

### An Investigation of the Relationships Among Volunteer Income Tax Assistance (VITA) Participation and Ethical Judgment and Decision Making

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Abstract The Pathways Commission (http://www. pathwayscommission.org, 2012) calls on accounting educators to develop students' skills in ethical judgment and decision making, but there is uncertainty about how best to accomplish this task. We test if participation in Volunteer Income Tax Assistance (VITA) programs is positively associated with students' ethical judgment and decision making. Using a questionnaire administered to students participating in VITA and students not participating in VITA at seven universities, we form multiple measures of students' ethical judgment and students' ethical decision making. Regression analyses reveal that VITA participation is positively and significantly associated with ethical judgment and, in certain cases, is also positively and significantly associated with ethical decision making, even after controlling for other determinants including completion of ethics courses. We conclude that VITA programs can be effective educational interventions to promote ethical development in students. Our study adds to the growing literature on positive student outcomes associated with VITA participation, provides empirical evidence to support the tenets of situated learning and service-learning theories, and contributes to the development of effective ethics education.

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### Introduction

Becoming an accounting professional requires individuals to develop specialized knowledge, behave ethically, and work with others to maintain the standards of the profession (Starr 1982). To adequately prepare students to meet the high standards of the accounting profession, university courses must go beyond focusing on technical accounting knowledge. Specifically, The Pathways Commission calls on accounting educators to "build skills in ethical decision making and responsible judgment" (The Pathways Commission 2012, p. 133). Ethical decision making and judgment have long been recognized as key components of the accounting profession (Accounting Education Change Commission 1990; Stanga and Turpen 1991; Nolder and Riley 2014), and both the AICPA Core Competencies Framework (1999) and the model tax curriculum (Dennis-Escoffier et al. 2009) were designed to aid accounting students in acquiring the knowledge and skills necessary for becoming professionals. But, there is less certainty about what types of instruction will effectively help students develop ethics-related competencies (Bampton and Cowton 2013). The purpose of this study is to determine if accounting student participation in a common servicelearning experience, the Volunteer Income Tax Assistance (VITA) program, is associated with the development of ethical judgment and decision making.

Although it is unclear how best to do so, it is essential that educators promote ethical development and professionalism in students (Bebeau 2002). Solberg et al. (1995)

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posit that community service should be a key component of ethics instruction. Students benefit from the opportunity to apply their knowledge to real-world situations and are more likely to develop necessary professional skills (Eva 2010). Kenworthy-U'Ren (2008, p. 820) states, "servicelearning is an incredibly powerful teaching tool," and Fleckenstein (1997) suggests that service-learning is an effective means of teaching business ethics. Servicelearning provides a means of applying situated learning theory which posits, "learning should be embedded in authentic activities" (Creuss and Creuss 2006, p. 205), to assist students in developing expert knowledge and professional skills such as ethical judgment. Further, consistent with the purpose of our study, which measures the association between VITA participation and ethical judgment and decision making, Locatelli (1998, p. 211) states, "Measuring the knowledge acquired and the development of intellectual skills is essential for service-learning to have credibility."

The VITA program is a form of service-learning in which students participate in tax training, pass IRS certification exams, and then prepare tax returns for low-income members of their communities. VITA programs embody service-learning and situated learning theories as students encounter a wide range of tax issues, some of which are ambiguous, and students must determine the proper tax treatment for those issues. Student participation in VITA programs differ from many other volunteer activities in that students' decisions have real financial impact, possibly resulting in larger tax refunds or larger tax liabilities for the clients they serve. While the Internal Revenue Service's (IRS) overall goal with respect to the VITA program is to provide assistance to low-income taxpayers, Carr (1998) suggests that students who participate in VITA programs develop much more than technical tax knowledge. She posits that students develop critical thinking, communication, and interpersonal skills along with ethical and community awareness. This is consistent with the findings of Brown-Liburd and Porco (2011) that student participation in volunteer activities or internships is associated with higher levels of moral reasoning. Hence, VITA programs may be effective venues for developing not only moral reasoning, but ethical judgment and decision making in accounting students.

In this study, we examine the ethical judgment and ethical decision making of students before and after participation in the VITA program using a questionnaire with tax-related scenarios developed from the extant literature. We administer questionnaires to students at seven universities and include students who do not participate in VITA as well as those who do. Our model is based on the ethical modeling work of Hunt and Vitell (1986) and Henderson and Kaplan (2005). We use students' responses to the tax



scenarios to measure ethical judgment using Reidenbach and Robin's (1990) three-component multidimensional ethics scale, and we measure ethical decision making based on students' responses indicating if they would behave in the same manner if they were in the same situations (Henderson and Kaplan 2005) and their expectations of how their peers would behave. We draw extensively from the extant literature to construct our dependent variables and also to measure relevant control variables.

Our study is the first to provide empirical evidence that VITA participation is positively associated with students' abilities to form ethical judgments and make ethical decisions. Our study contributes to the growing body of ethics education literature on situated learning theory and servicelearning as well as the tax education literature in several ways. We demonstrate that service-learning in a particular tax setting, participation in the VITA program, is positively associated with ethical judgment and decision making, sometimes when completion of an ethics course is not. To increase our confidence that our regression results stem from VITA participation and not from self-selection bias, we compare responses on measures of ethical judgment and decision making of students who plan to participate in VITA and students who do not plan to participate before the VITA sessions begin, and find no significant statistical differences at the level of p < 0.05. Then using post-VITA season responses to tax scenarios, we conduct regression analyses and find that VITA participation is positively associated with students' ethical judgment with regard to tax scenarios related to both underreporting income items and overstating deductions. We also find evidence from our regression analyses that VITA participation is positively associated with ethical decision making, but only with respect to deduction issues.

The remainder of this paper is organized as follows. We first review the relevant literature and develop our hypotheses. We present our methodology in the next section, then follow with a discussion of our results. Conclusions and limitations are put forward in the final section.

### Literature Review and Hypotheses Development

"Formal education will rarely improve the character of a scoundrel. But many individuals who are disposed to act morally will often fail to do so because they are simply unaware of the ethical problems that lie hidden in the situations they confront." Bok (1976, p. 28)

In discussing the long-debated question in the study of ethics education of whether or not ethics can be taught, Bok (1976, p. 28) suggests that it is the responsibility of higher education to attempt to teach ethics and that



problem-based courses in ethics should "help students become more alert in discovering the moral issues that arise in their own lives." When Bok (1976) made this admonition to higher education, service-learning and experiential learning settings such as the VITA program were in their infancies. However, based on the nature of these types of learning settings—real problems, real interactions, and real professional practice environments—we believe that such learning settings are likely to be effective in responding to Bok's admonition and that participation in such learning settings can be effective in fostering the development of ethical judgment and decision making in students.

