who anticipated changing their behavior based on the training experience, five indicated that the training helped them to feel a greater sense of social support amongst their 4-H community. Three specified that they did not feel an increase in relatedness from having experienced the training. Only two of the five volunteers who reported an increase in social support following the training mentioned their interactions with volunteers from their computer-mediated interactions. One shared, “It was really cool to see what other people are thinking and you can get so many more ideas with the number of people, obviously the more people that are in the training.” She went on to mention that having the ideas on the screen while also being able to talk about them was an enjoyable part of the experience. The remaining three

volunteers focused on getting to know those in the same physical space as a pathway to feeling more social support. One spoke excitedly of knowing who was a good resource person in their group following the training; another shared how nice it was to meet the new volunteers in the program and discussed her personal mission of wanting them to feel welcome.

Volunteers in the synchronodal condition showed less range than those in the face-to-face condition. Two did not feel that the training was necessary; therefore, they did not anticipate making any changes. Four volunteers planned to make somewhat difficult behavior changes; another four anticipated making more difficult changes. Higher level changes were characterized by the volunteer's clear pathway to achievement and/or their deeply personal nature. As a whole, the group felt confident in their ability to meet their objective. Half of the volunteers indicated a moderate level of confidence; those with moderate levels of confidence were split evenly between having moderate and challenging behavioral changes. Less confident volunteers tended towards either apathy or overwhelm depending on the nature of their behavioral change; individuals with easier goals leaned towards less of a sense of urgency. Compared to the face-to-face condition, fewer volunteers felt the experience provided them with substantial social support ($n = 5$); however, only two of five referenced the technology-mediated component of the training. Similar to the face-to-face condition, volunteers in this condition were more likely to tie social support to those who were physically present in the room.

The spread of anticipated behavioral changes in the asynchronous condition was similar to the face-to-face condition. One individual in the asynchronous condition indicated that he did not plan to do anything differently in his role as a volunteer as a result of attending the training. Two individuals expected somewhat simplistic behavioral changes that were somewhat connected to the training theme. Two volunteers anticipated making changes that were best

described as mid-level; that is, their behavioral changes show a moderate level of engaging with the content and consideration of changing one's actions. Five individuals interviewed planned to make higher-level changes which reflected a full effort to think critically about the content and change one's attitude and behaviors to be more inclusive.

When asked whether or not he anticipated changing his behavior as a result of the training, one volunteer explained that nothing clearly stood out from the training as something he wanted to do differently. He asked for additional time to consider it, and then never followed up. The two individuals whose changes were deemed "lower-level" planned behavioral changes related to the theme; however, the changes themselves were not necessarily reflective of the overall objectives. One volunteer saw a photo in the asynchronous training where the volunteer had set up the room for the training where they were meeting in a circle. She determined that she wanted to change the set-up for their youth meeting from having the chairs in rows to having them in a circle so that everyone would be able to easily see one another. Alternately, the second volunteer noted that the training had sparked the reminder that she wanted to focus more time and energy on having youth in her club to play more of a lead role. While youth as leaders is a central tenet of 4-H programming, it was not a key component of the asynchronous training curriculum viewed by the volunteer.

Two volunteers in the asynchronous condition provided behavioral changes best described as moderately connected to the subject and the objectives of the training. Part of the training utilized a pyramid-shaped model common to 4-H volunteer training; these two volunteers referenced best practices connected to the pyramid. They wanted to improve how they asked young people to reflect on their experiences for better learning. As one volunteer put it, she wanted to "[go] around to each kid at the end of the meeting and [say], 'What did you get of

it?” Volunteers at the furthest end of the spectrum planned personal behavioral changes that directly were related to the content of the training and were concrete, rather than more abstract in nature. Though the asynchronous training did not delve as deeply into the complicated components of cultural awareness, it did offer many practical, easy to implement suggestions that would provide a more welcoming and inclusive environment for all 4-H members. All five of these volunteers referenced one of the tactics from the training as something that they wanted to do differently to make theirs a friendlier club for youth. Two of the five wanted to put together materials that would be useful for youth and families who were new to the group. As one volunteer shared,

I was never aware that you should have information like brochures or bookmarks. . . .

We’re pretty new to this, to have that stuff so that you can give that to new members to say, ‘Here you go, here’s a brochure about 4-H.’ I don’t even know that we have anything like that . . . to be able to offer that to new people.

The training helped both of these volunteers realize that new members may not understand some of the key elements of the 4-H program; they had assumed that 4-H did not need to be explained to newcomers. They both wanted to put together packets of information that new families could take home to more easily assimilate into the group.

The remaining three volunteers were moved to do a better job of noticing and engaging those who may feel out of place in the group and therefore not be as actively engaged. Two individuals specifically focused on the youth in the club; one volunteer extended her focus to include both the youth and his or her family. She wanted to make an effort to speak with each family to ensure that they understood what the commitment was, answer questions about the content that was covered during the training, and encourage them to reach out to her if they

needed additional support. One of the youth-focused volunteers explained how the training inspired them to ensure that the quietest members had an opportunity to share their voice in a way that felt safe to them. He shared,

[I learned] how to be looking for something, in the sense of, looking for kids that seem to be not participating because they feel like they're out of place. . . . You keep that kid to encourage new things. I think that's sometimes what I fail to remember, is the fact that. . . . We all need reminders sometimes of how things, we could make it better.

The volunteer recognized that youth may be quiet in a group setting for a variety of reasons. He wanted to pay better attention to those youth who may seem less comfortable and engage directly with them in order to help them become more confident. Similarly, the other volunteer in this category explained that she wanted to be more intentional in making sure that the more boisterous members of the group did not overpower those who were more reserved.

Those who anticipated making behavioral changes related to the volunteer training in the asynchronous condition were, as a whole, moderately confident in their ability to make changes. Of the nine individuals, three had low levels of confidence, three had moderate levels of confidence, and three indicated a high level of confidence. Those on the lowest end of the spectrum seemed confident in their abilities; however, all three shared a sense that completing their behavioral change was largely out of their control. For instance, one volunteer wanted to have the young people in her club take more of a leadership role. She described having a very young club and felt that none of them had been quite ready to be in charge. She wanted them to be prepared, but saw their age as a barrier – one that was out of their control. Another volunteer mentioned wanting to create brochures or bookmarks to be more welcoming to new members; however, she did not know how to find the materials needed to change her behavior. She was not

aware of how to utilize the University branding, pay for the printing, etc. The third individual felt that the decision for room set up was out of her control since she was no longer the lead volunteer in her club.

Those who showed moderate levels of confidence indicated that they felt prepared; however, they did not seem to emphasize that changing their behavior was much of a personal priority. They believed they had the skills but their answers lacked enthusiasm. For instance, one volunteer responded: “I could do it. It’s just making sure I do it.” Another replied, “Yeah, I guess I feel pretty prepared.” The third, who wanted to encourage her own children to be more reflective, did not directly respond to the question about her level of confidence. Rather, she went off on a tangent about some of her frustrations over how her children’s club sometimes lacked structure and therefore, quality. She heard her own children’s complaints about the time spent being a “waste” and wanted them to learn from every opportunity they experienced.

Those with higher levels of confidence showed concrete plans for integrating their new knowledge into their behavior. The change was not something they mentioned fleetingly; rather, they carefully considered how to change their behavior and made actionable steps. For instance, one volunteer who wanted to create a packet of resources for new youth members planned to utilize the expertise and enthusiasm of her college-aged daughter to work together to change her behavior. Another volunteer whose higher-level behavioral change was connecting intentionally with the youth and parents in her club shared that she planned to find the rest of the phone numbers she did not have and text or call them to check in on them regularly. She shared the types of questions that she would ask and described her level of involvement. The third volunteer in this category set the behavioral change of connecting more intentionally with quieter youth in

his club. When asked to describe if he felt better prepared to change his behavior, he simply replied: “I don’t know if “prepared” would be the word to use, but ‘confident.’”

Those who indicated being confident essentially offered the same response when asked if the training built their competence needed to change their behavior: the training was a good reminder of information they already knew. It refreshed their memories of what was important and sharpened a focus that may have gotten sloppy with time. For instance, one volunteer shared, “[The training] gave me a reminder, and then a sense of urgency, in a sense, to go and at least try something.” Phrased differently, another volunteer offered: “I think I felt [prepared] on my own, but at the same time [the training] refreshes, it emphasizes something that you may have forgotten or taken for granted.” A third volunteer explained:

[The training reiterated] things that I knew that I haven’t paid attention to in a while. I know that when you go to a meeting, everybody in our larger club felt safe and comfortable, but not everyone is as committed. You start with good intentions.

The majority of volunteers in this condition described the content of the asynchronous sessions as foundational information that gives good background for new volunteers. The volunteers in this condition had the highest mean number of years as a volunteer (7.6 years). As a result, they felt they knew the information already; however, they found value in being reminded of the things they knew were important. The content served as exercise that helped them to tighten and tone their practice of being more welcoming.

