Using *Giving Voice to Values* to Improve Student Academic Integrity in Information Technology Contexts

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ABSTRACT

Academic integrity continues to be a concern for universities and faculty. Yet practical methods for conveying ethical behavior can be difficult to achieve. This study uses the multidimensional ethics scale to gain insight into three situations involving students. The findings from those scenarios are then framed using the *Giving Voice to Values* ethics pedagogy in order to provide common rationales given by students and to create levers or arguments that can be used to combat the rationales. The common rationales and levers provided in this study, along with the scenarios, can be used as teaching tools to promote ethical action among current students.

Keywords: Academic integrity, Information & communication technologies (ICT), Multidimensional ethics scale

1. INTRODUCTION

Cheating scandals at colleges and universities bring intense media attention and scrutiny. A number of institutions (e.g., University of North Carolina, Harvard, Stanford, Florida State University, The Ohio State University, and Dartmouth) have dealt with highly publicized failures related to cheating (Glum, 2014; Rivera, 2015; Vasilogambros, 2016). A number of the incidents included the use of technology and the Internet. Activities such as sharing answers for an online take-home exam, plagiarizing research papers, and having others complete work for an online class have been detected. Further, the problem is not limited to the students involved in these high-profile cheating scandals. Prior research shows that about 68% of undergraduates and 43% of graduate students admit to cheating (ICAI, 2015). This level of cheating creates questions about the value of the teaching and learning process inside higher education. Educators must jointly focus on the learning of students and maintaining the integrity of student work and assignment of grades. Not only must faculty remain current within their academic disciplines, they must also understand best practices for promoting academic integrity.

Interactions between individuals have changed with the introduction of the Internet into modern life. Townley and Parsell (2004) point out that the Internet is not simply a technological change that increases efficiency, but that the effects of it are more complex. They argue that the nature of communication and privacy are fundamentally changed. Interactions which once occurred face-to-face now occur through computers or phones causing users to "feel uninhibited and unconstrained by the usual social and ethical standards" (p. 271). Further, as people engage through the Internet, they operate with a feeling of independence. "Questions of community, responsibilities to others and binding norms of conduct fade into the background" (p.271).

The academic community is not immune to these changes. Hinman (2005) contends that the Internet has changed the ethics of the academic world, and vice versa, in important ways. To further analyze how academic integrity has changed in the information age, Hinman evaluated the effects by using the three categories of students first identified by Donald McCabe, a noted researcher on academic integrity. The first group consists of students who will never cheat or be dishonest in their academic work. The second group is comprised of students who cheat

occasionally, while the third includes students who cheat habitually. The second group is the largest and the one most affected by the introduction of the Internet with its instant and continuous availability of resources. The students in this group may be tempted to cheat by the ease of using Internet-related technology. They might not have put in the effort to cheat when it would have taken more time and work to locate resources. The purpose of this research is to better understand student decision-making related to academic integrity scenarios that involve information technology.

This study uses a proven research tool, the multidimensional ethics scale (MES), to gain insight into student reasoning related to academic integrity scenarios that include IT. The MES associates the ethical decisions of subjects with the ethical theory used to make the decision. The MES results give insight into both the decision and the reasoning used to make the final determination. The MES results are then incorporated into materials that can be used by instructors to discuss ethical behavior in class.

The materials are created in the framework of the ethics pedagogy, *Giving Voice to Values* (GVV) (Gentile, 2010). This approach to teaching ethics emphasizes the actions necessary to carry out ethical decisions. Students are asked to identify common rationalizations for not voicing their values and then learn to combat those rationalizations with levers or arguments that support acting with integrity. The MES results inform the creation of the common rationalizations and the competing levers. The class materials that are created from the perspective of students stress the importance of academic integrity. This allows a connection that can elevate the current ethical behavior across campuses.

The remaining sections of the paper are organized as follows. The literature review discusses the MES research tool and the GVV ethics teaching approach. Next, the research methods are presented followed by the results. The discussion and implementation section describes the class materials. The closing sections are the presentation of the limitations, future research, and conclusion.

2. LITERATURE REVIEW

This paper uses the multidimensional ethics scale (MES) research framework to analyze the decisions of college students. This framework identifies which ethical theories are incorporated by the students in making ethical determinations. The results from the MES analysis are then used with the *Giving Voice to Values* (GVV) approach to develop common rationalizations and levers that can be used by instructors to present and lead discussion on ethics.

2.1 Multidimensional Ethics Scale

The MES is a predictor of ethical judgment (Reidenbach and Robin, 1990) and is designed to assess multiple philosophies in order to offer a broad understanding of ethical behavior (Clark and Dawson, 1996). The research framework considers five philosophies: moral equity (i.e. justice theory), relativism, egoism, and utilitarianism (i.e. teleology), and contractualism (i.e. deontology). MES also seeks to evaluate more than one dependent variable. Most ethics theories assess behavioral intention as a determinant of actual

behavior. MES assesses behavioral intention using individual intention and additionally assesses peer intention and ethical awareness. Therefore, MES specifies that moral equity, relativism, egoism, utilitarianism, and contractualism are determinants of three different dependent variables: individual intention (i.e. behavioral intention), peer intention, and ethical awareness. Figure 1 depicts the research model.