Ethical decisions and behavior are often modeled or framed in terms of individuals first recognizing or determining that an issue has ethical content, followed by making an ethical judgment, deciding on a course of action (intention), and finally taking action (Rest 1979, 1986; Hunt and Vitell 1986, 2006). Mudrack and Mason (2013) posit that ethical judgment involves determining if an action is right or wrong, while moral reasoning focuses on the rationale for judging an action as right or wrong. Similarly, Henderson and Kaplan's (2005) model of taxpayer compliance suggests that individuals' ethical orientations, beliefs about what is right or wrong, precede ethical judgment and decision making. VITA students must make tax compliance decisions in the process of completing each tax return, thus their ethical judgment and decision making may improve over the course of the tax season.

### The VITA Program

The VITA program was founded in 1971 by California State University professor, Gary Iskowitz, to encourage accounting students to provide tax assistance to low-income taxpayers. The program has grown substantially over the years. There are now over 12,000 VITA sites (Chapin 2012) that provide students and other volunteers with the opportunity to apply their tax knowledge and skills in a real setting preparing actual tax returns. VITA participants encounter tax issues such as whether individuals are entitled to particular deductions or must report income to a particular state that require them to apply their technical tax knowledge as well as make ethical judgments and decisions regarding the proper reporting of those issues.

A number of studies describe the educational and community benefits of VITA programs (Poston and Smith 2015; Fischer et al. 2011; Clovey and Oladipo 2008; Price and Smith 2008), and Carr (1998) specifically describes, but does not measure, ways in which the VITA program may raise students' awareness of ethical issues. The few empirical VITA-related studies include Quinn et al. (1995)

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who surveyed 83 graduate student VITA participants and found that the majority of students perceived their tax knowledge, and problem-solving and documentation skills improved over the course of their VITA experiences. Christensen et al. (2010) surveyed students at eight universities using pre- and post-tests and found that confidence in their practical, citizenship, and personal responsibility skills increased significantly compared to a control group of students not participating in VITA, while confidence of VITA participants in their problem-solving skills actually decreased. Aldridge et al. (2015) use t tests to measure differences in knowledge related to tax topics between those who participated in an income tax assistance program and those who did not. The data were collected for participants in two semesters and non-participants for three different semesters. They find that participants scored better. Christensen and Woodland (2016) surveyed students before and after participation in VITA at seven universities along with a control group that did not participate and found that actual problem-solving skills significantly increased, but professional commitment did not. Christensen and Woodland (2015) also compared traditional students (age 25 and under) to non-traditional students (age 26 and older) and found that, while VITA participation was significant for both groups, the other factors that influenced problem-solving skills differed between the two groups. We extend that analysis and add to the VITA education literature by providing empirical evidence of the association between VITA participation and ethical judgment and decision making.

## Learning by Doing: Situational Learning and Service-Learning

Situated learning theory is based on the idea that learning takes place through the experience of dealing with actual problems in the real world (Eva 2010). Situational learning is described by Goel et al. (2010, p. 218) "as a process of changes in mental models that occurs through interaction between individuals within the contexts of a common theme, their prior understandings, social structures, and environmental characteristics." Thus, interactions with other people and an individual's environment cause mental models to change so that the individual learns something new. This description of situational learning theory is very much akin to Morton and Troppe's (1996, p. 21-22) statement, "In short, service learning theory begins with the assumption that experience is the foundation for learning; and various forms of community service are employed as the experiential basis for learning." Boss (1994) found that when her undergraduate students in an ethics course were required to participate in a community service project, they substantially increased their moral

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reasoning ability in comparison with students who did not participate in a community service project. VITA participation is a highly interactive and communicative servicelearning experience. Accordingly, we expect that students who participate in VITA are likely to develop and exhibit greater ethical judgment and ethical decision-making abilities than students who do not participate in VITA.

Participation in service-learning activities has been demonstrated to have educational value, but participation in VITA programs also provides a unique, natural setting for students to engage in performative ethics, providing further motivation for why we expect VITA participation to be associated with ethical judgment and decision making. The performative ethics pedagogy (Edwards and Kirkham 2014, p. 486) most commonly operationalized as Giving Voice to Values suggests that ethics activities with "discourse and conversation" lead to new ethical realities and mediate "the emergence of preferred ethical conditions (Nealon 1998)." During VITA service, students necessarily communicate directly with VITA clients, giving voice to their ethical and technical concerns. Students also engage in two-way direct communications with VITA program advisors and other VITA student participants about technical and ethical issues.

Based on the extant literature on service-learning and performative ethics, and based on the characteristics of VITA programs, we propose that ethical judgment is likely to be affected in a positive manner for students who participate in a VITA service-learning experience as these students are exposed to real-world ethical issues of actual clients. Our hypothesis aligns with Boss's (1994) finding that ethical reasoning increases significantly among students in an ethics course who were required to participate in community service, while it did not increase significantly for those students in an otherwise identical ethics course who were not required to participate in community service.

Hypothesis 1 Participation in VITA programs is positively associated with ethical judgment.

Sims and Sims (1991) suggest that courses requiring students to wrestle with ethical dilemmas and apply their knowledge should increase students' ethical behavior. They argue that applied business ethics courses are needed to change students' behavior. Cagle and Baucus (2006) find that education experiences can influence ethical decision making in a positive manner. They required undergraduate and MBA students to study contemporary ethics cases and scandals in an in-depth manner. However, Waples et al. (2009), in a meta-analysis of business ethics instruction, found the results to be mixed with some studies indicating that ethics instruction has a positive impact on ethical judgment and decision making and some studies indicating

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that such instruction has little or no impact. They suggest that shorter courses based on cases and delivered in a seminar or workshop format are most effective. Based on the extant literature, we expect that students who participate in VITA programs, which require students to work with actual tax issues in typically a workshop format, will make more ethical decisions than students who do not participate in VITA programs.

Hypothesis 2 Participation in VITA programs is positively associated with ethical decision making.

