

The Effect of VITA Participation on Student Empathy

Christina L. Byrd
Department of Accounting
Elon University
50 Campus Drive
Elon NC 27244 USA

Faculty Advisor: Dr. Susan Anderson

Abstract

Each year, college students and community members around the United States participate in the Volunteer Income Tax Assistance (VITA) program in partnership with the IRS. Through VITA, volunteers learn how to prepare income tax returns and then complete returns for low-income members of their communities during tax season. In 2015, over 3.3 million taxpayers had their tax returns prepared through VITA, representing refunds totaling just under \$4 billion. While other studies have examined the effect of VITA service on volunteers' knowledge and problem-solving abilities, little is known about how this service affects them emotionally. Empathy is increasingly seen as a key component to leadership and ethical decision-making, and it is crucial to success in the business world. This study's purpose is to examine the effect VITA participation has on program volunteers' empathy levels. The study will utilize the Toronto Empathy Questionnaire to measure empathy in a pre- and posttest design with group of VITA volunteers and a control group of non-volunteers. Prior to and following tax season, these individuals will complete a detailed survey. Analysis of survey responses coupled with VITA service observation and interviewing will be used to draw conclusions about the program's effect. It is anticipated that VITA involvement will be found to positively influence volunteers' empathy levels. This study will be of interest to any institution that encourages involvement in VITA. Further, it will benefit any organization that promotes service learning, by showing that community outreach initiatives do truly impact volunteers. Results of this study will be documented in a final, written thesis and presented before students and faculty members in several different contexts. The aim of the project is to substantiate the genuine value of service learning to volunteers, particularly in the sphere of business.

Keywords: Empathy, Tax, Service

1. Introduction

Robert Ingersoll is credited with making the powerful statement "We rise by lifting others." Service is "the action of helping or doing work for someone." Service is indispensable to society, and service learning is a bulwark of education today. Although the positive effects of service upon those served can be clearly seen, the impact of that service on those who provide it is less obvious. This project brings together the disparate elements of service to the local community, tax compliance, and the psychological concept of empathy. This project's goal is to show that service performed through the VITA program is valuable to volunteers because it increases their empathy levels.

2. Background

2.1. Empathy

The term empathy has its roots in the Greek noun “pathos,” meaning “feelings, emotion, or passion.”¹ It first appeared as we now recognize the word when Edward Bradford Titchener translated the German term “*Einfühlung*” into English in 1909.² Empathy can also be defined as “the action or capacity of understanding, being aware of, being sensitive to, and vicariously experiencing the feelings, thoughts, and experience of another of either the past or present, without having the feelings, thoughts, and experience fully communicated in an objectively explicit manner.”³

It is difficult to concisely and authoritatively describe empathy. Individuals’ views on the noun’s effects, origins, and meaning vary widely. “Empathy” is primarily applied to considering two phenomena: understanding the feelings and thinking of other people, and experiencing the drive to respond to the feelings of others. In their book titled “The Social Neuroscience of Empathy” Decety and Ickes list 8 distinct psychological states associated with the experience of empathy that are helpful in understanding this characteristic:⁴

- 1) Knowing Another Person’s Internal State, Including His or Her Thoughts and Feelings
- 2) Adopting the Posture or Matching the Neural Responses of an Observed Other
- 3) Coming to Feel as Another Person Feels
- 4) Intuiting or Projecting Oneself into Another’s Situation
- 5) Imagining How Another Is Thinking and Feeling
- 6) Imagining How One Would Think and Feel in the Other’s Place
- 7) Feeling Distress at Witnessing Another Person’s Suffering
- 8) Feeling for Another Person Who Is Suffering

In short, the concept of empathy can be summed up as the ability to understand and share the feelings of another person.

