J Acad Ethics (2017) 15:141–166
DOI 10.1007/s10805-017-9273-2

Ethical Behavioral Intention in an Academic Setting: Models and Predictors

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Published online: 30 January 2017

Abstract This study examines the theory of planned behavior (TPB) and the multidimensional ethics scale (MES). Variables from both are included to determine which ones significantly correlate with student ethical behavioral intention in an academic setting. Using a survey, responses are collected from undergraduate business students from two southwestern universities in the United States using a scenario-based approach, looking at individual situations and group situations. SmartPLS was used to assess the results for four scenarios. From the theory of planned behavior, attitude was a significant predictor of behavioral intention across all four scenarios while subjective norm was significant in one scenario. From the multidimensional ethics scale, moral equity and relativism were significant in one group scenario while moral equity and utilitarianism were each significant in an individual scenario. The findings indicate support for the use of the TPB and the MES when exploring ethics in an academic setting and for the need to study both individual and group situations. A discussion of the findings and implications is given.

Keywords Ethical behavior · Multidimensional ethics scale (MES) · Theory of planned behavior (TPB)

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Introduction

Contemporary students interact with one another and with the academic faculty through multiple means, many involving technology. With the Internet, cell phones, and wifi, students have virtually any information they need at their fingertips. However, this degree of connectivity and access to information produces ethical situations that did not exist for previous generations. For example, Hinman (2005) explains that before the Internet, plagiarism was, "tedious, time consuming, and required some forethought in most cases" (p. 49). This is no longer the case as plagiarism, either of entire works or pieces of other works, is now the quick and easy alternative to producing original writing. In addition, constant connectivity allows students to communicate without face to face interaction. Requests and suggestions that some might be intimidated to make in person are easier to broach via email, instant messaging, and texting. Further, sharing work via the Internet can now be facilitated with a sense of anonymity which reduces the sense of personal responsibility for one's actions. This creates the need for faculty to find ways to teach proper ethical conduct in a higher education environment that is completely facilitated by the Internet, technology, and connectedness.

The ethical decision-making process for students can be complex. Many researchers have examined numerous factors that influence the ethical decisions of business professionals, students, and segments of the general population. Several articles have summarized the empirical findings of research on ethical decision-making encompassing ethical awareness, judgement, intention and action (Craft 2013; Ford and Richardson 1994; Lehnert et al. 2015; Low et al. 2000; O'Fallon and Butterfield 2005). Within these studies, one subset of work focuses on the behavioral intent of the subjects; however, these studies examine variables from a single model to predict the dependent variable, behavioral intention. While those studies provide valuable insight, more can be learned about this process by examining the value of multiple models and motivational influences in academic settings.

In order to broaden the perspective on ethical decision-making in an academic context, this study examines ethical decision-making by exploring the theory of planned behavior (TPB), which includes multiple factors to explain behavioral intention, and the multidimensional ethics scale (MES), which relies on multiple theories to examine behavioral intention. The TPB and the MES have been used extensively in the ethics literature to help explain the ethical decision-making process (Carpenter and Reimers 2005; Chen et al. 2009; Manly et al. 2014; Nguyen et al. 2008; Nguyen and Biderman 2008; Yoon 2011). However, researchers have not examined both models jointly when evaluating the same decisions. Therefore, this study examines both as to influences on behavioral intention and shows that both contribute when explaining student decision-making in an academic setting. More specifically, this study utilizes student scenarios that require ethical decision-making in individual and in group contexts.

Group context has been demonstrated to influence ethical decision-making (Darley and Latane 1968; Taft and White 2007), with studies showing that individuals behave differently when the decision is not solely theirs (Ellman and Pezanis-Christou 2010) because they feel less responsible for the outcome. In the workplace, group situations are unavoidable. In fact, evidence indicates that group work has been increasing in the workplace since the 1980s (Devine et al. 1999; Fay et al. 2015; Ilgen 1999; Jones and Kato 2011). Given that the context (group versus individual) can be a determining

factor in ethical decision-making for students, this study explores academic situations that involve individual decision-making and group decision-making so that a comparison can be made. In order to accomplish this, a scenario-based survey is utilized.

The remainder of this paper is organized as follows. First, background literature regarding the TPB and MES is provided. Then, hypotheses and the proposed research models are presented. Next, the methodology utilized is presented along with results of the analyses. Finally, a discussion of implications and conclusions is provided.

Background

"Things that you do wrong at school are not as important as when you do it in the workplace, where it can affect your career" – student comment (Woodbine and Amirthalingam 2013, p. 321). The reality that students do not view academic activities as being significant can be amplified when students work in groups. Dating back to 1968, Darley and Latane showed that having more people involved in decision making can decrease an individual's sense of personal responsibility. Additionally, many papers suggest that individuals will hold themselves more accountable for outcomes when they have more direct control (Cox 2002; Ellman and Pezanis-Christou 2010; Dana et al. 2007), which they do not feel they possess in a group setting. Group situations can therefore influence individual choices and behavior (Taft and White 2007). "Group influences, often fostered through socialization and subtle forms of peer pressure, can enhance, degrade, or otherwise intervene in individual ethical choices" (Taft and White 2007, p. 624). Ethics in education should prepare students to face ethical issues in the workplace whether that is in the individual or group setting. Therefore, this study examines both individual ethical situations and group ethical situations using the TPB and the MES.