The three dependent variables provide a diverse perspective on human behavior. First, individual intention is a person's plan to carry out or not carry out an act (Fishbein and Ajzen, 1975), and is equivalent to behavioral intention (BI). It is a measure of a person's intention to behave in an ethical or an unethical manner, and BI has been shown to be an accurate predictor of a person's actual behavior (Ajzen, 1991; Banerjee, Cronan, and Jones, 1998; Leonard and Cronan, 2001; Leonard, Cronan, and Kreie, 2004). Peer intention (PI) is a consideration of others who are similar to one's own age. It is a measure of a person's assessment of how others comparable in age might intend to act in a given situation (Cohen, Pant, and Sharp, 2001). Finally, ethical awareness (EA) is a consideration of one's ethical scope. It is a measure of a person's assessment of another's action in a given situation as being ethical or unethical behavior (Shawver and Sennetti, 2009). The five philosophies used to evaluate BI, PI, and EA are discussed below.

Moral Equity. Justice theory helps to explain a person's beliefs regarding right and wrong (Rawls, 1971). It is based on the premise that equals should be treated equally and unequals should be treated unequally. Moral equity is part of justice theory, and can be thought of as "inherent fairness, justice, goodness, and rightness" (Reidenbach and Robin, 1990, pp. 645-646), therefore, making it fundamental for evaluating ethics in business situations. Moral equity begins at home with early childhood lessons regarding fairness and goodness. Moral equity has been found to influence one's perceptions about the appropriateness of certain behaviors (Nguyen et al., 2008), and it has been found to be a good predictor of a student's ethical decision making (Robin et al., 1996). In academic situations, moral equity will assess a student's sense of fairness and justice with regards to BI, PI, and EA.

Relativism. Relativism can be thought of as concerns for "guidelines, requirements, and parameters inherent in the social/cultural system" (Reidenbach and Robin, 1990, p. 646). This suggests that a person's ethical beliefs are influenced by society and culture. It also states that there are no universal rules that govern every person (Reidenbach, Robin, and Dawson, 1991). Relativism is obtained later in life as one normally acquires societal and cultural expectations over time. Relativism has been found to influence one's perceptions about the appropriateness of certain behaviors (Nguyen et al., 2008), and it has been found to be a good predictor of a student's ethical decision making (Robin et al., 1996). Relativism in academic situations will assess the societal and cultural expectations the student perceives. Students have acquired a great sense of expectations in academic situations by the time they attend college since most children begin school by the age of five.

Egoism. Egoism focuses on a person's self-promotion and personal satisfaction (Nguyen and Biderman, 2008).

This does not mean that a person cannot help others; it simply means that a person's actions are based on one's best interests. A person can help others if those actions ultimately help oneself (Reidenbach, Robin, and Dawson, 1991). In academic situations, a student must determine what he hopes to achieve. If making an 'A' is the goal, then the student's behavior will reflect that goal.

Utilitarianism. Utilitarianism is about creating the greatest good for the greatest number of people (Nguyen and Biderman, 2008). This is determined through a cost/benefit assessment of the situation and indicates that people should create the most good to counter evil in society (Reidenbach, Robin, and Dawson, 1991). Utilitarianism indicates that students must determine what is best for the group. That determination could impact the student's ethical intentions.

Contractualism. Contractualism is part of Deontology theory (Ross, 1930) and deals with "the idea of a 'social contract' that exists between business and society" (Reidenbach and Robin, 1990, p. 646). This could mean a written contract or an implied obligation, rule, or responsibility. This also goes beyond just a monetary notion to include fair play and telling the truth. Contractualism has been found to be a good predictor of a student's ethical decision making process (Robin et al., 1996). Contractualism in academia begins with the course syllabus and continues with the requirements/rules on projects and assignments.
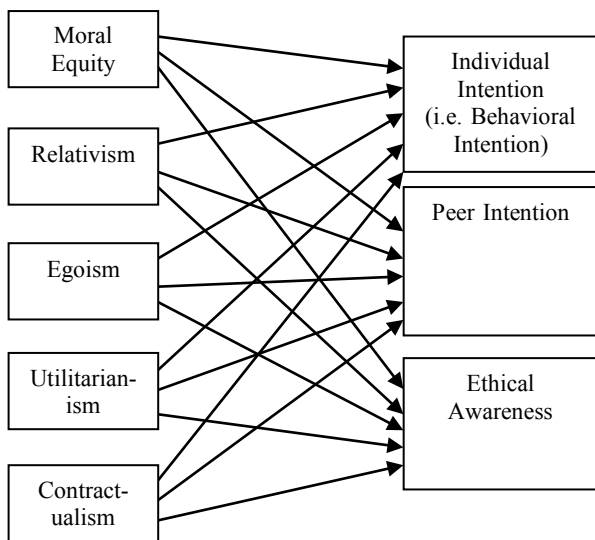
*Each dependent variable is tested separately, not collectively as a group.