### Methodology

### **Participants**

Participants in our study are business students primarily enrolled in upper-level accounting classes at seven geographically dispersed U.S. universities.<sup>1</sup> All survey questionnaires were completed online using SurveyMonkey. The questionnaire was administered twice, once at the beginning of the spring term (pre-survey), and once near the end of that spring term (post-survey). To test our hypotheses, we use regression analyses and the 188 responses to the post-VITA season survey. We use the 260 responses to the pre-VITA season survey to test for selfselection bias as well as differences in characteristics of students choosing to participate in VITA versus those who do not.

We sent structured emails to colleagues at each university that could be forwarded directly to students requesting their participation. The same instructions and information were provided to all participants. Participation was voluntary and students were informed that the researchers were interested in learning how students make tax decisions. Students were assured that all of their responses would be anonymous. Students at two universities completed the online questionnaire during their accounting classes and students at five universities completed the questionnaire outside of their accounting classes. Participants were encouraged to complete the questionnaire by being entered into a random drawing for gift cards of nominal value after completing the questionnaire. Subjects required 20-25 minutes to complete the questionnaire. We pilot tested the questionnaire with students who were not

 $<sup>^{1}\,</sup>$  Our human study was approved by the Institutional Review Board at Montana State University and has therefore been performed in accordance with the ethical standards laid down in the 1964 Declaration of Helsinki. Participation was voluntary and all participants gave their informed consent prior to their inclusion in the study. All responses are reported in aggregate form.



asked to participate in the final study and modified the questionnaire in response to their feedback.

The questionnaire included a section with two hypothetical tax reporting scenarios used to collect data about ethical judgment and decision making, a section for collecting responses about other information and attitudes potentially relevant to participants' ethical decision making, and a section for collecting information about participants' backgrounds. In a separate survey, we gathered additional information on the characteristics of and administration methods of VITA programs at each university at which we obtained participants.<sup>2</sup>

### **Ethical Judgment and Decision Making**

Participants responded to two hypothetical scenarios in which taxpayers chose not to comply with tax laws. The responses to the scenarios are used to measure ethical evaluation, ethical judgment, and ethical decision making. Ethical evaluation, judgment, and decision making have been measured in the literature by presenting participants with scenarios that include embedded ethical issues.<sup>3</sup> Shawver and Sennetti (2009) propose a composite multidimensional ethical scale (MES) based on the Reidenbach and Robin (1990) study that includes philosophical constructs as discussed in Rest et al. (1999). They use the MES with eight scenarios with embedded ethical issues. We choose to follow this methodology, but do not use the scenarios from their study as they are not tax specific. Henderson and Kaplan (2005) use the MES with two taxspecific scenarios with embedded ethical issues. The Henderson and Kaplan (2005) scenarios are effective in that they obtain results consistent with predictions of the Hunt and Vitell's (1986) general theory of ethics and are well suited to our specific research question. They contain ethical issues of a nature and complexity similar to those students likely to encounter when participating in VITA programs.

Both the first and second administration of the questionnaire included one tax scenario adapted with permission from Henderson and Kaplan (2005) and one scenario we developed ourselves (different for each administration). In each questionnaire, participants responded to one scenario involving tax reporting for an income item and to one scenario involving tax reporting for an expense item. The income scenario describes a situation in which a taxpaver sells a fully depreciated computer used for business purposes and knowingly chooses to exclude the resulting gain from taxable income. The expense scenario describes a situation in which a taxpayer knowingly deducts personal meals as business expenses. We developed two additional scenarios, one income scenario in which an individual barters professional services for new tires and fails to include the fair market value of the tires in income and another in which an individual includes the cost of personal travel as deductible business expenses. The dollar amounts in both income scenarios and both deduction scenarios are the same, \$1600 and \$1400, respectively. Our scenarios include both potential underreporting of income and potential over-reporting of expenses because prior research shows that taxpayers behave differently in those situations (Yankelovich et al. 1984). Christensen and Hite (1997) find that taxpayers perceive the risks of both detection and the severity of penalties are significantly greater for underreporting income than the risks associated with overstating deductions. Henderson and Kaplan (2005) assert that it is appropriate to use different scenarios for better insight into ethical evaluations using the multidimensional ethics scale (MES) because the foundation of the MES is that the judgment individuals use to make ethical decisions depends on the circumstances.

For each hypothetical tax scenario, participants provided responses to four types of items: an MES judgment of the behavior, an overall ethical judgment, and measures of their own expected tax compliance behavior and that of their peers in the same circumstances. The initial MES evaluations consist of rating on a seven-point scale the described tax evasion behavior on the dimensions of moral equity (e.g., just, fair), relativism (e.g., culturally acceptable), and contractualism (e.g., violates an unspoken promise). Higher MES scores indicate that the participant judges the tax non-compliance behavior described in the scenario as more unethical. We use one component of the scale, the dimensions of moral equity, to form our dependent variable, ethical judgment (moral equity dimension). We use the moral equity dimension of ethical judgment as our dependent variable because Reidenbach et al. (1991) find that it has greater explanatory power than Relativism and Contractualism. This variable is formed from a fouritem scale measuring whether the scenario decision is just, fair, morally right, and acceptable to family on a scale from 1 to 7 (Cronbach's alpha income = 0.85; deduction = 0.86). We use the other components of the MES, relativism and contractualism, to form control variables that we discuss later.

We also use overall judgment as a dependent variable because it is a comprehensive judgment of whether or not a particular action is ethical. Participants provided their

<sup>&</sup>lt;sup>2</sup> We noted fairly consistent VITA program characteristics and administration methods and did not find any differences that would cause us to question the validity and usefulness of our results.

<sup>&</sup>lt;sup>3</sup> The defining issues test (DIT) is commonly used to test ethical reasoning (Shaub and Lawrence 1996). However, studies show that it is less effective in evaluating ethical sensitivity (Shawver and Sennetti 2009) than using vignettes and a multidimensional ethical scale (MES).

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overall ethical judgment of the non-compliance decision described in the scenario by responding to a single question. Participants were asked, "overall, how ethical/ unethical do you think the (taxpayer's) decision is?" Participants responded on a seven-point scale ranging from "very ethical" to "very unethical," and those responses form our dependent variable, ethical judgment (*overall judgment*).

