

ADULT LITERACY LEARNING: PERCEPTIONS AND MOTIVATIONS  
OF VOLUNTEER TUTORS

by

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## ABSTRACT

Most adult literacy studies tend to focus on learner outcomes, and the few that do include tutors usually focus on their compassion as volunteers and/or assess the effectiveness of tutor training. Since community adult literacy programs are largely dependent on volunteer tutors to provide instruction, tutors come from various backgrounds and are not required to meet a standard of educational training. It should not be taken for granted that tutors are familiar with all of the theoretical approaches in adult literacy instruction, and it is reasonable to assume that different tutors may approach learning situations differently, based on their own underlying assumptions and experiences. This study was conducted to better understand how tutors think about different aspects of their work and why they volunteer for the cause of adult literacy.

Findings suggest that most tutors find at least some value in literacy activities representative of the main themes in the literature of the field, and that different subgroups of tutors share preferences for particular types of activities. Findings also indicate that tutors have a sense of universal ethics when they think about fairness in the context of societal organization, view tutoring as a way to express their humanitarian values, and are motivated by the worth they place on literacy in a socially just society.

## DEDICATION

This is for my parents, my greatest supporters and best friends. I still learn from your influence every day. You are the reason that I work hard and I will always aim to make you proud. I love you more than I can say.

## LIST OF ABBREVIATIONS AND SYMBOLS

<i>df</i>	Degrees of freedom: number of values free to vary after certain restrictions have been placed on the data
<i>F</i>	Fisher's <i>F</i> ratio: A ration of two variances
<i>M</i>	Mean: the sum of a set of measurements divided by the number of measurements in the set
<i>SD</i>	Standard Deviation
<i>p</i>	Probability associated with the occurrence under the null hypothesis of a value as extreme as or more extreme than the observed value
<i>r</i>	Pearson product-moment correlation
$\eta^2$	Effect size
<	Less than
=	Equal to
AM	Authentic Materials
SM	Structured Materials
PSY	Psychological Support

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People who know me best know that this accomplishment is part of a larger plan for me. It might be taking me a while but late bloomers bloom nonetheless.

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## CHAPTER 1

### INTRODUCTION

#### **Literacy as a Worthy Cause**

Most people would agree that literacy is important. Proficiently literate adults are able to make sense of street signs, bills, forms, notices, newspapers, books and webpages effortlessly, since the process became automatized in childhood. Functional literacy refers to the ability to use reading skills, in addition to other communication skills, like writing, speaking and listening, to function effectively in society. Adults with lower literacy levels are more likely to live in poverty, receive public assistance benefits, earn lower wages, be unemployed, and are less likely to participate in democratic processes like voting (Kirsch, Jungeblut, Jenkins & Kolstad, 2002).

Literacy is a shared social problem given its impact on both individuals and society. For decades, adult literacy organizations have served as a resource for adults to improve their literacy skills. The primary source of instructional delivery is provided by volunteers from the community, as there are very few paid staff members in adult literacy and adult basic education programs (Tamma et al., 2007). Through their work, volunteer tutors fulfill two roles, as community servants and educators.

A tutor's approach is informed by both the environmental circumstances of the learning situation and the tutor's own assumptions about learning and social cooperation. This study seeks to better understand why people choose to become literacy tutors and what they think they is most useful in their practice. Support for this study begins with a discussion of the main themes in literacy research and how they are reflected in tutor practices. This is followed by a

discussion of how motivational processes and conceptions of social cooperation may influence a tutor's decision to volunteer and which aspects of their work they find most useful.

### **The Work of Adult Literacy Organizations**

In the English language, reading requires the ability to make sense of letters, based on the sounds they represent and the way they are arranged. Over the course of normal development, most children learn to read along with other communication skills, like talking, listening, and writing (Ehri, & McCormick, 1998; Ehri, 1995). Functional literacy is a relative term, encompassing more than just reading ability and includes the application of broader communication skills. For adult literacy learners, adequate reading skills have not reinforced these broader communication skills, and in order for significant advancements in literacy development to occur they must practice not only reading, but writing, speaking, and listening skills (Cervero, 1985).

The most recent national statistics indicate that about 25 percent of adults in the US perform at basic or below basic reading levels (Kirsch et al., 2002). Unfortunately, these statistics have not changed much over the last decade, despite services in place to provide literacy instruction for adult learners (Rampey, 2016). Adult literacy programs struggle with high attrition rates, typically 50 percent, and have limited success in showing significant gains on standardized measurements for those learners who do continue with their participation (Pickard, 2013; Greenberg et al., 2013).

**Adult learning theory.** The minimal progress of literacy programs has been attributed in part to the standardized measures used to assess gains in adult literacy learners. Most of these measures are designed for use with children and fail to capture functional gains relevant to the lives of adults (Sabatini, Shore, Holtzman & Scarborough, 2011; Greenberg et al., 2011; Reder,

2009). Discourse in adult learning and literacy suggests that literacy be considered in terms of its functionality rather than technicality of isolated skills, however relativistic definitions of literacy can lead to subjective and anecdotal assessments of progress, making it difficult to measure gains in a quantifiable way (Roderick, 2013; Belzer, 2006b; Quigley, 1997; Fueyo, 1988; Kazamek, 1988; Cervero, 1985).

In order to address the needs of adult learners, literacy instruction must acknowledge that adults not only differ from children, but from each other as self-directed, autonomous learners (Knowles, 1970). In adult learning situations the teacher should be a facilitator of knowledge rather than a presenter of content and goals should be learner-centered, established through collaboration. Changes in technical skills, such as decoding and grammar usage, are likely not the only indicators of literacy advancement. For instance, changes in reading habits and increased engagement with literacy materials are important since they imply ongoing practice, which is likely to result in advancement of literacy skills over time (Reder, 2009; Kim, 2003, Smith, 1996).

**Best practices in adult literacy research.** The individualization required for literacy instruction can make it challenging to address all of the areas of communication related to literacy advancement within the limited time frames of tutoring sessions. In line with adult learning theory (Knowles, 1970), learner-centered goals are established, however in order to effectively address the most important targets of these goals, tutors are encouraged to become knowledgeable of many methods and have the flexibility to adjust their emphasis on different areas as needed. Approaches vary to the degree that they are centered around isolation and training of technical skills, and to the extent that they hold relevance to specific literacy activities in the learner's life.

***Bottom-up philosophy, structured programs.*** There are a number of available workbooks that provide an organized framework for teaching reading skills to adults. These materials are sequentially organized by grade reading level using sample reading passages and practice worksheets to isolate phonics, vocabulary and comprehension skills. To compensate for inadequate decoding skills, many struggling adult readers rely on a set of memorized sight words and use context to guess the identity of unknown words. At times, use of these strategies can make a reader appear competent during certain reading activities, however without the ability to decode unfamiliar words, readers are limited in their ability to comprehend a larger range of material. In addition to decoding skills, other technical skills, like knowledge of parts of speech, proper grammar usage, and reading comprehension strategies are important because they help a reader to decipher how, when and where something is happening to who or what in a given text when memory and context strategies are inefficient (Hock & Mellard, 2016; Mellard, Wood, Desa & Vuyk, 2015; Cutris & Kruidenier, 2005).

Structured programs approach literacy learning using a bottom-up methodology in that they explicitly train technical skills in a prescribed and controlled way, before they are applied in real-life situations for the learner (Meyer and Keefe, 1988). Structured materials have been criticized for being too similar to those used with children, failing to take into account the current relevance of literacy in adults' lives and reinforcing the other essential communication skills that define literacy (Rodrigo, Greenberg & Segal, 2014; Roderick, 2013; Greenberg, Rodrigo, Berry, Brinck & Joseph, 2006, Kazemek, 1988). The decontextualized nature of skills workbooks can be demotivating for many adult learners who are eager to apply literacy skills in their everyday lives. Research with adult learners suggests that use of materials with personal relevance during literacy instruction can be more engaging and effective in advancing related skills (Greenberg et

al., 2013; Shore, McNeil, Sabatini & Scarborough, 2008; Purcell-Gates, Degener, Jacobson and Soler, 2002; Purcell-Gates, Degener, Jacobson & Soler, 2001).

***Top down, learner-centered philosophy and authentic materials.*** Authentic materials refer to literacy materials that are used outside of classroom learning environments that are of use or interest to learners in their everyday lives. This wide ranging category of materials could include forms and documents related to work, bills, bank statements, calendars, appointment books, notices about health benefits and public assistance, recipes, shopping lists, menus, maps, directions, voter registration forms, newspapers, magazines, books of interest to the learner or his or her children and grandchildren, greeting cards, personal correspondence, emails, text messages, webpages and any other part of a learner's life that requires adequate literacy skills. The variety of these materials provides tutors with opportunities to better understand the functions of literacy in the lives of learners. Using authentic materials represents a top-down approach in that they provide the essential connection between tutoring sessions and what happens outside of them, directly targeting learner-centered goals (Purcell-Gates, Degener, Jacobson and Soler, 2002; Purcell-Gates, Degener, Jacobson & Soler, 2001). Gaining insight to learners' needs and interest also gives the tutor opportunities to introduce other materials that may be of interest, expanding the learner's familiarity and comfort with a wider range of sources. Findings from longitudinal studies suggest that positive changes in reading habits can eventually result in technical skill gains as readers naturally acquire more practice through increased engagement with print materials (Greenberg et al., 2013; Reder, 2009; Shore, McNeil, Sabatini & Scarborough, 2008). More creative approaches using relevant materials are thought to strengthen learners' interest and motivation, encouraging continued participation.

The nature of authentic materials lends itself to practice of literacy skills beyond reading, however, it can be difficult to manage the advanced skill levels of some texts that are often above the learner's skill level. A learner may be interested in reading a biography about a person he or she is interested in, but it may be written well above the learner's current level. Another learner may seek assistance with health insurance forms, which contain specialized language that can be challenging both conceptually and in reading level. It can be difficult to adapt these materials in a way that also appropriately facilitates needed practice in technical skills. Additionally, facilitating literacy skills in the context of their function may require training of other supporting, non-reading related skills. For example, a learner may need to complete online trainings as part of a new job requirement, but have limited knowledge of internet usage, using email, and downloading and saving important forms. This necessitates simultaneous guidance about accessing the needed content, and understanding the content itself. Comprehensively addressing these functional elements takes additional time and can become frustrating for both the learner and tutor (Roderick, 2013; Belzer, 2006a, 2006b).

Use of authentic materials has been successful in creating opportunities for meaningful and relevant exchanges during tutoring sessions, however in order for tutors to be comfortable with these more genuine conversations, they must be able to engage in perspective taking, as learners may share views and ideas that do not necessarily align with their own. For instance, discussing bible scripture can evoke feelings about deeply held epistemological beliefs that the tutor and learner do not share. Similarly, preparing to vote for an upcoming election can reveal conflicting political points of view. It might be difficult for tutors to manage these more complex topics and remain cognizant of the learner's advancement in literacy skills as the central goal (Talarr, 1995; Crew, 1995; Fueyo, 1988).

Generally, authentic materials are useful in addressing functional aspects of literacy but their use alone does not address all aspects of communication, or make tutoring easier. In order to facilitate communication, a tutor must be able to model effective communication. Both structured and authentic materials address expressive and receptive communication skills, but from different perspectives.

**Literacy as communication.** Given the diversity of learner needs and the individualized nature of tutoring sessions, a universal approach to literacy instruction is lacking. More important than identifying a single approach or set of specific strategies that one should adopt, a tutor's flexibility in response to the context of a learner's circumstances and efficiency of time usage during sessions are likely more valuable (Ziegler, McCallum & Bell, 2009; Bell, Ziegler & McCallum, 2004; Beder, 2007; Belzer, 2006a; Belzer, 2006b, Scanlon & Lenz, 2002; Ceprano, 1995).

Literacy advancement should be considered as part of a greater transformation that influences the ways one interacts with social networks and organized systems in society (Quigley, 1997; Fingeret, 1983). In addition to reading words, learners should be discovering how to use those words to communicate more effectively and become more agentic in their lives. Since reading, writing and speaking skills reinforce each other, they should each be considered important in practice.

**Oral Language.** For many learners, tutoring sessions are the only place they feel comfortable practicing speaking skills and expressing their ideas. More than just getting to know someone, conversations are an important part of supporting the broader changes that accompany literacy advancement (Saal & Dowell, 2014; Sandman-Hurley, 2008; Belzer, 2002; Nitri, 1999).

Whether using workbooks or authentic materials, tutoring sessions inevitably involve verbal communication. In order for goals to be learner-centered, tutors must find out how the learner currently uses literacy skills, and what they expect to gain by advancing those skills. While tutors empathize with a learner's struggle with reading, as proficient readers, they may find it hard to relate to a life without adequate literacy skills. Conversations that foster deeper perspective taking often happen naturally, but are not always acknowledged as a significant part of the learning process. Many struggling readers also struggle with oral language skills and verbal expression of thoughts, ideas and feelings. In order to experience the larger social changes that literacy advancement can afford, learners must practice speaking and listening so that they are better able to express their own ideas and consider alternative concepts (Talarr, 1995; Crew, 1995).

Rather than assume that verbal exchanges during tutoring sessions are achieving this goal, Talarr (1995) suggests that tutors employ "active listening" strategies that have been successful in conflict resolution and diversity training. This technique could be practiced through an extension of conversations that already take place, which could be decontextualized or relevant to the learner. For example, the tutor and learner could each respond to the same question (e.g. "Describe your morning routine"), and then each paraphrase the other's response, reflecting reception and understanding of that response. If personal privacy is an issue for some learners or tutors, the same types of exercises could be completed with less personal topics (e.g. "Describe the difference between a cat and a dog"). The objective is to activate the learner's background knowledge and provide them with insight to the ways they think and express themselves. Such exercises allow tutors and learners to share different learning patterns and create a common vocabulary.

**Writing Skills.** Practice of writing skills is implied through completion of workbook exercises and some activities designed around authentic materials, however it is seldom explicitly taught as a reinforcing communication skill in adult literacy sessions (Nielsen, 2015; Alvermann, 2017). Writing to complete a worksheet exercise or work-related form does not necessarily prepare one to use writing as a means of correspondence. As learners become better readers, they are able to recognize misspelled words in text, but often still unable to accurately spell words when writing from dictation or using prompts from text. Findings from the few studies that do emphasize writing skills suggest that reading skills are accelerated when learners document personal experiences through journaling and group sharing exercises (Alvermann, 2017; Nielsen, 2015; Rodrigo, Greenberg & Segal, 2014; Greenberg, Rodrigo, Berry, Brinck & Joseph, 2006; Nitri, 1999; Fueyo, 1988).

In a program that used a truly learner-centered approach, tutors assisted learners with writing down their personal experiences with school and learning, and then shared these journal entries with each other (Fueyo, 1988). Learners' personal stories became the authentic texts used during learning sessions, as they corrected, edited and reflected on their own work, and in effect, their own lives. Standardized measures of technical skills were not used to assess gains, however a retention rate of 86 percent reflects the learners' investment in the process. Furthermore, many learners who advanced in literacy level became tutors in the program. Despite the lack of attention that writing skills receive in the literature, these findings underscore their significance in the communicative aspects of literacy. Beyond development of phonetic and spelling skills, writing contributed to the success of this program by providing the means for learners to share their stories and discover from other learners that they were not alone in their feelings of insecurity and isolation. The next section describes the psychological and emotional

factors that affect adult literacy learners, and why it is important to acknowledge them as part of the learning process.

**Psychological and emotional support.** While impossible to disentangle from the cognitive processes of learning, negative attitudes and emotions toward reading and learning in general are another aspect a tutor must consider. Many adult literacy learners report feelings of frustration, shame and embarrassment, and experience anxiety in situations where their inadequacies may become apparent (e.g. ordering from a restaurant menu, completing a deposit slip at the bank) (Saal & Dowell, 2014; Sandman-Hurley, 2008). Some learners are uncomfortable sharing personal health or financial information with others and hope that advancing literacy skills will provide them with greater independence in managing personal matters (Saal & Dowell, 2014; Belzer, 2006a). Some learners are angry with previous educators for failing to provide the extra attention they needed and are resentful of the neglect they experienced during their formal education (Belzer, 2002; Nitri, 1999). Part of a tutor's role is to diminish these negative feelings and provide a positive learning experience that encourages confidence, pride, and self-respect. Many studies with tutors indicate that they find this a particularly important part of their role, reporting that they want to make a positive difference in another person's life (Webb, 2015; Sandman-Hurley, 2008; Belzer, 2006a; Ceprano, 1995). While most tutors are comfortable providing learners with encouragement and general positive emotional support, this feedback isn't always effective in a constructive way and may not alleviate a learner's frustration with slow progress. Some research suggests that excessive praise in the absence of advancement could be perceived as condescending, and enhance a sense of inferiority (Perry & Homan, 2015; Lipnevich & Beder, 2007; Quigley, 1992, Kazemek, 1988). Certainly, creating a positive learning environment is crucial, however most learning processes

entail some level of discomfort. Constructive feedback should acknowledge hard work and encourage continued efforts, but also provide useful suggestions that address areas in need of improvement.

**Influences on tutor practices.** Findings from the limited research related to tutor training suggest that the length and nature of initial training has little impact on tutor practices. Most tutors use an eclectic combination of strategies that do not necessarily reflect the content of training but rather the strategies with which they are most familiar or comfortable. Despite knowledge of the benefits of use of authentic materials, tutors may still choose to use technical skill workbooks because they are more comfortable following a structured program (Roderick, 2013). Some tutors use authentic materials exclusively despite the difficulty they have in adapting materials to an appropriate instructional level, while other tutors may place the primary emphasis of tutoring sessions on creating a positive experience for the learner by attempting to build self-confidence (Belzer, 2006a, 2006b).

Professional educational researchers are accustomed to reviewing and conducting research to determine the best practices for adult literacy instruction. It is important to remember that tutors, as volunteers from the community from various backgrounds, are unlikely to be familiar with this same body of research. Research in volunteerism suggests that tutors are driven by their own expectations of the volunteer experience, and that these expectations vary based on their motivation for volunteering (Clary & Snyder, 1991). This study will investigate which types of activities tutors think are most useful during tutoring sessions with different types of learners and whether their decisions are related to their motivations to volunteer with adult learners.

## **Motivational Functions of Volunteerism**

The functional approach to volunteerism proposes that the same volunteer activity can fulfill one or more social and psychological functions depending on one's motives for volunteering. Clary and Snyder (1998) propose six types of motivational functions that are served through volunteer activity: values, understanding, ego enhancement, ego protection, social and career. The nature of these functions vary in the degree to which they are internally or externally oriented. Values and understanding functions are primarily externally oriented, while the others serve more internal functions. The values function serves as an opportunity for the volunteer to express humanitarianism, or a way to help a person in need, while the understanding function allows one to use skills, that may not be utilized otherwise, for the purpose of gaining knowledge about the world. Enhancement and protective functions serve different aspects of the volunteer's ego. The ego enhancement function serves as a means to maintain a stable, positive self-esteem and image by engaging in positive behavior, whereas the protective function serves to counteract or escape negative feelings about the self, or protect the individual from experiencing those feelings. The social function serves as an opportunity for the volunteer to become more aligned with one's social reference group of family, friends and close associates. The career function serves as an opportunity for the volunteer to gain experience that would be useful to future employment, either by learning specific job-related skills or reflecting meaningful and constructive use of time on one's resume.

More than one function can be served for the same volunteer, however one function is typically regarded as primary, with less emphasis placed on the others. Research using the functional approach has identified typical patterns in large groups of different types of volunteers. Generally, both male and female volunteers tend to rank values, understanding and

enhancement functions with more importance than social, protective and career functions (Stukas et al., 2016; Stukas et al., 2009; Fletcher & Major, 2004; Clary, Snyder & Stukas, 1996).

Differences in motivational patterns by age suggest that younger adults may be more motivated by career, understanding and protective functions, when compared to older adults who tend to be more motivated by values (Omoto, Snyder & Martino, 2000; Clary, Snyder & Stukas, 1996).

Volunteers with less education tend to place more importance on career and protective functions (Clary, Snyder & Stukas, 1996) and volunteers with higher levels of education are more likely to volunteer for education-related causes (Nesbit & Gazley, 2012). While some volunteers employed in professional positions may be more motivated by social functions (Nesbit & Gazley, 2012), comparisons by income level suggest that volunteers with higher income tend to be motivated by understanding and enhancement functions compared with those in lower income brackets who are more motivated by career and protective functions (Clary, Snyder & Stukas, 1996).

**Motivations of literacy volunteers.** The functional approach has not been applied specifically in volunteer literacy tutors, however a few qualitative studies suggest that their work serves one or more of these motivational functions. In the only available comparison of literacy tutors with other volunteers, Wymer (2003) found that tutors came from smaller households with larger incomes, were more likely to respond to mass recruitment appeals (e.g. public service announcements), rather than through a friend or social network and less likely to be involved with multiple organizations or motivated by religious beliefs. When asked about motivation for their work, a love of reading and a theme of empathy was evident in responses such as “I can’t imagine not being able to read for pleasure and necessity” (p. 278) and many expressed that they were “making a difference in someone’s life” (p. 279) and that they enjoy

seeing success in others. Other qualitative studies with tutors echo these sentiments. Literacy tutors have described motivations for their work as “answering a call” (Belzer, 2006a, p. 563), a response to “a deep sense of the value reading plays in people’s lives” (Ceprano, 1995, p. 56), a way to give back to community, a means to do something useful with spare time, and utilizing personal experiences in a positive way (Sandman-Hurley, 2008). Literacy tutors have described their work in terms of the benefits they receive through statements like “feeling more confident in my ability to directly help people with different kinds of problems”, “gaining insight beyond expectations”, “developing an appreciation for the education process” and “this is important to me and rounds out the meaning of life” (Nitri, 1999, p. 56). Another tutor claimed that tutoring allowed him to help others while helping himself, and that the process was “good for his soul” (Webb, 2015, p. 44). These responses appear to align with motivational functions that place importance on humanitarian values, understanding others, and enhancement and protection of psychological well-being.

Clary and colleagues (1998) developed a measure, the Volunteer Functions Inventory (VFI) that assesses the value that volunteers assign these functions, whereby respondents rate the importance of items that represent each of these functions. This study investigates whether volunteer tutors are different from other volunteers in their demographic makeup and motivations. Additionally, it investigates whether there is a relationship between a tutor’s motivation and the approaches to practice they note as most useful.

The altruistic nature of literacy tutors’ work implies a sense of empathy and social responsibility. A tutor’s motives to volunteer may be influenced by broader views of social cooperation, or macro moral views about societal organization. In the next section, the

development of these views will be discussed in terms of their relevance to moral functioning and their potential to contribute both to the decision to tutor and the nature of tutoring itself.

### **Concepts of Social Cooperation: Moral Reasoning Development**

Volunteerism is considered a form of prosocial behavior, a moral action that carries the intention of helping another person. Functional illiteracy is a problem in society, and literacy tutors have volunteered to be part of the solution.

According to dominant moral development theory, moral functioning is a result of the interaction between four essential elements: empathetic sensitivity to identify an issue as moral, reasoning ability to apply universally just principles during consideration of the best solutions to the issue, motivation to take action, and the resilience of character to see the action through (Rest, Narvaez, Bebeau & Thoma, 1999a). Moral reasoning refers to the implicit processes that guide decisions about the best ways to solve social problems. In earlier stages of development in adult populations, moral judgments focus on societal norms and are upheld because of traditions, respect for authority, and the need for order and protection. In later stages, one's notions about fairness become less self-oriented and more encompassing of all members of shared society; laws and norms are followed because of the ethical principles they represent, striving toward an ideal of universal equity (Rest, Narvaez, Thoma & Bebeau, 2000; Rest, 1986; Kohlberg, 1975).

**Stage and schema theory and moral reasoning.** Combining stage and schema theory, Rest and colleagues extend Kohlberg's six stages in terms of three schemas that people use to make sense of moral situations and determine the best solutions for them: personal interests, maintaining norms, and postconventional (Rest, Narvaez, Bebeau, & Thoma, 1999a). Schemas represent multiple stages of moral development, and though one may not use a particular schema exclusively, the preference of a more sophisticated schema (maintaining norms versus personal

interest, or postconventional versus maintaining norms) represents an advancement in moral development.