Figure 1. MES Research Model

2.2 Giving Voice to Values
Mary Gentile's book, *Giving Voice to Values* (2010), outlines an approach to business ethics that shifts the focus away from theoretical analysis and puts emphasis on practical actions. The GVV concentration on action is based on the assumption that many people want to voice and act on their values in the workplace, especially if doing so does not put them at a systematic disadvantage. The approach begins by asking, what if the right thing to do were known? How

could that be accomplished? Gentile argues that current approaches to business ethics train students to recognize ethical dilemmas (awareness) and reason through conflicts to determine the best course of action (analysis), but that they fall short of assisting students to develop the skills, scripts, and competence to implement ethical choices (action).

To encourage ethical action, the GVV framework asks students to identify common rationalizations that might be used to act unethically. These are then countered with levers that promote rethinking the situation to promote acting on one's values. The common rationalizations and levers provide the link from MES to GVV. This study uses the results of the MES to identify related common rationalizations, followed by potential levers to be considered. This produces powerful cases that instructors can use to elevate student thinking and action related to technology and academic integrity. Appendix A gives a full description of the GVV approach.

3. RESEARCH METHODS

Initially, extant literature was used to assist in the development of multiple scenarios to address the research question. Through multiple iterations, we circulated the first draft and appropriate revisions to business professionals who did training and consulting in ethics and to academic researchers who had published multiple articles relating to ethics and IT. Eight experts, identified based on published research in ethics related to IT and ethics consulting experience, provided feedback that was included in both the scenarios and the instrument. Subsequently, the scenarios and instrument were pilot-tested using nine graduate students taking a graduate business ethics class. After the graduate students completed the instrument, they provided both written feedback and discussion comments regarding their ability to understand the scenarios and the questions presented as well as the time to complete the instrument. This information was used to further refine the instrument and scenarios.

Table 1 contains a summary of the three scenarios as well as the descriptive title for each for use throughout the paper. The *improper internet citation* scenario illustrates an example of plagiarism from material that is easily accessible due to the numerous technological devices that college students have access to and use. Admittedly, all higher education academicians face issues with student plagiarism and lack of academic integrity on a wide array of student assignments whether research papers, written case studies, or group presentations. Because of the high prevalence of plagiarism across disciplines, we included this scenario in the study. The *placement essay* scenario represents an example of a student employing an essay service to assist in a job application. While this scenario may have a futuristic time frame for some students, the idea of employing an essay service is also relevant for academic assignments, once again made relatively easy due to technology. The *social media* scenario provides an example of cyber-bullying relevant to college students. Cyber-bullying is defined by the National Crime Prevention Council (2012) as "the process of using the Internet, cell phones, or other devices to send or post text or images intended to hurt or embarrass another person."

Cyber-bullying is often a topic of class discussion regarding ethics in information technology (Reynolds, 2015). In a recent study of cyber-bullying (Chapin, 2016), Facebook was used as the platform, thus our choice for the *social media* scenario.

Improper Internet Citation

It is 11:00 p.m. and Susan is Facebook chatting with her friends. She has not started writing her research essay due the next day. One of her friends suggests finding papers on the subject from the Internet. Susan takes her friend's suggestion and copies and pastes three paragraphs exactly from a website and places them in her essay. She puts the URL at the end of the three paragraphs referencing the web site, but does not include any quotation marks. She continues by adding some paragraphs of her own to the writing. Even though University policy indicates that all material taken directly from sources must be quoted, Susan feels that the URL placed at the end of the paragraphs is sufficient.

Placement Essay

Sara is a senior at ABC University. She has earned very good grades and participates in a number of extracurricular activities. She is beginning the job search process to seek a full time position after graduation. She joins two online job placement websites. These sites allow her to post her resume and search through job openings, and they also send her weekly updates of new jobs that match her interests. The job placement websites also have message boards and chat rooms for fellow job hunters to share advice and encouragement. Sara notices several advertisements on these websites that offer services to job seekers. Since some of her job applications require a written essay, she is especially interested in one website that offers an essay-editing service for a fee. Sara posts a question on the discussion board to find out if anyone else has used this service. After receiving several good reviews, Sara writes her essay and then uploads it to the service and pays her fee. A week later, the revised essay is e-mailed to Sara. The essay had been changed substantially. Sara's original idea was there, but most of the writing was new. She realized this essay was much better than her original and submitted it with her job application and resume.

Social Media

Jennie and Grace are rooming together in the freshmen dorm, and the two of them seem to be getting along well. They are both in the room when Grace needs to leave to take laundry from the dryer. While she is gone, Grace receives a text message on her phone which she has left in the dorm room. Jennie reads the text message. The message is from one of Grace's friends asking how the "snobby" roommate is working out. This upsets Jennie so she posts a comment to Facebook regarding Grace's weekend escapades. The Facebook comments are viewed by prospective sorority sisters. Grace is not invited to join any of the sororities.