Overall, volunteers in the asynchronous condition did not express a strong sense of social support from the training primarily because they went through the experience alone. When asked if the training helped them to feel more connected to other volunteers, four of the ten directly responded that it had not. Three individuals shared that the experience itself had helped them to

feel that the training provided a sense of support from the organization that made them feel more supported. As he shared, “[The training] is kind of putting us in the same boat, the same direction.” Another described that the training had “show[n her] where [she] need[s] to be connected,” meaning that the training video had helped remind her of all of the different opportunities the organization provides for volunteers to be engaged and supported. The third explained that the training provided her with an “understanding [of] more what we should all be working for.” Interestingly, the remaining three volunteers in this condition described how the *content* of the training had drawn attention to the need for social support; this was the only condition where volunteers used the content of the curriculum as a lens when asked to think about their connectedness with volunteers. Both of the other conditions focused on the facilitated experience rather than the content. As one volunteer described,

I don’t know if it made me feel more connected. I’ve never been at a different club to see what their meetings are like, to see if they have a welcoming, do they do the role playing? Do they do leadership? I’ve been at leader council meetings, I’ve been at awards, county awards, and you’re always feeling welcome, that you know it’s a 4-H event. . . . I haven’t went[sic] to another club meeting or anything to see how they would run their meetings.

When asked about how the training helped her feel more connected to others, this volunteer framed the question in terms of how her behavior and experience compared to what’s happening for other volunteers. Another volunteer did something similar. She explained that the training “helps me relate to a percent of them because they could absolutely not know anything about you and they instantly open up.” The third volunteer offered that the training had drawn attention to where he needed to better focus his energy, but that he could have gotten that information by being in conversation with other volunteers who offer him advice. It is not clear if the volunteers

misunderstood the question or if they simply took an alternate perspective, aligning more with the content than with the learning experience.

Volunteers' stated behavioral changes in the asynchronous condition more closely mirrored those reported in the face-to-face condition. One individual planned to make no changes, two offered low-level behavioral changes, two had moderate behavioral changes, and five volunteers provided high-level behavioral changes. Those seven individuals with moderate to high intentions focused on improving accessibility for new members and improved belonging for current members. They connected with a specific piece of content in the training; individuals on the more advanced end created a well-defined plan of action to change their behavior. Compared to the face-to-face and synchromodal conditions, volunteers in the asynchronous condition seemed overall less confident in their competence to change. All volunteers who planned to make changes ($n = 9$) felt the training had been a good "refresher" of what was important. One third of volunteers indicated high levels of ownership over their objectives and felt very confident in their ability to perform well. In contrast, two thirds of volunteers felt confident in their own abilities but their responses did not indicate a strong sense of autonomy. One third described a lack of control in their environment; the other third seemed relatively apathetic about making their intention happen.

Summary of Planned Behavioral Changes

In summary, when placed into a context-appropriate framework given the affordances and constraints of their mediums, the types of planned behavioral changes volunteers had in each of the three conditions were relatively similar with a few exceptions. Planned behavioral changes in both the face-to-face and asynchronous conditions showed a range from none at all to easily accomplished to challenging. Volunteers in the synchromodal condition showed less range

because no volunteers offered low-level changes. In sessions featuring peer interaction, volunteers tended describe themselves as more confident in their ability to implement their intended changes than they did in the asynchronous sessions. They also expressed a greater sense of social support than individuals who watched an asynchronous module.

Follow Through of Volunteers on Planned Behavioral Changes

The final research question for this study examined the follow-through of volunteers on their initial behavioral changes and sought to better understand if relationship changes between the individual and other volunteers or the organization had affected their success. Follow up interviews were conducted with volunteers to determine if they had followed through on their individual plans to change behaviors as well as to determine if their relationship to other volunteers or the organization had changed since their initial interview. Both the face-to-face and synchromodal conditions had a 70% response rate; the asynchronous condition had a 50% response rate.

The following sections detail follow-up responses by condition, examining whether or not participants met their intended behavioral change and if they experienced any changes in the quality of their relationship with other 4-H volunteers and the organization as a whole. The Theory of Planned Behavior provides a framework for better understanding if intention to act, self-efficacy towards achieving their target, and subjective norms in the form of social support affected the likelihood of follow-through. As in the previous section, intention to act and self-efficacy are framed in the context of confidence and competence built during training and subjective norms are determined in the form of social support provided through the learning experience.

For RQ3, I coded participant responses by comparing their responses in the first interview to the responses provided in the second interview. If the volunteer was able to clearly explain how he or she was able to implement the changes they wanted to make, I coded it as “yes, behaviors changed.” For instance, a volunteer from the face-to-face condition noted in her first interview that she wanted to try the “What’s in a Name?” icebreaker activity with her club, and in the follow up interview, she described having done the activity and described how it went. Volunteers who did not attempt (for a variety of reasons) to make progress towards their goal clearly and said as much were coded as “no.”

Some responses were less obvious, due to either partial success, vaguely defined initial goals, or loosely connected descriptions of progress. In these cases, I made an effort to use other context clues provided in the interview to make a determination. For instance, one volunteer from the synchromodal condition wanted to use the resources from the training with her club but was unsure if she had been successful because her club had not met due to lack of involvement. Elsewhere in the follow up interview, she explained how she had been overwhelmed with activities and had not had the opportunity to think much about the training again. As a result, I coded this response as an unsuccessful effort because not only had she not used the resources, but she also had not thought again about the training session or its content. In two instances, volunteers indicated making an effort but did not fully accomplish what they set out to do. These responses were coded as partial successes. One of the two said, “I have tried a little bit of it. Part of that I would have a key leader so it's kind of easier for me to put that into involvement but when I'm not the key leader anymore, it's kind of hard to get that into it without overstepping the key leaders' position.” Though he tried to change his behavior, he was unable to achieve fully what he set out to do because he no longer was the lead volunteer of the club and therefore felt

he lacked the authority to direct its path. Volunteers who attempted but did not complete changes were categorized as partially successful, while those individuals who were unable to make any progress for a variety of reasons were classified as unsuccessful. This portion of the study will focus only on the responses of those volunteers who anticipated changing their behavior after participating in their training condition (n = 16, response rate 53%). The following table outlines the results. As a reminder, initial behavioral goals were coded based on their relevancy to the training condition's key points, their relative difficulty to achieve, and the individual's ability to articulate a clear path towards achieving their goal.

As a reminder, volunteers were given a score on both social support and confidence from their initial interview responses as part of RQ2. Table 12 indicates that the majority of the volunteers in the face-to-face (n = 5 of 7) condition indicated that they successfully implemented their behavioral change. Synchromodal volunteers were moderately successful as a group at meeting their planned behavior change (n = 2 of 4); interestingly, this was also a group that had the most volunteers choose not to set an intention (n = 2). Alternately, all volunteers in the asynchronous condition either only partially met (n = 2) or did not meet (n = 3) their behavior change.

Table 12

Volunteer Behavioral Change Results with Corresponding Factors

Changed Behavior	Condition	Confidence	Social Support	How Challenging was the Behavioral Change?
Yes	Face-to-face	High	High	High
Yes	Face-to-face	High	High	Moderate
Yes	Face-to-face	High	High	Moderate
Yes	Synchromodal	High	High	High
Yes	Synchromodal	High	Low	Moderate

Table 12 (cont'd)

Yes	Face-to-face	Low	Low	High
Yes	Face-to-face	Moderate	Low	High
Partial	Asynchronous	High	Low	Moderate
Partial	Asynchronous	Moderate	Low	High
No	Asynchronous	Low	Low	High
No	Asynchronous	Low	Low	Low
No	Asynchronous	Low	Low	Low
No	Face-to-face	High	High	Low
No	Synchromodal	High	High	Moderate
No	Face-to-face	Moderate	High	Low
No	Synchromodal	Moderate	Low	Moderate

No simple pattern emerged from the follow up data that clearly linked social support or confidence to a volunteer's successful efforts to change his or her behavior. The Theory of Planned Behavior predicts that volunteers who followed through on their intentions would consistently be those who showed high levels of self-efficacy, intentionality, and alignment with subjective norms. This was not the case, as there were volunteers with moderate and high levels of confidence or social support who did nothing as well as those who rated their confidence or sense of support as low who were still successful. Some weaker patterns, however, are worthy of note and perhaps further study. A weak pattern emerged for factors contributing to successfully changing one's behavior. Volunteers in interactive training sessions (either face-to-face or synchromodal) with challenging behavioral change goals and moderate to high levels of confidence tended to follow through on the intentions they set in the first interview. Only one participant categorized as having a highly difficult behavioral change did not follow through. The following sections provide an overview of the different categorizations as they connect to successful and unsuccessful behavioral change.