Reasoning based on the personal interest schema justifies resolutions in terms of how they benefit the decision maker and considers others only in terms of their value to that individual. More conventional lines of reasoning based on the maintaining norms schema prioritize rules and uniform application of laws as a means to preserve order in society. Consideration of others extends beyond how they may serve the individual and shifts to an orientation of duty toward the larger systems of society. Solutions to moral problems reflect the adherence to laws based on the traditions around them, with an assumption that they are just and fair. Reliance on conventional reasoning in all moral situations becomes problematic if one blindly adheres to an established norm, even if it is evident that it benefits only a portion of society and is not equitably just for all citizens. Postconventional lines of reasoning strive toward an ideal of equity for all citizens and consider laws and norms based on their moral purpose, not merely the traditions from which they were founded. Solutions to moral problems include negotiation of conventions if they are determined to be exclusionary to certain members of society.

**Moral reasoning and volunteerism.** Advanced moral reasoning has been studied as an outcome of participation in volunteer activities, particularly with college students (Boss, 1994; Brown-Liburd & Porco, 2011; Lies, Bock, Brandenberger & Trozzolo, 2012). Other studies have explored moral reasoning in terms of its relationship with volunteerism as a moral action.

Derryberry and colleagues (2009) found that non-prejudice, or a universal orientation towards others, and schema scores accounted for a portion of the variance in motivational functions for volunteerism in a sample of undergraduate students. Significant contributions to

the variance were found for all three schemas in values and career functions, and the maintaining norms schema also contributed to understanding and social motivations. The maintaining norms schema was the only predictor of the understanding function, suggesting that, in this sample, motivations to learn more about others stem from a sense of societal duty or obligation. Authors point out that postconventional scores were relatively low in this sample of undergraduate students and encourage research with more diverse samples.

Derryberry and Thoma (2005) investigated the influence of moral judgement and psychological self-concepts on the moral actions of honesty, altruism and taking a stand for civil liberties. In this study, altruism was indicated by the values motivational function. A relationship was found between moral judgement and altruism, but only when the analysis included psychological self-concepts, suggesting that all moral actions are not necessarily influenced by the same constructs.

**Moral reasoning in educators.** The expectation of higher levels of moral reasoning among educators is supported by the assumption that the purpose of education is to stimulate the natural development of students' moral capacities and judgements (Boss, 1994) and to help them to identify themselves as a moral agents so that they are motivated toward moral action (Rest, 1984). Adult literacy tutors are unique in their roles as educators in that they do not necessarily possess higher levels of education, but the voluntary nature of their service indicates that they have identified themselves as moral agents.

Contrary to expectations, lower levels of moral reasoning have been observed in undergraduate and graduate students in teacher education (Cummings, Dyas, Maddux and Kochman, 2001; Johnson, 2008; Yeazell & Johnson, 1988; Bloom, 1976) and educational leadership programs (Greer, Searby & Thoma, 2015). Interventions that target ethical

development through discussions of ethical dilemmas have shown promise in increasing levels of moral reasoning and continue to be an active subject of research (Cummings, Maddux & Richmond, 2010), and some include a volunteerism, or service-learning, component (Lies et al., 2012).

**Moral reasoning in literacy tutors.** Given their dual roles as community servants and educators, this study measured moral reasoning development in a sample of adult literacy volunteer tutors. Since moral reasoning represents an individual's macro moral conceptions of social cooperation, the nature of this reasoning could provide insight to a tutor's decision to volunteer as well as approaches to learning situations. Moral reasoning was considered in terms of its relationship with motivational functions.

### **Significance of Study**

Why do most people agree that literacy is important? Literacy by itself does not guarantee success, happiness, wealth or security. All illiterate people are not living in poverty or prison and some proficiently literate people are poor and commit crimes. However, literacy is important because even though it does not guarantee options in life, it increases the chances of new and potentially beneficial experiences.

More than just the ability to read words, advancement in literacy level reflects changes in the way one uses those words in other forms of communication like writing, speaking and listening. Adults with lower literacy skills are potentially excluded from exchanges that have meaning in their lives. The goal of adult literacy organizations is to help functionally illiterate adults become proficient communicators so that they have the option to participate in these meaningful exchanges. Literacy tutors have volunteered to carry out this mission. This study examines the issue of adult literacy from their perspective, by investigating influences on their

decision to become active in this cause and the aspects of their work that are most important to them.

### **Research Questions**

1. Which types of activities do literacy tutors find most useful for different adult learners?

(Literacy Scores)

2. How are volunteer literacy tutors represented by measures of motivation and moral judgement?

2a. How does the Volunteer Functions Inventory (VFI) describe literacy tutors?

2b. How does the Defining Issues Test (DIT) describe literacy tutors?

2c. Is there a relationship between DIT schema scores and the motivational function scores on the VFI?

3. Is there a relationship between literacy scores, motivation, and moral judgment?

## CHAPTER 2

### LITERATURE REVIEW

The following literature review supports the research questions for this study. First, the prevalence of illiteracy rates and the work of literacy organizations and their tutors are described in terms of the main themes identified in the available research. Next, literacy tutors will be considered with regard to their roles as volunteers, and how this prosocial behavior may be motivated by varied psychological functions for different tutors. Finally, concepts of social cooperation, considered in terms of moral reasoning development, will be discussed as they relate to volunteer behavior and the dual role of the literacy tutor as educator and community servant.

#### **Prevalence and Implications of Functional Illiteracy**

In contrast to measuring literacy in terms of grade level aptitude, as is the case with children, more relative definitions of literacy proficiency are applied with adults which refer to their ability to function within a social context, in roles as family and community members, citizens, consumers, employees, and members of social, religious, political or other chosen associations (Cervero, 1985). In line with this perspective, the National Adult Literacy Survey (NALS) is based on the definition of literacy as “using printed and written information to function in society, to achieve one’s goals, and to develop one’s knowledge and potential” (Kirsch et al., 2002, p.2). This broad definition is measured in terms of prose, document and quantitative literacies, which refer to continuous, non-continuous and numerical properties of resources and their usage in everyday culture.

The last NALS survey in 2002 indicated that about 25 percent of the adult population performs at the lowest levels of prose, document and quantitative literacy, with another 25-28 percent performing at Level 2, 33 percent at Level 3, and only 18-21 percent at the two highest levels of literacy. More recent results from the Program for the International Assessment of Adult Competencies (PIAAC) compare literacy skills among adults from 23 countries and found that the average score in the U.S. is in the second of five levels of literacy proficiency, matching the international average. When compared with other countries, the U.S. had a higher percentage of adults performing in both the lowest and highest levels of literacy, and rates of functional illiteracy were more prevalent among certain age groups and those in lower socioeconomic statuses. Similar to the NALS, the PIAAC broadly defines literacy as “understanding, evaluating, using and engaging with written text to participate in society, to achieve one’s goals and to develop one’s knowledge and potential” (Rampey et al., 2016, p. B-1).

More than a report of illiteracy rates, the objective of measures like the NALS and PIAAC is to provide a profile of literate and low-literate adults based on performance across a wide range of tasks. Not surprisingly, findings from both surveys show that higher education levels correlate with higher performance on literacy scales. Adults performing at the highest literacy levels are more likely to be gainfully employed with higher earnings compared with adults performing in the lowest levels of literacy. Adults performing in the lowest levels of literacy were also more likely to be living in poverty and receiving public assistance benefits. Eighty to ninety percent of adults in the higher levels of literacy reported voting in an election in the last five years, compared to only 55 percent of those in the lowest levels. Adequate or even advanced literacy skills alone do not guarantee opportunities for advancement in society,

however these results strongly suggest that literacy should be considered a currency in today's culture.

Even though these findings suggest that those with limited literacy skills may find it more difficult to achieve goals related to employment, earnings, decision-making, citizenship and other aspects of their lives, interestingly, most of the 90 million adults who performed within the lowest two levels of the NALS literacy scales did not perceive themselves as having poor literacy skills; about 70 percent of those at Level 1 and about 90 percent of those at Level 2 reported that they read "well" or "very well". Furthermore, less than 25 percent of these adults reported receiving help with everyday literacy tasks from family or friends (Kirsch, et al., 2002). This suggests that the skills they possess allow them to function within the context of their everyday culture and they do not perceive low literacy as an obstacle to other life opportunities. Family literacy studies suggest that children are much more likely to have low literacy skills if one or both parents demonstrates low literacy and these generational effects may make it difficult for some adults to recognize that their skill levels could be considered inadequate, potentially limiting their access to resources that would better inform their decisions (Lynch, 2009; Kirsch et al., 2002). In light of these findings, outreach and literacy instruction becomes more complex in that advancing literacy skills extends beyond the acquisition of a set of technical skills, but also includes how one might apply those skills to gain a greater sense of agency with regard to issues that impact their well-being.

**Defining literacy in practice.** The wide scope of literacy's purpose makes a single operational definition impractical. However, defining literacy in a more relativistic way can result in the creation of multiple context-specific meanings that are only relevant in certain environments. Cervero (1985) argues that a universal definition of literacy would limit

opportunities for adult learners, and rather serves centralized funding agencies that seek clear-cut criteria for measurement of progress and developers of commercialized literacy materials that reflect this criterion. More important than a common definition of literacy is how the guiding values of literacy programs support adult learners who have identified their own purposes of literacy.

The diversity of adult literacy learners can make it difficult to address all of the academic and sociocultural aspects of literacy learning. Adult literacy programs, particularly those receiving governmental funding, can find it challenging to show gains in technical skills on assessments that use grade-level criterion to measure progress (e.g. Test of Adult Basic Education - TABE). Some community literacy programs have adopted use of assessments that are more similar to the NALS, attempting to capture more functional aspects of literacy gains, such as the Comprehensive Adult Student Assessment Systems (CASAS), however it can be difficult to translate these functional elements into effective instructional methods (Belzer, 2006b; Kazemek, 1988).

In her comparison of four literacy programs, Belzer (2006b) found that three out of the four programs explicitly defined literacy in the course of their training, with more or less detail about application of skills in everyday life. For example, a local library program emphasized the individual's responsibilities in society: "a person's ability to use skills and knowledge in order to fulfill their responsibilities and meet their goals as workers, family members, and community members" (p. 121). Another community program emphasized language and communication: "listening, speaking, reading, and writing; each skill reinforces the other" (p. 123). A Literacy Council provided the most detailed definition:

- (a) decoding, which can be achieved by using the context, phonics, sight memory, sentence structure, or the dictionary;
- (b) comprehension, where the "guiding question" is

“What does it mean?”; (c) evaluation, which means that reading is reacting based on the guiding question of “What do I think about it?”; and (d) action, where the guiding question is “What shall I do?” (p. 124)

Despite slight variations in their descriptions, most would agree that each of these

definitions has merit. The greater challenge is to determine the best ways to adequately address all of the communicative elements of literacy skills in practice.

### **Connecting Conceptions of Literacy and Instruction**

Despite the functional elements included in definitions put forth by various agencies and organizations, Belzer’s (2006) observations of tutoring sessions revealed that most tutors focused on reading skills, and lacked a clear connection to how literacy skills are practiced in the context of learners’ everyday lives. In Fueyo’s (1988) comparison of three literacy programs, findings indicated that all demonstrated genuine care and concern for the progress of literacy learners, but only one adopted an approach to literacy learning that emphasized empowerment. Instructors from other programs, despite their good natured efforts, appeared to conceive of literacy learners as “economic beings whose goals are job security and advancement” (p. 107). In these programs, literacy learning entailed mastery of commercially produced worksheets with decontextualized content aimed at training discrete skills. Training materials of this nature mimic how one learns to read during the developmental stages of childhood, and fail to reflect the content and strategic methods with which adult learners are more likely to relate.

Kazemek (1988) suggests that using materials and methods designed for children fosters the perception that the needs of adult literacy learners are more like those of children rather than their adult peers; from this perspective, adult literacy learners are perceived as an inadequate, incompetent “other”. Literacy instruction should be considered a collaborative process of one adult helping another pursue personal goals and interests, rather than the transfer of predetermined skills from a competent, literate adult to an inadequate “other”. Instruction that

isolates the teaching of technical skills fails to recognize that the advancement of literacy skills involves a broader sense of social change (Fingeret, 1983).

Quigley (1997) described the perception of adult literacy learners as romanticized “heroic victims” (p. 174), typically regarded as simple individuals doing the best that they can despite limited opportunities, bad luck and low self-esteem. Belzer and Pickard’s (2015) more recent findings suggest that the “heroic victim” and similar types of characterizations have endured, supporting the notion of low literate adults as tragic.

Rather than a “second chance for an education”, Quigley (1997) proposed that adult literacy learning should be considered “a point on a continuum of lifelong learning” (p. 214). Regarding adult literacy learners as victims potentially places them in inferior roles, from which they must overcome certain deficits before ‘real’ learning can take place (Fingeret, 1983). Instead of asking the question, “Did they fail school or did school fail them?”, it may be more useful for practitioners to develop teaching philosophies that support lifelong learning for adult literacy learners in the same way learning is supported for other adults in higher education, vocational and technical schools.

**Adult learning theory: andragogy versus pedagogy.** In contrast to most children who learn to master reading over the typical course of development with other communicative skills such as writing and oral language, acquisition of advanced literacy skills for adults is usually not as straightforward. In order to adequately address the circumstances of adult learners, factors other than technical reading skills must also be emphasized. In contrast to pedagogy, andragogy refers to the art and science of helping adults learn, and has been an influential concept since 1970 when Malcolm Knowles began infusing this approach into a wide range of adult learning environments including workplace, business, healthcare, higher education and remedial

educational settings (Giannoukos, Besas, Galiropoulos & Hioctour, 2015; Henschke, 2011; Rachal, 2002; Knowles, 1970, 1990). In his extensive research, Knowles acknowledged that adults not only differ from children, but from each other as self-directed and autonomous learners. In adult learning situations the teacher should be a facilitator of knowledge rather than a presenter of content.

According to guiding principles based on research with diverse groups of adults, in order for an approach to be considered andragogical, the nature of the learning situation must be voluntary and initiated by the adult seeking knowledge or advancement in a certain area (Rachal, 2002), as is the case in literacy learning. Adults in literacy programs are intrinsically motivated to learn to read because of life circumstances that suggest it would be worthwhile, therefore the learning activities and materials should be inherently useful and not simply a means to an end result. Though learner-centered goals should be the focus, performance-based assessment should also be an element of the learning process, discussed with the learner in terms of learning evaluations rather than “tests” in order to reduce anxiety around judgments of performance. From an andragogical perspective, both the tutoring sessions and the assessment process should be considered a collaborative effort and a chance to gain insight to the learner’s strengths, weaknesses and strategies. The learner’s satisfaction with the process is essential, and learning environments should be designed in terms of how they support psychological well-being as well as physical conduciveness to the practice of reading. Different activities may require varied environmental designs (e.g. one on one reading aloud with a tutor versus group discussions with other learners).

As an adult literacy tutor, it can be difficult to support autonomy while bringing to light the essential reading skill areas that currently elude the learner. In other words, making the

learner aware of what he or she doesn't know, while keeping the goals learner-centered. From an andragogical perspective, adult literacy learners should be considered in terms of their adult lives and circumstances, rather than grade level performance.

Though impossible to isolate from cognitive processes, emotional elements of functional illiteracy add to the complexity of this already unique learning situation. The following highlights how emotional and psychological factors can impact the nature of adult literacy learning.

**Psychological and emotional elements of adult literacy learners.** A positive attitude toward reading has been strongly correlated with development of reading habits that are crucial for proficiency in literacy skills; the more one practices, the better one becomes (Kim, 2003; Smith, 1996). Many adult literacy learners report negative feelings about school experiences and traditional learning environments, in addition to feelings of shame, embarrassment and anxiety about their inability to read proficiently (Quigley, 1992; Beder, 1990).

Psychological and emotional changes related to improvements in reading ability are difficult to capture through conventional quantitative measures, and are more evident in studies that include a qualitative component. For instance, during interviews with three adult literacy learners and their tutors (Belzer, 2006a), "Sidney", a fifty year-old custodian, reported feeling less scared about getting lost as a result of learning to read street signs and maps, and that he was able to do more exploring while on vacation with his wife. "Connie", a 32 year-old unemployed mother of young children, reported being able to read a magazine that she enjoys without asking for help. "Allen", a 58 year-old retired construction worker, also reported greater independence in reading the bible, and becoming a more active participant in his church group. Other than anecdotal remarks about reading more words or reading faster, findings from this study did not

report gains in standardized skill levels. In another case study, “Charles” achieved one of his goals to “not be afraid to start another job, because words are involved and words can stop you” (Saal & Dowel, 2014, p. 139); in this case, in addition to a feeling of inadequacy, “Charles” expressed a genuine fear of trying.

In another case study of adult learners in a substance abuse treatment facility, emotional gains of two learners were documented in their journal entries about the tutoring process. A 35 year-old male preparing for enrollment at community college after earning a general education diploma (GED), reported an increased sense of self-confidence and wrote that improving his literacy skills gave him “a better perspective on life”. In the other case, a 40 year-old male who stopped attending school in the eighth grade also reported feeling “less close-minded”, writing in his journal that his tutor “had a nice attitude” and that he didn’t feel “angry at the world anymore” (Nitri, 1999, p. 56). In both cases, despite these positive changes in perspective, standardized tests (i.e. Woodcock Reading Mastery Test) did not show gains in skill levels.

In a study that assessed the efficacy of a training program designed for readers with dyslexia, an unexpected finding indicated the importance of interpersonal skills, given the impact that positive feedback and encouragement had on the learners. Though social skills were not a part of the training, each of the three learners observed during tutoring sessions commented on their tutor’s patience, persistence and ability to help the learner to feel more comfortable. One learner even reported that she no longer experiences panic attacks when she attempts to read by herself (Sandman-Hurley, 2008). Observations revealed that tutors utilized the multisensory strategies provided in training, however findings did not report changes in readers’ skill levels.

National Public Radio highlighted a story about a 55 year-old female learner who advanced from a kindergarten to second grade reading level over the course of eight years. She

received a certificate of achievement with the words “Top Performer” above her name. Even though she could not read the word “performer”, she stated “I know this is ‘top’ something; that means I’m doing good”. She also shared, “When my gas bill come to my house I'm learning how to read where it says 'pay by July 17th.' That makes me feel awesome" (Cardoza, 2013). In this case, emotional gains are highlighted as the most significant aspect of the learner’s success, followed by changes in everyday reading practices (e.g. paying bills) and lastly, gains in technical skill.

Self-esteem has been associated with literacy learning in negative and positive ways: low self-esteem has been identified as a barrier to participation in literacy programs and positive self-esteem has been attributed to success in literacy programs. Lipnevich and Beder’s (2007) comparison of adult literacy learners and PhD students challenge the assumption that all adult literacy learners lack confidence in their abilities and require specific attention to emotional needs. There were no significant differences in either academic or global self-esteem between the two groups, suggesting that while all learners may experience some anxiety and discomfort during the learning process, adult literacy learners do not necessarily have abnormally low self-esteem. These findings support Quigley’s (1997) conceptualization of adult literacy learning as continuing education, rather than special education. While many literacy learners are likely to benefit from positive feedback regarding their perseverance and effort, false praise can be perceived as condescending and enhance a sense of inferiority. The central challenge for tutors is to facilitate a learning situation that balances the technical, functional and psychological elements of literacy development. Given the limited time and resources available for training, literacy organizations often struggle to provide adequate attention to all vital components of instruction.

## **The Work of Adult Literacy Organizations**

Low literacy among adults is described as both a personal tragedy and a public dilemma, given its relationship with lower and unemployment, lower earnings, poverty levels, public assistance and crime (Lynch, 2009, Kirsch et al., 2002). The shared impact of low literacy raises the question of who should be responsible for addressing it. One perspective is that both the cause and remedy reside within the low literate individuals themselves; they must work through their challenges to overcome barriers to their success and end the cycles that perpetuate their predicament. An opposing view suggests that the responsibility of improving literacy skills is shared among members of a society that is unjust, and that high rates of low literacy in certain communities should be recognized as a failure to provide the civil liberty of adequate and equal education to all citizens (Quigley, 1997). There is an injustice associated with adult illiteracy, however, like other ethical problems, the resolution requires analysis of issues beyond the superficial, and in the case of literacy, factors deeper than academic ability.

**Literacy as communication.** Given the diversity of learner needs and the individualized nature of tutoring sessions, a universal approach to literacy instruction is lacking. More important than identifying a single approach or set of specific strategies that one should adopt, a tutor's flexibility in response to the context of a learner's circumstances and efficiency of time usage during sessions are likely more valuable (Perry & Homan, 2015; Ziegler, McCallum & Bell, 2009; Bell, Ziegler & McCallum, 2004; Beder, 2007; Belzer, 2006a; Belzer, 2006b, Scanlon & Lenz, 2002; Ceprano, 1995).

Literacy advancement should be considered as part of a greater transformation that influences the ways one interacts with social networks and organized systems in society (Perry & Homan, 2015; Quigley, 1997; Fingeret, 1983). In addition to reading words, learners should be

discovering how to use those words to communicate more effectively, and become more agentic in their lives. Since reading, writing and speaking skills reinforce each other, they should each be considered important in practice.

Whether a tutor uses a more or less structured approach, oral language and writing skills should receive attention in addition to reading skills. Rather than taking natural conversations for granted, these exchanges should be considered a salient part of literacy practice and advancement (Talarr, 1995; Crew, 1995). Additionally, writing exercises that are either personal or decontextualized are important to reinforcing other communication skills (Alvermann, 2017; Nielsen, 2015; Rodrigo, Greenberg & Segal, 2014; Greenberg, Rodrigo, Berry, Brinck & Joseph, 2006; Nitri, 1999; Fueyo, 1988). The volunteerism of tutors indicates that they view literacy as an important issue, but their preparedness to address all aspects of literacy during the limited session times is unclear (Roderick, 2013; Beder, 2007; Belzer, 2006a, 2006b; Cromley and Azevedo, 2005; Ceprano, 1995).

**Bottom-up philosophy, structured programs.** Adult literacy programs, particularly those receiving governmental funding, are pressured to assess progress in terms of quantifiable outcomes specifically related to gains in skill level, often translated to a grade-level competency. Traditional approaches to adult literacy learning focus on direct instruction aimed at development of technical skills, with variations of emphasis on certain skill areas. The main component skills of reading are well established and include decoding, fluency, vocabulary and comprehension. (Ehri, 1995; Ehri & McCormick, 1998; Tan & Nicholson, 1997). Structured programs apply a “bottom-up” approach to literacy advancement, whereby reading, writing and oral language skills are practiced around set groups of exercises, organized according to a given

curriculum. Through this approach, when the curriculum is complete, one's literacy skills should be adequate and everyday functional communication should be improved.

To compensate for inadequate decoding skills, many struggling adult readers rely on a set of memorized sight words and use context to guess the identity of unknown words. At times, use of these strategies can make a reader appear competent during certain reading activities, however without the ability to decode unfamiliar words, readers are limited in their ability to comprehend a larger range of material. In addition to decoding skills, other technical skills, like knowledge of parts of speech, proper grammar usage, and reading comprehension strategies are important because they help a reader to decipher how, when and where something is happening to who or what in a given text when memory and context strategies are inefficient (Hock & Mellard, 2016; Mellard, Woods, Desa & Vuyk, 2015; Cutris & Kruidenier, 2005).

Early development of programs for literacy learning with adults have typically been highly structured and emphasize the mastery of technical skills so that they can be applied in everyday life. For example, The "Laubach Way to Reading" was first developed in the 1930's, by a missionary named Frank C. Laubach, and carried on by his son, Robert Laubach (Meyer and Keefe, 1988). Robert Laubach eventually founded the New Reader's Press (2018), a company that is now partnered with the national ProLiteracy organization and publishes curriculum materials for adult literacy learning. The Laubach Way, and similar programs (e.g. Challenger and Voyager series), approach literacy through a "bottom up" philosophy, whereby learners are taught a series of sequential steps beginning with letters and sounds, vocabulary building and ultimately reading comprehension. All skills are taught from a set of workbooks which, other than minor revisions to update content, have been essentially unchanged from their original format. Other structured programs, such as Neuhaus (2018), are also offered online,

although they can be very costly and many adult learners lack both the financial resources and the knowledge to access online tools independently (Cullen & Cobb, 2011). While some may criticize more structured programs as adopting a “one size fits all” approach, there are some variations within these programs that place more or less focus on different skill areas.