Table 1. Scenarios

The participants for this study included undergraduate students from two southwestern universities in the United States. Student participation was completely voluntary and anonymity was maintained as only aggregate responses would be reported. Fifty-three responses from students at one university and 33 from the other university were collected. All of the students were in junior or sophomore level business classes. Table 2 contains detailed demographic information from the sample. Ninety-three percent of the participants were between the ages of 18 and 24, and fifty-five percent of them were male. Ninety-one percent of the respondents were classified as sophomores and juniors. Since the context of the decisions in the scenarios is framed in using technology, the participants were asked about their daily use of the following communication tools: Facebook, e-mail, LinkedIn, MySpace, Twitter, text messaging, instant messaging, and chat rooms. These students spend on average 2.39 hours per day and 6.76 average days per week connected with the aforementioned technology tools.

Demographic Variable		MES
Age	18 to 24	93%
	25 and over	7%
Gender	Male	55%
	Female	45%
Major	Accounting	27%
	Finance	19%
	Management	11%
	Marketing	8%
	MIS	5%
	Other/Unknown	30%
Race	African American	13%
	Asian	15%
	Caucasian	58%
	Other/Unknown	14%
Classification	Sophomore	58%
	Junior	33%
	Senior	6%
	Other/Unknown	3%
Days per week using technology tools for communication	Mean	6.76 days
	Std. dev.	2.23 days
Hours per day using technology tools for communication	Mean	2.39 hours
	Std. dev.	2.97 hours

Table 2. Demographic Information

Previously validated scales from extant literature were adapted for this study. Starting with a 33-item instrument across the 5 philosophies, the MES was originally reduced to 14 items (Reidenbach and Robin, 1988) and then ultimately reduced to 8 items (Reidenbach and Robin, 1990). However,

Shawver and Sennetti (2009) developed what they termed a Composite MES. That scale consists of 12 items, and considers egoism and utilitarianism, which are not included in the 8-item scale. We chose to utilize the 12-item scale which is comprised of all 5 ethical dimensions – moral equity, relativism, egoism, utilitarianism, and contractualism. Appendix B provides the details for the Placement Essay scenario including the specific measurement items. SmartPLS Version 2.0 was used to analyze the data following guidelines outlined by Chin (1998). The primary reason that SmartPLS was used is that it is appropriate when data are not normally distributed (Hair et al., 2014), which is the case with this study. Many of the variables were highly skewed. The recommended sample size requirement of 10 observations per construct (Hair et al., 2006) is met with a sample of 87 to analyze each of the dependent variable models with 6 constructs. Additionally, based on Cohen's (1992) statistical power table, the minimum sample size of 70 is required to analyze 5 independent variables using an alpha of 0.05 with statistical power of 80% to detect a R-square greater than or equal to 0.25 (Hair et al., 2014). Nomological, convergent, and discriminant validity were applied to assess the validity of the constructs. All of the construct scales for this study were previously validated in extant research providing nomological validity; convergent validity was assessed in four ways: examination of factor loadings, Cronbach's alpha, composite reliability (CR), and the average variance extracted (AVE). Table 3 includes the mean, standard deviation, AVE, Cronbach's alpha, and composite reliability for each of the constructs. Analysis of the factor loadings and cross loadings for each of the three scenarios showed all loadings greater than 0.70 as recommended by Hair et al. (2006). Additionally, the average variance extracted was greater than 0.50 as recommended by Chin (1998) for all variables and scenarios except moral equity for DV2 on the *social media* scenario. The Cronbach's alpha and composite reliability were greater than 0.70 (Fornell and Larcker, 1981). The square root of the AVE was compared to the construct correlations and in each case the square root of the AVE was greater than the correlations, indicating discriminant validity.

4. RESULTS

Considering the three scenarios and three different potential dependent variables for each scenario, we analyzed a total of nine structural models. The standard bootstrap resampling procedure in SmartPLS was used to test each model and determine the significant paths. Contractualism, utilitarianism, egoism, relativism, and moral equity were all modeled as reflective constructs. Table 4 shows the significant paths for each of the three models per scenario as well as the R-square value for each of the nine structural models. First, it is interesting to note that in each of the three

scenarios analyzing DV2 – would your peers do it? – the only significant predictor variable is relativism. This finding is presented and discussed in this section of the paper for parsimony since the result is the same across all three scenarios. Recall that in academic situations, relativism will assess the societal and cultural expectations the student perceives. So for each scenario, the societal and cultural expectations are the dynamics that are influencing the students to determine whether their peers would perform the behavior in question; for most students their beliefs regarding relativism have developed over time beginning with kindergarten through high school and now in college. The majority of the time this group of respondents have been alive, they have been in an academic setting. It is also interesting to note that the R-square for each scenario testing DV2 is relatively low: 0.11, 0.19, and 0.17 for *improper internet citation*, *placement essay*, and *social media* scenarios, respectively. In the next section we discuss the other significant variables for DV1 and DV3 in each of the three tested scenarios.