Participants then provided a qualitative prediction of their own expected tax compliance behavior. For the income scenario, the prediction was provided in response to, "If you were responsible for making the decision on whether to claim the income described in the scenario, what is the probability that you would make the same decision as the (taxpayer) and not claim the income?" Participants responded on a seven-point scale ranging from "highly probable" (indicating a strong intention to misreport) to "highly improbable" (indicating a strong intention not to misreport). These responses form the dependent variable ethical decision making (*same decision*).

We also collect an additional piece of information for which participants provide evaluations on a seven-point scale of the probability that their peers would make the same tax reporting decision as they would. These responses form the dependent variable ethical decision making (*peer same decision*). We collect this information to allow for differences between their own expected behavior and those of peers. Trivedi et al. (2003) find that individuals who believe their peers do not report their income accurately are less likely to accurately report taxable income. Cohen et al. (2001) and others posit that including a question in the MES about peers' behavior provides a means to control for social desirability bias (Fernandes and Randall 1992; Cohen et al. 1998).

#### **Control Variables**

We collect information to control for variables that prior literature indicates may be associated with ethical evaluation, ethical judgment, and ethical decision making. Demographic variables such as age and gender are related to ethical evaluation, judgment, and decision making in some cases (Waples et al. 2009; Eweje and Brunton 2010; Brown-Liburd and Porco 2011). Further, Timm and Gross (1990) find that students over 25 respond differently to learning experiences than younger students. The variable Gender is coded 1 if the participant identifies as female, and 0 if male. The variable over 25 is coded 1 if the participant is over the age of 25 and 0 otherwise.

We include questions to ascertain ethical orientation (Burns and Kiecker 1995) and perceptions of tax fairness (Scott and Grasmick 1981), as Henderson and Kaplan (2005) suggest these factors may influence ethical



judgments. We use ethical orientation statements adapted from Henderson and Kaplan (2005) and Burns and Kiecker (1995) to measure deontological and teleological beliefs.<sup>4</sup> On seven-point scales, students indicated the strength of their agreement with six statements such as "Before knowing the consequences of an action, it can be said to be either right or wrong" to form the variable Deontological Beliefs (Cronbach's alpha = 0.74). Higher scores indicate stronger beliefs. To measure perceptions of tax fairness, Fairness of Fed Inc Tax, five items from Christensen et al. (1994) were included in the questionnaire (Cronbach's alpha = 0.84). The variable is scored from 1 to 7, with higher scores indicating views of greater fairness of the federal income tax.

We also include questions that allow us to measure professional commitment, a component of professionalism, distinct from technical knowledge (Starr 1982; Dwyer et al. 2000). Kanes (2010) touts that individuals committed to being professionals should behave ethically. Professional commitment was measured using Dwyer et al.'s (2000) five-item scale (Cronbach's alpha = 0.89). This variable is scored from 1 to 7, with higher scores indicating greater professional commitment.

We asked students to respond to questions related to other factors that may influence their ethical judgment and decision making-intended career, risk preferences, whether they have completed an ethics course, and the number of tax courses taken. We measure intended career (tax/nontax) by asking students what profession (e.g., auditing, taxation) they intend to enter upon graduation. The variable, Tax Intended Career, is coded 1 if the student intends a career in taxation, and 0 otherwise. Ghosh and Crain (1995) found that attitudes toward risk are highly correlated with ethical standards, and those individuals who are more risk averse and have higher ethical standards are less likely to engage in tax evasion. So, we measure risk preferences using three items from Hung and Tangpong's (2010) Risk Propensity Scale to form the variable Risk Preference (Cronbach's alpha = 0.83). The variable is scored from 1 to 7, with higher scores indicating a greater preference for risk. We ask about completion of an ethics course because Armstrong (1993) finds that ethical reasoning increased among students who completed an ethics course. However, Jewe (2008) finds that ethical attitudes are not affected by completing a business ethics course. The variable, Ethics Course Taken, is coded 1 if the student has completed an ethics course, and 0 otherwise. We include the number of tax courses taken, Tax Courses, to

<sup>&</sup>lt;sup>4</sup> We later include only our measure of deontological beliefs in our regression analyses because of significant negative correlation between the deontological and teleological belief measures.

control for the level of technical tax knowledge and any attention to tax ethics included in those courses.

The initial MES evaluations used to form the Moral Equity Dimension dependent variable also include questions about relativism and contractualism, additional measures of ethical judgment (Reidenbach and Robin 1990), which we use as control variables in the ethical decisionmaking models. The variable contractualism is constructed using a three-item scale measuring whether the scenario decision violates an unspoken promise, unwritten contract, obligation/duty of citizens (Cronbach's or alpha income = 0.77; deduction = 0.77). The variable is scored from 1 to 7, with higher scores indicating higher ethical evaluation. The variable Relativism is constructed using a three-item scale measuring whether the scenario decision is culturally and traditionally acceptable to most people in the United States (Cronbach's alpha income = 0.87; deduction = 0.90). The variable is scored from 1 to 7, with higher scores indicating higher ethical evaluation.

### Models

Our models allow us to examine whether VITA participation is associated with ethical judgment and ethical decision-making skills. For each hypothesis, we evaluate our dependent variables in the context of both an income case and a deduction case. For Hypothesis 1, ethical judgment, we include two different specifications of the judgment dependent variable (moral equity dimension and overall judgment) in the context of an income case and a deduction case, for four total estimated regressions. For Hypothesis 2, ethical decision making, we include two different specifications of the decision making dependent variable (probability respondent would make the same decision and probability of peer same decision) in the context of both an income and a deduction case. We also estimate each model twice, using alternative measures of ethical judgment as independent variables, for eight total estimated ethical decision-making models. We first test whether VITA participants differ from non-VITA participants with respect to ethical judgment before the tax season begins by performing t tests comparing their responses on the moral equity, relativism, and contractualism components of ethical judgment as well as overall judgment, on both income and deduction cases. We then use regression in four analyses of our post-VITA data to determine if VITA participation is associated with Moral Equity and Overall Judgment for income and deduction scenarios.

Similarly, we first test whether VITA participants differ from non-VITA participants with respect to ethical decision making before the tax season begins by performing t tests comparing their decisions on both income and



deduction cases. We then use regression in eight analyses of our post-VITA data to determine if VITA participation and different components of ethical judgment are associated with ethical decisions for income and deduction scenarios.