In a study of 395 learners across 23 adult literacy programs, Greenberg and colleagues (2011) compared the effectiveness of five approaches that placed varied emphasis on skills instruction and types of materials across several categories: decoding, comprehension, fluency and extensive reading. All students who completed the interventions made some small yet significant gains, but no one approach appeared more effective than another. In another comparison of instructional approaches, 148 participants completed one of three supplementary tutoring programs that varied in emphasis on basic decoding skills and reading fluency instruction. Pre and post measures showed small to moderate gains for most participants but again, there were no significant differences in these gains between programs (Scarborough, Sabatini, Shore, Cuting, Pugh & Katz, 2013; Sabatini, Shore, Holtzman & Scarborough, 2011).

A possible explanation for the minimal gains of learners proposed by researchers is that many adult literacy interventions are based on knowledge about reading remediation with children and there is a shortage of valid and reliable assessments for adult struggling readers (Reder, 2009). Current assessments may fail to capture meaningful gains made outside of advancement in specific skills, such as increased engagement with reading materials, or exploration of a greater variety of materials.

**Top down, learner-centered philosophy.** More than the ability to read words, advancement in literacy level reflects changes in the way one uses those words in other forms of communication like writing, speaking and listening. Smith (1996) investigated the literacy

practices in a sample of 24,842 adults age 19 and older who were classified according to how often they read newspapers, magazines, books and other documents. The results showed that more proficient adult readers read more frequently with a greater variety of materials, indicating that reading practice and proficiency are strongly correlated. Participation in educational settings and learning activities where reading is commonly practiced is a strong predictor of proficiency. This proficiency requires extensive practice from a variety of sources, which is unlikely to take place if the learner has a negative attitude toward reading. Early negative experiences in academic environments during childhood and adolescence are likely to negatively influence reading practices in adulthood (Belzer, 2002; Quigley, 1992). Adults whom have not learned essential literacy skills in traditional environments are more likely to have a negative self-perception of their academic abilities, be discouraged from engaging in literacy practices and therefore avoid challenging reading materials.

High attrition rates from literacy programs, typically 40-50 percent, and overall minimal gains of instructional approaches can be discouraging, however longitudinal research related to literacy practices may offer alternative methods for assessing learners' progress (Pickard, 2013). In their comparison of adults that either completed or did not complete literacy programs, Greenberg and colleagues (2013) found that learners who reported lower exposure and avoidance of reading were more likely to report a negative self-concept of reading ability and were significantly less likely to complete literacy programs. Reder (2009) conducted a study over a 6-year period that investigated the relationship between adult literacy program attendance and literacy gain, and while he did not find a direct connection between these two variables, he did find a relationship between program attendance and increased engagement in literacy practices. Furthermore, increases in literacy practices eventually correlated with greater literacy skills

suggesting short-term impacts on practices could ultimately mediate long-term gains in proficiency.

***Authentic materials.*** Integration of authentic materials denotes a shift from traditional method to a “top-down” approach to adult literacy instruction. In order to change reading practices, literacy instruction must be made relevant to learners’ everyday lives. Alternatives to traditional teaching methods such as use of authentic materials and extensive reading groups have shown promise in changing reading habits. Authentic materials refer to texts and resources obtained outside of a school setting, derived from activities that a learner is likely to encounter during the course of his or her everyday life. These materials vary for learners, are typically functional in nature and could include workplace materials, religious texts, newspapers or documents related to financial and health issues. In the extensive reading approach, also known as pleasure reading, the primary focus is on reading large amounts of material at an appropriate linguistic level that is of interest to the learner with personal enjoyment as the main objective (Rodrigo, Greenberg & Segal, 2014; Greenberg, Rodrigo, Berry, Brinck & Joseph, 2006). The underlying assumption is that learners will be motivated to read if they are provided with materials of interest within their level of ability in a non-threatening learning situation. Consequently, learners will develop a more positive attitude toward reading and be encouraged to practice, ultimately resulting in advancement of component literacy skills.

Greenberg et al. (2006) reported increases in confidence and enthusiasm for reading along with increases in literacy engagement, fluency and expressive vocabulary skills as a result of an extensive reading program. In their study of literacy engagement patterns Purcell-Gates, Degener, Jacobson and Soler (2002) showed that use of authentic materials had a significant effect on increases in literacy practices. In a similar study with adult education classes,

approaches that integrated learner-chosen materials were found to be the most influential in changing reading practices; the greatest changes occurred in learners at the lowest literacy levels and those who attended class over longer periods of time (Purcell-Gates, Degener, Jacobson & Soler, 2001). Greenberg and colleagues (2013) found that participants who completed programs using materials chosen by the participants showed a significant change in reading habits, characterized by an increase in engagement and positive attitudes toward reading, maintained six months following the intervention.

The Guided Repeated Reading (GRR) is an approach that combines explicit skill instruction with the use of authentic materials by targeting fluency specifically, with embedded phonics instruction using learner-chosen texts including newspaper and magazine articles, and excerpts from books varying in subject matter such as family life, health, finance and human interest stories. In comparison to two other approaches designed for reading remediation with children (RAVE-O and Corrective Reading), only participants in the GRR program reported significant increases in the amount, frequency and types of reading materials with which they engaged. Furthermore, self-perception of reader ability was also reportedly increased for this group and these effects were maintained at a 6 month follow up (Shore, Sabatini, Lentini & Holtzman, 2013; Shore, McNeil, Sabatini & Scarborough, 2008).

The voluntary nature of literacy tutors makes mandatory, time-consuming training difficult and limited funds restrict many community programs' investment in training resources. Initial training attempts are usually designed to introduce tutors to various approaches and tend to stress the importance of flexibility in approach to meet the diverse needs of learners (Belzer, 2006b). Next, some outcomes of tutor training programs are discussed, followed by a discussion of other factors that potentially influence a tutor's approach to learning situations.

**Tutor training.** Lack of credentials and training has been raised as a concern in adult literacy research, however some comparisons of paid instructors and volunteer tutors suggest that there aren't necessarily differences in the knowledge base between the two groups. A study using the Assessment of Reading Instruction Knowledge for Adults (ARIK-A), showed that both groups mastered about 60 percent of the content (Ziegler, McCallum & Bell, 2009). There were no specific topics in which tutors' knowledge differed from paid instructors (i.e. alphabetics, phonics, fluency, vocabulary, comprehension and assessment). Volunteers in this study were active in a variety of literacy program types including community colleges, family literacy programs, local schools, libraries and correctional systems. Two-thirds of volunteers had a bachelor's degree or higher, and about one-fourth were certified educators; levels of literacy-specific training varied and included participation in conferences, workshops, college and independent study. The level of content knowledge demonstrated by these tutors was 10 percent higher than a group of paid adult educators who were assessed using the Knowledge of Teaching Reading to Adults Scale (KTARS), who demonstrated mastery of only 50 percent of the content (Bell, Ziegler & McCallum, 2004). Furthermore, adult educators in this study tended to overestimate their knowledge when asked to rate their level of knowledge prior to the assessment, however for those with higher levels of specialized training, both expected and actual scores were higher. In a comparison of common instructional approaches that used both commercially produced workbooks and authentic materials, Beder (2007) found that both paid instructors and volunteers used eclectic approaches that were not significantly different from one another.

Cromley and Azevedo (2005) investigated the extent to which more and less experienced tutors used scaffolding strategies and the nature of how they provided feedback. The average

age of the six tutors observed during sessions was 31, four had a bachelor's degree and two had a master's degree, five were female; none of the tutors had a professional background in education. The range of more experienced tutors was 11 months to 3 years, and for less experienced tutors it was 5 to 8 months. Less experienced tutors had received 9 hours of training compared to the more experienced tutors who had received 30 hours. All tutors used the same materials from a decoding program selected and deemed appropriate for the reader's level by administrators in the literacy program, which included workbooks, magnetic letter boards and word cards. Learner outcomes were not measured.

Findings indicated that more experienced tutors used more cognitive scaffolding techniques in response to errors such as breaking down a task into smaller parts, asking open-ended questions and providing hints and appropriate prompting, compared with less experienced tutors. Less experienced tutors provided more feedback overall, but tended to use more elaborated feedback (e.g. not simply saying "no" or "incorrect", but using terms like "almost" and "try that one again", p. 112). Though more experienced tutors used less feedback overall, they used more elaborated positive feedback, making a direct connection between their strategy and performance (e.g. "Do you see how identifying the word ending helped you to separate the word into smaller parts?", p. 89).

In a qualitative study with 16 tutors, Ceprano (1995) investigated the impact of a tutor training model that included best practices for addressing learner's mistakes during reading. Tutors listened to learners read the same passage at three different levels, which were labeled as either frustration (too difficult), instructional (appropriate difficulty level) or independent (too easy) levels. First, tutors were asked to identify which version was most similar to their learner's performance. Only 25 percent of tutors correctly identified the instructional level, while 62

percent incorrectly identified frustration levels as instructional, indicating that they may be choosing material that is too difficult for their learners; 12.5 percent incorrectly identified independent levels as instructional, indicating that they are likely choosing material that is too easy for their learners. Tutors were then asked to identify a strategy they would use to help their learner read the passage. Nine of the tutors suggested “top-down” strategies (e.g. reading passage ahead of time to the learner, relate the passage to the learner’s life, summarize the story before reading), four of the tutors suggested “bottom-up” strategies (e.g. teaching phonics skills, sight words or meanings of words before reading the passage), and three tutors did not know of a strategy to suggest. Despite training that explicitly stated that rather than interrupt the learner, mistakes that do not alter the text’s meaning should be corrected later, tutors incorrectly addressed 13 of 14 errors. Lastly, tutors were asked how they would direct a learner to make meaning of a challenging and uncommon word (i.e. gallimaufry). Thirty seven percent of tutors suggested looking it up in the dictionary, 31 percent said they would simply provide the meaning of the word and only 31 percent said they would suggest using context to derive meaning.

Ceprano’s sample consisted of 6 males and 10 females between the ages of 27 and 67, with an average age of 50. Other than four tutors of whom were identified as retired secondary teachers, educational background was not reported. All tutors completed 18-21 hours of training provided by the literacy program. During their interviews, several tutors expressed frustration over the lack of effectiveness of their approaches, as they did not feel that their learners were making very much progress. Overall, training did not seem to ease this frustration and despite their good intentions, volunteer tutors tended to implement strategies that were inappropriate for their learners.

Findings from Belzer's (2006a) case studies reflected similar trends in tutor preparedness. Though positive psychological gains for learners in the forms of independence and increased participation in preferred activities were noted after using authentic materials, tutors had difficulty choosing texts at an appropriate level and lacked basic strategies to facilitate word identification, often simply reading the word of difficulty to the learner. In one case a tutor described the learner's primary challenge as "self-esteem.

During a brief initial training for the tutors in Nitri's case studies (1999), several technical strategies were introduced including phonics, word attack, word families, context cues, and language experience activities, however emphasis was placed on the nature of the relationship between the tutor and learner, and how best to accommodate and make the learner comfortable. Philosophical approaches to literacy learning were also introduced in training including whole language learning, multiple intelligence theory, and adult learning theory. Findings centered on immediate changes in emotional attitudes toward learning and changes in literacy practices, including increases in self-esteem and confidence about reading, but did not report changes in technical skill.

Belzer's (2006b) findings from observations from four different literacy programs revealed that initial training of tutors may not be effective in facilitating the needed balance of strategies. The 12 tutors in this sample ranged in age from 23-73 and all had either a bachelor's or master's degree. Other than one retired teacher, and one remedial reading teacher, none of the other participants had a background in education. Four types of literacy programs were observed: 1) a county library program, 2) a community literacy program, 3) a literacy council program and 4) an adult center for lifelong learning. There was some variation in the nature of tutor training for each program.

A 2.5 hour training at the county library program defined literacy in terms of the learner's ability to fulfill responsibilities of social roles, and emphasized the importance of functional strategies and choice of authentic materials. This initial training was immediately followed by a 1.5 hour one-on-one training session before the tutor was matched with a learner. In this program, authentic materials were emphasized, with very little attention paid to specific skill training.

The community literacy program provided 20 hours of training over five sessions and defined literacy in terms of overall communication skills identifying listening, speaking, reading and writing as essential language acquisition skills that reinforce each other. Tutors and learners were matched after completion of all training sessions and a final exam. Though the training discussed certain social and cultural aspects of literacy, in practice the focus appeared to be on technical skills, using commercially published workbooks and materials.

The literacy council program provided 15 hours of training over five sessions, based on a definition of literacy that included training of component skills, personal construction of meaning and application of skills in everyday situations, however materials were limited to commercially published materials with emphasis on decoding and technical skills. A representative of the program acknowledged that these approaches do not work for everyone but was unable to offer alternatives.

An adult center for lifelong learning provided 9 hours of training over three sessions, and while they did not explicitly define literacy in training, phonics skills were de-emphasized and referred to as a "difficult method" (p. 120), and the focus of lessons was on goal-oriented functional materials, highly individualized to the learner's everyday life. When asked the main focus of the organization's approach to literacy, a representative responded that they "help

learners make meanings...It's all about creating a situation where people can practice something in a comfortable situation" (p. 125).

Despite the diversity of definitions of literacy and training provided, findings indicate that training did not seem to have a significant impact on tutoring sessions, as there were no significant differences in tutors' approach across programs. The type of training program appeared to have little effect on tutors' choice of materials, explicit skills instructional strategies, and how to appropriately address errors made by learners. Belzer (2006b) concluded that none of the four programs were especially helpful in preparing tutors for the challenges they may encounter with adult literacy learners, and suggests that rather than trying to develop training that captures all of the challenges tutors may face, the approach to literacy training may need to be rethought. She proposes a "less is more approach" in that minimal orientation training be provided up front, and continuous training be provided to tutors as they gain more experience and develop their own questions about literacy instruction; ideally literacy learners could take part in such training.

Findings from Roderick's (2013) interviews with eight literacy learners found similar weaknesses in connecting practice with training in that tutors tended to regard literacy in terms of technical skills, despite the emphasis of broader communication skills and sociocultural factors presented in a community literacy program's training. For instance, a tutor who formerly worked as a high school teacher acknowledged the importance of learner-centered planning, but in her description of implementing those goals made references to the larger objectives of "increasing reading ability" and to "read more fluently" (p. 60). Another tutor indicated her reliance on commercial materials when she expressed that she didn't have time to devote to lesson planning and simply "follows the book" (p. 62) , while another tutor relied on "internet

research” (p. 66) when she runs out of ideas. Other tutors described learner centered approaches but considered a casual, non-planned approach the most effective, evident in statements like

“you can’t go in with a set plan...you just go in and do what they need...the more informal, the more relaxed, the better off you are with these guys” (p. 63).

Another tutor expressed that she wished she had known her learner during her literacy training, because she didn’t realize that most approaches need to be adjusted, supporting Belzer’s (2006b) proposal for providing the majority of training after the tutor and learner become acquainted.

Taken together, these studies suggest that while adult literacy tutors may articulate the meaning of literacy in a functional way, in practice, their instructional strategies reveal that they may subconsciously conceive of literacy in a technical sense, evident in their choice of instructional materials, limited application of scaffolding techniques, and adoption of a uniform approach.

Fueyo’s (1988) observation of a critical literacy program offers an example of how literacy advancement also fosters empowerment. In this program, learners described and wrote their personal histories, with the assistance of their tutors, and included the reasons they believed they didn’t learn to read proficiently as a child. Their personal stories became the authentic materials they used during instruction, a text with which they practiced reading, comprehending and revising. As learners became more comfortable with the learning process, they began to share their stories, learning from the stories of other adults with whom they shared a common struggle. In addition to technical reading skills, they learned to communicate effectively with others and develop a greater respect for both learning and themselves. In comparison to the average 50 percent attrition rate, this program had a retention rate of 86 percent, with reported

gains in technical skill, everyday literacy practices and psychological aspects of learning. A middle-aged learner eventually became a tutor with the organization, began a writing group with his sons at home and described himself as a “new person” (p. 113).

In order for critical approaches to literacy to be effective, skill instruction must be balanced with sociocultural aspects of literacy that may not directly relate to reading. Before training toward this shift can take place, it is necessary to investigate the assumptions that tutors have about literacy learning. Despite knowing that that diversity in approaches is important, tutors tend to revert to instructional methods with which they are most familiar and worked for them. Crew (1995) asserts that in order to become a true collaborator in the process of literacy learning, tutors must make a conscious effort to identify the beliefs, assumptions and values that guide their behavior, while being open to the discomfort that accompanies the exploration of alternative beliefs. In an effort to develop reciprocity in the learning process tutors should ask themselves, “How does it feel to learn something new (reading) at 35 or 50 years old?”, and “What makes me want to continue my efforts when I try to learn something new?”. Talarr (1995) suggests using “active listening”, a strategy that has been effective in conflict resolution and diversity training, as a method for tutors to shift from a deficit-driven approach to one that focuses on buildable strengths. Active listening can be practiced through simple exercises such as asking someone “How was your day?” and then paraphrasing their response, reflecting reception of their response without judgment. Participants in this type of training have described it as a way to focus “intellectual energy”, create a safe environment for sharing, understand different patterns of learning and create a common vocabulary for tutors and learners.

Criticism of tutors’ abilities must be balanced with appreciation for their sacrifice of time and effort. Time constraints can make it difficult to coordinate training for tutors who already

dedicate hours per week to learning sessions, and most are eager to spend their donated time with learners. Training should not only be considered as a means to provide volunteers with more adequate instructional skills, but also provide a forum for them to share their assumptions and beliefs about learning and literacy in particular.

What appears to be more important than expertise in a given approach is a broader knowledge of different approaches and the ability to apply them appropriately with different learners. In this study, tutors were asked to assess different adult learner scenarios and indicate which types of activities they think are most important for different kinds of learners. Their responses provided insight to the approaches they consider valuable in their work and how they might vary their approaches in response to different learner circumstances.

The disconnection between tutor training and practice suggests that there are other factors that influence how tutors engage with learners. The voluntary nature of participation for both the tutor and learner make this a unique learning situation. If training does not have a large impact on tutoring sessions, what does? Perhaps the motivation to volunteer for a meaningful cause contributes to a tutor's approach. The following is a discussion of how tutors may be differently motivated to improve adult literacy rates in their community.

### **The Value of Volunteerism**

The Corporation for National and Community Service estimated that 25 percent of the adult population gave 7.9 billion hours of volunteer service worth \$184 billion in 2014 (Independent Sector, 2016). Given the value of people's time and labor, volunteer efforts can be considered demonstrations of prosocial behavior, or moral actions, which carry the intention to help or benefit other people.

Research in social psychology, political behavior, economics and psycho-social biology have historically studied prosocial behavior as a debate between the concepts of pure altruism versus egoism: altruism expressed by purely selfless behavior with no expected benefit to the actor, versus altruism expressed for the purpose of serving the actor's ego or a means of feeling better about oneself for having helped another (Liebrand, 1986; Margolis, 1982; Wilson, 1976). In their review of altruism research, Piliavin & Chang (1990) describe a paradigm shift that began in the late 1970's whereby the dominant view that all altruistic acts are ultimately selfishly motivated was challenged by the notion that a good deed can benefit both the actor and recipient, and in some cases have little to no benefit to the actor. To what degree prosocial behavior serves the actor is still unclear, however most agree that altruism is a part of human nature, and more complex than a dichotomous view of being either self-serving or selfless.

### **Characteristics of Volunteers**

Early research has identified common characteristics among volunteers that support the dominant status theory, which predicts that people with dominant statuses in sociocultural contexts are more likely to participate in volunteer activity. According to this perspective, people who are white, middle to upper class, college educated, professionally employed, and parents are more likely to volunteer (Smith, 1994; Lemon, Palisi & Jacobson, 1972). The most recent report from the U.S. Department of Labor (February, 2015) continues to support this theory with the highest rates of volunteerism among 35-54 year old adults, whites (followed by Blacks, Asians and Hispanics), married persons with children between the ages of 5 and 15, and those with a bachelor's degree and higher. Most volunteers (72 percent) work with one organization, while some work with two or more. Religious, educational or youth development

services, community service and health organizations are the most common areas of volunteerism (U.S. Department of Labor: Bureau of Statistics, 2015; Pilivian and Chang, 1990).

Research in volunteerism has looked beyond these general characteristics to explore which factors motivate people to volunteer their time and efforts. The functional approach posits that it serves to fulfill one or more social or psychological functions for the volunteer, and that even though the behavior may appear similar on the surface, it may serve very different functions for different people (Clary & Snyder, 1991). The following outlines how the functional approach to motivation has been studied in the context of personal and public opinion and attitude, and then extended to the specific action of volunteerism.

**Early influences on the functional approach.** The study of attitudes and opinion formation established the foundation for the functional approach to understanding how those attitudes influence behavior (Smith, Bruner and White, 1956; Katz, 1960). Katz (1960) defined attitude as the “predisposition of the individual to evaluate some symbol or object or aspect of the world in a favorable or unfavorable manner” and opinion as the “verbal expression of an attitude” ( p. 168); the organization of attitudes forms the basis of value systems which shape people’s exchanges. In line with Katz’s view, Smith et al. (1956) described an attitude as a “predisposition to experience a class of objects in certain ways which predict interactions with others” (p. 34). Based initially on extensive interviews with ten men from various backgrounds, Smith proposed three psychological functions that attitudes serve, which he referred to as object or event appraisal, social adjustment and externalization. Similarly, Katz proposed four psychological functions, drawing from dominant theories of human behavior: adjustment, value-expressive, ego-defensive, and knowledge.

Based on behaviorist perspective, Katz's adjustment, or utilitarian function, serves to maximize the benefits and minimize punishment or negative consequences. To serve the adjustment function, people develop favorable attitudes towards those who will help them and are unlikely to hurt them. Smith's social adjustment function also related to forming relationships but also carried an expressive function that allowed people to express values with a reference group of like-minded individuals.

Katz regarded value expression as a separate function with roots in psychoanalytic theory, serving to protect the ego. The value-expressive function allows people to maintain a positive self-image by engaging in virtuous behavior that supports that image. Value expressions relate to both internal feelings about the self and social roles: one thinks of himself as a "good guy" and so one makes an effort to be perceived as a "good guy".

In contrast to ego protection, Katz's ego-defensive function, uses negative tactics to protect the ego. In this case, "defense mechanisms", such as displacement or projection, serve to protect the self-image. One might successfully create a superior or strong self-image by projecting feelings of inferiority onto a minority group, but the inferiority ultimately lies within the defensive person.

Drawing from Gestalt theory, Katz proposed the knowledge function, serving one's need to make sense of the world as a whole, and a way to understand larger systems that interact to form societal organization. This is similar to Smith's object and event appraisal function which serves to help one organize and classify information in terms of relevance. Attitudes from this perspective still serve self-related needs, but also consider others according to traditional norms and expectations. The knowledge function also contains elements of Smith's externalization function, an unconscious effort to connect an external event to an unresolved inner conflict.

The functional approach itself does not imply a developmental course of using functions or the exclusivity of one function for an individual, but rather a difference in the degree to which multiple functions are served. These functions are considered adaptive in nature dependent upon circumstances and experiences.

***The functional approach to volunteerism.*** Clary and Snyder (1991) extended the application of functional analysis from attitude to behavior, specifically nonspontaneous volunteer activity. The central tenet of the functional approach in this context is that volunteer activity fulfills one or more social and psychological functions, even though the behavior may appear similar on the surface. Drawing heavily from the foundational work of Katz and Smith, Clary et al. (1998) proposed six types of motivational functions served through various forms of volunteer activity: values, understanding, enhancement, social, career and protective.

The values function gives the volunteer an opportunity to express values that are important to him or her, such as humanitarianism, environmental conservation, or a general desire to contribute to society. The understanding function satisfies an intellectual interest about the world, with an interest in social interactions in particular, and gives the volunteer the opportunity to utilize skills that would otherwise not be used.

Both enhancement and protective functions are motivated by egocentric needs, or one's own psychological issues, however they are distinct in that they relate to either positive or negative dimensions of affect. In the case of enhancement, volunteering serves as a means for personal growth and a way to maintain stability of temperament through positive interactions with others. Enhancement motives are driven by the positive value placed on advancing psychological development as part of an overall positive striving toward greater health. Conversely, the protective function stems from negative feelings and volunteering serves as a

means to escape those feelings. In this case, one may volunteer to feel less guilty about being more fortunate than others, to feel more competent in his or her abilities, or to increase a sense of personal worth. In another sense, one motivated by ego protection may believe that “what goes around, comes around”, so helping another during a time of need makes it more likely that another will help him or her at a time of need.