5. DISCUSSION AND IMPLEMENTATION

There are two levels of behavioral intention – strongly against and neutral represented in the *improper internet citation* scenario and the *placement essay* scenario, respectively. Both scenarios are academic integrity scenarios that include IT. The *social media* scenario representing cyber-bulling is one of the areas frequently addressed in IT ethics courses. Even though all business students may not be required to take a class in IT ethics, this scenario is indicative of the actual environment of most college students. Based on Townley and Parsell's (2004) observations of the Internet, the *social media* scenario would illustrate an example of uninhibited behavior and disregard for ethical standards. The BI is strongly against the behavior illustrated in this scenario. The Association to Advance Collegiate Schools of Business (AACSB) generally expects "individual ethical behavior and community responsibilities in organizations and society" (AACSB website) to be one of the topics covered for those receiving business degrees. More specifically, IS professional associations, such as the Association for Information Technology Professionals (AITP) and the Association for Computing Machinery (ACM), each have a code of ethics which they expect their members to uphold. IS educators have a responsibility to expose those students planning to be IS professionals to these ethical codes and stress the importance and significance of compliance. A responsibility for business educators is to assist in the education of the holistic person – as business school faculty help students to see the importance of applying ethics in all areas of their lives, not just the classroom or academic settings.

	Mean	Standard Deviation	Ave	Comp. Reliability	Cronbach Alpha	Ave	Comp. Reliability	Cronbach Alpha	Ave	Comp. Reliability	Cronbach Alpha
			Values for DV1 -- BI			*Values for DV2 -- PI*			*Values for DV3 -- EA*		
Improper Internet Citations											
Moral Equity	2.00	1.26	0.82	0.95	0.93	0.83	0.95	0.93	0.82	0.95	0.93
Relativism	2.49	1.32	0.81	0.89	0.76	0.79	0.88	0.76	0.81	0.89	0.76
Egoism	1.84	1.25	0.88	0.94	0.87	0.83	0.91	0.87	0.88	0.94	0.87
Utilitarianism	2.26	1.28	0.83	0.91	0.80	0.83	0.91	0.80	0.84	0.91	0.80
Contractualism	2.09	1.38	0.89	0.95	0.88	0.84	0.91	0.88	0.89	0.94	0.88
DV1 – Would you do it?	6.40	1.35									
DV2 – Would your peers do it?	4.30	1.41									
DV3 – Is it ethical?	6.29	1.03									
Placement Essay											
Moral Equity	3.44	0.18	0.86	0.96	0.95	0.86	0.93	0.95	0.86	0.93	0.95
Relativism	3.78	0.17	0.89	0.94	0.87	0.88	0.94	0.87	0.89	0.94	0.87
Egoism	3.31	0.21	0.87	0.93	0.85	0.87	0.93	0.85	0.87	0.93	0.85
Utilitarianism	3.90	0.20	0.86	0.93	0.84	0.85	0.92	0.84	0.86	0.93	0.84
Contractualism	3.29	0.21	0.97	0.98	0.96	0.96	0.98	0.96	0.97	0.98	0.96
DV1 – Would you do it?	4.51	0.21									
DV2 – Would your peers do it?	2.73	0.16									
DV3 – Is it ethical?	4.48	0.18									
Social Media											
Moral Equity	1.71	0.09	0.66	0.88	0.83	0.43	0.73	0.83	0.66	0.89	0.83
Relativism	2.41	0.14	0.86	0.93	0.84	0.86	0.93	0.84	0.86	0.93	0.84
Egoism	1.74	0.11	0.72	0.84	0.68	0.72	0.83	0.68	0.75	0.86	0.68
Utilitarianism	1.66	0.09	0.80	0.89	0.75	0.73	0.84	0.75	0.81	0.89	0.75
Contractualism	2.24	0.16	0.90	0.95	0.89	0.85	0.92	0.89	0.90	0.95	0.89
DV1 – Would you do it?	6.62	0.08									
DV2 – Would your peers do it?	3.58	0.19									
DV3 – Is it ethical?	6.37	0.11									

Table 3. Descriptive Statistics and Psychometric Measurement Validation

Variable	IMPROPER INTERNET CITATION			PLACEMENT ESSAY			SOCIAL MEDIA		
	dv1 BI	dv2 PI	dv3 EA	dv1 BI	dv2 PI	dv3 EA	dv1 BI	dv2 PI	dv3 EA
Moral Equity			X			X	X		X
Relativism		X			X	X		X	
Egoism	X			X			X		
Utilitarianism			X				X		
Contractualism	X								
R-square	0.64	0.11	0.48	0.55	0.19	0.80	0.28	0.17	0.44