Four volunteers fell into the category of having high support and high confidence combined with more challenging intentions. All four of them made behavioral changes. Three were from the face-to-face condition and the fourth was from the synchromodal condition. The volunteer from the synchromodal condition had a more difficult change she wanted to make, as did one of the three volunteers from the face-to-face condition. The other two set moderately difficult intentions. As these individuals described changing their behavior, they did so with passion and enthusiasm. The majority of the anticipated behavioral changes revolved around making their club environment a more inclusive place, which had a positive overall impact on the experience of diverse youth. One volunteer who had wanted to make sure she utilized the resources given to her if the opportunity came up described an experience she had with a parent and youth during the Christmas holiday. Typically, their club celebrated by doing activities associated with Christmas including making ornaments and decorating cookies. Unbeknownst to her, this youth and her mother were Jewish and did not celebrate Christmas. She shared, “That made me stop and think, too. We didn't have anything planned that was religious or wasn't ornaments, but I didn't even think of that when, you know, when we were like, ‘Oh, let's do some crafts!’” As a result, she and her co-leader made changes to the activities planned for the meeting that were inclusive of all religions.

Another volunteer described how the training and resources gave her the skills needed to better support youth in her club with special needs. Her club had become one known for its inclusion and engaged higher numbers of special needs youth than many other 4-H clubs, including youth with fetal alcohol spectrum disorder, severe anxiety, and autism. In fact, she noted that several of the special needs youth were traveling from a different county in order to participate in the club because they felt more welcome there than in the other clubs they had

experienced inside their counties. When asked how she approached changing her behavior, she offered: “[I meet] with the parents about it, [asking] what are their needs, and how can we best meet that. Letting them know that we're willing to make accommodations.” She went on to describe how a willingness to be upfront about providing accommodations at the outset of the relationship helped her to establish a bond with the parents that made them and their children feel more welcome. Further, the other youth in the club responded to the atmosphere of inclusion by being more welcoming to the youth with special needs. The volunteer shared that the youth coming from another county had felt excluded by the 4-H members there, both within the club and at school. She shared, “The county that they're in . . . the kids kind of have a reputation at school for, you know, ‘Oh, it's them. I don't want to sit by them.’”

Only one volunteer described any barriers on her pathway to changing her behavior. The training experience helped her better understand the breadth of 4-H programming in her community; previously she had only been aware of 4-H clubs that looked like her own. She felt it was important to expose the youth in her club to the different models of 4-H Youth Development to build their understanding of the diverse range of youth 4-H included in their community. While she was ultimately successful in achieving that mission with the youth she worked with, she needed to change her focus due to resistance from her co-leader. Her co-leader was unable to attend the training and therefore did not have the same appreciation for her enthusiasm. She explained:

I remember bringing that up with her . . . that the way that we have 4-H here is different, and that some kids experience it after school. Then, when [those ‘different’ youth] come to our meeting, it's like a whole different world. It's not what 4-H is to them, and that's okay. I think that's been a problem for our other leader, that she hasn't had that vision, or

that seeing that other program, how it works, and things. She's more traditional. I guess that's being aware of that, and letting it evolve in our minds, and things, that it doesn't have to be the traditional way. Sometimes, I think that the whole 4-H program will evolve, just because, what we're seeing in our clubs is that kids are so involved with other activities, and my family as well, that maybe the whole meeting thing will evolve, as well. It's just something to think about, but sometimes our meetings aren't well attended, and things. We've heard that from other groups, and that also, at our club council meetings, which is everyone. All the leaders come. Even those are not well attended by the youth. Just wondering how this all will evolve. Maybe things will change, not sure.

She went on to describe how the experience of working with another leader who was more close-minded in her approach had left her feeling a lack of motivation. Despite this challenge, she was able to change her focus from the large group of the 4-H club to a smaller group of youth in leadership roles called 4-H Ambassadors. Working with the Ambassadors had brought a renewed sense of passion to the volunteer and her work, and left her feeling energized. One of the roles of the 4-H Ambassador program is to serve as a youth face of the organization to the public, encouraging new audiences to participate. Instead of losing focus on her behavior change when faced with a negative experience, the volunteer found meaning elsewhere by serving a need not currently being met.

Two volunteers who accomplished their intentions fell into the category of having high or moderate confidence and low levels of social support. The high-confidence volunteer wanted to utilize the resources offered during the synchromodal training in the event that they were needed, while the moderate-confidence individual hoped to use the "What's in a Name?" activity used as an icebreaker during the face-to-face session. Interestingly, both volunteers offered similar

rationales for feeling low levels of social support gained from the training: lack of time or opportunity to connect meaningfully with other volunteers. One felt the time was too short to really get to know one another, while the other felt it would have been more beneficial to force volunteers to sit with those who they did not know well to get them beyond their initial comfort zone.

The moderate-confidence volunteer wanted to use the activity from the training with her own 4-H club. She lacked confidence because she felt she needed more time to process the information; however, she gave no indication during the interview that she was not well-equipped to achieve her objective. Despite lacking confidence in her ability to change her behavior, she nonetheless was very passionate about the subject matter. Elsewhere in both her initial and follow up interviews she spoke at length about the importance of diversity and her belief as a parent that she was responsible for raising her daughter to be well-prepared to thrive in a global environment. Further, she was a long-time public servant with a high profile career in the court system; as such, she had substantial experience in public speaking and leadership roles. She had the opportunity to work in partnership with her daughter, a member of the club, to co-facilitate the “What’s in a Name?” activity and was pleased to say she thought it went better at the club level than it did at the county training.

The high-confidence volunteer had the opportunity to use the resources given to him during the training when a youth with cerebral palsy joined his shooting sports program. He spoke about how the training stayed with him: “Knowing about the accommodations and stuff has helped as far as asking the right questions and who do I talk to about it to try and get this individual to be able to compete with the rest of the kids, even though he has a disability.” Because of this youth’s disability, he had requested an accommodation to use equipment

otherwise barred from the program at a statewide level. This equipment made it easier to utilize a bow. At the time of the follow up interview, the volunteer had still not been successful in lobbying the state to change the rules. He shared, “We’ve run into a lot of roadblocks so far, but I’m not giving up.” It is worth mentioning that this particular volunteer had a partner who also participated in the study; she too changed her behavior and fell into the high confidence, high support category.

One volunteer was able to change her behavior despite indicating low levels of both confidence and support. She put forth the intention of working on being more open-minded and listening to alternative perspectives. This volunteer placed into her low confidence ranking primarily because she seemed to have trouble connecting her personal mission with the content of the training. Despite being asked directly if the training helped her to feel more confident in changing her behavior, she conflated her behavior change with a comment made by the 4-H staff person about the organization making an effort to build the diversity of the 4-H program. When asked if she felt prepared to change her behavior, she said:

I still really don't know. If we get a Muslim coming into our club . . . I still don't have any resources. We were told that this is what we should do, grant money, et cetera, but I don't know how to apply for a grant for this new club. Some of it wasn't even- some of it, [is the responsibility of the staff], not volunteer level. I've never been told or shown how to apply for a grant. Where do you go? Doesn't help me if I don't know.

Efforts to clarify what she meant by this were unsuccessful. It was unclear if the volunteer had connected her personal challenge of being more open-minded to getting grant money that would create opportunities to start a new 4-H club to serve underrepresented audiences. Nonetheless, when the follow up interview took place, she felt she had been successful in changing her

behavior of being more understanding of those who were different from her. She gave an example of an interaction she had with another parent and youth in her 4-H club who was a Jehovah's Witness. When she learned how Jehovah's Witnesses do not celebrate Christmas or any other holidays, she worked with her club to come up with a holiday celebration that did not exclude them. Further, she described how the experience was positive for the other youth in the club; she anticipated them complaining about having to change their traditions or acting as though they were strange because they were different, but they asked questions and simply accepted them and moved on. In the follow up interview, she did not mention the grant or starting a new club. Further, it should be noted that this particular volunteer worked at the county Extension office. Though she did not mention specifically going to the local 4-H program coordinator for support in changing her behavior, she had daily access to resources and encouragement if needed.

Two volunteers, both from the asynchronous condition, shared partial progress towards changing their behavior when contacted for the follow-up interview. Both individuals had similar goals: they wanted to focus their energy on better engaging the young people they worked with as part of their volunteer role. The first volunteer wanted to use some of the techniques from the asynchronous training to keep the young people focused during the meeting. During the follow-up interview, he shared: "I have tried a little bit of it. [To do that] I would have to be the key leader. It's kind of easier for me to put that into involvement but when I'm not the key leader anymore, it's kind of hard to get that into it without overstepping the key leaders' position." The volunteer shared an intention that he lacked, to a certain degree, the ability to actually control. His role within his 4-H club was as a supportive volunteer, *not* the lead volunteer who provides ultimate direction for how the meeting will run.