The social function serves as an opportunity for the volunteer to become more aligned with one’s social reference group of family, friends and close associates. A socially motivated volunteer may feel pressured to participate in the activity because it is of importance to people they know. Expansion of social circles and formation of new social contacts is a potential benefit from this function, however these benefits are related to fitting in and complying with societal norms, rather than making friends for the purpose of feeling better about oneself, as in the enhancement function.

The career function serves as an opportunity for the volunteer to gain experience that would be useful to future employment, either by learning job-related skills that may increase the likelihood of getting hired or simply by enhancing one’s resume to reflect meaningful and constructive use of time.

Clary and colleagues (1998) developed a measure, the Volunteer Functions Inventory (VFI) that assesses the value that volunteers assign these functions, whereby respondents rate the importance of items that represent each of these functions. Likely more than one function is served by the same volunteer activity, however one function is typically prioritized with significantly less importance placed on others. This study investigates whether volunteer tutors are different from other volunteers in their demographic makeup and motivations and whether

there is a relationship between their motivational functions and their approaches to practice noted as most important.

*Typical motivational function patterns of volunteers.* Studies with large samples of volunteers have found similar patterns in the ways they rank the importance of motivational functions. For example, Stukas et al. (2016) found that among 4,085 Australian volunteers values, understanding and enhancement motivations were most important, and social, protective and career functions were less important, similar to a sample of 1,388 volunteers in the United States (Stukas et al, 2009). Findings from a sample of 2,671 volunteers and non-volunteers, Clary, Snyder and Stukas (1996) found that women, younger to middle aged white adults and those with higher levels of education were more likely to volunteer. Both groups ranked functions in a similar order, however, volunteers reported significantly greater levels of values, enhancement, social and understanding functions compared to non-volunteers, who ranked the career function significantly higher. Differences in these patterns have been found among certain demographic groups.

With regard to gender differences, in their large national sample, Clary, Snyder and Stukas (1996) found that women assigned more importance to all six motivations when compared to men, however both groups ranked functions in a similar order, with values, enhancement, and social as most important. A more recent study specifically designed to explore gender differences in motivational functions found similar patterns in a group of medical students. Women ranked all motivations higher than men and both genders ranked functions in the same order (i.e. values, understanding, enhancement, social, career and protective) (Fletcher & Major, 2004).

Findings also suggest that motivational functions may differ depending on the age of volunteers. For instance, Clary, Snyder and Stukas (1996), found that adults aged 35-44 were most likely to volunteer, followed closely by the 45-54 group, then the 25-34 groups. Younger adults were more likely to grant greater importance to career, understanding and protective functions, compared to older age groups. In a study of hospice volunteers, Omoto, Snyder and Martino (2000) found that older volunteers were more likely to be motivated by factors related to societal obligations, whereas younger volunteers were more likely to be motivated by the impact of personal relationships that would be result from their participation.

Due to the makeup of Clary, Snyder and Stukas' (1996) national sample, comparisons by race only included whites and African Americans; about 43 percent of the African American sample reported participation in volunteer activity, compared to 53 percent of the white adults in the sample. Order of rankings of motivational functions was the same for both groups – values, enhancement, social, understanding, protective and career - however African Americans rated all functions at higher levels of importance, despite their comparatively lower volunteer participation.

Comparisons by income showed that those with lower levels of income placed more importance on the career and protective functions, where understanding and enhancement were more important to those with higher income levels. Clear patterns according to specific levels of education were not distinct except that volunteers with less education placed more importance on career and protective functions (Clary, Snyder & Stukas, 1996). In a sample of 26,305 volunteers from professional associations, the social function was the most important motivator. Those with the highest degrees (PhD and MD), employed in academic and governmental sectors, and in higher level professions (CEOs and mid to senior level management) were more likely to

volunteer, either for a cause directly related to their profession or in the community, and those with graduate degrees were more likely to volunteer for an education-related cause (Nesbit and Gazley, 2012).

***Recruitment and retention of volunteers.*** In addition to understanding motivations of volunteers in the interest of exploring the nature of prosocial behavior, organizations that rely heavily on volunteers use this information in recruitment and retention efforts. Using the functional approach allows organizations to appeal to these motivations, increasing the likelihood that volunteers will be satisfied with their work and continue their participation (Clary, Snyder & Ridge, 1992). Certain motivational functions may be associated with different types of volunteer activities.

In a study that assessed the effectiveness of recruitment efforts, Clary and colleagues (1996), asked participants to rate the persuasion level of six advertisements, each highlighting a different motivational function. Respondents found advertisements that highlighted their personal motivational functions more appealing than those that didn't. In their Australian sample, Stukas et al. (2016) found that volunteers motivated by values, understanding and social functions were more likely to report greater satisfaction with experience and intentions to continue their volunteer work.

Houle, Sagarin and Kaplan (2005) investigated whether motivations would predict the type of volunteer activity one would choose. Using the motivational functions and a list of eight brief descriptions of potential volunteer activities, psychology undergraduate students matched motivations to the types of listed activities. Findings support that volunteers may differentiate tasks based on motive as the values function was a significant predictor for reading to the blind,

card making and data entry, and the career function was a significant predictor for typing letters and study brochures.

Clary, Snyder and Stukas (1996) found significantly distinct configurations of motivational functions for 12 of the 15 categories of volunteerism included in the study. Unique patterns were observed for the most common categories: social and career motivations for religious, values motivation for health, and understanding, enhancement and protective motivations for educational organizations. These differences could be useful to recruitment and retention strategies for various types of organizations and suggest that the motivational functions served by volunteerism may change with experience. In the same study values was the most important function for both volunteers and non-volunteers, however the distinctive motivational patterns found between categories indicate that while values may be the initial driver of volunteer participation, other benefits may become more important when one connects with a particular type of activity. Finkelstein's (2008) findings with a group of hospice volunteers supports this suggestion. She examined the relationship between the amount of time spent volunteering and the motivational function of the volunteer at two time points during service, 3 and 12 months. At the 3 month mark, the amount of time spent volunteering was positively associated with the values function, and at the 12 month mark, there was a positive association with understanding and enhancement motives. However in another study, the most common motivations in a group of volunteer hospice workers were values and understanding, and while satisfaction with their work increased over time, their motivational functions remained stable after six months (Nissim et al., 2016). Taken together, these findings suggest that shifts in motivational function may take place over longer periods of time, and that other factors likely contribute to participation patterns.

**Volunteer literacy tutors.** In a study that compared volunteer literacy tutors with volunteers from other nonprofit organizations, Wymer (2003) found differences in tutors' demographic characteristics, values and circumstances preceding their participation in volunteer work. Compared with other volunteers, literacy tutors came from smaller households with larger incomes. Tutors were more likely to respond to mass recruitment appeals (e.g. public service announcements), rather than through a friend or social network. They were also less likely to be involved with multiple organizations or motivated by religious beliefs. Findings from the Rokeach Values Survey (RVS) showed that literacy tutors placed the most importance on the happiness value, and less importance on salvation, pleasure, and social recognition values. When asked about motivation for their work, a love of reading and a theme of empathy was evident in responses such as "I can't imagine not being able to read for pleasure and necessity" (p. 278) and many expressed that they were "making a difference in someone's life" (p. 279) and that they enjoy seeing success in others.

Other qualitative studies with tutors echo these sentiments and motivations appear to align with values, understanding and enhancement functions. Literacy tutors have described motivations for their work as "answering a call" (Belzer, 2006a, p. 563), a response to "a deep sense of the value reading plays in people's lives" (Ceprano, 1995, p. 56), a way to give back to the community, a means to do something useful with spare time and utilize personal experiences in a positive way (e.g. relating to family members that struggle with reading disabilities) (Sandman-Hurley, 2008). Literacy tutors have described their work in terms of the benefits they receive through statements like "feeling more confident in my ability to directly help people with different kinds of problems", "gaining insight beyond expectations", "developing an appreciation for the education process" and "This is important to me and rounds out the meaning of life"

(Nitri, 1999, p. 56). Another tutor claimed that tutoring allowed him to help others while helping himself, and that the process was “good for his soul” (Webb, 2015, p. 44).

The good intentions of these tutors are clear, and their motivations appear to align with functions that place importance on humanitarian values, understanding others, and enhancing self-esteem. Self-report of motivational factors is likely to be useful in recruitment and retention of volunteers, however it represents only one layer of the factors that drive prosocial behavior.

While some tutors may have some educational training or background (e.g. retired teachers) it is not the standard, and even those with educational training often lack specific expertise in adult learning (Tamassia et al., 2007). Findings from studies about tutor training tend to emphasize what happens subsequently in tutoring sessions without much attention to the kinds of beliefs tutors may be bringing to their work (Roderick, 2013; Belzer, 2006a; Belzer, 2006b). The absence of standardized credentials and minimal training among volunteers makes their underlying ideas and assumptions particularly salient as they are the primary influences on their work.

Moral development is associated with prosocial action in that its progression increases tendencies toward altruism as a result of greater competence in empathy and perspective taking, broader knowledge of cultural norms, increased social responsibility, and enhanced moral reasoning capacities (Piliavin & Charng, 1990). Moral reasoning in particular relates to the different ways people assess a moral issue in terms of its possible solutions. Through an adult’s course of moral development, certain elements of moral situations are thought to become more or less relevant to their solutions. The following discusses moral reasoning as a reflection of one’s macro moral view of social cooperation, and how this view may influence the decision to engage in volunteerism.

## **Concepts of Social Cooperation and Prosocial Behavior**

The cognitive developmental perspective of moral reasoning was introduced through the foundational work of Jean Piaget (1964), who proposed a constructivist view of child development. In contrast to the previously dominant behaviorist view, constructivism suggests that rather than passive receivers of information, children are active in their construction of ideas through their experiences with the environment.

Within Piaget's central theory, he proposed that moral development occurs as a progression over three stages during childhood. In the initial or pre-moral, stage, behavior is guided purely by biological reactions, driven by personal motivations without an appreciation of rules or social organization. Around age three or four, children enter the second, heteronomous stage when a sense of morality develops as a result of "relations of constraint"; children learn to follow rules and obey authority in order to avoid punishment while satisfying needs. Between the ages of 7-10, children enter the third, autonomous stage, when the basis for morality shifts to "relations of cooperation"; children begin to learn how to negotiate rules based on fairness and a respect for others as equals.

The core of Piaget's work begins with the concept of generalized knowledge structures committed to long term memory, known as schemas. Beginning in infancy, patterns in experiences are continuously integrated into cognitive reference points, triggered when a similar set of circumstances is encountered. Schemas serve as the means for facilitation of information processing and allow for the application of prior knowledge to a novel situation.

Schemas can reflect characteristics of a certain object or person, as well as the processes involved in an event. Disequilibrium occurs when a current schema or system of schemas becomes inadequate and requires reorganization. Different types of interrelated and overlapping

schemas are created and modified through processes of assimilation and accommodation, and become more sophisticated over time.

Moral schemas are developed as a result of experiences that center on notions of social cooperation. Circumstances under which all people benefit in a given culture are determined by way of modifying existing schemas in order to achieve “functional equilibrium” within social contexts. Piaget’s developmental and schematic model of moral development laid the groundwork for Lawrence Kohlberg’s more extensive stage theory of moral development.

**The Kohlbergian view of moral reasoning.** Kohlberg delved deeper into the course of moral development with cognition as the basis for the construction of beliefs about social cooperation. Through shared experiences, people form ideas about duty, responsibility, reciprocity and justice, and as their competence in perspective taking increases, their considerations become more principled. Kohlberg’s Moral Judgment Interview (MJI) served as the method for investigation of the construction of these principles through discussion of moral dilemmas with hundreds of adults and children. Interviewees shared what they believed to be the best solutions to these dilemmas as well as which aspects of the dilemmas they considered most important. Using a complex coding technique, Kohlberg proposed that development of moral judgment takes place over six stages within three levels: pre-conventional, conventional and postconventional (Kohlberg, 1975).

At the pre-conventional level, stages one and two are defined by orientation of moral behavior in response to avoidance of punishment or benefit to the self. During stage one, conduct is based on the physical consequences of an action, without regard for moral order or the effect that actions may have on others. Known as the “punishment and obedience stage”, there is a lack of both respect for authority and principles of morality. Goodness or badness is

determined by whether the consequence is good or bad for oneself. As one moves into the second, “instrumental-relativist” stage, orientation takes a slight shift to include consideration of others, however this adjustment remains self-serving. Kohlberg describes these moral actions as similar to marketplace exchanges, where one will act in favor of another, with the expectation that the favor will be returned. Fairness and reciprocity are considered in light of practical solutions rather than justice or loyalty.

At the conventional level, stages three and four are defined by a shift in orientation to conformity and maintenance of appearances to one’s family and cultural group. During stage three, moral behavior is driven by interpersonal concordance or “good boy-nice girl” orientation in that moral actions are driven by approval from others and conformity to behavior that coincides with society’s expectations. During this stage, intentions of behavior become relevant so that the perception of a behavior as good, makes that behavior good. In the fourth “law and order” stage, moral behavior is supported by a respect for authority and maintenance of social order. Unlike stage one, where authority is respected as a means to avoid punishment, in stage four there is a sense of duty toward the established rules of a society based on principles born from traditions.

At the post-conventional level, during stages five and six, orientation shifts to application outside of established societal norms and the groups that uphold them. In stage five, the social contract or “legalistic” orientation considers individual rights as good after critical examination and agreement of society. Outside of what is fairly agreed upon through democratic processes, right actions are based on personal values and opinions. Respect for the law remains essential, however what differentiates stage five from stage four is the potential to change these laws should they be deemed unfair to certain individuals or groups. In stage 6, a universal ethical

principle drives moral behavior through a sense of collective principles of justice and respect for the dignity of individuals as human beings. These principles are abstract (e.g. treat others as you would like to be treated), and not necessarily dictated by a fixed set of rules (e.g. the Ten Commandments).

Kohlberg's qualitative methodology received criticism as reliance on interview data assumes that people are aware of their own cognitive processes and furthermore are able to articulate them (Nisbett & Wilson, 1977). In an effort to address this criticism and articulate a more holistic perspective of moral functioning, James Rest and colleagues proposed a model that considers moral reasoning in addition to other essential components to explain the nature of moral development (Rest, 1986).

**The neo-Kohlbergian view of moral reasoning.** The Four-Component Model put forth by James Rest (1986), proposes four distinct processes that contribute to moral functioning: sensitivity, judgment reasoning, motivation and character. Sensitivity refers to the ability of an individual to recognize a situation as one where their actions could potentially benefit the welfare of others and him or herself (i.e. to identify a situation as a moral one). Moral judgment reasoning refers to the ability to choose the best course of action in that situation. Motivation refers to the intention to take the morally just action and prioritize moral values above personal ones. Character refers to an individual's will and perseverance to overcome obstacles in order to carry out the best course of action.

Rest and his colleagues, known as the neo-Kohlbergians, developed a quantitative measurement of the second component of this model, moral judgment, using Kohlberg's qualitative research as its foundation (Rest, Narvaez, Bebeau & Thoma, 1999a; 1999b; Rest, Thoma & Edwards, 1997). The Defining Issues Test combines schema and stage theory to

assess differences in moral reasoning using the dilemmas discussed in Kohlberg's interviews. The neo-Kohlbergian view maintains a constructivist model of moral reasoning and the developmental shift of moral reasoning from conventional to postconventional lines of thought. In addition to assessment, neo-Kohlbergians differ with Kohlberg on the notion of a fixed, sequential progression through "hard" developmental stages, without skipping stages or returning to previous stages once completed. In contrast, Rest and colleagues propose a progression through stages in a "soft" sense. Rather than viewing development in terms of distinct points along a set course, a soft stage approach takes into account the shifts in frequency with which one relies on a particular line of thought. From this perspective, an overlap can occur as one transitions from one stage to another, for instance, employing postconventional modes of thinking some of the time, but primarily relying on conventional reasoning.

Combining stage and schema theory, Rest and colleagues represent Kohlberg's six stages in terms of three schemas that people use to make sense of moral situations: personal interests, maintaining norms, and postconventional (Rest et al., 1999a).

The personal interests schema is considered presociocentric, in that it does not take into account concepts of an organized society. Reflecting elements of Kohlberg's stages two and three, the personal interest schema justifies resolutions that serve to benefit the decision maker, including others that are of importance to that individual.

The maintaining norms schema reflects elements of Kohlberg's stage four, as it recognizes the need for rules and uniform application of laws in an organized society. Decisions using this schema are oriented toward partial reciprocity and duty. The scope of persons considered within this schema extend beyond personal interest to include others in society. Public knowledge of norms implies that it is each individual's duty to uphold laws, and in turn,

will receive the benefits of a peaceful and orderly society. The decision maker using this schema justifies resolutions in terms of “law and order”, using an established law to infer what actions should or should not be taken for the benefit of greater society. Reliance on the maintaining norms schema in all moral situations becomes problematic if one blindly adheres to an established norm, even if it is evident that it benefits only a portion of society, and is not equitably just for all citizens.

The postconventional schema reflects elements of stages five and six, and gives primary consideration to the moral purpose of laws, which should be amended if they do not ensure reciprocity for all citizens. Postconventional decision making appeals to an ideal for society in that resolutions are considered just only if they ensure fair treatment and protection for everyone. Decision makers using this schema justify decisions in terms of what provides the greatest common good, and consider previously established conventions as negotiable if they are not rooted in moral purpose.

Rest and colleagues (1999a) consider the Defining Issues Test (DIT) a device for activating moral schemas. Previous methodology that relied solely on interview data assumes that individuals are able to effectively articulate the reasons that support their beliefs, however in many cases people lack the ability to put their understanding into words. The DIT uses the dilemmas that were discussed in Kohlberg’s interviews with statements created from fragments of responses elicited during those discussions. Each of the statements represent one of the three moral schemas and respondents are asked to rate and rank their importance. Narvaez and Bock (2002) illustrate how the DIT activates schemas and accesses implicit thought processes with one of the first and most referenced dilemmas, Heinz and the drug.

In this scenario, the inventor of a drug that could save a woman's life is selling the drug for ten times its cost, making it unaffordable to the woman and her husband (Heinz). The question of whether or not Heinz should steal the drug is posed. The decision to steal or not steal is considered the content of the moral decision, however the questions that follow seek to uncover the reasoning that supports the choice. High importance placed on benefits and risks to Heinz, and his perception by others would indicate activation of personal interest schema. High importance placed on the laws against stealing would indicate activation of the maintaining norms schema. High importance on the universal right to life would indicate activation of the postconventional schema, reflecting a primary concern for equitable protection for all people in society.

Since schemas are not necessarily stored verbally, their activation provides access to implicit knowledge and networks of ideas that have been formed as a result of social experiences. Though the DIT presents dilemmas that take place within different contexts, schema scores represent "bedrock" schemas, in the sense that they are applicable in the larger context of macro morality. In other words, schema scores represent the nature of one's thinking when they encounter any moral problem.

***Moral reasoning and volunteerism.*** Advanced moral reasoning has been studied as an outcome of participation in volunteer activities, particularly with college students. In a study of undergraduate students in an ethics course that included discussion of ethical dilemmas and principles, one half of the group participated in volunteer service for the duration of the semester, while the other half served as a comparison group. Findings from the DIT, administered at the beginning and end of the semester, found that only those students that participated in the volunteer activity showed a significant increase in postconventional scores (Boss, 1994).

Another study of college freshman who completed 21 hours of volunteer service did not find an increase in DIT scores in comparison to a control group, however the entry level status of students and brief length of service may have been additional factors that inhibited change (Stevick & Addleman, 1995). In the same study, students were offered fifteen dollars at the end of their service and given the option to donate the money to a humanitarian cause of their choice, however all students declined to make a donation. A more recent study found that undergraduate accounting students who reported a higher level of volunteerism also had significantly higher postconventional scores compared to those who do not participate in volunteer activity (Brown-Liburd & Porco, 2011). Lies and colleagues (2012) also found significant increases in DIT scores in college students that completed an 8-week summer service learning project. While these studies demonstrate how prosocial behavior can enhance moral reasoning development, other studies have explored moral reasoning in terms of its relationship with volunteerism as a moral action.

Derryberry and Thoma (2005) investigated the influence of moral judgement and psychological self-concepts on the moral actions of honesty, altruism and taking a stand for civil liberties. Of particular relevance in this study is the assessment of altruism, which was measured in terms of the values motivational function, as measured by the VFI, typically ranked as the most important motivation among volunteers (Stukas et al., 2016; Stukas et al., 2009; Clary, Snyder & Stukas, 1996). A relationship was found between moral judgement and altruism, but only when the analysis included psychological self-concepts, suggesting that all moral actions are not necessarily influenced by the same constructs. Derryberry and colleagues (2009) found that non-prejudice, or a universal orientation towards others, and schema scores accounted for a portion of the variance in motivational functions in a sample of undergraduate students.

Significant contributions to the variance were found for all three schemas in values and career functions, and the maintaining norms schema also contributed to understanding and social motivations. The maintaining norms schema was the only predictor of the understanding function, suggesting that motivations to learn more about others stem from a sense of societal duty or obligation. Authors point out that postconventional scores were relatively low in this sample of undergraduate students.

***Moral reasoning and educators.*** Since formal training is not required for adult literacy tutors, they are not regarded as a professional group despite the roles they fulfill as educators. Moral reasoning has been assessed in educators as early as 1976 when Bloom found significantly lower levels of moral reasoning in graduate education students when compared to students from other liberal arts programs. In another comparison of faculty, graduate and undergraduate students, findings showed higher levels of principled reasoning among faculty, but no differences between undergraduate and graduate students in a teacher education program (Yeazell & Johnson, 1988). A later study found lower moral reasoning scores among pre-service teachers when compared with students from other majors (Cummings, Dyas, Maddux and Kochman, 2001). Greer, Searby and Thoma's (2015) sample indicated a similar trend in students pursuing educational leadership degrees, with moral reasoning scores below the national average for graduate students.

A study of teacher education candidates found inconsistencies between DIT measures of moral judgment and participants' descriptions of their moral roles as educators with respect to assessments, instruction, and classroom management (Johnson, 2008). Participants' qualitative responses tended to represent more postconventional lines of reasoning, in contrast to lower DIT scores which indicated reliance on the maintaining norms schema. Authors suggest that while

teacher candidates may in fact use conventional lines of thought to resolve relevant moral dilemmas, they are able to regurgitate postconventional responses that apply to educational situations, based on discussions held during formal training. Interventions with education students that target ethical development by introducing theories of moral development and facilitate open discussions about ethical dilemmas have shown promise in increasing levels of moral reasoning and continue to be an active subject of research (Cummings, Maddux & Richmond, 2010).

The expectation of higher levels of moral reasoning among educators is supported by the assumption that the purpose of education is to stimulate the natural development of students' moral capacities and judgements (Boss, 1994) and to help them to identify themselves as moral agents so they are motivated toward moral action (Rest, 1984). Adult literacy tutors are unique in their roles as educators in that they have not necessarily participated in formal education settings designed to foster moral reasoning, but the voluntary nature of their service indicates that they have identified themselves as moral agents.

Tutors' deeper assumptions about serving the community and engaging in adult learning become even more important given their varied backgrounds and absence of standardized training. This study measured tutors' moral judgment development to gain insight to their broader ideas about social cooperation and societal organization using the Defining Issues Test (DIT-2) (Rest et al., 1999a). DIT scores were used to describe volunteer literacy tutors as a group and to investigate the relationship between moral judgement, motivation and ideas about adult literacy learning.

### **Focus of Proposed Study**

What appears to be more important than expertise in a given approach to adult literacy instruction is a broader knowledge of different techniques and the ability to apply them appropriately with different learners. In this study, tutors chose the types of activities that they thought were most useful based on varying circumstances of adult learners. Their responses provide insight into the approaches they consider important in their work and how they might vary their approach in response to different learner circumstances. Additionally, tutors' motivation and broader ideas about social cooperation were explored as potential influences on their decision to volunteer and their ideas about different types of learners.

### **Research Questions**

1. Which types of activities do literacy tutors find most useful for different adult learners? (Literacy Scores)
2. How are volunteer literacy tutors represented by measures of motivation and moral judgement?
  - 2a. How does the Volunteer Functions Inventory (VFI) describe literacy tutors?
  - 2b. How does the Defining Issues Test (DIT) describe literacy tutors?
  - 2c. Is there a relationship between DIT schema scores and the motivational function scores on the VFI?
3. Is there a relationship between literacy scores, motivation, and moral judgment?