#### Results

### **Descriptive Statistics**

Table 1 presents descriptive statistics and control variables for students who participated in VITA and those who did not. Measures are generally consistent between VITA and non-VITA students, but more non-VITA subjects were female (61.4 %) than VITA subjects (55.2 %). For both VITA and non-VITA participants, auditing and taxation are the top intended career choices. A greater percentage of VITA participants (45.98 %) intend to work in taxation than non-VITA participants (25.74 %). Students who participated in VITA were generally satisfied with the

 Table 1
 Descriptive statistics of demographic data and independent variables

Variable	VITA (n	n = 87)	Non-VIT	Non-VITA $(n = 101)$		
	Mean	SD	Mean	SD		
Gender (female)	0.552	0.500	0.614	0.489		
GPA	3.471	0.329	3.349	0.359		
Age	24.621	4.816	24.552	4.671		
Over25	0.310	0.465	0.347	0.478		
Year in school	4.483	0.790	4.042	0.787		
Professional commitment	6.250	0.882	6.052	0.980		
Deontological beliefs	4.729	0.919	4.990	1.011		
Fairness of fed tax	3.908	1.736	4.000	1.463		
Risk preference	4.934	1.203	4.943	1.153		
Ethics course taken	0.322	0.470	0.337	0.475		
Tax courses	1.430	0.739	0.994	0.889		
Satisfaction with VITA	5.395	0.925				
Preparation for VITA	5.026	1.432				
	n	%	n	%		
Intended career						
Auditing	32	36.	78 3	2 31.68		
Taxation	40	45.	98 2	6 25.74		
Managerial Accounting	6	6.	90 1	6 15.84		
Government Accounting	2	2.	29	4 3.96		
Finance	1	1.	15	7 6.93		
Management	2	2.	30	1 0.99		
Marketing	0	0.	00	1 0.99		
Not indicated	4	4.	60 1	4 13.87		

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Table 2 Multidimensional ethics scale: descriptive statistics for ethical judgment and decision-making variables and t tests

Variable	Post-non-VITA $(n = 101)$		Post-VITA $(n = 87)$		Pre-non- VITA (n = 142)	$\begin{array}{l} \text{Pre-VITA} \\ (n = 118) \end{array}$	Difference (pre- non-VITA–pre- VITA)	t value	$\operatorname{Prob} > t$
	Mean	SD	Mean	SD	Mean	Mean	(1111)		
Ethical judgments									
Moral equity dimension-income case	5.446	1.168	5.774	1.194	5.159	5.375	-0.217	-1.16	0.2453
Moral equity dimension-deduction case	5.852	1.219	6.213	0.912	6.085	6.281	-0.197	-1.60	0.1100
Overall judgment—income case	5.089	1.408	5.425	1.444	5.178	5.284	-0.106	-0.64	0.5250
Overall judgment-deduction case	5.525	1.527	5.724	1.353	5.824	5.873	-0.049	-0.29	0.7712
Contractualism—income case	5.308	1.293	5.403	1.424	5.157	5.446	-0.289	-1.59	0.1129
Contractualism—deduction case	5.495	1.270	5.854	1.110	5.622	5.815	-0.193	-1.18	0.2382
Relativism-income case	3.616	1.352	3.693	1.592	3.570	3.497	0.073	0.34	0.7338
Relativism-deduction case	4.129	1.528	4.203	1.621	4.525	4.578	-0.053	-0.29	0.7707
Ethical decision making									
Same decision-income case	5.501	1.500	5.667	1.736	4.752	5.186	-0.434	-1.78	0.0771*
Same decision-deduction case	5.962	1.462	6.471	0.963	6.187	6.297	-0.110	-0.70	0.4815
Peer same decision-income case	3.941	1.660	4.299	1.733	3.658	3.737	-0.080	-0.35	0.7278
Peer same decision-deduction case	4.572	1.608	5.057	1.616	4.543	4.862	-0.319	-1.71	0.0891*

\* p < 0.1 reported p values are two tailed

\*\* p < 0.05

\*\*\* *p* < 0.001

experience (mean of 5.40 out of 7) and well prepared for the experience (mean of 5.03 out of 7).

## **Descriptive Statistics and** *T* **Tests for Ethics Measures**

Table 2 presents descriptive statistics for the post-VITA ethical judgment and decision-making variables used in our regression analyses by non-VITA (n = 101) and VITA (n = 87) participation. We also present pre-tax season means and t tests for differences in means of students who intend to participate in VITA (n = 118) and students who do not intend to participate in VITA (n = 142). Each of the dependent variables are coded such that higher scores indicate more ethical judgment and more ethical decision making, with 1 being the lowest and 7 being the highest. For all ethical measures, the mean scores of VITA participants are higher than the mean scores of non-VITA participants. Means for the ethical dependent variables for the post-non-VITA sample range from a minimum of 3.941 (ethical decision making, peer same decision, income case) to a maximum of 5.962 (ethical decision making, same decision, deduction case), with standard deviations ranging from 1.168 (ethical judgment, moral equity dimension, income case) to 1.660 (ethical decision making, peer same decision, income case). Means for the ethical dependent variables for the post-VITA sample range from a minimum of 4.299 (ethical decision making, peer same decision, income case) to a maximum of 6.471 (ethical decision



To determine whether our regression results may be solely the result of pre-existing differences between those who choose to participate in VITA and those who do not, we performed t tests to compare the dependent variables of VITA participants (n = 118) and non-VITA participants (n = 142) obtained from the pre-survey.<sup>5</sup> T tests indicate no statistically significant differences at the level of p < 0.05between non-participants and participants with respect to our ethical judgment and decision-making variables. However, there are marginally significant differences on two decisionmaking variables (same decision—income case p = 0.0771and peer same decision—deduction case p = 0.0891). Our pre-VITA season survey indicates that non-VITA and VITA participants are fairly similar with respect to their ethical judgment and ethical decision-making abilities, which indicates it is unlikely that our post-VITA season regression results stem from self-selection bias. Our regression results that follow incorporate control variables necessary to more clearly evaluate the association between VITA participation and ethical judgment and decision making.



 $<sup>^{5}</sup>$  Of the 118 students intending to participate in VITA who took the pre-survey, 52 also took the post-survey and are included in the post-survey results. Of the 142 students not intending to participate in VITA who took the pre-survey, 52 also took the post-survey and are included in the post-survey results.