Table 4. Significant Variables by Scenario

The theoretical contributions of this study come from the identification of which ethical theories were significant in predicting the various dependent variables for each scenario. MES, an ethics research tool that has not received significant attention in the IS literature, was applied to explain the influences that differing ethical philosophies/theories have on the ethical judgments of college students involving IT. A better understanding of student decision making in these settings can help faculty clearly set expectations for student responsibilities. Moral equity (significant in four models) was one philosophy that most frequently predicted the student judgments. This finding suggests that students respond to an overall sense of fairness in evaluating questionable behavior. Faculty and campus administrators can capitalize on this knowledge by explaining policies in a way that shows how the behavior of one ultimately affects the fairness to the whole group. Current students may not readily consider the campus community as a whole, and bringing this to their attention can appeal to their reliance on fairness. The other philosophy that also was significant in 4 models was relativism, the only significant predictor for DV2 (peer intention) in all three scenarios. Students are both culturally and traditionally influenced regarding the perception of what their peers should or should not do for all three of the scenarios. Relativism also influenced student awareness in the *placement essay* scenario.

The practical implications of this study will be addressed by providing specific examples of how these scenarios may be used in a class setting. As previously indicated, the GVV pedagogy takes a step beyond traditional discussion of ethics to include *skills* that students can use to implement ethical choices rather than just recognizing the ethical dilemma. Applying the MES findings to the GVV pedagogy, common rationales and levers can be developed and discussed in class settings that will aid in preparing students for sound ethical decision making. In a class setting, instructors should develop a plan for approaching the discussion such as follows. Students should read and analyze the scenario given. Then, the instructor should ask the class for common rationalizations that might be made to justify the behavior in the scenario. Making a list of these rationalizations on a whiteboard will aid in the discussion and understanding for the students. Next, the instructor should provide levers that can be used to question the rationalizations. Students can also provide levers that will counter the rationalizations on the list. These too should be written on the whiteboard. Finally, students need to practice the levers. Students can work in a group setting. One or more students should be allowed to rationalize the behavior in the scenario and other students in the group should use the appropriate lever(s) to counter the rationalizations given. This immediate feedback will show students that for every rationalization, or excuse, that can be made, there is a way to prove the invalidity of the excuse. It will also show students that behaving ethically is a choice. This interactive learning in which students articulate rationalizations and levers to counter them can assist students in developing skills to implement ethical choices and also provide an opportunity to enhance communication skills. After this initial scenario, a second scenario should be given that allows the students to complete the above process in their group again without the class discussion. This will permit all students to identify rationalizations and practice levers so that the appropriate, ethical action can be identified.

Below is a full discussion of this study's findings for each scenario assessed, along with practical ways the scenarios and their findings can be used in the classroom to identify rationalizations and levers from the GVV pedagogy. Given that previous studies have shown that the scenario itself can influence behavioral intention and result in different variables of significance (Banerjee, Cronan, and Jones, 1998; Leonard, Cronan, and Kreie, 2004; Loch and Conger, 1996), each scenario is discussed separately, with varying influencers on behavioral intention and ethical awareness.

5.1 Improper Internet Citation Scenario
As illustrated in Table 4, for the *improper internet citation* scenario, egoism and contractualism are significant in predicting DV1 – behavioral intention, while moral equity and utilitarianism are significant in predicting DV3 – ethical awareness. We use these to identify common rationalizations that might be encountered by students.

Rationalizations:
- The instructor will never know the paragraphs were copied (i.e., egoism).
- A citation at the end is good enough (i.e., contractualism).
- I don't want the instructor to know that I copied exactly so I'm not going to use quotes (i.e., egoism).
- It is okay to copy because it doesn't hurt anyone (i.e., moral equity).
- I'm in a hurry and copying will be best for me today (i.e., utilitarianism).

These are examples of rationalizations that students could identify in class discussion based on the factors identified in this study as being influencers on behavioral intention and ethical awareness. In order to combat these common rationalizations, instructors can present levers that are used to question the rationalizations. The below levers can be used by an instructor to get discussion started and allow students to identify additional levers during the class session.

Levers:
- Copying is plagiarism and could result in failure of the course or even university dismissal.
- Starting the copying habit now could result in copying more often in the future.
- Would I be comfortable if everyone in the class knew this was how I wrote my essay?

Finally, the GVV approach emphasizes giving the students scripts to use to act on ethical choices. Instructors can allow students to practice with each other by asking them to present their arguments to a friend who wanted to use the information from the Internet without properly citing it. As previously indicated, this can be done during class discussion so that the instructor may get immediate feedback regarding how the students' actions affected the class's feelings towards intention and awareness. Students should realize the appropriate action in this scenario is to rewrite the material in his/her own words or to used quotation marks so that plagiarism is not an issue.

5.2 Placement Essay Scenario
The *placement essay* scenario provides a platform for instructors to discuss how academic integrity applies to the workplace. This scenario is relevant for not only graduating students but those undergraduate students who may be seeking an internship. For the *placement essay* scenario, egoism significantly influences behavioral intention, while moral equity and relativism are significant predictors of ethical awareness. Based on these influencers, below are some common rationalizations that could be identified by students in class discussion and the corresponding levers to counter those rationalizations.