2.1.1. *the distinction between empathy and sympathy*

Empathy is most often associated with the word “sympathy,” and the two terms are widely considered to be synonymous. However, there is actually a subtle distinction between these feelings that merits recognizing. Sympathy is “Feelings of pity and sorrow for some else’s misfortune” or “Understanding between people; common feeling.”⁵ Sympathy is recognizing another’s hardship and wishing they were not experiencing it, whereas empathy involves actually putting oneself in the other person’s shoes and vicariously facing what they are facing. In short, “Empathy is the ability to experience the feelings of another person. It goes beyond sympathy, which is caring and understanding for the suffering of others.”⁶

2.1.2. *the importance of empathy*

Empathy is “the glue that holds society together.” True empathy involves understanding the experiences of other individuals, putting oneself in their shoes, and then responding in a thoughtful manner. Mankind could not have relationships if there were not the compassion and responsiveness that characterize empathy. Empathetic individuals recognize the hardships of those around them to the point of experiencing them themselves, and react in ways that support others. Man is not just a society of robots, with each individual operating independently, oblivious to the state of those around them. Rather, society is a community of individuals who work better together, and conversation, teamwork, and mutual understanding are all part of what it is to be human.

The lack of empathy in an individual is often blatantly obvious. In her article exploring the importance of empathy, Dianne Crampton explains that “People who lack the capacity to flip situations and try them on for size are doomed to shallow relationships, deeds of shady moral character, cruelty, or a psychological condition known as narcissism. Narcissists are often poor listeners and poor communicators because they are unable to comprehend or listen to another person’s emotional pain.”⁷

2.1.3. empathy and leadership

There are many characteristics that make an effective leader. Vision, strategic thinking, clear communication, realism, optimism, determination, and toughness are just a few of them. However, empathy is widely considered to be the most important leadership trait of all. Daniel Goleman, in his article “What Makes a Leader,” published in the Harvard Business Review, discusses the term “emotional intelligence.” Emotional intelligence involves the utilization of empathy. It is defined as “the ability to identify and manage your own emotions and the emotions of others.”

True leaders are not only able to see what needs to be done and communicate what needs to be done, but they are also able to connect with those they are working with to better grasp their situation, encourage them, and motivate them. Extraordinary intelligence and flawless strategy are useless without the personal acumen to connect with the individuals one is leading. Goleman continues to emphasize how valuable empathy and emotional intelligence are to leadership: “The chief components of emotional intelligence – self-awareness, self-regulation, motivation, empathy, and social skill – can sound unbusinesslike, but Goleman, co-chair of the Consortium for Research on Emotional Intelligence in Organizations, based at Rutgers University, found direct ties between emotional intelligence and measurable business results.”⁸ To summarize then, effective leadership is predicated on the ability to leverage others’ strengths, make changes based on the needs and development of one’s team, and relate to those surrounding oneself. Leaders cannot afford to be oblivious to the needs and “pulse” of their teams.

In 2016, Development Dimensions International (DDI) published a write-up of a study they had recently conducted considering the importance of empathy. The organization utilized data from their “standardized first-level leadership assessment process” to test a number of different key interaction skills that managers must have.⁹ Forbes, in an article written on empathy and management, references the DDI study and its finding that “Overwhelmingly, empathy tops the list as the most critical driver of overall performance.” Forbes responds to this conclusion by stating that unfortunately only 4/10ths of the workforce is actually effectively empathetic. Lipman laments that there is “a substantive gap between a valuable management attribute and the common possession of that attribute.”¹⁰

2.1.4. empathy and business

The business world, though numbers driven, is ultimately about meeting people’s needs, and it runs through the decisions and work put in by individuals. In his article “Why Empathy Is the Force that Moves Business Forward,” Jayson Boyers argues that leadership’s mastery of the skill of empathy is behind the triumph of every successful business. He highlights the fact that even the most successful individuals do not live and work in a vacuum. Everyone needs the help and contributions of others to reach their aims. He states the following: “Without growth and innovation, businesses stagnate and eventually fade away. Those with staying power, however, have mastered an intangible, often overlooked factor that allows them to focus on the future with clarity: empathy....When businesses fail, it is often because leaders have stopped focusing on understanding their environment....”¹¹

Further, communication is an essential part of life in the business world. Businessmen and businesswomen must be able to thoughtfully communicate with other people, considering others’ backgrounds and needs while doing so. If one cannot put himself or herself in the shoes of the other party and be able to think through what is going through his or her mind, then every team meeting and client meeting will result in hard feelings and little progress. From a strategy perspective, individuals cannot effectively push companies forward or strive to meet consumers’ needs without having the capacity to understand the desires and experiences of those around them.