Student Studies Using TPB and MES

The TPB model and the MES scale have been studied separately in ethics research with regards to student decision making. For the TPB, several studies have focused on piracy (Chang 1998; Cronan and Al-Rafee 2008; Liao et al. 2010; Phau et al. 2014; Phau and Ng 2010; Plowman and Goode 2009; Robertson et al. 2012; Wang et al. 2009; Yoon 2011) and time theft (Henle et al. 2010) for students. The studies on piracy have examined software and music illegal downloading issues primarily and gathered perceptions regarding how students would intend to behave, as well as their attitude, subjective norm, and perceived behavioral control. More specifically, Yoon (2011) surveyed Chinese university students and found attitude, subjective norms, and perceived behavioral control to influence a student's behavioral intention to commit digital piracy, whether it is software, music, or movies. Robertson et al. (2012) studied student perceptions regarding illegally downloading music. They found both male and female students to be equally likely to illegally download. Cronan and Al-Rafee (2008) surveyed American college students regarding illegally copying or downloading copyrighted software and media files. Using TPB, they found attitude and perceived behavioral control to influence a student's intention to commit piracy. Finally, Henle et al. (2010) surveyed employed undergraduate business students in

order to assess ethical perceptions regarding stealing time at work. They found attitude, subjective norms, and perceived behavioral control to influence a student's intention to steal time at work.

For the MES, studies have focused on issues of morality (Nguyen et al. 2008) and ethical decision making (Robin et al. 1996; Siu et al. 2000) for students. Nguyen et al. (2008) used three of the MES ethics' scales – moral equity, relativism, and contractualism. They surveyed undergraduate university students regarding moral issues related to sales, auto, and retail situations, and they found both men and women to use moral equity and relativism when making judgments regarding the appropriateness of a behavior. Robin et al. (1996) also used three scales of the MES – moral equity, relativism, and contractualism. They surveyed undergraduate and graduate students regarding three real-world situations, and they found the MES to be good a predictor of a student's ethical decision making. Most recently, Kara et al. (2016) studied business students in Turkey to assess the impact of personality, cultural dimensions, religiosity and the five moral philosophies of the MES on ethical decisions using the eight vignettes that Cohen et al. (1996) created and Shawver and Sennetti (2009) also used. The vignettes from the Kara et al. study are much broader and represent a wider range of scenarios (e.g. employee layoff, product safety, bad debt) than those used in this study. Nonetheless, their findings show that MES had the greatest influence on the ethical decisions of the business students.

Both the TPB and MES, as shown above, have been studied using student subjects. While these studies have focused on student perceptions, most did not address actual "student" situations in academia. Digital piracy (as examined in TPB) is an extremely important issue that occurs on college campuses, but it is not unique to the academic environment. The same can be said for the MES scenarios used. Retail scenarios can affect students but they are not academic situations. This study focuses on academic integrity scenarios which differ from prior studies in some important and interesting ways. First, there is no immediate financial gain or loss when a student chooses to behave unethically in an academic setting. Second, students widely perceive cheating in school to be a victimless offense (Bloodgood et al. 2010). They do not perceive that their behaviors have any negative consequences on their instructors or peers. Finally, cheating in education does not break formal laws that lead to potential criminal consequences. Even though college faculty and administrators understand that academic dishonesty undermines the higher education process, students rarely share this understanding. Research that explains student decision-making with respect to specific academic scenarios is beneficial as campuses move toward a culture of learning supported by honesty and integrity. Therefore, the premise of the current study is to examine the TPB and the MES using student subjects in academic situations, with the scenarios representing both individual and group situations. Extending the investigation into both individual and group scenarios provides insight into how group dynamics affect students when making ethical decisions in an academic context. As described earlier, prior research shows that groups often cause people to take less responsibility for their actions. Since academic choices differ from other ethical judgments, evaluating individual and group decisions separately adds to understanding of how the group dynamic works in these decisions. The next section will provide background information regarding the constructs for the TPB and the MES, followed by the hypotheses and the proposed research models.