The second volunteer's goal and lack of autonomy were somewhat similar to her counterpart. She wanted to focus her efforts on encouraging some of the quieter young people in her club to feel more confident in sharing their thoughts during the meeting. Nonetheless, she had only an intermittent involvement with a group of young people. She was a longtime volunteer with her county 4-H program and lacked consistent involvement with any specific club. Instead, she often helped with special projects or countywide committees that came together less often. When asked directly if she had been able to make the behavioral changes she indicated in her first interview, she was not fully able to respond because she had not been regularly involved with a group of young people. After thinking about her activity over the months during the first and second interviews, she shared that she thought she had done better at engaging the quieter youth during her brief encounter with a team of 4-H Youth Ambassadors. Though she did change her behavior to some degree, she also was clear that she did not tie her behavioral change to anything learned in the training. She described it as a reminder of something that she already knew, which made it unclear if she selected a goal she already knew she could achieve. She shared, "I'm very good at [engaging youth] because I do it at my job. I do it with the youth. It was a good video, but I did know a lot of it already." Though the volunteer did state an intention to change her behavior, her description in the follow-up indicated this practice was already something she did.

The volunteers who did not follow through on their stated behavioral changes were more difficult to separate into clear groups based on lack of confidence or social support. The clearest point of commonality was a lack of setting challenging behavioral change intentions. Of the seven volunteers who did not achieve their goal, only one set an intention classified as difficult

and only two set one classified as moderately challenging. Four volunteers fell into the category of easily achieved or somewhat unrelated behavioral changes.

To some degree, volunteers who did not change their behavior (or only partially achieved) tended to be from the asynchronous condition. The total number of people in the partial-changes or no-changes was nine; of the nine individuals, five were from the asynchronous condition. While two volunteers each in the no-changes group were from the face-to-face and synchromodal condition ($n = 4$), it is worth noting that the majority of volunteers from the higher human interaction group ended up successful in changing their behavior ($n = 7$).

With the exception of one volunteer who simply forgot to integrate a new roll-call routine at the beginning of her meetings, the excuses offered by volunteers who did not make progress towards their stated actions are best summarized as indicating a lack of autonomy. Thwarted autonomy took several forms: youth not showing up to 4-H club meetings, not being the lead volunteer and therefore unable to make decisions, scheduling difficulties including holiday programming, and struggling to move forward due to lack of resources. For example, when asked if he was able to make progress towards implementing his goal of getting youth more involved, one volunteer responded:

No. With holidays and such we have not been together much, so not really. We've had one gathering here in January. We've had one club meeting and that was actually more of an after holiday potluck get together. We had a very short meeting and there wasn't much go discuss. Not really a lot has happened since we last talked. Next Sunday will be our next meeting. We'll start. I honestly haven't looked at what's on the plate.

This volunteer participated in the face-to-face training, which occurred in early November. Between his initial and follow-up interviews, the only activities the club had focused on

celebrating the holidays. Nonetheless, his words are not indicative of an individual who is especially motivated to make the changes. Not only did he not remember his initial goal, but he also had not given the goal much thought since the first interview. The follow-up interview was his reminder and he did not appear to have plans for how he would better involve the youth in his club.

Three individuals in this group described lack of control in the form of not being the formal leader of the 4-H club. Despite being engaged parent, volunteers who felt moved to identify a way they wanted to use the information they learned; these three volunteers chose not to communicate with the lead volunteer to share their ideas with them to improve the club experience. In some cases, volunteers spoke of openly negative relationships between themselves and the 4-H club leader. One volunteer, described in earlier sections of the study as having cried through much of her initial interview because of this difficult relationship, shared that not much had improved during the interim between the two interviews. Though her goal was relatively simple – changing the set-up of the room from chairs in rows to chairs in a circle – she was unable to accomplish it. When asked why, she explained:

We still sat in our regular stripes like normal. . . . We have some people that are very, like, kind of the boss in how, you know, ‘This is how we've always done it, this is how we're gonna[sic] do it.’ It just really depends on who’s there, if that makes sense. Like who is there to help set up early, some people are like ‘Oh okay,’ and other people are like ‘This is how we've done it for years.’

Because of the negative relationship between herself and the lead volunteer, this individual did not feel comfortable suggesting something as simple as changing the room configuration. Her

poor experiences had left her feeling timid and unwilling to challenge decisions with which she did not agree.

Another volunteer shared similar sentiments. Though his relationship with his 4-H club leader was less volatile, he still was hesitant to give the impression of overstepping his bounds. He had been a 4-H club leader before and seemed more aware how suggestions could be seen as criticism of the leader's skills. He shared:

[The club leader is] a little more controlling in the sense of 'This is the way I'm going to do it. This is what's on my mind and that's the way it's going to be.' I didn't really put a lot [of effort into making the change, but did] what I felt like wasn't overstepping a bound. Sometimes if you do that you don't intentionally mean it but they feel like you're demeaning . . . you're downgrading them. [When you're not the leader,] you're not the designated person. Sometimes that title has more to do with it than what you actually accomplish. Just because you're the key leader doesn't mean you're better; it's just the best position so you have to lead that way and people look up to you [to have the answers, even if you don't know them.]

Volunteers with thwarted autonomy failing to make progress towards changing their behavior is consistent not only with the Theory of Planned Behavior, but also with Self Determination Theory. TPB frames behavioral change in terms of an individual's intention to act autonomously, how important the change is to valued peers, and if an individual is confident that he or she can accomplish the change relatively easily. Five of the seven individuals who did not make any efforts to change their behavior indicated low or moderate levels of confidence; four of seven indicated low levels of social support gained as a result from the training. As a whole, the unsuccessful group set less challenging behavioral change intentions than the group of

individuals who made more progress. Of the seven intentions set in this group, four were characterized as low difficulty, two as moderate, and one as high. One may argue that these individuals' basic motivational needs were less satisfied than their higher-confidence, higher-support volunteers; as a result, they challenged themselves to grow less and also felt less able to persevere through barriers that came up.

I asked volunteers in the follow-up interviews if their relationships with their peers and with the organization had changed since the initial interview. Answers to this question varied. Overall, the majority of those who completed follow-up interviews indicated that their relationships with their peers and with the organization had not changed since their first interview ($n = 10$ of 18). Three individuals described some frustrations with other volunteers or having disagreed with decisions made at the organizational level. Despite their somewhat negative experience, all three individuals were clear in that these challenges did not affect their overall intention to continue volunteering with the organization. Five individuals felt their relationships with their peers and with the organization only had improved over time; the longer they were involved in the organization, the deeper their connection to it became. Two volunteers from the improved relationship group had made an effort to get to know other volunteers on a social level and felt that it had improved their overall experience in the program.

There were no apparent patterns between training condition and relationship status with both peers and the organization. Additionally, volunteers were not more or less likely to have made progress towards changing their behavior with a corresponding rise or decline in the quality of their relationships.

Summary of Follow Through of Volunteers on Planned Behavioral Changes

To summarize, despite a somewhat poor response rate, I attempted to determine if there were any visible patterns connecting planned behavioral changes with action steps. Though the small sample size made the task challenging, I identified some commonalities. First, volunteers who had acted upon their intentions set goals that were both harder to achieve and more clearly articulated. Further, they had higher levels of confidence. Those who partially changed their behaviors ($n = 2$) had profiles similar to those who fully changed their behaviors with the exception of both lacking full autonomy to change their behavior; in both cases, the volunteers had no control over the circumstances. Alternately, individuals who had not implemented any steps towards changing their behavior more commonly set intentions for themselves that were easier to achieve or less concretely connected to the cultural awareness training. Lack of confidence was also a factor in failure to achieve. Individual level of social support often appeared alongside successful behavior changes, but not frequently enough to be as clear of a pattern as the type of goal a volunteer set for him or herself and their confidence. Additionally, condition also appeared to influence a volunteer's success. While not all volunteers in training conditions with higher levels of peer-to-peer interaction were successful, a slim majority were ($n = 7$ of 13). Further, no volunteers from the asynchronous condition were able to implement their action steps completely. Two asynchronous volunteers were partially successful. When I viewed the explanations of the volunteers who were not successful in changing their behavior together, I saw a recurring theme of thwarted autonomy. Volunteers shared various explanations for why they did not feel a sense of control over their ability to take action. Finally, the majority of those who completed a follow-up interview did not experience changes in their relationship

with peers or with the organization. Changes in the quality of relationship appeared to have no bearing on an individual's ability or willingness to take action on changing their behavior.

CHAPTER 6: DISCUSSION

Current research on best practices for retaining volunteers in their service suggests that relationships are essential: not only between the volunteer manager and the volunteer, but also among volunteers themselves. As the use of technology becomes more commonplace and affordable, increasingly more nonprofit organizations rely on computer-mediated tools to support and prepare volunteers in their roles. Similarly, as new generations of volunteers come into their service, more individuals come to expect that organizations will communicate and provide resources virtually. Technology meets a need by allowing organizations to support volunteers in a cost and time effective manner and by providing volunteers on-demand access. Nonetheless, little is known about how moving from primarily face-to-face practices to online delivery affects the motivation and retention of volunteers. This study explored how volunteers in two different technology-mediated training conditions described how training on issues of cultural awareness motivated them by either satisfying or thwarting their basic needs—in contrast the same training delivered face to face. The study was framed by Deci and Ryan's (2000) Self Determination Theory (SDT) and Ajzen's (1991) Theory of Planned Behavior (TPB). Thirty volunteers participated in a cultural awareness training divided equally into three conditions: face-to-face, synchromodal, and asynchronous. Volunteers completed a qualitative interview that I supplemented with observational data from their training sessions.