2.1.5. the neuroscience of empathy

Empathy is a trait that manifests itself in individuals early in life. Babies begin to exhibit empathy from just a few months of age. Researchers Ronit Roth-Hanania, Maayan Dvidov, and Carolyn Zahn-Waxler conducted a study with 37 children aged 8 to 16 months and tested how the children responded to different distressing situations, such as watching videos of other children crying or seeing their mothers bump their knees or accidentally hit their fingers with toy hammers. In response to these situations, all the children exhibited true, noticeable empathic responses, studying their mothers’ faces and supposed “hurt” areas and making compassionate cooing sounds. Nancy Eisenberg, professor of psychology at Arizona State University, affirms these findings, stating that it has been shown that children display concern from as early as one-year old.¹²

In 2013, Giorgia Silani, Claus Lamm, Christian Ruff, and Tania Singer of the Max Planck Society, Germany’s most successful research organization, published an article in the *Journal of Neuroscience* investigating empathy and the

human brain.¹³ Their study connected the experience of empathy with the part of the brain called the right supramarginal gyrus. The supramarginal gyrus is part of the cerebral cortex and is located approximately at the junction of the parietal, temporal and frontal lobes. This part of the brain enables individuals to separate their own experience from that of others to motivate compassion.¹⁴ If the supramarginal gyrus is not functioning correctly, one will not be able to successfully put themselves in another's shoes.

2.1.6. empathy – an in-born or developed trait?

Dr. Perri Klass in her article "Understanding How Children Develop Empathy" states "The capacity to notice the distress of others, and to be moved by it, can be a critical component of what is called prosocial behavior, actions that benefit others...." Duke psychology and neuroscience professor Scott Huettel provides two explanations for prosocial behavior and the manifestation of empathy. The first is that empathetic thought and actions are motivated by the resulting activation of "dopaminergic centers" in the brain. Prosocial behavior results in mental "reward" and good feeling. Secondly, Dr. Huettel states that empathetic behavior is motivated by social cognition, "the recognition that other people have needs and goals." The coupling of mental recognition of the state of others and the personal emotional benefit of helping others drives empathetic action.

Carolyn Zahn-Waxler, senior research scientist at the University of Wisconsin-Madison, has performed several studies looking at empathy and twins. She found that identical twins react more similarly to viewing another's distress than do fraternal twins, which indicates that "there is some genetic component" and "some degree of heritability" to prosocial and empathetic tendencies. However, as there is no actual gene for empathy, inherent personality characteristics are to be credited with some measure of an individual's expression of empathy.¹⁵

The human brain has the characteristic of neuroplasticity, meaning that it "has the ability to form and reorganize synaptic connections, especially in response to learning or experience or following injury." Although individuals are inborn with unique personalities and an individual sensitive baseline driving their expression of empathy, this characteristic can be matured through experiences.¹⁶ Increased opportunities to do good and meet with more areas of the world will significantly aid in heightening both one's recognition of others' hardships and one's level emotional response, such that exhibiting empathy results in more personal satisfaction.

2.1.7. religion and empathy

The impact of religiosity on empathy is a factor worthy of consideration. Tim W. Smith is a preeminent scholar in the social sciences and a senior fellow at the National Opinion Research Center (NORC) at the University of Chicago.¹⁷ In 2006, he published the results of a study he conducted considering trends and correlations involving altruism and empathy in the United States. The project leveraged the 2002 and 2004 General Social Surveys (in-person, full-probability samples of adults living in American households). The data used was composed of approximately 2,700 distinct survey responses from those two years. Smith found that greater involvement in religious activities, as measured by ("self-rated strength of religious attachment, frequency of attending church, frequency of praying") was positively related to greater empathy levels.¹⁸ Considering Mr. Smith's findings, this study will include a religiosity variable in analyzing empathy capacity drivers.