### **Regression Results**

#### Ethical Judgment (Hypothesis 1)

The results of regressing ethical judgment dependent variables on VITA participation are presented in Table 3 for the full post-VITA sample (n = 188) for both the income and deduction scenarios. We find that VITA participation is positively and significantly associated with Ethical Judgment after controlling for other possible determinants of ethical judgment skills for three of our four regression models. The coefficient on VITA is positively and significantly associated with Ethical Judgment for moral equity dimension—income case, moral equity dimension—deduction case, and for overall judgment—income case. Interestingly, we do not find that ethics course taken or tax courses are significantly associated with ethical judgment in any of our models.

We find that professional commitment is positively and significantly associated with moral equity dimension—income case, moral equity dimension—deduction case, and overall judgment—income case. Deontological beliefs is positive and significantly associated with all four specifications of ethical judgment. Fairness of fed Inc tax is positive and significantly associated with moral equity dimension in both the income and deduction cases, but not for overall judgment. The  $R^2$  for the regression models are

Table 3 Regression results of ethical judgment

reasonable, though low for overall judgment—deduction case, when compared to the extant literature, and all of the F values are statistically significant. Based on our results, we find support for Hypothesis 1. VITA participation is positively associated with ethical judgment.

## Ethical Decision Making: Same Decision (Hypothesis 2)

The results of regressing two separate measures of ethical decision making on VITA participation are presented in Table 4 for the full sample (n = 188) for both the income and deduction scenarios, and using different measures of ethical decision making as our dependent variables. One measure is the probability the respondent would make the same decision as the individual in the scenario (same decision). The other measure is the probability that the respondents' peers would make the same decision (peer same decision). Panel A contains regressions that use same decision as the measure of ethical decision making. Panel B contains regressions that use peer same decision as the measure of ethical decision making.

As noted in Panel A, we find that VITA participation is positively and significantly associated with ethical decision making—same decision after controlling for other determinants of ethical decision making in the deduction case in both model specifications (ethical judgment specified in

n = 188	Moral equity dimension income case		Moral equity deduction ca	dimension use	Overall judg	gment	Overall judgment deduction case	
	Parameter estimate	$\operatorname{Prob} > t$	Parameter estimate	$\operatorname{Prob} > t$	Parameter estimate	$\operatorname{Prob} > t$	Parameter estimate	$\operatorname{Prob} > t$
Intercept	1.684	0.0193**	1.893	0.0045**	1.520	0.0823*	2.698	0.0039**
VITA	0.354	0.0368**	0.371	0.0180**	0.442	0.0327**	0.278	0.2019
Gender	0.232	0.1705	0.100	0.5204	0.534	0.0101**	0.069	0.7529
Tax intended career	0.369	0.0323**	0.208	0.1873	-0.005	0.9804	0.322	0.1463
Over 25	0.155	0.3831	0.072	0.6606	0.177	0.4141	-0.107	0.6395
Professional Commitment	0.339	0.0003***	0.208	0.0157**	0.369	0.0013**	0.120	0.3161
Deontological beliefs	0.159	0.0743*	0.283	0.0007***	0.250	0.0217**	0.372	0.0014**
Fairness of fed Inc Tax	0.102	0.0484**	0.088	0.0643*	0.020	0.7533	0.065	0.3239
Risk preference	0.038	0.6008	0.136	0.0415**	-0.039	0.6600	-0.024	0.7955
Ethics course taken	0.277	0.1103	0.119	0.4535	-0.063	0.7660	0.085	0.7034
Tax courses	-0.082	0.4125	0.075	0.4208	-0.166	0.1747	-0.034	0.7945
F value	4.50		4.68		3.94		2.08	
$\operatorname{Prob} > F$	< 0.0001		< 0.0001		< 0.0001		0.029	
$R^2$	0.203		0.209		0.182		0.105	
Adj <i>R</i> <sup>2</sup>	0.158		0.165		0.136		0.055	

\* p < 0.1

\*\* p < 0.05

\*\*\* p < 0.001



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### Table 4Regression results

Panel A: Ethical decision making

n = 188	Same decision income case (overall judgment)		Same decision income case (moral equity dimension)		Same decision deduction case (overall judgment)		Same decision deduction case (moral equity dimension)	
	Parameter estimate	$\operatorname{Prob} > t$	Parameter estimate	$\operatorname{Prob} > t$	Parameter estimate	$\operatorname{Prob} > t$	Parameter estimate	$\operatorname{Prob} > t$
Intercept	-0.918	0.2153	-0.915	0.2009	0.279	0.6538	0.509	0.3782
VITA	0.092	0.6178	0.053	0.7653	0.354	0.0175**	0.277	0.0457**
Gender	0.409	0.0249**	0.452	0.0091**	-0.033	0.8184	-0.018	0.8901
Over 25	0.068	0.7236	0.008	0.9637	0.435	0.0053**	0.290	0.0461**
Tax intended career	0.437	0.0203**	0.277	0.1310	-0.001	0.9931	0.025	0.8608
Professional commitment	-0.065	0.5288	-0.117	0.2415	0.013	0.8689	-0.071	0.3525
Deontological beliefs	0.361	0.0003***	0.341	0.0003***	0.307	0.0001***	0.241	0.0015**
Fairness of fed Inc tax	-0.014	0.8016	-0.021	0.7024	0.019	0.6570	0.001	0.9731
Ethics course taken	0.414	0.0279**	0.290	0.1101	0.085	0.5695	0.085	0.5437
Tax courses	0.103	0.3483	0.061	0.5646	0.221	0.0125**	0.123	0.1371
Overall judgment	0.262	0.0005***			0.341	<.0001***		
Moral equity dimension			0.535	< 0.0001***			0.737	< 0.0001***
Contractualism	0.358	< 0.0001***	0.238	0.0027**	0.208	0.0011**	-0.013	0.8429
Relativism	0.325	< 0.0001***	0.222	0.0014**	0.142	0.0035**	0.045	0.3420
F value	14.71		16.87		14.01		18.47	
$\operatorname{Prob} > F$	< 0.0001		< 0.0001		< 0.0001		< 0.0001	
$R^2$	0.502		0.536		0.490		0.559	
Adj R <sup>2</sup>	0.468		0.505		0.455		0.529	