## CHAPTER 3

### METHODS

#### **Participants**

Participants were recruited from a community literacy program in the southeastern region of the via email announcement sent by the organization's administrative director to about 100 tutors affiliated with the organization. Additionally, the program manager of the ProLiteracy network extended the invitation to all of its member organizations via an announcement in the monthly newsletter, which has several thousand subscribers nationwide. From this pool of participants, 125 completed this study in its entirety and were included in the analysis.

Comparative demographics of tutors are not available through the ProLiteracy network, and the requirements to become a volunteer tutor are broadly defined by the organization:

“When it comes to volunteering, passion and positivity are the only requirements” (ProLiteracy Network, 2018). Potential tutors are asked to provide a strong commitment to helping people learn to read and write, have excellent communication skills, the ability to speak, read and write English fluently, have a high school diploma or equivalent, and the ability to use computer technology is considered a plus.

There were 95 female and 27 male participants in this study (3 did not indicate gender), all of whom were volunteer adult literacy tutors from one of 28 adult literacy organizations across the United States. Age of participants ranged from 22 to 86, with a mean age of 61.4 (SD=13.04), and retirees made up about 67% of the group. Most of the sample reported completion of some form of higher education, with about 85% completing at least a bachelor's

degree. Tutors reported various occupational backgrounds, with about 30% indicating a background in education, and 15% with a background in healthcare or mental healthcare. Length of experience as a tutor ranged from less than one year to more than nine years, with a mean of 6.8 years. See Table 1 for a complete summary of demographic characteristics of the sample.

Table 1

*Summary of Participants' Demographic Characteristics*

Variable	N	%
Gender	122	
Male	27	22.1
Female	95	77.9
Age	123	
Under 25	2	1.6
25-34	5	4.1
35-54	21	17.1
55-75	87	70.7
Over 75	8	6.5
Education Level	125	
High School	5	4.8
Some College	12	9.6
BA degree	33	26.4
Graduate/Post Grad	74	59.2
Occupational Background	125	
Retired	84	67.2
Non-Retired	41	32.8
Educator	38	30.4
Mental/Healthcare	19	15.2
Writing/Journalism	11	8.8
Religious Services	2	1.6
Governmental Agency	8	6.4
Professional/Management	15	12.0
Customer Service/Clerical	6	4.8
Technical/Labor	11	8.8

Community/Non-Profit	4	3.2
Other/Not Specified	11	8.8
Length of Tutor Experience	125	
Less than 1 year	29	23.2
Between 1 and 3 years	34	27.2
Between 3 and 9 years	30	24.0
More than 9 years	32	25.6
Region	125	
Northeast	24	19.2
Southeast	54	43.2
West	12	9.6
Midwest	34	27.2
Southwest	1	.8
Ethnicity		
Caucasian	114	91.2
African American/Black	7	5.6
Hispanic	3	2.4
Asian	1	.8

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***Participant training.*** When asked to provide the nature and length of their training, participants varied in the level of detail they shared. The average number of days of training reported was two, with a range from zero to ten. Most training occurred as an initial orientation to the tutoring process and some occurred in the form of ongoing workshops over the course of the tutor's experience. A small number of tutors mentioned topics included in training, such as phonetic elements of reading, lesson planning, and cultural considerations of learners; some tutors mentioned specific training programs including the Wilson Reading System, NOW Foundations program, Laubauch Literacy, and the Inspired Learning Model. Some tutors reported not having any training, or report that their training took place so long ago that they did not remember its content. In some cases, different tutors from the same agency reported different types of training, perhaps a reflection of changes in the training program over time.

The wide range of responses makes it difficult to use training as a contributing factor when considering differences in responses on other measures.

### **Procedures**

Approval to conduct the study was granted from the University of Alabama's Institutional Review Board prior to recruitment of participants and data collection. Participants accessed the online link provided in the recruitment announcement. Qualtrics survey platform software was used to administer all measures.

Following review and acceptance of the informed consent, participants were presented with a two-part literacy questionnaire. The first part of the questionnaire asked demographic and background questions. The second part presented three scenarios, in randomized order, of different adult literacy learners followed by 10 items which the participants were asked to rate and rank. Following the literacy questionnaire, the Volunteer Functions Inventory (VFI) was presented followed by the 3-story short form of the Defining Issues Test-2 (DIT-2). It was estimated that the literacy questionnaire would take about 15-20 minutes to complete, the VFI between 10 and 15 minutes and the DIT-2 about 15-20 minutes; the total completion time for the study was estimated to be between 40 and 55 minutes.

### **Measures/Instruments**

#### **Literacy Questionnaire**

**Intent and purpose.** Most adult literacy studies tend to focus on learner outcomes, and the few that do include tutors usually focus on their compassion as volunteers and/or assess the effectiveness of tutor training. Since community adult literacy programs are largely dependent on volunteer tutors to provide instruction, tutors come from various backgrounds and are not required to meet a standard of educational training. It should not be taken for granted that tutors

are familiar with all of the theoretical approaches in adult literacy instruction, and it is reasonable to assume that different tutors may approach learning situations differently, based on their own underlying assumptions and experiences.

The literacy questionnaire was designed to assess how volunteer literacy tutors consider the main themes of research related to adult literacy instruction: 1) the use of structured curriculums to teach literacy, 2) the use of materials of relevance to learners to teach literacy (i.e. authentic materials), and 3) providing psychological support to adult learners during instruction. Rather than directly ask tutors the extent of their knowledge and application of these areas in their work, which may be difficult for them to articulate, the questionnaire reflects these themes through the presentation of hypothetical learner scenarios followed by a list of potential activities that might take place during tutoring sessions. Different learner scenarios represent common challenges for adult literacy learners, and the activities following the scenarios reflect how different theoretical approaches might be applied in practice. Support for the scenarios and related items are discussed in more detail next.

**Development of literacy questionnaire.** Scenarios were developed by the researcher based on case studies discussed in the literature (e.g., Belzer, 2006a) and the personal experience of the researcher as a volunteer literacy tutor with several adult learners over the course of the last eight years. Scenarios were reviewed and vetted by the Birmingham Literacy Council's Program Director, Director of Research Initiatives and Volunteer Coordinator prior to the pilot study. The study was piloted with a small group (n=10) from the Literacy Council of Central Alabama in order to get feedback about the relevance and authenticity of the vignettes and items on the literacy questionnaire as well as to test the overall clarity and efficiency of the study procedures. The researcher was present for all pilot subjects' participation and based on

responses and debriefing sessions, the investigator was able to adjust and clarify items so that they clearly represented common activities drawn from various practices discussed in the literature.

**Literacy questionnaire.** The first part of the literacy questionnaire asked participants to provide information about their occupational and professional background, location and length of current and prior tutoring experience, nature and length of training, and motivation for becoming a tutor. Other demographic questions included age, education level, ethnicity, political liberalism, United States citizenship and whether English was the tutor’s primary language.

In the second part of the questionnaire, tutors were presented with three scenarios of different adult literacy learners followed by ten items which they rated and ranked based on their usefulness during a tutoring session.

Each scenario description consisted of approximately 300 words and included information about the learner’s age, formal education level, employment status, nature of referral to the program, attendance patterns, personal motivation for participation in the program, an example of an area of difficulty with reading skill, and a reference to the learner’s attitude toward reading and/or learning (i.e. emotional element such as anxiety, embarrassment, resistance). Table 2 provides a summary of scenario characteristics; see Appendix A for full measure.

Table 2

*Literacy Questionnaire - Summary of Story Characteristics*

Story	Summary of Story Characteristics
Story One - Gus	Age 73, retired. Would like to become better at reading the bible and participating in bible study discussions, become more independent in managing personal correspondence. Trouble with phonics, comprehension. Feels anxious and embarrassed about reading aloud.

- Story Two – Faye      Age 27, employed in food service, mother of two young children. Needs to improve computer skills so that she can access work documents through new online system. Trouble with fluency and comprehension. Feels anxious about reading big words and nervous when reading aloud.
- Story Three – Derek    Age 19, unstable/part-time employment in construction. Improve reading to enter GED class, obtain more secure employment. Trouble with phonics, comprehension. Strongly encouraged by family members to participate in literacy sessions, lacks personal motivation, inconsistent attendance. Defensive when mistakes are corrected.
- 

Each of the items that followed the scenarios represented activities that could potentially take place during a tutoring session with the learner. Each activity is organized around one of the three main themes discussed in the literature: 1) structured material use, 2) authentic material use, and 3) psychological support.

- 1) Structured material use items: These items represent activities centered on structured materials, implying a more traditional, bottom-up philosophy of instruction (Mellard et al., 2015; Cutris & Kruidenier, 2005; Meyer and Keefe, 1988). These items include common activities that train specific skills using decontextualized materials that are part of a larger structured curriculum of some kind (e.g. sample reading passages from workbooks, vocabulary list, online phonics program).
- 2) Authentic material use items: These items represent activities centered on authentic materials, implying a more learner-centered, top-down philosophy of instruction (Rodrigo, Greenberg & Segal, 2014; Greenberg et al., 2006; Purcell-Gates, Degener, Jacobson & Soler, 2001). These items include common activities that train skills using materials that are specifically relevant to the learner, whether they be functional or based on the learner's interest (e.g. bible, biography of interest, forms related to employment).

3) Psychological items: These items represent ways that the tutor might provide psychological or emotional support for the adult learner (e.g. praise, encouragement), do not address a specific technical skill and are not centered on either structured or authentic materials (Saal & Dowel, 2014; Sandman-Hurley, 2008; Belzer, 2006a; Nitri, 1999;).

**Literacy scores.** To assess how participants considered the different activities representative of the main themes in adult literacy instruction, responses to the literacy questionnaire were solicited in a two phase process. In the first phase, after reading the learner scenario, the participant was asked to rate the activities that followed in terms of how useful they would be for that learner during tutoring sessions. In the second phase, participants were asked to rank the activities that they think would be most and least important to address during tutoring sessions.

**Item ratings.** After each scenario, in the first phase of the response process, participants rated each item on a 5-point scale according to how useful it would be during a tutoring session, whereby 1 represents “not useful at all” and 5 represents “extremely useful”.

Mean ratings of items by type across all three stories indicate the highest ratings for psychological support, followed by authentic materials and lastly structured materials (See Table 3 for means and standard deviations of item ratings).

Table 3  
*Means and Standard Deviations for Item Ratings by Type*

Variable	N	Mean	SD
AM Items	125	3.87	.53
SM Items	125	3.75	.60
PSY Items	125	4.24	.57

Checks of internal consistency show generally acceptable levels of alpha coefficients for items when grouped by type. There were 6 total psychological support items with a Cronbach's alpha of .66, 12 authentic materials items with an alpha level of .76 and 12 structured materials items with an alpha level of .82.

*Correlations between mean ratings and mean rank scores.* Rank scores, which are discussed in more detail next, are based on the second phase of the response process, whereby the participant is asked to choose the most and least important activities for each learner. While the ratings serve to orient the participant to the items and initiate their review, the rank scores force prioritization of certain items from the same list after further review. To determine whether rank scores support the initial patterns of mean ratings, correlational analysis was performed with mean ratings for each type and mean rank scores for each type (See Table 4 for a summary of these correlations). Positive correlations were found between mean ratings and mean rank scores of each type. Since patterns of ratings and rankings of the same type are similar, and rank scores represent a more targeted response from participants, only rank scores were included in subsequent analysis and the Results section of this document.

Table 4

*Correlations Between Mean Ratings and Mean Rank Scores*

	1	2	3	4	5	6
1. AM Mean Ratings	1.00					
2. SM Mean Ratings	.23*	1.00				
3. PSY Mean Ratings	.21*	.19*	1.00			
4. AM Rank Score	<b>.48**</b>	-.33**	-.19*	1.00		
5. SM Rank Score	-.47**	<b>.40**</b>	-.31**	-.57**	1.00	
6. PSY Rank Score	-.03	-.07	<b>.54**</b>	-.49**	-.44**	1.00

\*Correlation is significant at the .05 level (2-tailed).

\*\*Correlation is significant at the .01 level (2-tailed).

*Item rankings.* Following the ratings, participants were asked to rank the three items they thought were most important for the person described in the scenario. They were then asked to rank the two least important items for the person in the scenario. Since all activities could be considered to have some usefulness, and potentially receive similar ratings, high and low rankings serve to force the participant to prioritize and de-emphasize certain activities, revealing the areas the tutor finds worthy of greater attention.

*Initial rank score analysis of both top and bottom rank scores.* Item rank scores consist of weighted averages that reflect which types of items a participant prioritizes and de-emphasizes for different learners during tutoring sessions. Therefore, both top and bottom rank scores were calculated for each category of items.

For top rank scores, for each scenario, values 3, 2, 1 were assigned to the first, second and third rank assignments, respectively. For bottom rank scores, for each scenario, values 2 and 1 were assigned to the first lowest rank and the second lowest rank, respectively. Actual rank values were summed for each category and divided by the total possible sum for that category across stories, based on the total number of items for that category, so that each score is on a scale of 100 percent.

*Subsequent analysis including only top rank scores.* The initial analysis of both top and bottom rank scores resulted in six overall literacy rank scores for each participant: three top rank scores for each type of activity (authentic, structured, psychological support), and three bottom rank scores for each type of activity. In a second set of analyses, only the top rank scores were included and results showed similar trends, indicating that inclusion of the bottom rank scores did not add to, or change the outcome of data analysis. Since the more concise analyses present the same patterns, in an effort to be efficient, only the top rank scores were included in

all subsequent analyses and the Results section of this document. Results from the initial analysis including top and bottom rank scores can be found in Appendix B. Since differentiation between top and bottom rank scores is no longer necessary, hereafter the top rank scores that remain in the analysis are referred to simply as “rank scores”.

***Overall literacy rank scores: rank scores across all three stories.*** Rank scores for each category were based on the top three items that participants ranked as most important to address for learners during tutoring sessions.

Each rank score consists of a weighted average, on a scale of a total possible 100%. For each scenario, values 3, 2, and 1 were assigned to the first, second and third rank assignments, respectively. Actual rank values were summed for each category and divided by the total possible sum for that category across stories, based on the total number of items for that category, so that each score is on a scale of 100%. Rank scores for each category were calculated according to the following formulas:

Authentic Materials Rank Score (AM Rank Score) = Total Actual Ranked Value/18  
Structured Materials Rank Score (SM Rank Score) = Total Actual Ranked Value/18  
Psychological Support Rank Score (PSY Rank Score) = Total Actual Ranked Value/15

A high rank score indicates that the participant often ranked this category as the ***most*** important during tutoring sessions.

***Story literacy rank scores: rank scores for each story.*** In order to assess whether tutors adjusted their responses according to the context of the learner scenarios, rank scores were also calculated for each story. Three rank scores (one for each category) were calculated for each story. The total actual ranked value was divided by the total possible value; possible values were adjusted to the story level and calculations were made according to the formulas below:

Story One: Gus:

Gus Authentic Materials Rank Score (G-AM Rank Score) =

$$\begin{aligned} \text{Gus Structured Materials Rank Score (G-SM Rank Score)} &= \frac{\text{Total Actual Ranked Value}}{6} \\ \text{Gus Psychological Support Rank Score (G – PSY Rank Score)} &= \frac{\text{Total Actual Ranked Value}}{5} \end{aligned}$$

Story Two: Faye

$$\begin{aligned} \text{Faye Authentic Materials Rank Score (FY AM Rank Score)} &= \frac{\text{Total Actual Ranked Value}}{6} \\ \text{Faye Structured Materials Rank Score (FY SM Rank Score)} &= \frac{\text{Total Actual Ranked Value}}{6} \\ \text{Faye Psychological Support Rank Score (FY PSY Rank Score)} &= \frac{\text{Total Actual Ranked Value}}{5} \end{aligned}$$

Story Three: Derek

$$\begin{aligned} \text{Derek Authentic Materials Rank Score (DK AM Rank Score)} &= \frac{\text{Total Actual Ranked Value}}{6} \\ \text{Derek Structured Materials Rank Score (DK SM Rank Score)} &= \frac{\text{Total Actual Ranked Value}}{6} \\ \text{Derek Psychological Support Rank Score (DK PSY Rank Score)} &= \frac{\text{Total Actual Ranked Value}}{5} \end{aligned}$$

A high story rank score indicates that the participant often ranked this category as the most important during tutoring sessions, *for that learner specifically*.

***Tutors' familiarity with learners.*** After each scenario, and before the rating and ranking of items, participants were asked, “How similar is (this learner’s) story to a learner with whom you have worked?”; participants responded on a three point scale where 1 = not similar at all, 2 = somewhat similar, and 3 = very similar. This variable was used to investigate whether overall and individual story scores differed based on how familiar the tutor was with the described learners. For across and within story comparisons, the three-level responses for each story were collapsed to two levels, similar or not similar, and the number of learners familiar to the tutor was summed. The resulting variable represents the total number of learners familiar to the tutor; this number can range from 0-4.

## **The Volunteer Functions Inventory (VFI)**

The Volunteer Functions Inventory (VFI) is a 30-item measure that assesses the degree to which a volunteer is motivated by one or more psychological functions: values, understanding, enhancement, career, social, and protective.

The following provides a description of each function with example items that represent these functions on the VFI.

The values function gives the volunteer an opportunity to express values that are important to him or her, such as humanitarianism, environmental conservation, or a general desire to contribute to society. Examples of VFI items that represent this function include, “I can do something for a cause that is important to me” and “I am genuinely concerned about the particular group I am serving”.

The understanding function satisfies an intellectual interest about the world, its social aspects in particular, and gives the volunteer the opportunity to utilize skills that would otherwise not be used. Examples of VFI items that represent this function include, “Volunteering lets me learn things through direct, hands on experience” and “I can learn how to deal with a variety of people”.

The enhancement function serves as a means for personal growth and a way to maintain stability of temperament through positive interactions with others. Examples of VFI statements that represent the enhancement function are “Volunteering is a way to make new friends” and “Volunteering makes me feel better about myself”.

The protective function stems from negative feelings and volunteering serves as a means to escape those feelings. Examples of VFI items that represent the protective function are “No

matter how bad I've been feeling, volunteering helps me to forget about it", and "Volunteering helps me work through my own personal problems".

The social function serves as an opportunity for the volunteer to become more aligned with one's social reference group of family, friends and close associates. Examples of VFI items that represent the social function are "People I know share an interest in community service" and "My friends volunteer".

The career function serves as an opportunity for the volunteer to gain experience that would be useful to future employment, either by learning job-related skills that may increase the likelihood of getting hired in a given field or simply by enhancing one's resume to reflect meaningful and constructive use of time. Example VFI items that reflect the career function are "Volunteering can help me to get my foot in the door at a place where I would like to work" and "Volunteering experience will look good on my resume".

***VFI scores.*** Volunteers indicated the importance of each statement by ranking each item on a 7-point Likert scale where 1 is "not important/accurate" and 7 is "extremely important/accurate". Each motivational function is represented by five VFI items. The score for each motivation was calculated by adding the ratings for each of the five items and calculating the mean. Six scores were calculated for each participant, one for each motivational function. Typically, the function ranked first is considered the primary motivational function for that participant. Scores were considered in terms of both their categorically ranked ordered patterns and the magnitude of mean ratings for each category.

***Psychometric properties of the VFI.*** Exploratory and confirmatory analyses demonstrated factor solutions with substantial internal consistency and the temporal stability of six distinctive factors in a series of three seminal studies conducted to test the psychometric

soundness of the VFI (Clary et al., 1998). In the first study with 465 volunteers of various types, with a mean age of 41, a six-factor model was supported by LISREL's goodness-of-fit index, GFI = .91, the normed fit index, NFI = was .90, and the root mean squared residual index, RMSres = .057. Chi-square tests demonstrated further support for the six-factor model,  $\chi^2(120, N = 434) = 412.69$  when compared with five factor,  $\chi^2(125, N = 434) = 519.19$ , and seven factor,  $\chi^2(H5, N = 434) = 399.49$ , models. Additionally, the six factor model was supported by high rates of internal consistency for each of the motivational function subscales; Cronbach's alpha levels were as follows for each scale: career,  $\alpha = .89$ ; enhancement,  $\alpha = .84$ ; social,  $\alpha = .83$ ; understanding,  $\alpha = .81$ ; protective,  $\alpha = .81$ ; and values,  $\alpha = .80$ . Average correlation among the scales in this sample was .34.

The second study in the series served to cross validate the VFI with a younger group of subjects with more diverse volunteer experiences. The VFI was administered to a sample of 534 college students, with a mean age = 21.25, with a battery of other tests, to investigate whether the same six factor solution would emerge when motivation for volunteering is not the main variable of study. Students with volunteering experience were asked to respond to the items in relation to their experience; students without volunteering experience were asked to respond to the items in relation to how important they would be if they were to volunteer. Findings with this sample also support that a six factor solution is optimal: GFI = .89, NFI = .88, RMSres = .065, and  $\chi^2(120, N = 535) = 630.37$ . The model was again supported by high rates of internal consistency for each of the motivational subscales; Cronbach's alphas were as follows for each scale: career and enhancement,  $\alpha = .85$ ; for understanding,  $\alpha = .84$ ; for social,  $\alpha = .83$ ; and for values and protective,  $\alpha = .82$ . Average correlation among the scales in this sample was .41.

Coefficients of congruence across samples in the first and second studies indicate congruence and a high degree of relation between their structures: Career = .98, Protective = .98, Social = .98, Understanding = .97, Values = .94, and Enhancement = .93.

In the third study, a sample of 65 psychology students with a mean age of 25.34, 13 current volunteers, 27 previous volunteers and 25 students who had never volunteered, completed the VFI at two time points four weeks apart. The test-retest correlation for the values scale was .78; for understanding and enhancement, .77; for social and career, .68; and for protective, .64 (all  $p < .001$ ), indicating that the individual VFI scales are stable over a 1-month interval.

### **The Defining Issues Test (DIT-2)**

The Defining Issues Test is a measure of an individual's level of moral development in terms of stages and schemas outlined in neo-Kohlbergian theory (Rest et al., 1999a, 1999b; Rest et al., 1997). The full measure presents five ethical dilemmas for which respondents make an action choice followed by 12 statements, each representing one of the three schemas of moral reasoning: personal interest, conventional or post-conventional. Respondents are asked to rate the importance on a five point scale. Following the statement ratings, respondents are asked to rank the four statements that were most important in their decision. Based on time constraints and feedback during the pilot study, whereby subjects expressed fatigue toward the end of the measure, the short-form of the DIT-2 administered, which presents only the first, second and fourth stories.

***DIT-2 scores.*** The N2 score was used to represent participants' developmental level of moral judgement reasoning. The N2 score is a reflection of 1) the degree to which post-conventional items are prioritized (the P-score) and 2) the degree to which personal interest items receive lower ratings than postconventional items.

*Psychometric properties of the DIT-2.* Validity for the DIT has been assessed in terms of seven criteria cited in over 400 published articles (Rest, Narvaez, Bebeau, & Thoma, 1999a; 1999b; 2000; Thoma, 2006): (1) differentiation of various age/education groups, supported by studies of large composite samples that demonstrate 30-50% of DIT score variance is accounted for by education level; (2) longitudinal gains, supported by study conducted over ten years that showed significant gains in DIT scores for diverse groups of men and women and college and non-college students; (3) correlation with cognitive capacities, supported by relationships with cognitive measures; (4) sensitivity to moral education interventions, supported by large effect sizes for interventions that include dilemma discussions; (5) correlation with pro-social behavior and professional decision making; (6) predicting political choice and attitude; (7) reliability, supported by a high Cronbach alpha ranging from the high 70s to the low 80s, and similar test-retest reliability. Using the shortened, three-story, version of the DIT can result in a 10-point decrease in reliability (Cronbach's alpha) and 10 point reduction in correlations with outside variables (Bebeau & Thoma, 2003). The recommended story combination of one, two and four, was used to minimize this tradeoff.

The DIT safeguards against respondents' inconsistency by including meaningless items within the 12 statements for each scenario. These items use complex language, but are have no meaning or relevance to the scenario. If a respondent rates or ranks these items with importance, it is an indicator that that he or she may be unable to distinguish this item from the relevant statements that represent the larger moral argument, and that they may be attempting to fake a high score.

## Research Questions and Analysis

1. Which types of activities do literacy tutors find most useful for different adult learners?

(Literacy Scores)

Ratings and rankings of literacy questionnaire items were assessed for patterns in data that indicate prioritization of particular types of activities that would take place during tutoring session with different learners.