2.2. VITA

Grandson of U.S. Supreme Court Justice Hugo L. Black, Mr. Stephen Black is founder and leader of the Center for Ethics & Social Responsibility at The University of Alabama. He also serves as President and Chairman of the Board for Impact Alabama, an award-winning, wide-stretching student nonprofit initiative intent on meeting true needs in Alabama.¹⁹ Upon hearing of this research project, Mr. Black contributed this quote on the VITA program's value: "Service-learning done through IRS Volunteer Income Tax Assistance sites encourages students to rethink causes, effects, and assumptions of poverty in America. The experience of working alongside and conversing with taxpayers whose average income is \$20,000 a year forces students to deepen their understanding of the paycheck-to-paycheck lives of millions of Americans. In reviewing a taxpayer's employment, income, childcare, health insurance and dependency information for the tax year, it quickly becomes apparent to volunteers that the taxpayers they meet are incredibly hardworking. Common misconceptions of poverty as a result of laziness must be reconciled with the fact of a woman with two children and three W-2s talking to volunteers about her daily life experiences. With structured reflection, meeting incredibly hardworking, kind, and generous people who happen to be living at or near the poverty line compels students to quickly realize that an apathetic response to poverty will no longer suffice; instead, they must

begin to reckon with the causes of poverty and how they can be involved in reconciling these structures and their effects.”

2.2.1. what is the vita program?

Began in 1969, the Volunteer Income Tax Assistant (VITA) program is an initiative sponsored by the U.S. Internal Revenue Service.²⁰ Through this program, individuals of middle to low incomes, the elderly, limited English-speaking taxpayers, and taxpayers with disabilities are provided with free tax return preparation services.²¹ Millions of individuals have their tax returns prepared through VITA each year, representing billions of dollars of refunds obtained. According to the IRS, more than 90,000 VITA participants assisted more than 3.7 million taxpayers in preparing and submitting their tax returns during the 2015 filing season.²²

Organizations and community members volunteer their time to complete required trainings and then complete returns.²³ Individuals who have met the relevant requirements review the returns to check for errors. Return preparation is offered to individuals free of charge, and volunteers utilize electronic filing to submit the returns.²⁴ Currently, there are VITA locations in all 50 states and in the District of Columbia.

Janice Carr, in her chapter “Service-Learning in Accounting: A Role for VITA Tax Programs,” outlines a number of benefits of involving college students in the VITA program. These include the value of the VITA program as a service learning initiative, and the fact that serving taxpayers through VITA simulates a real accounting job. Additionally, the VITA program is easy for organizations, academic or not, to implement because it is an organized program. Resources, policies and procedures are already established for the program, ready to be implemented. Accounting educators are increasingly of the opinion that students ought to learn more by doing and should be actively engaged in the learning process, motivating their personal progress and academic development.

The VITA program is unique because it grows volunteers in two ways: by helping them learn about the tax return process and tax law, and by equipping them to teach those they serve. Carr explains that California Polytechnic Institute offers a VITA course to students that involves participation in and reflection on the VITA program. She states, “Students...repeatedly identify three major benefits gained from the experience: (1) how much they have learned by applying their knowledge to real-world situations, (2) increased self-confidence, and (3) the reward of using the knowledge acquired in their coursework to help people in the community.”²⁵

Participation in the VITA program, and service learning in general, is something anyone can do, regardless of their academic record. One does not have to have a perfect resume to serve others, and this fact makes involvement in the VITA program an attractive venture to academic institutions and their students.

2.2.2. previous vita research

Cynthia Blanthorne and Stu Westin of the University of Rhode Island conducted a detailed literature review on the VITA program for the purpose of motivating a productive, current discourse on the initiative. Together, they surveyed every accounting program in the U.S. (for a total of 895 programs) in order to construct an accurate picture of the relationship between the VITA program and accounting education. Nearly seventy percent of the institutions that responded to their initial inquiries for information were found to participate in the VITA program. In their article “VITA: A Comprehensive Review of the Literature and an Analysis of the Program in Accounting Education in the U.S.,” Blanthorne and Westin discuss their aggregation of institutions’ comments and input regarding VITA.

Topics covered in the article include VITA’s impact on students’ self-confidence and social awareness, how VITA scheduling is done, students’ motivation for participation (voluntary vs. credit-based), and best practices for VITA programs. Blanthorne and Westin also share that the program legitimately benefits three constituencies: students (by learning and growth), faculty (by learning and instructional reinforcement), and the community (by tax help).