### Panel B: Peer ethical decision making

n = 188	Peer same decision income case (overall judgment)		Peer same decision income case (moral equity dimension)		Peer same decision deduction case (overall judgment)		Peer same decision deduction case (moral equity dimension)	
	Parameter estimate	$\operatorname{Prob} > t$	Parameter estimate	$\operatorname{Prob} > t$	Parameter estimate	$\operatorname{Prob} > t$	Parameter estimate	$\operatorname{Prob} > t$
Intercept	0.274	0.7451	0.263	0.7595	0.838	0.2925	0.996	0.2192
VITA	0.246	0.2420	0.304	0.1555	0.335	0.0775*	0.336	0.0833*
Gender	0.065	0.7524	0.165	0.4260	-0.121	0.5059	-0.107	0.5620
Over 25	0.358	0.1054	0.385	0.0880*	0.495	0.0128**	0.465	0.0228**
Tax intended career	0.263	0.2183	0.231	0.2934	0.155	0.4246	0.187	0.3424
Professional commitment	-0.102	0.3830	-0.062	0.6087	-0.054	0.6012	-0.065	0.5454
Deontological beliefs	0.093	0.4027	0.127	0.2608	0.000	0.9979	0.026	0.8033
Fairness of fed Inc tax	0.065	0.3192	0.052	0.4302	0.046	0.4162	0.047	0.4177
Ethics course taken	-0.383	0.0740*	-0.428	0.0503*	-0.423	0.0282**	-0.422	0.0317**
Tax courses	0.092	0.4633	0.068	0.5917	0.167	0.1359	0.146	0.2071
Overall judgment	0.217	0.0102**			0.205	0.0032**		
Moral equity dimension			0.085	0.4981			0.169	0.1607
Contractualism	-0.013	0.8724	0.030	0.7518	0.006	0.9386	-0.008	0.9308
Relativism	0.641	< 0.0001***	0.652	< 0.0001***	0.615	< 0.0001***	0.617	< 0.0001***
F value	10.44		9.58		13.74		12.67	
$\operatorname{Prob} > F$	< 0.0001		< 0.0001		< 0.0001		< 0.0001	
$R^2$	0.417		0.396		0.485		0.465	
Adj R <sup>2</sup>	0.377		0.355		0.450		0.428	

### \* *p* < 0.1

\*\* p < 0.05

\*\*\* p < 0.001



terms of overall judgment or in terms of moral equity dimension), but not for the income case. Females were positively and significantly associated with ethical decision making for the income cases, but not for the deduction cases. Over 25 is positive and significantly associated with ethical decision making for the deduction cases, but not for the income cases. Deontological beliefs is positive and significantly associated with ethical decision making in both income case and both deduction case model specifications. We also find that overall judgment is positive and significant in both the income and deduction case models as is moral equity dimension. Contractualism and relativism are positive and significant in both specifications of same decision income case, and in same decision deduction case (overall judgement) model, but not in the same decision deduction case (moral equity dimension). The  $R^2$  values for the regression models are high compared to the extant literature, and all of the F values are statistically significant.

# Ethical Decision Making: Peer Same Decision (Hypothesis 2)

The second measure of ethical decision making is students' evaluations of the likelihood that their peers would make the same decision as in the scenarios. The results of estimating these regressions are presented in Table 4 Panel B. Similar to the results for ethical decision making-same decision, we find that VITA participation is positively and marginally significantly associated with ethical decision making-peer same decision after controlling for other determinants of ethical decision making for the deduction case, but not the income case. The significance of control variables in our peer ethical decision-making models differs somewhat from the results presented in Panel A for ethical decision making. Over 25 is positive and significantly associated with peer ethical decision making for both deduction cases, and also for one income case model (moral equity dimension). Ethics course taken is negative and significantly associated with peer ethical decision making in both income case and both deduction case model specifications. We also find that overall judgment is positive and significant in both the income and deduction case models. Relativism is positive and significant in both specifications of peer same decision income case and peer same decision deduction case. Unlike the ethical decisionmaking results presented in Panel A of Table 4, we do not find significance for gender, deontological beliefs, or contractualism. The  $R^2$  values for the regression models are high when compared to the extant literature, and all of the F values are statistically significant. Our results show a stronger association between VITA participation and students' own ethical decision making than that of students' perceptions of their peers' ethical decision making.

Based on our results, we find some support for Hypothesis 2. VITA participation is positively associated with increased ethical decision making, but only for deduction scenarios, not for income scenarios. The difference in our findings for ethical decision making for underreporting an income item and overstating a deduction may stem from taxpayers' perceptions that the risk of detection and penalties differ significantly for understating income versus overstating deductions (Christensen and Hite 1997). Further, Cohen et al. (2015) find that both the context and the individual characteristics of taxpayers do influence tax-related decisions. These results illustrate the importance of context (income or deduction case) and ethical beliefs (e.g., deontological beliefs, contractualism, and relativism) as well as ethical judgment in assessing ethical decision making.

### Sensitivity Tests

We considered other possible variables that might influence ethical judgment and ethical decision making. These other variables include GPA, teleological beliefs, familiarity with the school honor code, political views, religiosity, and financial pressure. We estimated the regression models for Hypotheses 1 and 2 including these variables (results not tabulated). These variables were not statistically significant and our results did not change significantly. Our conclusions are unchanged by the addition of these variables.

The extant literature provides some evidence that traditional and non-traditional students respond differently to learning experiences,<sup>6</sup> mixed results about the impact of gender on education,<sup>7</sup> and limited evidence that career

<sup>&</sup>lt;sup>7</sup> Waples et al. (2009) find no clear distinction between male and female responses to ethical instruction. Craft (2013), in a review of empirical ethical decision-making studies from 2004–2011, and O'Fallon and Butterfield (2005), in a review from 1996 to 2003, also found mixed results with respect to gender, with some studies reporting significant differences for females and others not. Although Christensen et al. (2014), in their meta-analysis of ethics studies, find that females have slightly higher levels of moral reasoning than males, the significant level of heterogeneity among the studies suggests that the differences may be due to factors other than gender alone.



<sup>&</sup>lt;sup>6</sup> Timm and Gross (1990) find that non-traditional students respond differently to learning experiences than traditional students. Moorer (2009) found that graduate students possess greater interpersonal and conceptual skills than the undergraduate students. However, Eweje and Brunton (2010) find that, among New Zealand business majors, age impacts ethical judgment, but not ethical awareness. Waples et al. (2009), in their meta-analysis of business ethics instruction studies, find that ethics instruction has a larger impact on individuals aged 35 or older.

intentions impact educational efficacy.<sup>8</sup> To consider how these characteristics might affect our results, we re-estimated each model with subsets by age, gender, and by intended career. Our results with regard to ethical judgment appear to be driven primarily by the effects of VITA participation on traditional students. VITA participation did not significantly affect the ethical judgment of non-traditional students. We also re-estimate these models by including an interaction between age and VITA. Our results remain substantially the same. Thus, while some types of ethics instruction may affect non-traditional students differently than traditional students, VITA participation is associated with both non-traditional and traditional students' ethical decision making in a positive manner.