Overall means and standard deviations for literacy scores were calculated for the sample and scores were investigated to determine relationships with other variables. Comparisons were made across and within stories.

Cluster analysis was used to determine subgroups within overall trends found for the sample and comparisons with clusters and demographic and experience variables were made to investigate potential relationships with these factors.

2. How are volunteer literacy tutors represented by measures of motivation and moral judgement?

2a. How does the Volunteer Functions Inventory (VFI) describe literacy tutors?

Continuous VFI scores were calculated for each motivational function; the hierarchy of scores represents a ranked categorical pattern of motivational functions for volunteering as a literacy tutor. Descriptive statistics are outlined and used to make comparisons with other variables, and with larger groups of volunteers previously measured with the VFI.

2b. How does the Defining Issues Test (DIT) describe literacy tutors?

The DIT N2 score represents the developmental moral reasoning level in this group of volunteers. Descriptive statistics are outlined and used to make comparisons with other variables, and the normative values for others with similar education levels.

2c. Is there a relationship between DIT schema scores and the motivational function scores on the VFI?

Correlational analysis was performed to determine any significant relationships between motivational functions and developmental level of moral judgement reasoning.

3. Is there a relationship between literacy scores, motivation, and moral judgment?

To determine if motivation for tutoring and underlying developmental level of moral reasoning contributed to the importance placed on particular types of literacy activities for learners, discriminant function analysis was performed with cluster membership as the dependent variable and VFI motivational function scores and DIT N2 score as independent variables.

## CHAPTER 4

### RESULTS

The majority of adult literacy instruction is carried out by community volunteers with various occupational backgrounds and motivations for donating their time. In adult literacy research, tutors are rarely studied as a group, as the focus is largely on learner characteristics and outcomes. This study seeks to contribute to the literature by providing a profile of literacy tutors with respect to what they find most important in their work, and why they volunteer for this cause. The first point of investigation in this study is to determine which types of activities tutors find most useful during tutoring sessions, whether different types of tutors share different patterns in how they prioritize activity types, and how adjustments in approaches may be made in response to different kinds of learners. The second question addressed by this study is tutors' motivations to volunteer for the cause of literacy instruction, specifically which psychological functions are served by their engagement in this prosocial behavior. The third area of interest in this study is tutors' broader notions of social cooperation, and underlying assumptions about societal organization, represented by the nature of their developmental moral reasoning processes. Finally, analysis will examine potential relationships between tutor's motivational functions and moral reasoning processes, and whether these variables influence their approaches to learning situations. Results in this chapter are organized in terms of the research questions posed by the study.

**Research Question One: Which types of activities do literacy tutors find most useful for different adult learners? (Literacy Scores)**

**Overall literacy rank scores.** Rank scores across all three stories indicate an overall pattern whereby the highest rank score is for authentic materials, followed by psychological support and lastly structured materials (See Table 5). The range of scores suggests that most tutors consider a combination of approaches for learners, assigning at least some importance to all three types of activities, however they tend to assign more importance to engaging in activities centered on authentic materials and providing psychological support than they do to activities using structured materials.

Table 5

*Literacy Scores - Means and Standard Deviations for Overall Rank Scores*

Variable	N	Mean	SD
AM Rank Score	125	.44	.22
SM Rank Score	125	.27	.21
PSY Rank Score	125	.35	.24

To determine whether differences in rank scores were significantly different from each other, a repeated measures ANOVA was performed with overall rank scores (i.e. authentic, structure, psychological) as within subjects factors and a significant main effect was found,  $F(2, 248) = 11.562, p < .001, \eta^2 = .09$ . Pairwise comparisons indicate that the rank score for authentic materials was significantly higher than the rank scores for psychological support and structured materials; additionally, the rank score for psychological support was significantly higher than structured materials.

To investigate whether mean rank scores differed by tutor's length of experience or the number of stories with learners familiar to the tutor, a repeated measures ANOVA was performed again with overall rank scores as within subjects variables and experience and familiarity as between subjects factors. Again, a main effect was found for rank scores,  $F(2,$

218) = 10.252,  $p < .001$ ,  $\eta^2 = .09$ . No main effects were found for familiarity,  $F(3, 109) = 1.826$ ,  $p = .147$ ,  $\eta^2 = .05$ , or for length of experience,  $F(3, 109) = 1.677$ ,  $p = .176$ ,  $\eta^2 = .04$ . An interaction was found between rank scores and familiarity,  $F(6, 218) = 2.666$ ,  $p = .016$ ,  $\eta^2 = .07$ , however no interaction effects were found between rank scores and length of experience,  $F(6, 218) = 1.866$ ,  $p = .088$ ,  $\eta^2 = .05$ , or the three variables together, rank scores, familiarity and experience,  $F(18, 218) = .663$ ,  $p = .845$ ,  $\eta^2 = .05$ .

To better understand the interaction effect between tutors' familiarity with learners and the rank scores for different types of materials, one-way ANOVAs were performed with each rank score (i.e. authentic, structure, psychological) and familiarity with learners (See Figure 1). A significant main effect was found between the structured materials rank score and familiarity with learners,  $F(3, 121) = 4.618$ ,  $p = .004$ ,  $\eta^2 = .10$ ). Pairwise comparisons indicate that the mean for tutors familiar with all three learners ( $M = .36$ ,  $SD = .22$ ) was significantly higher than the means for tutors familiar with two learners ( $M = .22$ ,  $SD = .20$ ) and those who weren't familiar with any learners ( $M = .19$ ,  $SD = .15$ ). The relationship between the authentic materials rank score and familiarity with learners was not significant but suggests a statistical tendency,  $F(3, 121) = 2.637$ ,  $p = .05$ ,  $\eta^2 = .06$ , whereby pairwise comparisons indicate that the mean for tutors familiar with no learners ( $M = .53$ ,  $SD = .19$ ) was significantly higher than tutors familiar with three learners ( $M = .38$ ,  $SD = .21$ ) at the .05 alpha level (See Table 6 for summary of the descriptive statistics associated with this analysis). No significant effect was found between psychological support rank score and familiarity with learners,  $F(3, 121) = 1.746$ ,  $p = .161$ ,  $\eta^2 = .04$ . While length of experience does not share a direct relationship with rank scores, not surprisingly, experience and familiarity with learners are positively correlated,  $r = .244$ ,  $n = 125$ ,  $p = .006$ ; tutors with more experience are familiar with more learners. Taken together, these

results suggest a trend whereby less experienced tutors who are familiar with fewer learners place more importance on using authentic materials, but as tutors gain experience and become familiar with more learners, there is a shift to assigning more importance to structured materials.

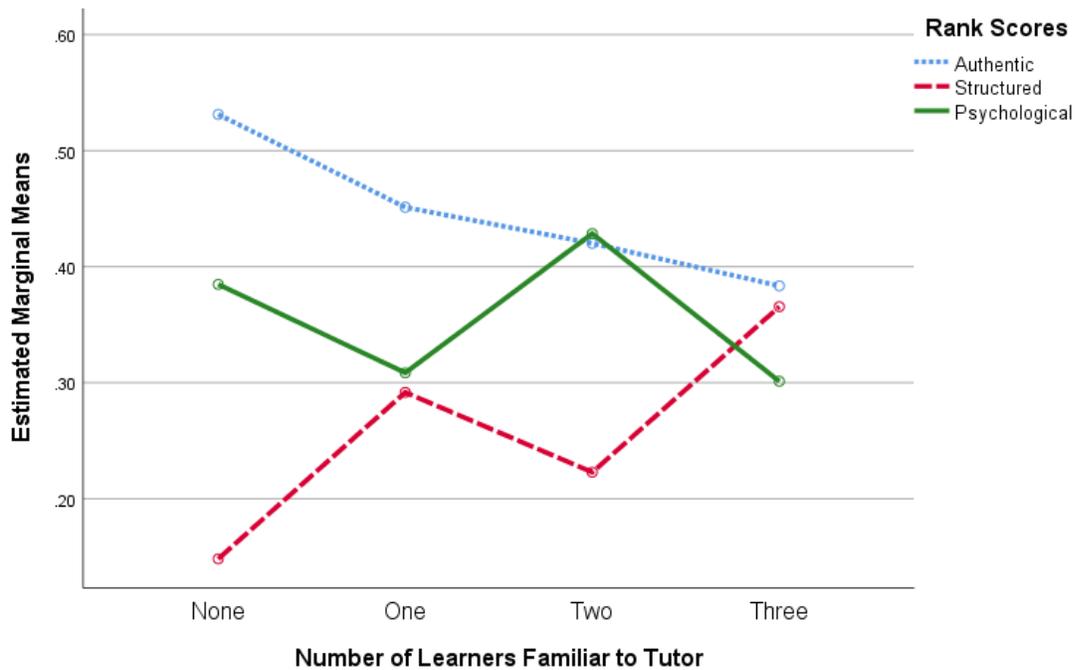


Figure 1. Rank Scores by Familiarity with Learners

Table 6

*Means and Standard Deviations for Rank Scores by Familiarity with Learners*

Number of Learners Familiar to Tutor	AM Rank Score <i>M (SD)</i>	SM Rank Score <i>M (SD)</i>	PSY Rank Score <i>M (SD)</i>
None	.53 (.19)	.19 (.15)	.33 (.21)
One	.46 (.26)	.28 (.19)	.32 (.24)
Two	.43 (.18)	.22 (.20)	.42 (.20)
Three	.38 (.21)	.36 (.22)	.31 (.26)

**Rank patterns for each story.** Examination of rank scores at the story level indicate different patterns of rank scores for each story (See Figure 2). In the case of story one, Gus, the ranking pattern for most useful activities was authentic materials first, followed by structured materials and lastly psychological support. This suggests that, in response to Gus' description, tutors tend to consider a combination of activities that use authentic and structured materials, with some sensitivity for psychological support, but the most emphasis is placed on activities that use authentic materials. When asked how similar Gus' story is with a learner with whom the participant has worked, about 21% responded with "very similar", about 41% responded with "somewhat similar", and about 38% responded with "not similar at all".

The ranking pattern for most useful activities for the second story, Faye, was authentic materials first, followed by psychological support and lastly structured materials. This suggests that, in response to Faye's description, tutors tend to consider a combination of activities, with slightly more emphasis on psychological support than they did for Gus, but, again, placed the greatest emphasis on authentic materials. When asked how similar Faye's story is with a learner with whom the participant has worked, about 20% responded with "very similar", about 46% responded with "somewhat similar", and about 34% responded with "not similar at all".

The ranking pattern for most useful activities for the third story, Derek, was psychological support first, followed by authentic materials and lastly structured materials. This suggests that tutors had a particular sensitivity to Derek's need for psychological support, as they consistently ranked it as most useful above both authentic and structured activities. Again, tutors appear to consider a combination of authentic and structured materials but placed more emphasis on authentic materials. When asked how similar Derek's story is with a learner with whom the

participant has worked, about 17% responded with “very similar”, about 37% responded with “somewhat similar”, and about 46% responded with “not similar at all”.

**Between story analyses.** To determine if differences between stories were significant, a repeated measures ANOVA was performed with story rank scores for each type of activity as within subjects variables. Significant main effects were found for story,  $F(2, 248) = 24.559, p < .001, \eta^2 = .17$ , and type of rank score,  $F(2, 248) = 11.562, p < .001, \eta^2 = .09$ , as well as an interaction effect between story and type of rank score,  $F(4, 496) = 13.794, p < .001, \eta^2 = .10$ . Taken together, these effects indicate that variations in patterns of rank scores differed based on which story was being assessed.

To investigate whether mean story rank scores differed by familiarity with learners, as found in overall scores across stories, a repeated measures ANOVA was performed again with story rank scores as the within subjects factor and familiarity with learners as the between subjects factor. Main effects were found for story  $F(2, 242) = 22.245, p < .001, \eta^2 = .16$ , and type of rank score,  $F(2, 242) = 14.824, p < .001, \eta^2 = .11$ ; no main effect was found for familiarity with learner,  $F(3, 121) = 1.746, p = .161, \eta^2 = .04$ . Interaction effects were found between story and type of rank score  $F(4, 484) = 12.570, p < .001, \eta^2 = .10$ , and between type of rank score and familiarity with learners  $F(6, 242) = 2.865, p < .001, \eta^2 = .07$ , but not between story and familiarity with learners  $F(6, 242) = 1.615, p = .144, \eta^2 = .04$ , or between all three variables together: story, type of rank score and familiarity with learners,  $F(12, 484) = 1.006, p = .442, \eta^2 = .024$ . Taken together, these analyses confirm that the trend related to familiarity with learners found in overall rank scores is also significant for each of the stories, whereby tutors familiar with fewer learners tend to emphasize authentic materials, and tutors familiar with more learners place more emphasis on the use of structured materials.

Table 7

*Means and Standard Deviations for Rank Scores by Story*

Rank Score	Story One: Gus <i>M (SD)</i>	Story Two: Faye <i>M (SD)</i>	Story Three: Derek <i>M (SD)</i>
AM Rank Score	.46 (.31)	.50 (.30)	.35 (.26)
SM Rank Score	.32 (.30)	.25 (.27)	.26 (.28)
PSY Rank Score	.27 (.32)	.30 (.28)	.47 (.33)

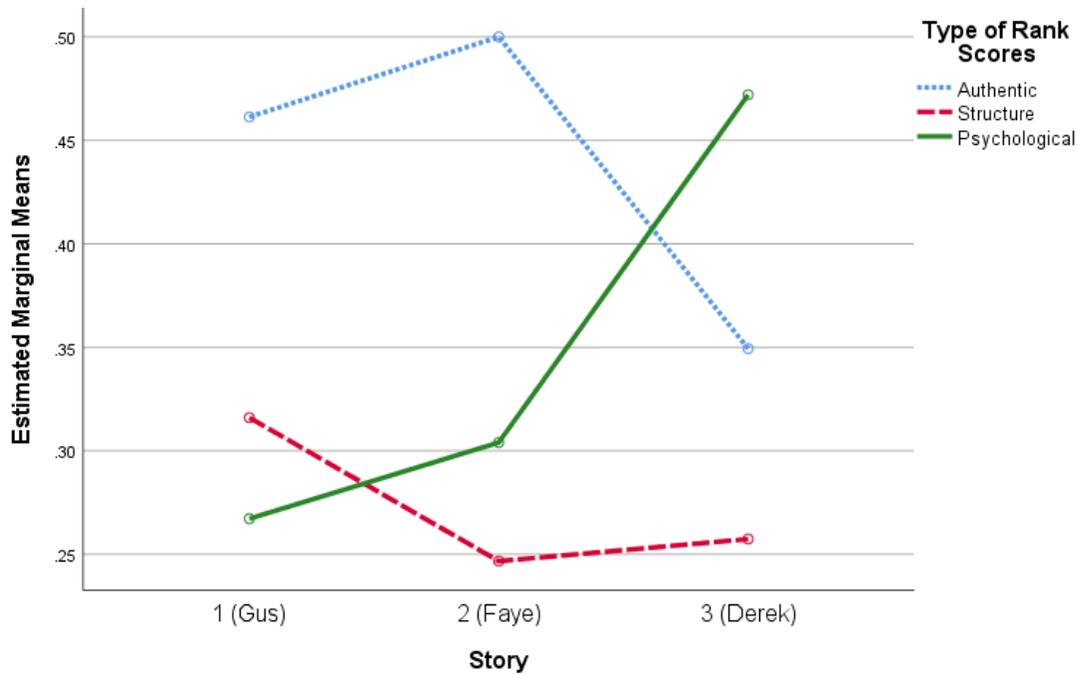


Figure 2. Literacy Rank Scores by Story

**Cluster analysis.** In order to investigate subgroups of tutors defined by different patterns in rank scores, K-means cluster analysis was performed with overall rank scores across the three stories. Clusters were formed based on the following criteria: a) a reasonable number of participants in each cluster, b) ability to interpret the patterns of cluster formation, and c) statistical differences on the clustered variables. Three distinct clusters were formed, indicating

different overall patterns in preferences among tutors (See Table 8), suggesting that different types of tutors may combine activities differently for the same learner. Clusters are described below.

Table 8

*Final Cluster Centers by Mean Literacy Rank Scores*

Mean Rank Scores	Cluster		
	1 (↑ AM)	2 (↑ SM)	3 (↑ PSY)
AM Rank Score	.63	.31	.30
SM Rank Score	.18	.54	.20
PSY Rank Score	.10	.01	.65
N	52	30	43

***Cluster 1: Preference for authentic materials, with less emphasis on structured materials and psychological support; n = 52 (largest).*** AM rank score is one standard deviation above the mean, while the SM rank score is about .5 SD below the mean and the PSY rank score is about one SD below the mean.

For tutors in this cluster, there is some consideration for structured materials and providing psychological support, but the emphasis is on literacy activities with materials that are of direct relevance to the learner’s life.

***Cluster 2: Preference for structured materials, with some consideration for authentic materials and a de-emphasis of psychological support; n = 30 (smallest).*** SM rank score is about one SD above the mean, the AM rank score is about .5 SD lower than the mean, and the PSY rank score is about 1.5 SD below the mean.

For tutors in this cluster, there is some consideration for authentic materials, but the emphasis is on literacy activities that use materials that offer a structured framework for teaching literacy skills. Very little importance is assigned to providing psychological support during tutoring sessions in this group of tutors.

***Cluster 3: Preference for psychological support, with a mixture of literacy activities that use authentic and structured materials; n = 43.*** PSY rank score is a little more than one *SD* above the mean, AM rank score is about .5 below the mean, SM rank score is in line with the mean.

For tutors in this cluster, providing psychological support is the most important part of tutoring sessions, with a mixture of literacy activities that use both authentic and structured materials.

*Summary of cluster membership analysis.* The range of tutors' responses reflect that they assign at least some importance to each of the different activities that are representative of the main themes in the literature. The formation of distinct clusters suggests that while most tutors consider a combination of these approaches, different tutors may vary in the way they combine different strategies, based on which types of activities they think are most important to address during tutoring sessions.

***Relationships between demographic variables and literacy rank scores.*** To investigate potential relationships between rank scores and demographic variables, a repeated measures ANOVA was performed with rank scores as the within subjects variable and each demographic variable as the between subjects variable (See Table 9 for summary of these results).

The significant main effect for type of rank score remained in analyses with all demographic variables: age,  $F(2, 242) = 6.420, p = .002, \eta^2 = .05$ ; gender,  $F(2, 240) = 10.587, p$

< .001,  $\eta^2 = .08$ ; education level,  $F(2, 240) = 4.416, p = .013, \eta^2 = .04$ ; region,  $F(2, 242) = 10.225, p < .001, \eta^2 = .08$ ; and background,  $F(2, 244) = 11.125, p < .001, \eta^2 = .08$ .

*Psychological support rank scores and regional differences.* A significant main effect was found for region,  $F(3, 121) = 3.877, p = .011, \eta^2 = .09$ , and a significant interaction was found between region and type of rank score,  $F(6, 242) = 2.225, p = .041, \eta^2 = .05$ . One-way ANOVAs were performed with each rank score as the dependent variable and region as the independent variable and a significant relationship was found specifically between psychological rank score and region,  $F(3, 121) = 3.877, p = .011, \eta^2 = .09$ . Pairwise comparisons indicate that the mean PSY rank scores for tutors from the Northeastern ( $M = .45, SD = .19$ ) and Western ( $M = .44, SD = .22$ ) regions are significantly higher than the means for tutors from Southeastern ( $M = .33, SD = .23$ ) and Midwestern ( $M = .27, SD = .25$ ) regions. No main effects were found for region and authentic materials rank score,  $F(3, 121) = 1.028, p = .383, \eta^2 = .03$ , or region and structured materials rank score,  $F(3, 121) = 1.543, p = .207, \eta^2 = .04$ .

*Psychological support rank scores and tutor background.* A significant main effect was found for tutors' type of background,  $F(2, 242) = 3.452, p = .035, \eta^2 = .05$ . One-way ANOVAs were performed with each rank score as the dependent variable and type of background as the independent variable and a significant main effect was found between psychological support rank score and background,  $F(2, 122) = 3.452, p = .035, \eta^2 = .05$ . Pairwise comparisons show that the mean psy rank score for educators was significantly higher than the mean for people with other types of backgrounds. No significant effects were found between background and authentic materials rank score or structured materials rank score.

Table 9

*Summary of Repeated Measures ANOVA Results by Rank Score Types and Demographic Variables*

Variable	Within-Subjects Rank Scores		Between- Subjects Demographics		Interactions	
	<i>p</i>	$\eta^2$	<i>p</i>	$\eta^2$	<i>p</i>	$\eta^2$
Age	.002**	.050	.421	.005	.426	.007
Gender	.000**	.081	.969	.000	.731	.003
Education Level	.013**	.035	.965	.002	.920	.008
Region	<.001**	.078	.011**	.088	.041*	.052
Background	<.001**	.084	.035*	.054	.094	.032

\*\*significant at the .01 alpha level, \*significant at the .05 alpha level

*Non-significant relationships with other demographic variables.* Type did not differ by the remaining demographic variables of age  $F(1, 121) = .653, p = .421, \eta^2 = .01$ ; gender,  $F(1, 120) = .002, p = .969, \eta^2 = .00$ ; education level,  $F(3, 120) = .090, p = .965, \eta^2 = .00$ .

No interaction effects were found between type of rank scores and the remaining demographic variables: age,  $F(2, 242) = .855, p = .426, \eta^2 = .01$ ; gender,  $F(2, 240) = .313, p = .731, \eta^2 = .00$ ; education level,  $F(6, 240) = .331, p = .920, \eta^2 = .00$ ; background,  $F(4, 244) = 2.005, p = .094, \eta^2 = .03$ .

*Cluster membership and demographic variables.* Chi-square tests were performed to investigate potential relationships between demographic variables and cluster membership. No significant relationships were found between clusters and demographic variables, see Table 10 for summary of these results.

Table 10

*Summary of Chi-Square results with Cluster Membership by Demographic Variables*

Variable	N	df	$\chi^2$	<i>p</i>	$\phi_c$
Age	123	2	.670	.715	.074
Gender	122	2	1.429	.490	.108
Education Level	124	6	3.998	.677	.127
Region	125	6	9.380	.153	.194
Background	125	4	8.766	.067	.187

**Research Question Two: How are tutors described by measures of motivation and moral reasoning?**

*Research Question 2a: How are tutors described by the Volunteer Functions*

*Inventory?* VFI scores are considered in terms of their magnitude (on a continuous scale) and their ranked pattern (categorical). The continuous score calculated for each category can vary in magnitude depending on the ratings given to each of the designated items for that category; see Table 11 for summary of continuous scores for each motivational function. VFI scores also indicate a categorical ranked pattern, where the category with highest score represents the primary motivational function for the participant, and the others follow in importance.

Results indicate that values and understanding scores are the highest in magnitude and most often ranked as the primary motivations, followed in importance by enhancement, protective, social and career functions.

Table 11

*Volunteer Functions Inventory Scores – Summary of Means and Standard Deviations*

Motivational Function	N	<i>M</i>	<i>SD</i>
Values	125	6.37	.68

Table 11 (continued)

Understanding	125	4.94	1.33
Enhancement	125	3.98	1.47
Protective	125	2.81	1.46
Social	125	2.68	1.45
Career	125	1.70	1.26

---

***Qualitative responses about motivation to volunteer.*** In addition to assessing volunteer motivation using the Volunteer Functions Inventory (VFI), the literacy questionnaire asked participants to briefly share the reason for becoming a volunteer literacy tutor. Open-ended responses were coded according to the six motivational functions outlined by functional motivation theory (Clary et al., 1998).

Most participant responses, 87.2%, were aligned with the values motivational function, in that they cited humanitarian values through their desire to “improve lives”, “reach an underserved group”, “give back to society”, and “address social injustice”. Literacy was described as an “enabler”, an “equalizer” and a “differentiator” and a means for people to “more equally participate in society”.

Another 11.2% of responses were aligned with the understanding function, a desire to learn more about the social world and/or a desire to practice underused skills. One of these participants shared that she had a desire to “learn a lot about something interesting”; another was “looking for a productive way to use language skills as a retiree”.

One participant’s motivation was social; following the loss of her husband, she accepted a friend’s invitation to join her in tutoring and “loved it”. One participant was motivated by a change in career: “I was unemployed so I was looking for new experiences...this was the one that stuck.”