The VITA program aids volunteer participants through improving their “(1) Technical skills (i.e., tax knowledge as well as critical thinking); (2) communication skills (i.e., speaking, writing, and listening); (3) interpersonal skills (i.e., group and leadership); and personal capacities (e.g., self-confidence, ethical, and community service awareness).” The authors culminate their synopsis of VITA literature to date by making the following powerful statement: “We see the bottom line as this: VITA is almost universally recognized as a valuable educational opportunity, with students commonly describing it as the ‘highlight’ of their accounting education.”²⁶ Clearly, the VITA program is an indispensable initiative.

Also in 2016, Anne Christensen and Angela Woodland from Montana State University published an article in *Issues in Accounting Education* documenting a study they conducted looking at the tie between VITA participation and students’ problem-solving skills and professional commitment. Christensen and Woodland utilized data “obtained

from business students enrolled in upper-level accounting classes at seven U.S. universities located in six states in the Midwest, Northwest, Southwest, and Northeast,” administering surveys pre- and post-VITA and tax season involvement.

They found that participation in VITA is positively and significantly associated with growth in problem solving ability for volunteers. In addition to testing whether participation in VITA affected volunteers problem solving skills and commitment to the accounting profession, Christensen and Woodland’s study considered the variables of age and intended career, with control variables of self-reported GPA, gender, ethics course taken, and other factors. Unfortunately, they did not find a relationship between VITA participation and any of the other factors.²⁷ Nevertheless, the tie the study has drawn between VITA participation and improvement in problem-solving ability is still impactful, and the study emphasizes that VITA is valuable to individuals served and to program volunteers.

3. Methodology

As outlined above, studies have examined the effect of VITA service on volunteers’ knowledge and problem-solving abilities. However, little is currently known about how such service affects volunteers emotionally. Building upon the background provided above, the purpose of this study is to look at the relationship between participation in VITA and volunteers’ empathy levels, in the hopes of filling a “hole” in current research surrounding this program.

Hypothesis 1: VITA volunteers’ empathy levels will increase after performing VITA service.

3.1. Subjects

This study was carried out at Elon University during the spring semester of 2018. It consists of two sets of detailed surveys administered to two groups of individuals. The first group is composed of twenty-three students in two sections of basic financial accounting, who are not involved with VITA. This group serves as the control group for the study. The second group is a constituency of twenty-two student volunteers in the university’s arm of VITA. This group constitutes the test group for the study. Volunteers were presented with the project and the offer to participate at the beginning of February and assured that participation was completely voluntary. The surveys used were reviewed and approved by the Institutional Review Board (IRB) and subjects were informed that they were free to cease participating at any time. As an expression of appreciation for their involvement, subjects were offered a \$10 gift card to a local coffee shop for completing both surveys.

Elon volunteers serve with VITA during the months of February and March. Students complete trainings and take the necessary certification exams in January or early February, and then begin serving as they have availability over the next several weeks. Volunteers provide free income tax preparation services to community members as well as Elon students and staff who meet the relevant IRS requirements for utilizing VITA. Returns are prepared under the supervision of Elon tax professor Dr. Susan Anderson, and they are completed either on campus or at Elon’s Downtown Center for Community Engagement in Burlington, NC.

3.2. Materials

Two sets of surveys were composed for administration to the control group of non-volunteers and to the sample group of VITA volunteers. The first pair of surveys (pre-test surveys) was presented to students during the first week of February, prior to the test groups’ participation in VITA. The second pair of surveys was presented to students during the last week of March, when VITA service was coming to a close for the tax season.

The pre-test surveys are essentially identical and are composed of three parts. Firstly, a set of demographic questions is listed which ascertains students’ current status, activities, and service levels. Secondly, questions from the Toronto Empathy Questionnaire are included as a means of quantifying participants’ empathy levels. The last section of the survey is five questions that compose the Duke University Religion Index (DUREL). The post-test surveys delivered to subjects are similar except that the survey delivered to VITA participants includes several free response questions asking students to state their experience, what they believe the value of the VITA program to be, and how they think the program could be made better.