Chapter Four focused on how volunteers in different technology-mediated settings described aspects of their training experience connected to relatedness, competence, and autonomy. Using Ajzen's (1991) Theory of Planned Behavior, Chapter Five then explored the types of goals volunteers set for themselves based on their training experience as well as their

level of confidence and support to achieve their personal objective. It also utilized data from the follow-up interviews to determine to what degree volunteers implemented behavioral changes based on their training experience and what factors contributed to their success or failure. Before considering some of the implications of this study, I will first summarize the main results from those two chapters.

Different training conditions satisfied relatedness, competence, and autonomy to different degrees. Regardless of assigned condition, all participants held the belief that face-to-face training was the standard to which all other forms of training were compared. Volunteers were asked about their prior training experiences. Unspecific to the cultural awareness training condition they were assigned, volunteers nearly always ($n = 29$) indicated that they enjoyed the opportunity to interact with one another and found the hands-on activities more engaging. As the findings from the study indicated, volunteer preferences connect with both relatedness and competence need satisfaction.

Volunteers in the face-to-face condition spoke of the CA training truly allowing them to feel a closer personal connection to others in the program through activities that allowed them to build friendships, generate ideas from peers, and build a common vision promoting greater inclusion in 4-H. Those in the synchromodal condition experienced the relatedness benefits of small group discussion and activities as well as broad-based discussion with other 4-H volunteers across the country towards addressing challenges with cultural competency. Volunteers in the asynchronous condition primarily noted that the learning experience did not fully meet their relatedness needs despite helping them to feel a larger sense of connection to the organizational mission and providing good reminders of practice when working to make their 4-H club a more welcoming environment.

Volunteers in all conditions spoke about how training offered them new ideas and helped them gain confidence in addressing scenarios of inclusion. Further, volunteers in the face-to-face and synchromodal conditions noted an increased sense of competency from having access to new material resources such as the handouts describing inclusion practices for a variety of disabilities. An unanticipated finding was a general sense among volunteers in the synchromodal condition of greater competency following the completion of training. The lecture component of the synchromodal CA training was facilitated off site; as a result, time limits were strictly adhered to in a way that they were not in the face-to-face CA training. Because the facilitator managed time in accordance with the schedule, volunteers had the opportunity to complete all activities without feeling rushed and were able to review the handouts provided as a part of the training. In the face-to-face setting, facilitators often let the opening activity go too long because participants were engaged in learning each other's personal histories. As a result, they adjusted activities elsewhere to make up time and sent volunteers home with a packet of resources they did not review during the evening. In the asynchronous condition, volunteers noted that the information itself was not new for them but was important information that often reiterated what they already knew or reminded them of practices about which they had forgotten.

Autonomy resulting from the CA training experience was difficult to identify; thwarted autonomy surfaced from the data in the form of disengagement. In the face-to-face condition, disengagement took the form of volunteers 'checking out' before the end of the evening. Volunteers in the synchromodal condition identified portions of the training session where they felt their time was not used effectively, leaving them frustrated. Volunteers in the asynchronous condition felt bored by what they felt was the monotonous tone or the belaboring of certain key points.

Condition assignment seemed to have limited impact on whether or not an individual planned to change his or her behavior following the CA training and on the types of changes they planned to make. In the training conditions where there were higher levels of interactivity, slightly more volunteers indicated strong feelings of competence towards making changes relative to diversity and inclusion. Volunteers in the face-to-face and synchromodal conditions more frequently described the training experience as thought-provoking. Their responses were also generally longer and more fully developed which could indicate a greater sense of inspiration and motivation from having participated in an experience that pushed them outside of their comfort zones. Volunteers shared that participated in processing the scenarios with others gave them new ideas; further, the group discussion may have helped them to question their assumptions. The asynchronous group demonstrated a less clear pathway towards implementing their behavioral change; because most of them felt the training was review, they felt it was a good reminder of practices they already did and therefore seemed less focused on the changes they would make.

Though the effect of condition on volunteers' follow-through was not as clear as it was for the issue above, training condition did appear to have somewhat of an influence. While not all volunteers in training conditions with higher levels of peer-to-peer interaction were successful (face-to-face and synchromodal), the majority were. Further, no volunteers from the asynchronous condition were able to implement their action steps fully. Volunteers who had acted upon their intentions set goals that were both harder to achieve and more clearly articulated. Further, they had higher levels of confidence. This was true across conditions. Alternately, individuals who had not implemented any steps towards changing their behavior more commonly set intentions for themselves that were easier to achieve or less concretely

connected to the cultural awareness training. Lack of confidence was also a factor in failure to achieve. Individual level of social support often appeared alongside successful behavior changes, but not frequently enough to be as clear of a pattern as the type of goal a volunteer set for him or herself and their confidence.

Key Findings

To my knowledge, this study was the first of its kind to explore the motivational impact of technology-mediated training on volunteer motivation. Though it is widely understood that volunteers need training to build their skills and establish relationships that are critical to retention, existing studies have only examined the effects of face-to-face training. Technology has become more affordable at the same time that organizations utilizing volunteer labor have faced budget cuts. Bringing individuals together at the same time and place is expensive and time consuming, and online offerings allow organizations the opportunity to provide flexible offerings that meet volunteer schedules while keeping costs low. Nonetheless, when existing research on retaining volunteers upholds relationships as the critical factor, the effects of online training on volunteer motivation had not yet been examined.

Results from this study suggest that face-to-face volunteer training is still the most effective way to establish a strong positive relationship between volunteers and staff and build a supportive volunteer community. Synchronodal training meets volunteers' motivational needs in a manner similar to face-to-face training due to its real-time opportunities to interact with individuals in person and at a distance. However, one of the key arguments in favor of using technology as an educational tool is that it can reduce costs and offer flexible schedules for volunteers. Because synchronodal training requires volunteers to be physically present in the same location at a local level, it still carries the burdens associated with the face-to-face option. It

gives volunteers access to experts outside the local program in a cost-effective way and provides the added benefit of more perspectives due to a wider network of volunteers. While volunteers appreciate the opportunity to learn independently through asynchronous training, it does not seem to support their motivation to the same degree because it lacks the critical element of interaction to support both relatedness and competence. Though not directly asked within the context of this study, volunteers suggested that the asynchronous training format best supported their ability to determine autonomously what and when they would participate in learning due to its flexible nature. Nonetheless, they were clear in their feedback that they missed the opportunity to learn from others as part of a community and often lacked the discipline needed to avoid multitasking during the session, therefore missing critical information because they did not devote their full attention. In finding a technology-supported solution that meets the demands for flexibility and cost-effectiveness as well as interaction needed to support relatedness and competence, one may argue that an online environment that supports asynchronous interaction like a discussion board may be the best solution to balance the needs of programs with those of volunteers.

Relationship to Extant Literature

This study drew on a wide body of literature: Deci and Ryan's (2000) Self Determination Theory, Ajzen's (1991) Theory of Planned Behavior, as well as research on volunteer motivation and retention practices and adult learning theory, particularly in online environments (Dean & Goodlad, 1998; Franz, 2007; Gidron, 1983, 1985; Jung et al., 2002; Knapp & Smith, 1995; Knowles, 1973, 1980; Lammers, 1991; Moore, 1993; Prouteau & Wolff, 2008; Stebbins, 1996). My research contributes to each of these fields of studies in a variety of ways as detailed in the sections to follow.

Self Determination Theory informed the development of interview questions to a large degree. Participants were asked how the cultural awareness training experience supported their relationships with other volunteers and with the 4-H staff, what they learned during the CA training as well as if and how they anticipated using the information presented, and if they felt prepared to implement the content into their volunteer practice. Patterns emerged from volunteers' descriptions of their overall experience in the 4-H program as well as their experience within the training environment that fit Deci and Ryan's motivational model of basic need satisfaction including relatedness, competency, and autonomy. Volunteers discussed the three basic needs consistently across all conditions; however, some experiences better satisfied their needs than others. This is important to note as it begins to build upon the work of Walther (2009) to determine the boundary conditions in which different theories can be applied. He writes, "boundary conditions stipulate the contextual conditions in which different theoretical chains-of-events are expected to occur. Boundary specifications will help us understand when one theoretical process applies, or when a different one applies, or even . . . precisely when communicators shift from one type of process to another" (p. 748).

In this study, face-to-face training was used as a baseline as the most common mode of offering training. Synchromodal and asynchronous training modes served as the contextual conditions used to test the boundary specifics of SDT. Though volunteers equally discussed relatedness, competence, and autonomy in each condition, some conditions were better at supporting their needs than others. For instance, asynchronous volunteers talked about how their relatedness was thwarted and the structure of the synchromodal session seemed to best support competence based on volunteer's comments. Autonomy to act following the training experience was difficult to identify based on the setting: volunteers' roles are inherently autonomous as they

are expected to act independently without much oversight. Autonomy surfaced through the training experience in the form of engagement; regardless of condition, volunteers spoke of various factors that thwarted their engagement in the training.