Tutors' open-ended responses corroborate findings from the VFI in that they reflect how most tutors are motivated by their humanitarian values and desire to use skills in a productive way.

***Relationships between VFI scores and demographic variables.*** To investigate potential relationships between VFI scores and other characteristics of tutors, ANOVAs were performed with each VFI score as the dependent variable and each demographic as independent variables: age, gender, educational level, background and region. Appendix C summarizes all results between demographic variables and the six VFI scores; significant findings with demographics are discussed next.

*Differences in motivational functions by gender.* Significant relationships were found between gender and VFI understanding scores,  $F(1, 120) = 8.625, p = .004, \eta^2 = .07$ , VFI enhancement scores,  $F(1, 120) = 4.759, p = .031, \eta^2 = .04$ , VFI protective scores,  $F(1, 120) = 5.903, p = .017, \eta^2 = .05$ , and VFI career scores,  $F(1, 120) = 4.347, p = .039, \eta^2 = .04$ . Means for females were significantly higher than the means for males for the understanding, enhancement, protective, career motivational functions. While the magnitude of these motivational function scores were significantly higher for females, males and females had similar ranking patterns, indicating the same primary motivations for volunteering.

*VFI Understanding motivational function score and region.* A significant relationship was found between VFI Understanding scores and region,  $F(3, 121) = 3.446, p = .019, \eta^2 = .08$ . Pairwise comparisons indicate that the means for tutors from the Western ( $M = 5.62, SD = .93$ ) and the Midwestern ( $M = 5.33, SD = 1.21$ ) regions are significantly higher than the means for tutors from the Northeastern ( $M = 4.68, SD = 1.37$ ) and Southeastern ( $M = 4.66, SD = 1.37$ ) regions.

*VFI Career motivational function score and age.* Significant relationships were found between the VFI career motivational function and age,  $F(1, 121) = 55.477, p < .001, \eta^2 = .31$ . Pairwise comparisons indicate that the mean for tutors under the age of 55 ( $M = 3.01, SD = 1.75$ ) is significantly higher than the mean for tutors over the age of 55 ( $M = 1.32, SD = .75$ ).

No other significant relationships were found between VFI scores and demographic variables.

***Research Question 2b: How are tutors described by the Defining Issues Test?*** The DIT-2 N2 score was used to represent participants' developmental level of moral judgement reasoning. The N2 score reflects both the degree to which post-conventional items are prioritized (the P-score) and the degree to which personal interest items receive lower ratings than postconventional items.

The mean N2 score for participants was 38.13, with a standard deviation of 15.94. Given that 26.4% of the sample had a bachelor's degree, and 59.2% had a graduate degree, the mean N2 score is comparable with national normative scores for similar education levels (i.e. B.A. degree:  $M = 34.76, SD = 15.45$ ; MS degree:  $M = 41.33, SD = 14.57$ ) (Dong, 2010).

*Relationships between N2 score and demographic variables.* To investigate potential relationships between N2 scores and other characteristics of tutors, ANOVAs were performed between N2 score as the dependent variable and each demographic as independent variables: age, gender, education level, background and region. Appendix D summarizes all results between demographic variables and N2 scores; significant findings are discussed next.

*N2 score and background.* A significant relationship was found between N2 score and type of background for tutor,  $F(2, 122) = 3.309, p = .04, \eta^2 = .05$ . Pairwise comparisons indicate that the mean N2 score for tutors with a background in mental healthcare or healthcare ( $M =$

46.63,  $SD = 18.47$ ), was significantly higher than tutors with a background in education ( $M = 36.71$ ,  $SD = 14.29$ ) or those with other types of backgrounds ( $M = 36.54$ ,  $SD = 15.54$ ).

No other significant relationships were found between N2 score and demographic variables.

***Research Question 2c. Is there a relationship between motivational functions for volunteerism (VFI scores) and developmental level of moral reasoning (DIT N2 score)?***

No significant relationships were found between motivational function scores from the VFI and the DIT-2 N2 score. See Table 12 for summary of correlational analysis. Additionally, no non-linear relationships were found between VFI and DIT scores.

Table 12

*Correlations Between VFI and DIT Scores*

	1	2	3	4	5	6	7
1. DIT N2 Score	1.00						
2. VFI Values	.10	1.00					
3. VFI Understanding	.12	.20*	1.00				
4. VFI Social	.03	-.01	.27**	1.00			
5. VFI Enhancement	.15	.14	.40**	.34**	1.00		
6. VFI Protective	.12	.16	.41**	.34**	.72**	1.00	
7. VFI Career	.07	.05	.32**	.18	.25**	.37**	1.00

\*Correlation is significant at the .05 level (2-tailed).

\*\*Correlation is significant at the .01 level (2-tailed).

**Research Question Three: Is there a relationship between literacy scores, motivational functions (VFI scores), and level of moral reasoning development (DIT scores)?**

To investigate whether tutors' motivations for volunteering and underlying developmental level of moral reasoning related to the types of activities they find most important for literacy learners, discriminant analysis was performed with cluster membership as the

dependent variable and motivational function scores from the VFI and the DIT N2 score as the independent variables.

The overall model was not statistically significant, Wilks  $\lambda = .903$ , Chi-square = 12.093,  $df = 14$ , Canonical correlation = .289,  $p = .599$ . Tests of equality of group means of the independent variables were non-significant. These results indicate that measures of motivation and moral judgement were not helpful in predicting how tutors might respond to different learners in terms of which activities they regard as most important. It is likely that the lack of variation in the independent variables made it difficult for them to differentiate membership in a particular cluster.

## CHAPTER 5

### DISCUSSION

In adult literacy research, most studies are focused on learners. These studies attend to characteristics of the learner: the diversity of their backgrounds, the circumstances that led to their participation in literacy programs and the effectiveness of instructional methods used in these programs (Saal & Dowel, 2014; Sandman-Hurley, 2008; Nitri, 1999). Though no one instructional method has been deemed the most effective, literacy researchers have made comparisons among many programs that use both bottom-up (e.g. sequentially organized lessons from a program workbook) and top-down (e.g. practice of literacy skills using learner's bible study materials) strategies in literacy learning (Scarborough et al., 2013; Greenberg et al., 2011). Volunteer literacy tutors serve as the connection between the approaches supported by the experts and the learners who stand to benefit from them. The prosocial nature of tutors' behavior is evident by their donation of time and suggests that the dynamic between tutor and learner extends beyond academics. A few small scale studies have included observations of tutors during learning sessions (Belzer, 2006a; Ceprano, 1995) and interviews with them about their work (Roderick, 2013), while some have focused on the effectiveness of tutor training (Belzer, 2007; Cromley and Azevedo, 2005), but to date, none have asked a larger group of tutors about what they think is most important in their work, while also investigating what motivates them to engage with this cause.

While the field may support the notion of relativistic definitions of literacy for different learners (Cervero, 1985), it may be taken for granted that all tutors would perceive learners'

needs similarly. Rather than assume that all tutors would individualize instruction for a learner in the same way, this study poses the idea that different tutors might respond to the same learner's needs differently. Findings suggest this may be the case in that different subgroups of tutors chose different areas of emphasis for the same learner scenarios, and that these subgroups were consistent in these emphases for all learner scenarios. Despite the similarities that subgroups of tutors shared, most seemed to respond in similar ways to certain learner characteristics, specifically, a learner's prior negative learning experiences and lack of motivation for participation in tutoring sessions. The voluntary nature of tutors' work and the importance granted to the psychological support they provide to learners indicates that they are not only attuned to the main themes in instructional strategies, but that they also understand adult literacy as a deeper social issue.

### **Tutors Perceptions of Learners Needs**

*Overall responsiveness to themes.* Overall means of literacy rank scores suggest that tutors find value in each of the themes in the research with the most importance assigned to use of materials with relevance to learners' lives, followed by providing psychological support to learners and use of materials that provide structured curriculum for practice, and providing psychological support to learners during the learning process. These preferences notwithstanding, differences in themes by scenario indicates that tutors are flexible and adjust combinations of strategies in response to learners' circumstances.

*Experience and familiarity with learners.* Perceptions might change based on familiarity and experience. Though groupings of tutors indicate a preference in activities across different contexts of learners, this perspective is not entirely dogmatic – all groups considered a combination of strategies. The greater emphasis on authentic materials for tutors with less experience and familiarity with learners may reflect a means of getting to know the learner by

becoming more acquainted with that learner's everyday uses of literacy and which topics and types of materials are more likely to motivate continued engagement and participation.

The shift to greater integration of structured materials as a tutor gains more experience and familiarity could reflect refinement in approach, in that the tutor has identified more specific areas of skills deficit and sees the value in targeting these skills with materials that are designed to do so. The shift to structured materials could also be indicative of the recognition that authentic materials can be difficult to adapt to a learner's reading level and use to teach specific strategies. Perhaps these realizations happen naturally with more experience, and as the tutor builds a trusting relationship with the learner, introduction of structured materials is less likely to be perceived as negative or de-motivating by learners who have had previous difficulties in traditional learning environments.

*Subgroups of tutors.* Groups of tutors with similar combinations of strategy usage with emphasis on a particular theme suggests that these tutors share ideas about which approaches are most important or effective. For example, tutors who place greater emphasis on the use of authentic materials likely find the most usefulness in understanding both the learner's interests and functional literacy needs. Assigning importance to materials of relevance signals that the tutor may use a top-down approach, by considering ways to get to know the learner better and provide the means for natural practice by using materials the learner regularly encounters, ultimately leading to changes in reading habits and overall greater engagement with literacy materials (Rodrigo, Greenberg & Segal, 2014; Shore, et al., 2013; Reder, 2009; Shore, McNeil, Sabatini & Scarborough, 2008; Greenberg et al., 2006; Degener, Jacobson and Soler, 2002; Smith, 1996).

Tutors who place greater emphasis on structured materials likely value the curriculum and systematic method they provide. The tendency to rely on these materials suggests a bottom-up philosophy to literacy learning, whereby literacy skills are acquired, then applied to everyday life (Meyer and Keefe, 1988). On the other hand, this preference may relate to the practicality of their use. Tutors may value materials of relevance to the learner but find that they don't easily lend themselves to instruction, therefore they tend to use structured materials because of the straightforward approach they provide (Roderick, 2013, Belzer, 2006a, 2006b).

Tutors who emphasize their role in providing psychological support during tutoring sessions are more likely to recognize literacy advancement as part of a larger social change for learners. More than acquiring a set of skills or becoming adept at an everyday functional task, these tutors may recognize the process of literacy advancement as a deeper acquisition of communicative ability and self-reliance. Similar to tutors in previous studies who prioritized confidence building and self-esteem, tutors in this group are likely to identify negative emotions about academic performance as significant barriers to advancement (Saal & Dowel, 2014; Belzer, 2006a; Nitri, 1999).

*Levels of refinement in approach.* Subgroups could also potentially represent a hierarchy that builds in complexity from the first to the third grouping. Tutors in the first cluster that seem to choose strategies that incorporate authentic materials most often with little consideration for more structured materials or providing psychological support. Tutors in the second cluster also assign little importance for psychological support but continue to regard authentic materials with moderate importance even though structured activities are assigned the most importance. Though tutors in the third cluster clearly prioritize psychological support during sessions, they still assigned moderate importance to both structured and authentic materials, indicating that they

consider the greatest range in approaches. The more balanced reliance on multiple themes may further suggest a more complex view of the tutoring process in which materials and context are both prioritized. One implication for this interpretation of Cluster 3 is the potential beneficial impact on the learners. It may be that future studies should attend to both material preferences as interactive components associated with a successful tutoring experience.

The convergence of means for all three theme areas for tutors with more experience and familiarity with learners supports the notion of a hierarchy in that more experienced tutors draw from a greater knowledge of strategies and pool of resources.

*Sensitivity to context across subgroups.* The differences between learner scenarios indicate that even when a tutor prefers a particular type of literacy activity, there still appears to be sensitivity to the context of learners. In particular, the learner scenario (Story 3: Dereck) that described a lack of motivation and previous negative experiences in school elicited a stronger preference for psychological support from all groups of tutors. Psychological support was considered significantly more important for this learner, than for learners who struggled with anxiety and performance issues. This pattern of preferences may reflect tutors' sense of importance for continued participation in a positive learning environment in order to promote long term changes in literacy engagement (Reder, 2009; Kim, 2003; Smith, 1996).

### **Tutors Motivations for Volunteerism**

Similar to studies with different types of volunteers (Stukas et al., 2016; Stukas et al., 2009; Clary, Snyder & Stukas, 1996), volunteering primarily served to help tutors in this study express their humanitarian values, gain a better understanding of the world and use skills that may not have been used otherwise. To a lesser extent, tutoring also served as a means of securing and preserving well-being and good mental health, as well as participating in one's social group. For the few younger tutors in this group, volunteering was viewed to either show

productive use of time, or to gain experience that would lead to eventual gainful employment. When asked why participants chose to volunteer for this cause, many participants echoed sentiments expressed by tutors in previous qualitative studies by expressing desires to “improve lives”, “give back to society”, “learn a lot about something interesting” and use skills in a productive way in retirement (Sandman-Hurley, 2008; Belzer, 2006a; Wymer, 2003; Ceprano, 1995). Many tutors in this sample expressed dedication specifically for the cause of literacy, describing it as an “enabler”, an “equalizer” and a “differentiator” and a means for people to “more equally participate in society”.

### **Developmental Moral Reasoning and Social Application**

Given the age and education level of the participants in this study, the developmental level of moral reasoning for participants was consistent with normative ranges for people of similar age and education level, indicating that tutors have a sense of universal ethics when they think about fairness in the context of societal organization (Dong, 2010). This combined with their expression of humanitarian values and the importance placed on the psychological aspects of tutoring suggests that tutors do recognize the issue of adult literacy as a broader social issue, as outlined by Quigley (1997) and Fingeret (1983), and address it as such during their work.

Overall, measures of volunteer motivation and moral reasoning did not explain variations in tutors’ responses to learner scenarios. Taken together, these findings describe literacy tutors as very similar in motivation and social moral skills as volunteers more broadly defined. It is interesting to note that both of these measures take a broad perspective of volunteering and moral judgment development which may be too global to identify more subtle differences in motivating factors particular to literacy tutors. To more fully explore these constructs within literacy research it may be that attention to the context will be important. For instance, profession

specific moral judgment measures have provided a more nuanced understanding of the moral strategies used to understand and make action choices within professional settings. A similar approach seems warranted for literacy tutors.

## **Implications**

*Tutor training.* This study was conducted to better understand how tutors reason about different aspects of their work and why tutors volunteer for the cause of adult literacy. These insights are potentially useful in training with tutors in two ways. First, the findings support training models posed by Belzer (2006b), who suggests that rather than providing in-depth training at the initial orientation, minimal introductory training should be provided, with more targeted training to follow after tutors and learners become more familiar with each other. This is likely to be helpful to tutors as they try to combine activities that are most effective in serving learners' needs and interests and are also within appropriate skill levels.

Second, a scenario assessment component similar to the one used in the current study may be a useful tool in training in order to elicit assumptions tutors have about particular learner characteristics that may be otherwise difficult to articulate. For instance, tutors' consistently strong response to a learner's need for psychological support, as in the case of the third scenario in this study, could be the basis for an open discussion about how tutors assess these needs, and the different ways they might address them. Additionally, tutors could be asked to choose or generate their own activities for a learner scenario, followed by a discussion of reasons that support those choices. As tutors gain more experience, they could reflect on these scenarios over time and talk about how those activities unfold in real life sessions and how their impressions of the tutoring process may have evolved.

*Matching tutors with learners.* This study further suggests that tutors have ideas about how the tutoring session ought to be organized. This knowledge about tutors should be helpful

when matching tutors with learners since this study has shown that certain types of learners evoke different mixes of strategy usage. Different types of tutors could reflect different preferences for activity types, but also the potential for tutors to specialize in activities they feel particularly connected with during the learning process. Some tutors may be more comfortable with structured materials and step-by-step strategies, while others might feel more natural when they are addressing real-life issues with learners. A tutor who feels most comfortable providing psychological support may be well suited to design group activities that facilitate comfortable interaction between learners in a way that lessens their anxiety, embarrassment, and shame about their inadequacies in literacy, and fosters empowerment through their mutual support. Those tutors who seem to encourage a particular type of activity may be better suited to work with learners who favor the corresponding approach. Additionally, learners may prefer particular strategies and be better matched with tutors that are more adept in those areas.

*Tutor retention and support.* Knowledge about how tutors are motivated to engage with adult literacy learners can serve as a means for organizations to effectively recruit and retain tutors and support them in their efforts. Agencies could appeal to potential volunteers by highlighting areas of positive change in learners that arise as a direct result of tutor's approach or relationship with that learner. These notions are highlighted in some of the case studies in the qualitative literature, however consistent updates in agency newsletters and correspondence that include the tutor's specific interactions with learners (e.g. learner ordering from a restaurant menu, paying bills, reading to children) could both express gratitude for tutor's donation of time and effort and promote retention of their service.

## **Limitations**

While it is valuable to have the diversity of a national sample in this study, the sample size could still be considered small, relative to the thousands of tutors from hundreds of

organizations in the country that provide adult literacy services. It is also unknown if tutors volunteer for other causes; whether or not they volunteered for the cause of literacy exclusively may have an impact on the depth of their knowledge base and preferred combination of approaches.

Specific information about the different training tutors may have received through the various organizations that participated is unknown, limiting the knowledge of how training could have contributed to tutors' responses.

Additionally, this study recruited from community adult literacy organizations and did not include tutors from basic adult education programs offered through community colleges; the structure of higher education institutions may vary from that of a non-profit community based organizational model and could potentially influence tutor responses.

Lastly, retirees made up the majority of this sample and it is unclear whether most adult literacy tutors are retired, or if those who are retired had more free time, and therefore were more likely to complete the study; a larger sample that includes working professionals may result in different responses.

### **Future directions**

*Investigation of subcategories of themes.* More than appreciating volunteers' time and assuming that tutors' are aligned with the main themes in research, this study sought to use a methodology that allowed tutors to express what is most important to them when they think about adult literacy learning. This study broadly characterized these themes and it could be beneficial for future work to evaluate more specific features within these comprehensive areas. For instance, authentic materials refer to a wide range of materials that are either of interest or function for the learner. Perhaps a study that assesses differences within this category would provide a more nuanced view of tutor preferences (e.g. the value and practicality of working

with documentation related to employment versus reading a novel of interest). Similarly, there are many ways a tutor might provide psychological support for a learner who struggles with anxiety, confidence issues, or lack of motivation. Perhaps future studies could glean more details about the best ways for tutors to support learners' emotional needs as well as ways in which tutors could foster communication between learners and provide a venue for them to practice the types of social exchanges associated with literacy advancement.

*Nature of tutors' experience.* It may be useful for future studies to distinguish a tutor's overall length of experience from experience with a specific learner. For instance, if a tutor indicates familiarity with a learner scenario, it would also be helpful to know how long have they worked with a similar learner. Tutor and learner pairs may experience developmental changes over time and responses related to strategy usage might reflect knowledge of such changes.

*Connect tutors' strategies with learners' success.* In part, this study attempts to demonstrate that the investigation of tutors' ideas and assumptions about their work are important on their own, still the instructional strategies that these ideas inform should eventually be connected with the success of the learners. In line with andragogical theory, this connection could potentially be uncovered by future studies that not only include learner outcomes, but also learners' own preferences and assumptions about the process and why certain types of activities and support are successful.

## **Conclusion**

In addition to appreciating tutors' knowledge, compassion and effort, this study suggests that they be invited to the discussion of the broader issue of functional illiteracy for adults. This study attempts to delve deeper than a tutor's desire to "change someone's life" or "give the gift of literacy", in an effort to understand which mechanisms tutors think facilitate both the cerebral and social changes that accompany literacy advancement. Future research should continue this

line of inquiry and to generate the most innovative approaches to literacy learning, researchers, practitioners and learners should all be included in these explorations.

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## APPENDICES

### APPENDIX A: Literacy Tutor Questionnaire

#### Part One: Demographic and General Characteristics

Participants will be asked to report the following information: (1) Name of literacy organization, (2) occupation/professional background, (3) length of tutor experience with current organization, (4) length of tutor experience with other or previous organizations (if any), (4) reason for volunteering as a tutor, (5) age, (6) education level, (7) gender, (8) ethnicity, (9) political liberalism, (10) US citizenship status, and (11) whether English is the primary language.

#### Part Two: Scenarios

##### I. Scenario One: Gus

Gus is 73 years old and attended school through the sixth grade. Gus worked in the maintenance department at a local school for nearly 30 years, is now retired and collects a pension. Gus is heavily involved with his church community and recently decided to participate in a new bible study group. The group takes turns reading bible verses and explanatory passages. Gus shared that he is embarrassed because he reads slower than others and makes a lot of mistakes; he has been asked to read faster by some members of the group. Gus has memorized many words, some large and complex, but when he encounters a word he has not committed to memory, even a smaller word, he is unable to sound out the word and will often guess based on the first one or two letters, and the context of the word in the sentence. Gus often grasps the main idea of a story or passage, but tends to struggle when asked for more details, at times making them up or speculating what they may be based on the main idea. Gus enjoys singing and writing gospel music and is also involved with the church choir. He enjoys creating song lyrics with rhyming patterns but has a lot of difficulty with spelling and writing these lyrics down independently. Gus lives in apartment housing for senior citizens where he has a couple of neighbors that help him read and write personal correspondence (i.e. bills, information received in the mail), but he would like to be more independent in handling his personal matters. Gus learned about the literacy program from a friend at church and has been consistently participating in sessions twice weekly in the evenings for about three months.

1a. How similar is Gus's story to a learner with whom you have worked?

Not similar at all, somewhat similar, very similar

1b. For each of the following activities, please indicate on a scale from 1 to 5 how useful you think each would be during tutoring sessions with Gus.

A rating of 1 indicates that you do not think the activity would be useful at all and a rating of 5 indicates that you think the activity would be extremely useful.

1. Read aloud using Gus' bible study materials.
2. Read aloud from a biography chosen by Gus.
3. Write and maintain a list of Gus' personal appointments and bills.
4. Discuss review questions at the end of passages in Gus' bible study materials.
5. Read aloud from groups of word families in phonics skills workbook.
6. Use an online phonics program to practice blending of sounds.
7. Write and practice a list of new vocabulary words.
8. Discuss answers to comprehension questions from sample reading passages in skills workbooks.
9. Provide continuous positive feedback for effort and attendance, regardless of progress.
10. Talk about what makes Gus anxious when he reads aloud, and ways he might alleviate it.

1c. Is there a type of activity that you think would be important during sessions with Gus that is not listed here?

1d. From the same above 10 activities that you just rated, please indicate which **3** you think would be **MOST** important for Gus.

1e. From the same above 10 activities that you just rated, please indicate which **2** you think would be the **LEAST** important for Gus.

## II. Scenario Two: Faye

Faye is 27 years old and stopped attending high school during the eighth grade. Faye works various hours at a local restaurant and is raising two children, ages 10 and 8, by herself, with minimal support from extended family and friends. Faye recently learned that her place of employment is converting from a paper-based system to an online system to process payroll documents, provide information about health insurance policies and to facilitate some areas of required training. Faye has a neighbor whom she occasionally asks for help with completing forms for work, but her neighbor does not know much about using computers. Faye has limited experience using computers and does not own one; her phone allows her access to the internet but she very seldom uses it for this purpose. Faye remembers having trouble reading in school and feeling nervous when asked to read aloud. Faye is able to sound out many one and two syllable words but feels intimidated by longer words and has difficulty separating them into smaller parts. Faye seems to have a good sense of the sounds that correspond with individual letters, but reads very slowly and is often unable to answer basic comprehension questions at the end of a passage. Faye's co-worker told her about the Literacy Council and how they help people get their GED. Faye is unsure about committing to a GED program but would like to focus on improving her reading and computer skills for now. Faye has been coming to the literacy center for about two months. She has limited time to participate in tutoring sessions and

tries to come twice per week, but often can only make it once because of conflicts with her job and responsibilities with her children.

2a. How similar is Faye's story to a learner with whom you have worked?

Not similar at all, somewhat similar, very similar

2b. For each of the following activities, please indicate on a scale from 1 to 5 how useful you think each would be during tutoring sessions with Faye.

A rating of 1 indicates that you do not think the activity would be useful at all and a rating of 5 indicates that you think the activity would be extremely useful.