Using the keys for the Toronto Empathy Questionnaire (TEQ), students’ empathy levels can be quantified. The TEQ was developed by several scholars at universities in Canada for the purposes of “formulat[ing] a consensus among the many scales in use to gauge the empathy construct” and developing a measure for empathy that considers empathy on

a broader scale and of a more encompassing definition. The TEQ is composed of sixteen questions which “encompass a wide range of attributes associated with the theoretical facets of empathy.” The questions touch on a number of empathetic behaviors, altruistic capacities, comprehension of others, sympathetic responses, and other factors. The TEQ design dictates that points be assessed to question responses on a 0 – 4 scale, with 4 being the most empathetic of possible responses and 0 being the least empathetic of responses. Seven questions of the questionnaire (questions 1, 2, 5, 6, 8, 9 & 13) are positively scored, meaning a response of “always” yields a score of 4, and the remaining eight questions are negatively scored, with a response of “always” yielding a score of 0.²⁸ The maximum possible empathy score is a 64, with the minimum score being a 0.

Executing mean testing between the average empathy levels of the control group and the test group before and after VITA participation may be used to determine the significance of participation on empathy levels. Additionally, using empathy levels as the dependent variable, regression analysis on the data from the test group may be used to determine the significance of VITA participation as well. The significance of other factors falling out from survey questions on empathy levels, such as college year, gender, etc. can also be tested through regression analysis.

The means for considering participants’ religiosity will be through questions composing the Duke University Religion Index (DUREL). This index “is a five-item measure of religious involvement, and was developed for use in large cross-sectional and longitudinal observational studies.” The index consists of three separate dimensions of religious experiences, namely organizational religious activity, non-organizational religious activity, and intrinsic religiosity (or subjective religiosity), which are tested by means of three distinct subscales.²⁹ In executing regression analysis on computed religiosity scores for participants, these subscales will be considered in separate regressions in order to mitigate any potential correlation effects.

A final facet this study will consider is the accuracy of individuals’ perceptions of their own empathy levels. In each survey, participants were asked to rate themselves in terms of how empathetic they believed they were. A tiered chart was created based on the numerical values associated with the TEQ that ties the different “empathy designations” with numerical scores. Taking the total possible empathy score of 64 and dividing it by 5 (the number of possible designations) derived the cut-off values for the tiered system. Essentially, each tier is approximately twelve points in width, and this flexibility takes into account some variation in individuals’ responses to survey questions. For example, a “not empathetic person” may answer positively to a couple survey questions. In order to consider the veracity of individuals’ opinions of their own empathy levels, their self-given designation will be compared with that which their calculated “true empathy score” ties to in the tiered system.

4. Results and Discussion

Both sets of surveys were administered to the two groups of participants. Thirteen test group members and twelve control group members finished both surveys successfully, giving complete responses. The remainder of participants either completed only one of the two surveys, did not fully answer all of the questions, or did not input a consistent identifier number across both surveys, making their responses impossible to track and use. These twenty-five members responses were compiled and their empathy and religiosity scores calculated.

Table 1. Average empathy scores calculated for each study group

	<i>Average Empathy Scores</i>	
	Control Group	Treatment Group
Pretest	43.92	41.00
Posttest	42.25	43.23
Change	-1.67	2.23

Before VITA service started for the semester, the VITA group’s average empathy score was a 41, and the control group’s average score was a 43.92. After VITA service, the VITA group’s average score increased to a 43.23, whereas the control group score actually decreased to a 42.25.

Although this change in test group empathy score is encouraging, real analysis is necessary to determine the significance of VITA service in influencing empathy levels.

Table 2. Means testing on empathy scores

	Control Group	Treatment Group
Pretest:		
Mean	43.92	41.00
Variance	42.99	31.67
t statistic	1.20*	
Posttest:		
Mean	42.25	43.23
Variance	38.57	11.86
t statistic	2.11*	

* Not statistically significant at $\alpha = 0.05$

Conducting mean testing on the pre and posttest empathy data between the groups revealed that both groups had statistically similar empathy levels both before and after the VITA service period. Although there was real positive change (as opposed to negative) in empathy levels for the VITA group, this change was not large enough to be classified as significant.

Next, regressions were run using posttest data to test the significance of a number of variables, most importantly VITA service, on empathy levels. Empathy score was the dependent variable in the regressions, with various other factors serving as independent variables.