Gidron (1983) found that role satisfaction accounted for 42% of the overall variance in a volunteer's enjoyment of his or her work. Role satisfaction was a measure of interest in the work itself, the opportunity to use existing skills, achieving objectives, and experiencing few barriers. Volunteers in my study discussed these factors not only in their description of their general experience, but also relative to the cultural awareness training. Those who enjoyed the cultural awareness training the most found it interesting and applicable to their work as volunteers, walked away with concrete tools to use, and believed they would be able to easily change their behaviors. Further, relatedness among volunteers and between volunteers and staff is essential to pro-social motivation (Dean & Goodlad, 1998; Gidron, 1985; Knapp & Smith, 1995; Lammers, 1991; Proteau & Wolf, 2008; Stebbins, 1996). My findings were consistent with existing literature; volunteers felt the overall environment was rich with opportunities to connect with youth, volunteers, and staff. Further, their relationships were the primary factors stated when they asked what they liked best about volunteering with the 4-H program.

Research has found that competency, relatedness, and autonomy influence online learner motivation and learning outcomes (Chen et al., 2010; LaPointe & Reissetter, 2008; Sim et al., 2011). Feeling competent in navigating the online environment easily supports the motivation of college students (Chen et al., 2010). Similarly, participants in the asynchronous condition appreciated the easy-to-navigate setting of the online module; nonetheless, they also talked about facing difficulty accessing the modules when viewed at home, as they were intended to be. The same individuals discussed missing the opportunity to interact with their peers. LaPointe and

Reisetter (2008) discovered that interaction with the instructor in formal online learning environments had a significant impact on the relatedness of college students. Interestingly, they found that students did not place a high value on interacting with peers. In contrast, adult volunteers in this study tended to focus almost exclusively on interacting with peers rather than with 4-H professionals. This finding may indicate a critical difference between students in a formal learning environment and adults in a nonformal setting. Adult learning theory places a high priority on interaction with both subject matter experts and peers along with the opportunity to share one's own expertise (Knowles, 1980).

This key difference may be due to the age of the sample and the key differences between young adult learners in a college setting and adult professionals in a volunteer setting. One of the basic tenets of andragogy, as will be discussed in later sections, is the ability to interact with and learn from peers. Other studies focusing on the importance of synchronicity in technology-mediated environments found that the ability to communicate in real time reduced negative relatedness and increased cooperation, acceptance, and motivation (Roseth et al., 2011; Saltarelli & Roseth, 2014). These studies focused on an activity called constructive controversy, where students were to reach consensus on opposing issues. The present study fits within the findings of that study, particularly when one considers the complicated feelings that often arise when discussing cultural competency and diversity. While not framed explicitly in terms of a constructive controversy, volunteers were presented with scenarios where they were asked to confront a practice or belief outside of the 'norm' and arrive at possible solutions through small group discussion. Discussion forced them, to some extent, to reach a consensus on the recommendations they presented to the large group for moving forward. Volunteers in conditions where synchronicity was present spoke highly of how the training supported their relatedness

needs; further, these individuals tended to be more successful in following through with their intended behavioral change. Cultural awareness is different from other topics volunteers might encounter; individuals must engage with the subject at more personal levels by questioning their assumptions, values systems, and worldview. Volunteers in interactive training conditions talked about the opportunity to confront their own beliefs in the context of others. As a result, they appeared to experience greater levels of relatedness and competence.

Ajzen's (1991) Theory of Planned Behavior (TPB) influenced the development of questions in the follow-up interviews. Volunteers were asked if they recalled the change they wanted to implement, how motivated they felt to make the change at the time, how confident they felt in their ability to make the change, and if they had experienced any changes in their relationships with other volunteers and the 4-H program in general. TPB was not as effective as anticipated at predicting volunteers' follow-through with their intended behavioral changes following the cultural awareness training. The theory dictates that a sense of control over one's behavior, a strong feeling of self-efficacy relative to the change, and the support of important others from within one's social circle all predict whether or not an individual will change his or her behavior. This was not the case within my study, as there were volunteers with moderate and high levels of confidence or social support who did nothing as well as those who rated their confidence or sense of support as low who were still successful.

I chose TPB because it seemed to align well to SDT. SDT posits that motivation exists along a continuum from amotivation to varying forms of extrinsic motivation to intrinsic motivation. Deci and Ryan identified four stages of extrinsic motivation: (a) external regulation, (b) introjected regulation, (c) identified regulation, and (d) integrated regulation (2000). Integrated regulation is the most autonomous form of extrinsic motivation and is the result of the

individual personally selecting their goals based on their values and beliefs. Individuals do not necessarily move across the self-determination continuum in a linear fashion; rather, people move through various forms of regulation depending on the environment and their personal histories. Volunteers' motivation to change their behavior following a training encompasses a variety of contexts: the training environment, the volunteer environment, and an individual's personal environment. While the training environment may have been conducive to establishing predictive elements of behavioral change, it may not have been sufficient in overcoming an erratic volunteer environment or personal situation. Adults must often prioritize responsibilities at home and at work over volunteering because volunteering is something they may choose to opt out of at any time.

TPB may be too imprecise to gauge a volunteer's likelihood to follow through. In retrospect, I may have been better able to identify factors that contribute to behavioral change if I developed my questions around the premises of introjected, identified, and integrated regulation. Ryan and Connell (1989) developed a model of perceived locus of control for prosocial behavior that includes many complex components including wanting to be liked, avoiding punishment, believing the goal is important, and doing something because it was fun. They also examined factors like environment, including parental and teacher motivation, coping strategies, anxiety levels, and personal level of effort. The self-regulation scales developed based on SDT provide a more nuanced and complex portrait of the factors that influence individual behaviors (Levesque et al., 2007; Ryan & Connell, 1989; Williams & Deci, 1996; Williams, Grow, Freedman, Ryan, & Deci, 1996). Survey instruments provide reasons for following through on behavior that range from introjected to integrated. For instance, one instrument focusing on medical students' learning includes the following possibilities in response to whether or not they will use the

information presented: (a) Because I feel like it's a good way to improve my skills and my understanding of patients, (b) Because others would think badly of me if I didn't, (c) Because learning to interview well is an important part of becoming a doctor, and (d) Because I would feel bad about myself if I didn't study this approach (Williams & Deci, 1996). Odd numbered responses are more likely to indicate autonomous regulation while even numbered responses indicate controlled regulation.

To the extent that the technology afforded, all three training conditions integrated the principles of andragogy. Participants in each cultural awareness training condition indicated an understanding for why the subject matter was important to their work and left the experience with concrete, realistic techniques for integrating the material into their work as volunteers. The asynchronous module provided more flexibility for the learner in terms of self-directed learning; volunteers had the opportunity to navigate through the content as they wished and interact directly with the content. Insofar as problem-based learning and the opportunity to employ a variety of engaging methods to practice addressing challenges, the face-to-face and synchromodal conditions were more effective.

The affordances and constraints of interactive (face-to-face and synchromodal) training and asynchronous learning modules present an interesting conundrum within the context of adult learning theory: adults want and need flexible opportunities to learn and on-demand options meet those needs. Though volunteers echoed an appreciation for the flexibility of these online modules, the vast majority of them still indicated a preference for face-to-face learning because it provides for a more engaging and meaningful experience due to the interactivity and hands-on activities. Research indicates that content that fully asynchronous content that utilizes high quality design can be just as meaningful as cohort-based experiences for adult learners in the

realms of teacher professional development and improving one's health practices (Christensen et al., 2002; Ruelhman et al., 2012; Russell, Kleinman, Carey, & Douglas, 2009).

In my research practicum, I found that online communities for volunteers could be a successful way to support both the learning and the relationships of volunteers (Frendo, forthcoming). Asynchronous modules were housed in a password-protected community; asynchronous discussion boards followed the modules for volunteers to ask questions specific to the content. Further, volunteers wrote in additional discussion boards meant to enhance collaboration with one another on ideas related to their volunteer roles or function as an online support group for people in a shared experience. Additional research indicates that peer-to-peer interactions in virtual support groups in a variety of settings can foster a strong sense of social support, learning, and interdependence (Ballatine & Stephenson, 2011; Barak, Boniel-Nissim, & Suler, 2008; Drentea & Moren-Cross, 2005; Ridings & Genfen, 2004). An asynchronous community where online modules are posted could serve as the middle ground that meets the flexibility adult learners need while also providing the interaction they crave.

The findings of this study were consistent with the literature describing factors supporting volunteer retention and engagement. Volunteers need strong relationships with program staff and other volunteers (Gidron, 1983; Lammers, 1991), clear direction and communication from the organization they serve (Eisner et al, 2009), and enjoyment of the task itself (Gidron, 1985). If they have a positive experience in the early stages of their volunteer work, their commitment to the organization is likely to grow as they take on additional responsibilities (Wilson, 1976). Volunteer training not only serves to give them the skills they need to feel competent in their role, but also develops the relationship between the volunteer and his or her community of peers, and begins to build the rapport needed for a strong positive connection with the program staff.