When we re-estimate our models for females only and males only, we note that in some models our results do not differ between the female-only and the male-only samples, in some models we only find results for females, and in some models we only find results for males. We do not find a discernible pattern in differences between results for females and males, and, therefore, do not draw any conclusions about differential effects of the educational efficacy of VITA participation for females and males.

When we re-estimate our models by intended career (tax versus non-tax), we find very little evidence that VITA participation affects students intending a non-tax career and students intending a tax career differently.

We also examine the potential impact of ethical judgment on ethical decision making. We compare the  $R^2$  of the ethical decision-making models with and without the ethical judgment variable, and we find (results not tabulated) that ethical judgment explains a large amount of the variance. On average, the  $R^2$  of the models decreases 75 % without the ethical judgment variable, with a minimum decrease of 57 % and a maximum decrease of 92 %. This is consistent with the theories and results in the extant literature (Rest 1979, 1986; Hunt and Vitell 1986, 2006) that include ethical judgment as a key component of ethical decision making. Further, it may explain why we find ethical judgment is statistically significant with respect to VITA participation for three of four income and deduction judgment measures, but only deduction cases with respect to ethical decision making. Including ethical judgment measures in our decision-making regressions may explain the variance captured by VITA participation in the judgment regression for the income cases.

In Table 2, we present t statistics for tests of differences in means in our pre-VITA sample of 142 students not intending to participate in VITA and 118 students intending to participate in VITA. We also performed tests of differences in means in our pre-VITA sample (results not tabulated) of the 52 students not intending to participate in VITA and the 52 students intending to participate in VITA who also took the post-VITA survey. These t test results are substantially similar and do not change our conclusion that our regression results are not the result of self-selection effects.

### **Conclusions and Limitations**

Our study, using data collected from students at seven universities, is the first to provide empirical evidence that VITA participation can improve students' abilities to form ethical judgments and make ethical decisions. We provide evidence that student participation in VITA programs is associated with better ethical judgment and, in some cases, better ethical decisions. We find that VITA participation is significantly positively associated with ethical judgment, but do not find similar results for having completed an ethics course. We also note that VITA participation is significantly positively associated with ethical decision making in deduction scenarios, but not in income situations, suggesting that the context in which ethical decision making is measured does matter.

Our results indicate that having completed an ethics course is significantly negatively associated with ethical decision making in both income and deduction scenarios when perceptions of peers' ethical decisions is the measure of ethical decision making, but not when the measure is individuals' expression of whether they personally would make the same ethical decision. This finding may indicate that students who complete an ethics course believe their peers are more likely to make unethical tax reporting decisions. However, in one of the four "same decision" cases (income-ethical judgment), ethics course is positive and statistically significant, and in the other three cases it is positive, but not statistically significant, indicating that completing an ethics course generally has minimal but not negative effects on ethical decision making in a tax context. In addition, we find that professional commitment is statistically significantly associated with ethical judgment in three of the four ethical judgment regressions, but it is not statistically significantly associated with decision making in any of the four decision-making regressions.

Ethics models frequently posit ethical beliefs and ethical judgment precede ethical decision making and behavior



<sup>&</sup>lt;sup>8</sup> Seider et al. (2011) studied students from a variety of majors who participated in a service-learning project centered on poverty and found that, while all students' understanding of social responsibility increased, it increased more for non-business majors. The differences they cite are among broader fields such as liberal arts, education, nursing, and business rather than the more narrowly defined career choices we measure (e.g., audit, tax, management accounting).

(Rest 1979, 1986; Hunt and Vitell 1986, 2006; Henderson and Kaplan 2005), and our results lend support to these models. Similar to Henderson and Kaplan's (2005) model of taxpayer compliance, ethical (deontological) beliefs are strongly associated with ethical judgments, which are strongly associated with ethical decision making in our study. We find that ethical judgments explain the majority of the variance in ethical decisions with respect to income and deduction reporting decisions. These results are strongest when individuals indicate what they themselves would decide as opposed to what their peers would decide.

Our results, testing ethical judgment and decision making in a tax setting in the VITA program, support the assertion in situated learning theory that learning takes place through the experience of dealing with actual problems in the real world (Eva 2010). Our results in this setting provide evidence to support the assertion in service-learning theory that community service is an effective venue for experiential learning (Morton and Troppe 1996) and demonstrate that VITA participation may be an effective service-learning activity for developing ethical judgment and, in some contexts, ethical decision making. Our results also add much needed empirical evidence to the developing literature on the effects of VITA, most of which has focused on perceptions rather than more direct measures.

Our results are naturally limited by our student sample, the formation of the measures we use, and the nature of survey data. It is possible that our sample is not representative, that our measures do not capture our intended attributes, or that students did not respond truthfully or did not understand our questionnaire. Our research design did not allow us to randomize the assignment of VITA participation and non-participation, and our results might be affected by repeated testing for the 104 students who took both the pre- and post-surveys to the extent the questions on the surveys were similar. Our results might also be affected by instrument change for the 104 students who took both surveys to the extent the questions on our surveys differed. Given the number of variables included in the study, our sample sizes by VITA participation and nonparticipation are relatively small when only students who completed both surveys are considered. As such, because of the very small sample available, we do not match preand post-data to assess baseline performance and changes over time. Our results do not allow us sufficient insight into why VITA participation affects ethical decision making in income and deduction scenarios differentially. More research is needed to address these differences and to determine how they might affect educational choices and VITA program administration. Additionally, more research is needed to determine if and how other experiential learning opportunities such as internships impact students'

ethical judgment and decision making. We find that VITA participation may differentially impact traditional versus non-traditional students with regard to ethical decision making, but not ethical judgment. More research is needed to explore how educational interventions differentially affect younger versus older students.

Accounting educators and academic advocates such as the Pathways Commission and the Accounting Education Change Commission emphasize the importance of developing ethical judgment and decision making in the accounting profession. Our paper provides evidence that accounting educators may find useful as they design curricula and consider educational alternatives.

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