Table 3. Regression results per variable

Variable	Coefficient	P Value
Age	-1.06	0.577
Class	-3.61	0.303
Gender	4.06	0.050 *
Other service hours	-0.58	0.650
VITA service hours	0.05	0.892
Religiosity subscale 1	-0.60	0.317
Religiosity subscale 2	0.55	0.538
Religiosity subscale 3	-0.17	0.551

Dependent variable is Empathy Score. The religiosity scale measures were included in three separate regressions.

* Statistically significant at $\alpha = 0.05$

Given a 95% confidence interval, hours of VITA participation was shown not to be a significant variable. However, gender has a p-value of an acceptable amount and is the only significant variable of the group. In short, females are approximately four points higher in empathy than males are.

Individuals' perceptions of their own empathy were also considered.

Table 4. Tiered empathy classification chart

Total Empathy Score Range	Designations
0 - 11.99	Not at all empathetic
12 - 23.99	Somewhat empathetic
24 - 35.99	Typical level of empathy
36 - 47.99	More than a typical level of empathy
48 - 60	Extremely empathetic

It was found that 52% of participants labeled themselves as being of a different empathy level than they actually were. Of all participants, 44% gave themselves a designation that was one tier lower than their actual empathy level. From this, it might be possible to say that these participants seemed to have a “relatively healthy, even unpretentious view” of their own empathetic capacity.

In completing the second of their two surveys, VITA volunteers were asked to share their thoughts on their experience serving with the program. This feedback serves as useful qualitative data. Select quotes from survey participants are listed below:

- “VITA made me realize how many people so close to Elon's campus are barely making ends meet. It gets you out of the Elon ‘bubble’ and gets you to interact with the diverse community of Burlington. *VITA changed the way I think of Elon's surrounding community, making me more compassionate to those in worse situations than me.*”
- “VITA has definitely made me more aware of my surroundings. Elon can be a bubble, and I think it is very important to get to know the Burlington Community and *to learn about individuals' struggles*. Serving with VITA has also made me more confident when it comes to doing my own taxes.”

As can be seen from the quotes above, VITA program volunteers felt that their participation in the program was beneficial. Over all, it seems that their involvement with VITA was valuable in that it broadened their perspectives and made them more aware of the needs of individuals in their own community. The student in the second quote mentions that the program caused them to be more compassionate for those who are in difficult situations, which directly supports the project hypothesis that VITA participation serves to increase individuals' empathy levels.

To sum up the study's findings, the VITA group did experience a marked increase in empathy levels after VITA service, with the control group a decrease. However, this change was not large enough to be determined significant. VITA service was not found to significantly influence empathy levels. Through regression analysis, gender was found to be significant in influencing empathy levels. Female participants were more empathetic than males. Participants also seemed to have realistic perceptions of their own empathy.

The major limitation of this study was the relatively small sample size of students. It is likely that if a larger group of individuals had participated, a strong, true tie between VITA service and empathy development could have been found. Additionally, a sample spreading across campuses, geographic areas, and age ranges would certainly have yielded results more representative to that of the VITA volunteer population as a whole. Moving forward, studies similar to this one could be conducted sampling volunteers at VITA sites across the U.S., or, on a smaller scale, at least student volunteers at several universities. Depending on the resources available for a future project, new questions could be introduced in the surveys which could test additional aspects of volunteers' background, upbringing, and personality in order to craft a clearer view of participants' empathetic development.

5. Conclusion

In sum, empathy is a crucial trait whose development in the human brain makes for fascinating study, and the VITA program is a unique initiative that does real good for a number of constituencies. Although this study did not definitively show that VITA participation is linked to empathy development, it did display some connections between the two. Student feedback and commentary indicated that program participation did lead to some effect in their own lives, and that alone merits the time spent to empirically test the program's benefit. There are numerous opportunities for further investigation into this topic of volunteer tax return service and development of human empathy. Daniel H.

Pink is quoted as making the striking statement “Empathy is about standing in someone else’s shoes, feeling with his or her heart, seeing with his or her eyes. Not only is empathy hard to outsource and automate, but it makes the world a better place.” Through whatever means it may be developed, may empathy come to more and more characterize Elon students and the greater world.

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