Implications for Practitioners

My investment in the outcomes of this study stems in part from my role as a practitioner. For a decade, I have worked in this field and support many colleagues and partner organizations who face similar struggles of needing to achieve program outcomes with fewer resources and supporting volunteers through technology as it becomes a more commonplace tool. Because of this investment, I have pushed myself not just to report the findings stemming from the research, but also to make sense of how the findings can inform practice. I see myself as a scholar of engagement in context, utilizing my workplace as a learning lab, and truly emphasizing the “so what, now what” of research.

Moving forward, I believe there is a time and place for all types of volunteer training examined in this study as well as for additional options. Participants found aspects of each that they both enjoyed and disliked. Research on educational technology encourages educators to look at the realms of content, pedagogy (or andragogy), and technology when designing learning opportunities (Mishra & Koehler, 2006). Volunteer managers designing training opportunities should use adult learning theory to ensure that learners will be engaged through the process and examine the depths to which they want learners to be able to connect with the content. If the content is one like cultural awareness with the end objective being that volunteers are more equipped to create inclusive environments for youth, then a technology that supports interaction both with an instructor and a peer community may be a consideration. For educational goals where the learning objective is knowledge transfer rather than attitude change or skill development, it may not be necessary for volunteers to have more interaction. In situations that combine both knowledge transfer as well as relationship development, skill building, and attitude change, educators could examine the affordances and constraints of an asynchronous learning

environment or utilize a flipped classroom approach where volunteers could view short lectures ahead of time to allow more efficient and effective use of limited in-person time.

Limitations of the Study

The primary limitations of this study arise from its limited sample size and in its qualitative nature. Qualitative research has many affordances. It allows the researcher to better understand the perspectives of a group of individuals with common experiences, it can help develop hypotheses that can later be tested, and it can generate ideas for program improvement. Nonetheless, a major limitation of qualitative research is that it does not provide an opportunity to explore causation between variables. For instance, though participants in this study shared a belief that interaction with other volunteers improved their engagement in the training, I do not have an objective and reliable measure for engagement or interaction to test that belief. Further, qualitative research tends to engage a small number of participants in a deep way rather than a large sample size in a broad manner. The small sample size of this study limits its application to generalized audiences. Finally, the lack of random assignment to condition also limits the findings of the study. Though I had no explicit information on how my participants differed, within and between condition, I was not able to exercise experimental control in how they were assigned to condition.

An additional limitation of this study was the use of Self Determination Theory and the Theory of Planned Behavior to frame the interview questions asked. Rather than allowing the data to form the theoretical framework of the inquiry as it does in the grounded theory approach, two existing frameworks structured the questions I posed and therefore to some degree the responses of volunteers. Creswell (2009) described grounded theory as using the lived experiences of study participants to begin to form a general theoretical pattern. In grounded

theory, researchers do not begin with an existing theoretical framework in mind to guide the hypothesis. Rather, they use participants' reports of their lived experience to generate the hypotheses and then puts them into the context of the existing literature. When one formulates questions with existing frameworks in mind, he or she may receive responses back that limit the complexity of the issue. That said, I still coded all of the data for any patterns I saw – not just those related to either SDT or TPB. I did not find themes that I could not fit within the frameworks I selected for the study.

Finally, it was impossible to remove completely my own investment in the outcomes of this study and my own subjectivity due to my employment as the host organization's State Director of Volunteer Systems. Though many efforts were made to assure that my own biases and opinions did not shape the end results and interpretations, one is never completely free of their own lenses particularly as a researcher/practitioner. Volunteers tended to associate me first and foremost with my profession, despite my efforts to have them view me as a researcher. When they had the opportunity to speak with me individually, many of them wanted to take the opportunity to ask questions, seek advice from an expert, and vent frustrations. While I allowed them to do so, I requested that they do so at the end of the interview. Despite the challenges this presented to keeping the interview focused and managing the volume of data collected, both the volunteers and I benefitted from the digressions. Throughout the experience, many volunteers expressed gratitude to me for receiving an opportunity to share their feedback with someone at an administrative level. They felt the organization truly valued their input and appreciated the opportunity to influence the future of the program.

Future Research

The findings in this study lend themselves to several next steps in understanding the role of synchronicity and technology in volunteer training and their effects on motivation. One is a quantitative study that measures the basic need satisfaction of volunteers in different technology-mediated training environments to determine if there is a measurable difference in their experiences. One way of measuring this would be modifying the Basic Needs Satisfaction at Work scale to fit the context of adult volunteer work (Deci et al., 2001; Ilardi, Leone, Kasser, & Ryan, 1993; Kasser, Davey, & Ryan, 1992).

Similarly, it would be beneficial to the field to investigate the additional influences of technology on volunteers' experiences. Technology is a regular part of many key components of the volunteer lifecycle including looking for an opportunity, screening for the role, being oriented to the organization, and communicating with staff to learn the role and receive support. Though extant research clearly indicates the importance of strong relationships in retaining volunteers, training is only one way of building the relationship. All of the aforementioned components listed above tie back to relationships and many have changed because of the affordances and use of technology. Throughout my volunteer interviews, volunteers mentioned the various points that technology touched their experiences: emailing with other volunteers and staff, texting with youth, completing the online screening and orientation components, and inappropriate interactions with other volunteers on Facebook. Another qualitative study about the various ways that technology enhances and causes barriers in the volunteer experience could provide a greater understanding of the volunteer experience and move forward the practice of supporting volunteers and simplifying their experience.

Finally, a third potential avenue for future research is a comparative study that examines how synchronous interaction differs from asynchronous action in satisfying volunteers' basic needs. In my research practicum, I found that a virtual volunteer community proved to be very effective for some volunteers at helping to satisfy relatedness. Presently, asynchronous learning for volunteers happens without any opportunity for volunteers to process the information with other volunteers or staff in corresponding platform. It would be interesting to see if volunteers' appreciation for and learning from the medium grew with the opportunity to interact with others after viewing it. Further, my study found that the experience of interacting with other volunteers online was something that appealed to a select type of volunteer, though I was unable to truly explore the characteristics of individual volunteers who helped other volunteers to enter into the conversation. Through the careful structuring of the online environment and the collection of key demographic data, social network analysis could be utilized to see how volunteers support and educate one another.

Conclusion

This study was the first of its kind to explore how synchronicity and computer-mediated training impacts volunteer motivation. Participants experienced three different formats of cultural awareness training; findings indicate that environments that support interaction between volunteers and the opportunity to talk through problem-based scenarios were not only preferred by volunteers, but also seemed to contribute more to an individual's likelihood of following through on changes they wanted to implement after the training. Adult volunteers seek opportunities for flexible, on-demand learning but also desire experiential, engaging, and cooperative learning where they can grow from the wisdom of their peers. None of the three conditions studied fully met the need for flexibility as well as the need for collaborative

conversations. An asynchronous learning network where volunteers could complete online modules and connect with one another at their leisure could prove effective as an in-between. In several instances during the interview experiences, volunteers talked about communicating and collaborating through text messaging, social networking, email, and other technologies. They already utilize technology in unique ways to support and learn from one another. Minnesota 4-H could provide an opportunity for volunteers to collaborate on a much larger scale and build connections with others outside of the volunteer's local community. With relatively minimal effort, we could transition the online modules into an environment that supports asynchronous conversation and the posting of state-approved resources.

My colleagues across the country have been hesitant to explore this structure because they believe it could be a risk management issue or worry that volunteers could express their frustration with the program in writing. Both a decade of experience as well as nearly three years of completing a study about volunteers' experiences have taught me that people do not wait for a formal space to complain. Venting frustrations, disagreeing with policies made by the administration, gossiping about others, and simply not getting along are commonplace even in an organization where families are deeply committed and engaged for generations. One may wonder if it would be more efficient to provide volunteers with a closed community where the frustrations could be voiced freely rather than staff hearing about them through the rumor mill. Early intervention and correcting false information before it becomes widespread are critical to dealing with challenges. Further, volunteers benefit from the potential collaborations, online friendships, and shared passions that are possible in a closed support community. In my practicum, I found that being able to observe the asynchronous conversations of volunteers in an online community allowed me to intervene earlier during challenging situations and gave me

new ideas to better support volunteer needs. Rather than wonder about the topics I should focus on for my training, I looked to their asynchronous conversations to get ideas.

Minnesota 4-H Youth Development is a leader in their use of distance learning to train and support volunteers. This study helped the organization better understand the experiences of volunteers in those training environments and how we can improve the support we provide them. Further, as one of the largest and most well recognized youth development programs in the world, the practices of 4-H are often used as models for emerging volunteer programs through other nonprofit organizations. Though the long-term implications for this research are many additional studies into the future, this study took the first step in understanding the effects of technology and synchronicity in volunteer training. This approach helps researchers know what interventions they might consider in the future and what frameworks are valid. Through this study, practitioners better understand the need to carefully choose a technology tool that matches with learning objectives to ensure that the tool has the affordances needed to achieve the goal.