Rationalizations:
- No one will ever know it is not my work in the essay and this better essay could help me to get the job (i.e., egoism).
- It doesn't hurt other applicants as they could use the service as well (i.e., moral equity).
- Business professionals will require my writing skills to be great so I must use the service in order to get the job (i.e., relativism).

Levers:
- If the employer learns the essay was written by someone else, both my writing and my integrity will be questioned and I will lose this opportunity. This is too risky.
- The essay does not represent my writing abilities and those same abilities will be expected on the job. In the long run, this could cause me to lose the job.
- I do not want to misrepresent who I am. I cannot continue to use someone else's writing as my own.

Instructors will want to allow students to generate their own rationalizations and levers. Those presented above can be added if the students do not include them in the discussion. The class discussion should focus on the action needed to represent students' values. In this case, the required action may be to use the original essay or even to write an entirely new essay to submit. Students must identify or realize that this is the appropriate, ethical action.

5.3 Social Media Scenario
In the *social media* scenario, moral equity, egoism, and utilitarianism are significant predictors of behavioral intention, while moral equity is the only significant predictor of ethical awareness. Therefore, some common rationalizations and levers might be as follows.

Rationalizations:
- I was wronged, so this is payback (i.e., moral equity).
- My feelings were hurt so I will feel better if her feelings are hurt too (i.e., egoism).
- I'm saving the sororities from having to deal with this person so I'm helping them (i.e., utilitarianism).

Levers:
- Social media comments reflect back on me and create perceptions of my character.
- Poor comments made by me on social media can adversely affect my reputation on the university campus.
- Is there another alternative for me for deal with the conflict privately?

Since this scenario involves multiple participants, students can develop scripts of how each of the girls in the scenario could approach the situation in accordance with their values. Instructors can assign roles to groups in the class and then let each group present their script. The class can evaluate the responses. The goal is to focus on creating a way for the students to express their values. Instructors

can use the GVV method to put the students past the debate stage and into the implementation stage by focusing on variables that impact intention and awareness.

Admittedly, from the media exposure regarding ethical violation in business practices, dating back to the Enron scandal in 2001 to the more recent investigations of multiple lending institutions, to the numerous colleges and universities dealing with student cheating cases, the pertinence of ethics education in business remains at the forefront. One of the strongest practical implications of this study is the application of the findings to the classroom for faculty teaching ethics and IT. Because the study uses academic-based scenarios that are relevant to college students, the scenarios can be utilized as a foundation for classroom discussions. Through class discussion and the application of the GVV, faculty can emphasize both the ethical use of IT and illustrate the unethical use of IT. Interactive learning can be facilitated by engaging the students in dialogues applying common rationales and levers of improper and proper behavior regarding their use of IT. In particular, discussions of individual intention, peer intention and ethical awareness can enhance student understanding and expand their mental model for the importance of ethics in business. Faculty could also include a discussion of the antecedents/influencers: moral equity, egoism, relativism, contractualism, and utilitarianism. In the next section, we address the limitations of this study as well as provide suggestions for future research.

6. LIMITATIONS

As with all studies, limitations exist. First, student subjects were selected from private universities in geographically similar locations. It is possible that geographical location could produce cultural influences that impact one's judgment. Future research could include subjects attending both public and private universities in different regions of the United States as well as different countries to allow for a comparison across international cultures. The second limitation is that students provided self-reported judgments about their behaviors; the researchers did not observe or report any actual behaviors. Future research could expand on this study by including data captured from classroom discussions to identify weaknesses in students' ethical frameworks. Content analysis could be used to analyze transcripts of classroom discussions and expand the current MES framework to include additional antecedents to individual intention, peer intention, and ethical awareness. The application of GVV to classroom discussions could also provide additional insight into potential antecedents.

7. FUTURE RESEARCH

Additionally, future research should expand this study by creating more IT scenarios with a variety of applications. Scenarios addressing IT and work place settings should be developed, tested, and used in classroom discussions to better prepare students for ethical challenges they may face once they are employed in an internship or after graduation. Future research should also apply ideas for classroom activities using these three scenarios by collaborating with instructors in France, Germany, India, and so forth. Researchers would be able to assess cultural differences across many universities and countries by applying the same scenario in similar courses offered in each university. Another opportunity for future research would be to develop additional instructional materials for other scenarios/cases employing IT that could be used following the *Giving Voice to Values* approach. This idea could be expanded to apply the *Giving Voice to Values* approach to using an ethical decision making scenario in observation of virtual teams. By applying the case to virtual teams, future research could potentially uncover ethical, cultural, regional, technological, and communicational differences across the members of the virtual team.

8. CONCLUSION

This study used the MES to assess three scenarios involving student behavior using IT. Using the MES research framework, moral equity, relativism, egoism, utilitarianism, and contractualism were assessed as to influences on behavioral intention, peer intention, and ethical awareness. This study found various influencers depending on the scenario in question. The MES findings were applied to GVV in order to provide illustrations of common rationales and levers that can be used by instructors in classroom discussions for each scenario. A plan is given regarding how to use the scenarios in class discussion, how common rationalizations and levers can be identified, and how instructors can help students to use the rationalizations and levers to identify the appropriate ethical course of action. This study provides scenarios that are applicable to students across the globe and therefore provides reasoning that can be used by instructors in classroom settings to improve ethical decision making of students.