1. Practice reading using work documents (training requirements, health insurance policies, employee benefits) accessed through employer website.
2. Practice repetitive reading using articles accessed online, that are of interest to Faye.
3. Write and maintain a list of personal appointments and bills.
4. Discuss new work policies and practice asking and answering questions about work-related issues.
5. Read from groups of word families using online phonics phone application.
6. Practice repetitive reading using an online fluency program.
7. Write and practice a list of new vocabulary words.
8. Discuss answers to comprehension questions from sample reading passages in skills workbooks.
9. Provide continuous positive feedback for effort and attendance, regardless of progress.
10. Talk about what makes Faye anxious when she reads aloud, and ways she might alleviate it.

2c. Is there a type of activity that you think would be important during sessions with Faye that is not listed here?

2d. From the same above 10 activities that you just rated, please indicate which **3** you think would be **MOST** important for Faye.

2e. From the same above 10 activities that you just rated, please indicate which **2** you think would be the **LEAST** important for Faye.

### III. Scenario Three: Derek

Derek is 19 years old and stopped attending high school during the tenth grade. Derek lives with his aunt and other extended family members and occasionally works part-time, temporary construction jobs with his cousin who remodels homes. Derek's aunt told him about the literacy center and has strongly suggested that he work toward getting his GED diploma so that he has more job options in the future. Derek is working toward improving his reading skills in preparation for GED classes, but seems to lack some personal motivation. Derek says that he didn't like school because it was boring and he would get into trouble a lot because he had a hard time paying attention to directions and following rules. Derek says he finds out about a lot of things he needs to know by using his phone to search the internet. He also uses his phone to play

games and watch videos but does not have a computer at home. Derek says that he is able to read and doesn't think he has too much improving to do in order to get to the GED level. During sessions Derek tends to read very fast and doesn't articulate the words very well. Derek knows the sound of individual letters but seems to have trouble putting the sounds together; when he gets to a word he does not know, he tends to guess what the word might be, rather than try to sound it out. Derek is often unable to answer basic comprehension questions at the end of a story. Derek tends to get defensive when his mistakes are corrected. Derek initially signed up for twice weekly tutoring sessions about one month ago, but usually only comes once per week.

3a. How similar is Derek's story to a learner with whom you have worked?

Not similar at all, somewhat similar, very similar

3b. For each of the following activities, please indicate on a scale from 1 to 5 how useful you think each would be during tutoring sessions with Derek.

A rating of 1 indicates that you do not think the activity would be useful at all and a rating of 5 indicates that you think the activity would be extremely useful.

1. Read aloud using job descriptions from websites of potential employers.
2. Read aloud using brief articles from online websites of interest to Derek.
3. Write list of objectives and job skills in preparation for a resume.
4. Discuss potential job interview questions and practice answering them.
5. Use an online phonics program to practice blending sounds.
6. Practice reading word families using online phonics phone application.
7. Write and practice a list of new vocabulary words.
8. Discuss answers to comprehension questions from sample reading passages in skills workbooks.
9. Provide continuous positive feedback for effort and attendance, regardless of progress.
10. Talk about personal goals and making tutoring more positive than previous school experiences.

3c. Is there a type of activity that you think would be most important during sessions with Derek that is not listed here?

3d. From the same above 10 activities that you just rated, please indicate which **3** you think would be **MOST** important for Derek.

3e. From the same above 10 activities that you just rated, please indicate which **2** you think would be the **LEAST** important for Derek.

## APPENDIX B: Results with both top and bottom rank scores

**Rank scores across all stories.** Both top and bottom rank scores for authentic materials, structured materials, and psychological support items were included in analysis:

- Top AM: Top Rank Authentic Materials Score
- Top SM: Top Rank Structured Materials Score
- Top PSY: Top Rank Psychological Support Score
- Bottom AM: Bottom Rank Authentic Materials Score
- Bottom SM: Bottom Rank Structured Materials Score
- Bottom PSY: Bottom Rank Psychological Support Score

Participants were asked to rank three top items and two bottom items. Each participant received three overall top rank scores (one for each category) and three overall bottom rank scores (one for each category). Scores were calculated for each category according to the formulas below:

Top Rank Authentic Materials Score (Top-AM) = Total Actual Ranked Value/18  
Top Rank Structured Materials Score (Top-SM) = Total Actual Ranked Value/18  
Top Rank Psychological Support Score (Top-PSY) = Total Actual Ranked Value/15

Bottom Rank Authentic Materials Score (Bottom-AM) = Total Actual Ranked Value/9  
Bottom Rank Structured Materials Score (Bottom-SM) = Total Actual Ranked Value/9  
Bad Rank Psychological Support Score (Bottom-PSY) = Total Actual Ranked Value/9

A high top rank score indicates that the participant often ranked this category as the *most* important during tutoring sessions. A high bottom rank score indicates that the participant often ranked this category as the *least* important during tutoring sessions.

### Literacy Scores for Each Story

In order to assess whether tutors adjusted their responses according to the context of the learner scenario, top and bottom rank scores were also calculated for each story. Three top rank scores (one for each category) and three bottom rank scores (one for each category) were calculated for each story. The total actual ranked value was divided by the total possible value;

possible values were adjusted to the story level and calculations were made according to the formulas below:

Story One: Gus:

Top Rank Scores:

Authentic Materials = G-Top AM = Total Actual Ranked Value/6

Structured Materials = G-Top SM = Total Actual Ranked Value/6

Psychological Support – G-Top PSY = Total Actual Ranked Value/5

Bottom Rank Scores:

Authentic Materials = G-Bottom AM = Total Actual Ranked Value/3

Structured Materials = G-Bottom SM = Total Actual Ranked Value/3

Psychological Support = G-Bottom PSY = Total Actual Ranked Value/3

Story Two: Faye

Top Rank Scores:

Authentic Materials = FY-Top AM = Total Actual Ranked Value/6

Structured Materials = FY-Top SM = Total Actual Ranked Value/6

Psychological Support – FY-Top PSY = Total Actual Ranked Value/5

Bottom Rank Scores:

Authentic Materials = FY-Bottom AM = Total Actual Ranked Value/3

Structured Materials = FY-Bottom SM = Total Actual Ranked Value/3

Psychological Support = FY-Bottom PSY = Total Actual Ranked Value/3

Story One: Derek

Top Rank Scores:

Authentic Materials = DK-Top AM = Total Actual Ranked Value/6

Structured Materials = DK-Top SM = Total Actual Ranked Value/6

Psychological Support – DK-Top PSY = Total Actual Ranked Value/5

Bottom Rank Scores:

Authentic Materials = DK-Bottom AM = Total Actual Ranked Value/3

Structured Materials = DK-Bottom SM = Total Actual Ranked Value/3

Psychological Support = DK-Bottom PSY = Total Actual Ranked Value/3

**Overall rank scores.** Overall rank scores, across all three stories, indicate a similar pattern with the highest top rank score for authentic materials, followed by psychological support and lastly structured materials. The bottom rank scores also show a similar pattern with the highest average for structured materials, followed by authentic materials and psychological

support (See Table 12 for summary of top and bottom rank scores). This pattern suggests that tutors consider a combination of approaches for learners but that they tend to assign more importance to engaging in activities centered on authentic materials and providing psychological support than they do to activities using structured materials.

Table 12

*Means and Standard Deviations for Top and Bottom Rank Scores*

Variable	N	Mean	SD
Top AM	125	.44	.22
Top SM	125	.27	.21
Top PSY	125	.35	.24
Bottom AM	125	.41	.28
Bottom SM	125	.44	.28
Bottom PSY	125	.13	.18

**Differences between stories, analysis of story scores.** Analysis of each story’s rank scores indicates that there are some variations in rank patterns for different learners. Next, differences in rank scores by story are discussed, followed by a description of characteristic patterns for each story.

**Differences in rank scores by story.** To determine if rank scores were significantly different between stories, a repeated measures ANOVA was performed with both top and bottom story rank scores as within subjects variables. Main effects were found for top AM rank scores,  $F(2, 248) = 13.31, p < .001, \eta^2 = .10$ , and top PSY rank scores,  $F(2, 248) = 24.56, p < .001, \eta^2 = .17$ ; no main effect was found for top SM rank scores. See Table 13 for descriptive statistics for each story and Table 14 for summary of ANOVA results. Pairwise comparisons for top AM rank scores indicate that the means for stories one (Gus) and two (Faye) were significantly

higher than for story three (Derek). Pairwise comparisons for top PSY rank scores indicate that the mean for story three (Derek) was significantly higher than both the means for story one (Gus) and story two (Faye).

Main effects were found for bottom AM rank scores,  $F(2, 248) = 13.31, p < .001^*, \eta^2 = .10$ , bottom SM rank scores,  $F(2, 248) = 9.230, p < .000^*, \eta^2 = .07$ , and for bottom PSY rank scores,  $F(2, 248) = 7.296, p = .001^*, \eta^2 = .06$ . Pairwise comparisons for bottom AM rank scores indicate that the means for stories one (Gus) and two (Faye) were significantly higher than the mean for story three (Derek). Pairwise comparisons for bottom SM rank scores indicate that the mean for story three (Derek) was significantly higher than stories one (Gus) and two (Faye). Pairwise comparisons for bottom PSY rank scores indicate that the mean for story three (Derek) was significantly lower than the means for stories one (Gus) and two (Faye).

***Summary of top and bottom rank score comparisons between stories.*** This pattern between stories indicates that tutors generally assigned some importance to each category for all learners, but that they generally regarded psychological support as more important for Derek than the other two learners, evident by both higher top rank score and lower bottom rank score. Although authentic materials were still considered more important than structured materials for Derek, authentic materials were assigned less importance for him than for the other two learners. Generally, the importance of structured materials was relatively the same for all of the learners, with the exception of a slight de-emphasis for Derek.

Table 13

*Means and Standard Deviations for Top and Bottom Rank Scores by Story*

Rank Score	Story One: Gus M (SD)	Story Two: Faye M (SD)	Story Three: Derek M (SD)
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Top AM	.46 (.31)	.50 (.30)	.35 (.26)
Top SM	.32 (.30)	.25 (.27)	.26 (.28)
Top PSY	.27 (.32)	.30 (.28)	.47 (.33)
Bottom AM	.44 (.35)	.45 (.47)	.33 (.40)
Bottom SM	.38 (.35)	.40 (.38)	.55 (.43)
Bottom PSY	.18 (.28)	.14 (.26)	.07 (.21)

Table 14

*Summary of Repeated Measures ANOVA results for Top and Bottom Rank Scores by Story*

Rank Scores by Story	N	df	F	p	$\eta^2$
Top AM	125	2, 248	13.31	<.001*	.10
Top SM	125	2, 248	3.03	.053	.02
Top PSY	125	2, 248	24.56	<.001*	.17
Bottom AM	125	2, 248	3.714	< .026*	.03
Bottom SM	125	2, 248	9.230	< .000*	.07
Bottom PSY	125	2, 248	7.296	.001*	.06

*\*significant at the .01 alpha level*

### **Analysis of top and bottom rank scores at story level**

**Characteristics of Story One: Gus.** The top rank scores for Gus indicate that the most useful activities for Gus are authentic materials, followed by structured materials and lastly psychological support (See Table 13 for summary of descriptive statistics). A repeated measures ANOVA with top rank scores for Gus as within subjects variables indicated a significant main effect,  $F(2, 248) = 8.870$ ,  $p < .001$ ,  $\eta^2 = .07$ . Pairwise comparisons indicate that the mean for Gus' authentic materials rank score was significantly higher than the means for both structured materials and psychological support.

A repeated measures ANOVA with bottom rank scores for Gus as within subjects variables indicated a significant main effect  $F(2, 248) = 14.296, p < .001, \eta^2 = .10$ . Pairwise comparisons indicate that both the mean bottom AM and SM rank scores were significantly higher than the mean bottom PSY score.

Taken together, top and bottom rank scores indicate that in response to Gus' description, tutors tend to consider a combination of activities that use both authentic and structured activities, though there tends to be slight emphasis on authentic materials; psychological support is considered with some importance.

**Characteristics of Story Two: Faye.** The ranking pattern for most useful activities for Faye was authentic materials, followed by psychological support and lastly structured materials (See Table 13 for summary of descriptive statistics). A repeated measures ANOVA with top rank scores for Faye as within subjects variables indicated a significant main effect,  $F(2, 248) = 18.261, p < .001, \eta^2 = .13$ . Pairwise comparisons indicate that the mean for Faye's authentic materials rank score was significantly higher than the means for both structured materials and psychological support.

A repeated measures ANOVA with bottom rank scores for Faye as within subjects variables indicated a significant main effect  $F(2, 248) = 17.168, p < .001, \eta^2 = .12$ . Pairwise comparisons indicate that both the mean bottom AM and SM rank scores were significantly higher than the mean bottom PSY score.

Taken together, top and bottom rank scores indicate in response to Faye's description, tutors tend to consider a combination of activities that use both authentic and structured activities, though there tends to be slight emphasis on authentic materials; psychological support is considered with some importance.

**Characteristics of Story Three: Derek.** The ranking pattern for most useful activities for Derek was psychological support, followed by authentic materials and lastly structured materials (See Table 13 for summary of descriptive statistics). A repeated measures ANOVA with top rank scores for Derek as within subjects variables indicated a significant main effect,  $F(2, 248) = 11.317, p < .001, \eta^2 = .08$ . Pairwise comparisons indicate that the mean for Derek’s psychological support top rank score is significantly higher than both the means for his authentic materials and structured materials top rank scores; authentic materials is also significantly higher than structured materials.

A repeated measures ANOVA with bottom rank scores as within subjects variables indicated a significant main effect,  $F(2, 248) = 37.201, p < .001, \eta^2 = .23$ . Pairwise comparisons indicate that the mean for Derek’s psychological support bottom rank score was significantly lower than both his authentic materials and structured materials bottom rank scores.

This pattern suggests that tutors had a particular sensitivity to Derek’s need for psychological support, as they consistently ranked it as most useful above both authentic and structured activities. Again, tutors appear to consider a combination of activities, but with a greater emphasis on psychological support and activities centered on authentic materials.

**Cluster Analysis**

Table 15

*Final Cluster Centers by Top and Bottom Rank Scores*

Mean Rank Scores	Cluster			
	1 (↓ PSY)	2 (↑ AM)	3 (↑ PSY)	4 (↑ SM)
Top AM	.55	.58	.30	.28
Top SM	.26	.16	.16	.53
Top PSY	.23	.31	.64	.23

Bottom AM	.23	.20	.52	.70
Bottom SM	.32	.73	.43	.14
Bottom PSY	.39	.05	.03	.14
N	23	42	28	32

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**Cluster 1: De-emphasis of Psychological Support (n=23, smallest).** De-emphasis of psychological support, relatively average usefulness for authentic and structured materials

Good Psychological score is .5 standard deviation below the mean, with Good Authentic Materials score .5 SD above the mean; Good Structured Materials score is in line with overall mean. Bad Psychological score is one standard deviation above the mean and Bad Structured Materials score is .5 standard deviation below the mean; Bad Authentic Materials score is in line with overall mean.

Taken together, these scores suggest that this group does not find psychological support very useful during tutoring sessions, as they seldom assigned it a high rank and often deemed it less useful.

**Cluster 2: Preference for Authentic Materials (n=42, largest).** Preference for authentic materials, de-emphasis of structured materials, average usefulness of psychological support.

Good Authentic Materials score is .5 standard deviations above the mean, while the Good Structured Materials Score is .5 standard deviation below the mean. Bad scores reinforce this pattern with Bad Authentic Materials score one standard deviation below the mean and the Bad Structured Materials score one standard deviation above the mean. Good Psychological score is aligned with the overall mean while the bad Psychological score is .5 standard deviation below the mean.

Taken together, these scores suggest that this group finds working with authentic materials most useful, and structured materials least useful, with some consideration for psychological support as scores are relatively aligned with the overall mean for the sample.

**Cluster 3: Preference for Psychological Support (n=28).** Emphasis on psychological support, relatively average usefulness for authentic and structured materials

Good Psychological score is one standard deviation above the mean, Good Structured Materials score is .5 standard deviation below the mean, Good Authentic Materials score is aligned with overall average. Bad Psychological score is one standard deviation below the mean, while Bad Authentic and Structured Materials scores are aligned with overall means.

Taken together, these scores suggest that this group prioritizes psychological support during tutoring sessions, most often ranking them as most useful and rarely deeming them less useful.

**Cluster 4: Preference for Structured Materials (n=32).** Preference for structured materials, de-emphasis of authentic materials, average usefulness of psychological support.

Good Authentic Materials score is one standard deviation below the mean while the Good Structured Materials score is one standard deviation above the mean; Good Psychological score is slightly lower (.5 SD) than the mean, while the Bad Psychological Score is aligned with the mean. Bad Authentic Materials score is one standard deviation above the mean and Bad Structured Materials score is one standard deviation below the mean.

Taken together, these scores indicate that this group finds structured materials most useful and authentic materials least useful, with some consideration for psychological support, as scores are relatively in line with the overall means.

**Relationships between cluster membership and demographic variables: cross**

**tabulation with chi-square tests.** Chi-square tests were performed with demographic variables and variables related to experience and familiarity with the learner descriptions (See Table 16). A significant relationship was found between familiarity with learner scenarios and cluster membership,  $\chi^2(9, N = 125) = 23.06, p = .006$ . A cross tabulation of cluster by familiarity with learners indicates that in Cluster 2, defined by the greater usefulness assigned to authentic materials, there are more participants with less familiarity, and less participants with more familiarity than expected by chance. Conversely in Cluster 4, defined by the greater usefulness assigned to structured materials, there are less participants with no familiarity and more participants with more familiarity with learners. These results support the previously identified trend that indicates that activities organized around authentic materials are considered more useful when tutors are less familiar with the learner, and when a tutor is more familiar with a learner, activities using structured materials become more useful. No other significant relationships were found between cluster membership and demographic variables.

Table 16

*Summary of Chi-Square results with Clusters by Demographic and Experience Variables*

Variable	N	df	$\chi^2$	p	$\phi_c$
Age	123	8	13.170	.357	.189
Gender	122	2	2.878	.411	.154
Education Level	124	6	9.208	.418	.157
Region of Organization	125	8	13.128	.360	.187
Background (Educator)	125	2	3.361	.339	.164
Background (Healthcare)	125	2	3.499	.321	.167
Length of Experience	125	6	12.766	.173	.185
Familiarity with Learners	125	6	23.058	.006*	.248

\*significant at the .01 alpha level

## APPENDIX C

### *Summary of ANOVA results for VFI Scores by Demographics*

VFI Score By Demographic Variables	N	df	F	p	$\eta^2$
<b>Values</b>					
Age	123	1, 121	1.00	.753	.00
Gender	122	1, 120	2.445	.121	.02
Education Level	124	3, 120	.540	.656	.01
Background	125	2, 122	.245	.783	.00
Region	125	3, 121	.998	.396	.02
<b>Understanding</b>					
Age	123	1, 121	.701	.404	.01
Gender	122	1, 120	8.625	.004**	.07
Education Level	124	3, 120	1.313	.273	.03
Background	125	2, 122	.670	.513	.01
Region	125	3, 121	3.446	.019*	.08
<b>Enhancement</b>					
Age	123	1, 121	.228	.634	.00
Gender	122	1, 120	4.759	.031*	.04
Education Level	124	3, 120	.755	.521	.02
Background	125	2, 122	.144	.866	.00
Region	125	3, 121	.822	.484	.02
<b>Protective</b>					
Age	123	1, 121	1.253	.265	.01
Gender	122	1, 120	5.903	.017*	.05
Education Level	124	3, 120	.784	.505	.02
Background	125	2, 122	.132	.876	.00
Region	125	3, 121	2.165	.096	.05
<b>Social</b>					
Age	123	1, 121	1.393	.240	.01

Gender	122	1, 120	.034	.854	.00
Education Level	124	3, 120	.405	.750	.01
Background	125	2, 122	1.285	.280	.02
Region	125	3, 121	.813	.489	.02
Career					
Age	123	1, 121	55.477	< .001**	.31
Gender	122	1, 120	4.347	.039*	.04
Education Level	124	3, 120	.321	.810	.01
Background	125	2, 122	1.502	.227	.02
Region	125	3, 121	2.283	.082	.05

\*Correlation is significant at the .05 level (2-tailed).

\*\*Correlation is significant at the .01 level (2-tailed).

## APPENDIX D

*Summary of ANOVA results for DIT N2 Score by Demographics*

DIT N2 Score By Demographic Variables	N	df	F	p	$\eta^2$
Age	123	1, 121	3.426	.067	.03
Gender	122	1, 120	3.680	.057	.03
Education Level	124	3, 120	1.206	.311	.03
Background	125	2, 122	3.309	.040*	.05
Region	125	3, 121	1.720	.166	.04

\*Correlation is significant at the .05 level (2-tailed).

\*\*Correlation is significant at the .01 level (2-tailed).

## Appendix E

### *Means and Standard Deviations for Rank Scores by Story and by Clusters*

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Rank Scores	N	Story One: Gus M (SD)	Story Two: Faye M (SD)	Story Three: Derek M (SD)
<hr/>				
Overall Story				
Rank Scores:				
AM Rank Score	125	.46 (.31)	.50 (.30)	.35 (.26)
SM Rank Score	125	.32 (.30)	.25 (.27)	.26 (.28)
PSY Rank Score	125	.27 (.32)	.30 (.28)	.47 (.33)
Cluster 1 (↑ AM):				
AM Rank Score	52	.71 (.23)	.72 (.20)	.46 (.26)
SM Rank Score	52	.21 (.23)	.12 (.17)	.21 (.23)
PSY Rank Score	52	.10 (.15)	.20 (.21)	.40 (.33)
Cluster 2 (↑ SM):				
AM Rank Score	30	.34 (.28)	.29 (.28)	.28 (.26)
SM Rank Score	30	.65 (.27)	.52 (.27)	.46 (.34)
PSY Rank Score	30	.01 (.04)	.22 (.26)	.32 (.31)
Cluster 3 (↑ PSY):				
AM Rank Score	43	.25 (.20)	.38 (.24)	.27 (.20)
SM Rank Score	43	.21 (.22)	.21 (.24)	.18 (.23)
PSY Rank Score	43	.65 (.18)	.49 (.27)	.66 (.27)

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October 16, 2017

Erin O'Connor  
Educational Psychology  
College of Education  
Box 870231

Re: IRB#: 17-OR-345 "Motivation, Social Cooperation, and Strategies among Volunteer Adult Literacy Tutors"

Dear Ms. O'Connor:

The University of Alabama Institutional Review Board has granted approval for your proposed research.

Your application has been given expedited approval according to 45 CFR part 46. You have also been granted the requested waiver of written documentation of informed consent. Approval has been given under expedited review category 7 as outlined below:

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies

Your application will expire on October 15, 2018. If your research will continue beyond this date, complete the relevant portions of the IRB Renewal Application. If you wish to modify the application, complete the Modification of an Approved Protocol Form. Changes in this study cannot be initiated without IRB approval, except when necessary to eliminate apparent immediate hazards to participants. When the study closes, complete the appropriate portions of the IRB Request for Study Closure Form.

Please use reproductions of the IRB approved stamped consent form to provide to your participants.

Should you need to submit any further correspondence regarding this proposal, please include the above application number.

Good luck with your research.

Sincerely,

Director & Research Compliance Officer

September 11, 2018

Erin O'Connor  
Department of ESPRMC  
College of Education  
The University of Alabama  
Box 870231

Re: IRB # 17-OR-345-R1 "Motivation, Social Cooperation and Strategies among Volunteer Adult Literacy Tutors"

Dear Ms. O'Connor:

The University of Alabama Institutional Review Board has granted approval for your renewal application. Your renewal application has been given expedited approval according to 45 CFR part 46. You have also been granted the requested waiver of documentation of informed consent. Approval has been given under expedited review category 7 as outlined below:

*(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.*

Your application will expire on September 10, 2019. If your research will continue beyond this date, complete the relevant portions of the IRB Renewal Application. If you wish to modify the application, complete the Modification of an Approved Protocol Form. Changes in this study cannot be initiated without IRB approval, except when necessary to eliminate apparent immediate hazards to participants. When the study closes, complete the appropriate portions of the IRB Study Closure Form.

Should you need to submit any further correspondence regarding this proposal, please include the above application number.

Good luck with your research.

Sincerely,

Director & Research Compliance Officer  
Office for Research Compliance