APPENDICES

APPENDIX A

INTERVIEW 1 QUESTIONS

Interview Warm-Up	
<i>Thank you again for participating in my project and for making time to talk with me after your training session on [title of the training session]. Tell me a little about why you became a 4-H volunteer and what you do in your role with Minnesota 4-H.</i>	Goal: Set the context of the study and make the interviewee feel comfortable
Background to the Target Session on Cultural Competency	
• <i>How many years have you been a 4-H volunteer?</i> • <i>Have you volunteered anywhere else? If so, where?</i> • <i>At best you can remember, please describe your previous volunteer training experiences with Minnesota 4-H.</i> • <i>How have those different formats worked out for you?</i>	Goal: Hear each participant's recent experience in their own words with volunteer training within the program in terms of both content and delivery format. Though I will have access to individual training records, the first three questions are there to establish rapport and ease the participant in to talking about volunteer training. I will listen for references throughout the training to comparisons to past trainings.
Present Training Experience	
• <i>Now I would like to have you think about today's training. What was the overall focus?</i> • <i>What do you understand the purpose of today's training to be?</i> • <i>If you were to describe today's training for someone who wasn't there and you wanted to give a clear picture of what it was like, what would you say? How would you describe it?</i> • <i>How did you feel about the overall focus and purpose of today's training?</i> • <i>What did you like the most about it? What was it about that aspect that you appreciated the most?</i> • <i>What did you like the least about it? What was it about that aspect that you disliked?</i> • <i>Can you describe some of the activities that you were asked to engage in during this training?</i> • <i>What did you like most about these activities?</i> • <i>What did you like the least?</i>	Goal: Enter the volunteer's experience of the target training. The questions are intentionally framed in both general and broad terms.

Engagement Questions	
<i>I am interested in knowing how easy it was for you to be attentive during the training. On this graph, you'll see that the bottom line indicates the beginning, middle, and end of the training. The left line indicates low, medium, and high levels of attentiveness. Please draw a graph indicating your level of attention during the session. After you're done, I'll ask you to please describe the story the graph tells.</i> <i>What does your graph reflect or say about your level of attention during the training? [Where the height of the graph changes] What can you tell me about this period of the training where your graph [rises/falls]?</i> <i>[If the response to the above question focuses on "external" events (e.g., aspects of the training)] How did you feel during those moments?</i>	Goal: Understand the volunteer's engagement and how they took shape over the session.
Relationship with Organization	
<i>How would you describe your relationship with Minnesota 4-H as an organization?</i> <i>To what extent do you feel valued by the organization?</i> <i>If I were to ask you to assign a numerical ranking from 1-10 (with 10 as the highest value), what would you say?</i> <i>What does it mean to you to feel valued as a 4-H volunteer?</i> <i>What is it like for you to be a part of 4-H?</i> <i>What do you like about being a Minnesota 4-H volunteer? What is going well for you?</i> <i>What would you like to see changed or improved about your relationship to the organization?</i> <i>How did today's training contribute to or take away from your relationship with the organization?</i>	Goal: Understand the volunteer's relationship and perception of Minnesota 4-H and how the present training session connected with that relationship/view.
Relationship with Other Volunteers	
<i>How would you describe your relationship with other 4-H volunteers?</i> <i>How important are these relationships to you? Why are they important?</i> <i>To what extent did today's training make you feel connected to other volunteers? In what ways did it help you to establish a connection?</i> <i>How could the training have contributed more to your relationship with other volunteers?</i>	Goal: Understand the role of other volunteers in the interviewee's experience.
Sense of Success as a Volunteer	
<i>What does it mean to you to be successful in your role as a 4-H volunteer?</i> <i>When you are successful as a 4-H volunteer, what does it look like?</i>	Goal: Understand how the volunteer describes success as a volunteer.

• <i>What is your greatest contribution or an aspect of your work as a volunteer that makes you feel most successful?</i> • <i>In what ways does the organization help you to be successful?</i> • <i>What sorts of obstacles get in the way of your success as a 4-H volunteer?</i> • <i>What do you think the organization could do (or do more of) to help you to be more successful in your role?</i>	
Learning	
• <i>What, if anything, was new for you in this training? Was there nothing, one thing, or more than one?</i> • <i>[For each named element] Can you tell me how that was “new” for you?</i> • <i>Do you think any of these may be useful in your practice as a 4-H volunteer? [Probe as needed to understand perceived usefulness]</i> • <i>What do you think will influence whether and how you will or will not apply the information you learned today?</i> • <i>What parts of the training are you less likely to use in your role as a 4-H volunteer?</i>	Goal: Understand what the volunteer took away as “new” from the training.
Expected Changes in Volunteer Work	
• <i>As a result of today’s training, what is one thing you will want to change in your role as a 4-H volunteer? What’s the one thing you’ll do in the next month?</i> • <i>How well prepared do you feel to make that change?</i> • <i>Did today’s training make you feel more prepared? Why or why not?</i> • <i>What features were important to prepare you?</i> • <i>Do you think the training could have prepared you better to make this change? How?</i>	Goal: Understand how the volunteer looks ahead to work in their role and whether the training experience is connected to those hopes and plans.
Opening to Volunteer	
<i>I know that I have asked you a lot of questions today. Is there anything else you want to tell me or that you think I should know about today’s training or your role as a 4-H volunteer?</i>	Goal: Give the volunteer a chance to voice any unaddressed issues.
Interview Closing	
<i>Thank you so much for your time and thoughtful responses to my questions today. Your input is really valuable. One thing that often happens in interviews and conversations is that we think of things that we wished we would have said after the interaction is over. If this happens and you have anything else you’d like to share with me, you can call me at (612) 626-8327 or email me at mefrendo@umn.edu. I will be back in touch with you in about a month. Good luck with your work and thank you for everything you do on behalf of Minnesota 4-H Youth Development.</i>	Goal: Express appreciation for the volunteer’s time and provide them with a way to share additional thoughts.

APPENDIX B

INTERVIEW 2 QUESTIONS

Interview Warm-Up	
<i>Thank you again for agreeing to meet with me again to discuss your volunteer training experience. As a reminder, your responses will kept anonymous and you're free to stop the interview at any time.</i>	Goal: Set the context of the study and make the interviewee feel comfortable
Recall	
• <i>When we talked the first time in [when, where], I asked you about you hoped to use the information from the training on [topic name] in your volunteer work.</i> • <i>Do you remember what you said at that time? I am not giving you a memory test, but I am interested in the ideas that remained with you.</i> • <i>[If needed], do your best to recall where you were on this issue at the end of the training.</i> • <i>Did you feel that the training made you feel you wanted to change some part of your volunteer work?</i> • <i>What part of the training had the significant effect on you personally?</i> • <i>Share a summary of their previous response.</i>	Goal: See what the volunteer says about the objectives they stated in the first interview, both before and after your reminder.
Explore the Difference, Briefly	
• <i>Do you see those two descriptions as pretty much the same [no real change] or do you see important differences?</i> • <i>[If differences] What do you think led to those differences?</i>	Goal: See if the volunteer sees any important difference in what they initially said [that you played back to them] and what they remembered.
Understanding the Differences	
• <i>Do you feel you were able to successfully implement what you hoped you would? Were there things going on in your area of service that made it hard to implement your goals? Were there supportive things going relative to your goals?</i> • <i>When we met last time, you indicated that you wanted to change _____ about your practice as a 4-H volunteer. At the time, you shared that you felt (prepared, unprepared, etc.) to make that change. Were you able to make the changes you desired? Why or why not?</i>	Goal: Explore the reasons for the shift, specifically whether "obstacles" led to the shift.
Relationship Changes	
• <i>Has your relationship with other 4-H volunteers changed since the training? [If so, how?]</i> • <i>Has your relationship with the organization changed since the training? [If so, how?]</i>	Goal: Understand any shifts in the relationship dynamic between/amongst volunteers and the organization.

Opening to Volunteer	
<i>I know that I have asked you a lot of questions today. Is there anything else you want to tell me or that you think I should know about your training experience or your role as a 4-H volunteer?</i>	Goal: Give the volunteer a chance to voice any unaddressed issues.
Interview Closing	
<i>Thank you so much for your time and thoughtful responses to my questions today. Your input is really valuable. One thing that often happens in interviews and conversations is that we think of things that we wished we would have said after the interaction is over. If this happens and you have anything else you'd like to share with me, you can call me at (612) 626-8327 or email me at mefrendo@umn.edu. Our learnings from this study will be shared with our stakeholders as appropriate. Good luck with your work and thank you for everything you do on behalf of Minnesota 4-H Youth Development.</i>	Goal: Express appreciation for the volunteer's time and provide them with a way to share additional thoughts.

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