9. ENDNOTES

Donald McCabe published numerous articles related to academic integrity during his career. This book summarizes much of his research, McCabe, D., Butterfield, K., and Trevino, L. (2012) *Cheating in College: Why Students Do It and What Educators Can Do About It*, The Johns Hopkins University Press.

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APPENDIX A. GIVING VOICE TO VALUES SUMMARY

Curriculum

In addition to the book, Gentile has compiled a full curriculum that she makes available online (www.GivingVoiceToValues.org). The curriculum includes readings, exercises, videos and numerous cases that require students to develop scripts and plans to act on their values in a variety of situations. The approach to cases asks students to first identify common rationalizations that they might have for not acting on their values in this circumstance. Next, students use levers to question these rationalizations systematically. Going through this thought experiment, as described by GVV, positions the students to prepare their responses for action. Students practice with their peers and develop confidence in using the levers to voice their values.

Common Rationalizations

Common rationalizations include responses such as the following:
- This is beyond my responsibility.
- This is a small amount and will not be noticed.
- This is common practice.

Levers

Frequently used levers include responses such as the following:
- Fraud in any amount is significant.
- Consider the long term as well as the short term.
- Recognize that an unethical choice now can lead to an addictive cycle.

References for Other Implementations of GVV

The GVV method is being utilized internationally by colleges and universities, as well as directly in corporate training (Arce and Gentile, 2015). It has also been demonstrated to be effective in a variety of business disciplines. McKone-Sweet, Greenberg, and Wilson (2011) describe using GVV to train entrepreneurs. Arce (2011) uses the approach in finance and economics. Trefalt (2011) explains how GVV was integrated across an entire MBA curriculum. Further, Ingols (2011) demonstrates how including a GVV approach to teaching business ethics improved assessment of learning efforts. And Cote, Goodstein, and Latham (2011) illustrate how the model can be used to link teaching and research for faculty members.

APPENDIX B. INSTRUMENT ITEMS

Scenario – Placement Essay

Sara is a senior at ABC University. She has earned very good grades and participates in a number of extracurricular activities. She is beginning the job search process to seek a full time position after graduation. She joins two online job placement websites. These sites allow her to post her resume, search through job openings, and they also send her weekly updates of new jobs that match her interests. The job placement websites also have message boards and chat rooms for fellow job hunters to share advice and encouragement. Sara notices several advertisements on these websites that offer services to job seekers. Since some of her job applications require a written essay, she is especially interested in one website that offers an essay-editing service for a fee. Sara posts a question on the discussion board to find out if anyone else has used this service. After receiving several good reviews, Sara writes her essay and then uploads it to the service and pays her fee. A week later, the revised essay is e-mailed to Sara. The essay had been changed substantially. Sara's original idea was there, but most of the writing was new. She realized this essay was much better than her original and submitted it with her job application and resume.

Example questions for Scenario:

DV1 – Would you do it?
The probability that I would undertake the same action as Susan is:
High 1   2   3   4   5   6   7 *Low*

DV2 –Would your peers do it?
The probability that others my age would undertake the same action as Susan is:
High 1   2   3   4   5   6   7 *Low*

DV3 – Is it ethical?
The action by Susan is:
Ethical 1   2   3   4   5   6   7 *Unethical*

MES Scale:
With respect to the action by Susan, I would consider it:

Moral Equity
Unjust 1   2   3   4   5   6   7 *Just*
Unfair 1   2   3   4   5   6   7 *Fair*
Not morally right 1   2   3   4   5   6   7 *Morally right*

Relativism
Not acceptable to my family 1   2   3   4   5   6   7 *Acceptable to my family*
Culturally Unacceptable 1   2   3   4   5   6   7 *Culturally Acceptable*
Traditionally Unacceptable 1   2   3   4   5   6   7 *Traditionally Acceptable*

Egoism
Not self-promoting for me 1   2   3   4   5   6   7 *Self-promoting for me*
Not personally satisfying for me 1   2   3   4   5   6   7 *Personally satisfying for me*

Utilitarianism
Produces the least utility 1   2   3   4   5   6   7 *Produces the greatest utility*
Minimizes benefits while maximizes harm 1   2   3   4   5   6   7 *Maximizes benefits while minimizes harm*

Contractualism
Violates an unwritten contract 1   2   3   4   5   6   7 *Does not violate an unwritten contract*
Violates an unspoken promise 1   2   3   4   5   6   7 *Does not violate an unspoken promise*

STATEMENT OF PEER REVIEW INTEGRITY

All papers published in the Journal of Information Systems Education have undergone rigorous peer review. This includes an initial editor screening and double-blind refereeing by three or more expert referees.