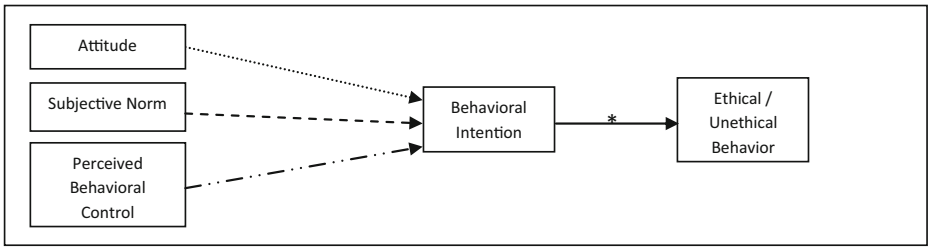
Hypotheses Development

Both the TPB and the MES describe the influences on a person's behavioral intention[1]; therefore, behavioral intention is the commonality between the TPB and the MES. Behavioral intention is one's intention to perform or not perform an act (Fishbein and Ajzen 1975), and is used as a measure of one's intention to behave ethically or unethically. Intentions show the motivation behind a behavior and indicate the amount of effort one is willing to exert to perform a behavior. Therefore, an individual's behavior can be accurately predicted from intentions (Ajzen 1991). Behavioral intention is considered an antecedent to actual behavior and has been tested extensively as such (Banerjee et al. 1998; Leonard and Cronan 2001; Leonard et al. 2004). The TPB indicates that an individual's ethical behavioral intention is determined by three potential antecedents: attitude, subjective norm, and perceived behavioral control. The original literature regarding TPB (Ajzen 1991) does not indicate whether variables contribute equally, but that depending on the behavior under study, the influence of the antecedents may change. According to Ajzen and Fishbein (1980, p. 58), "…variations in any of the four elements defining the behavior (i.e., action, target, context, and time) may influence the relative importance of the attitudinal and normative components." MES specifies that five antecedents: moral equity, relativism, egoism, utilitarianism, and contractualism, are potential determinants of behavioral intention. Two research models are presented to illustrate the TPB and the MES and their corresponding constructs. Figure 1 depicts the behavioral intention (BI) model for the TPB, and Figure 2 depicts the behavioral intention model for the MES. The models depict the expected relationships. The models indicate potential variable influences on behavioral intention but the models do not indicate the extent that each antecedent will influence behavioral intention or that the antecedent influences are equal. The variables for each model are used together to improve the predictive power towards behavioral intention. This study examines both the TPB and the MES to show influences on ethical behavioral intention in academic situations when studying both individual and group situations for students, seeking to determine whether a significant relationship exists for each antecedent. Since both models study the same dependent variable, it is beneficial to know all significant relationships influencing behavioral intention so those antecedents can be incorporated while teaching ethics.

Theory of Planned Behavior

The TPB is an extension of the Theory of Reasoned Action (TRA) (Fishbein and Ajzen 1975). TRA indicates that an individual's attitude toward an act and an individual's subjective norm can be used to explain behavioral intention. The TRA was extended to the TPB by adding perceived behavioral control (Ajzen 1991, 1985, 1989). Therefore, the TPB uses attitude, subjective norm, and perceived behavioral control to explain behavioral intention. By using four illustrative academic scenarios, we propose that a student's ethical behavioral intention, in individual and group situations, relates to these variables: attitude, subjective norm, and perceived behavioral control. Each of these variables is briefly discussed below.

[1] MES can also be used to determine influences on peer intention and ethical awareness. Peer intention is an individual's assessment of how he believes others his age would intend to act in a given situation. Ethical awareness is an individual's assessment of the person's action in the given situation as being ethical or unethical. Since TPB does not assess these dependent variables, they are excluded from the MES assessment for this study.



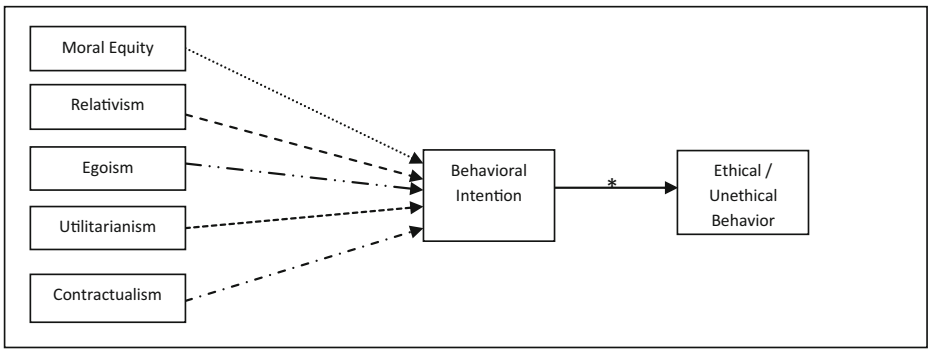
* not measured in this study

Fig. 1 Behavioral Intention Model for TPB

Attitude Attitude is the extent to which one favorably/unfavorably evaluates a behavior (Fishbein and Ajzen 1975) and is indicated as a predictor of behavioral intention in both the TRA and TPB. Attitude has been found to influence behavioral intention in many studies (Chen et al. 2009; Henle et al. 2010; Leonard et al. 2004; Stone et al. 2009). For example, Chen et al. (2009) studied a consumer's behavioral intention to use pirated software using the TPB. They found attitude to positively affect a consumer's behavioral intention to use pirated software. Henle et al. (2010) surveyed undergraduate students to investigate time theft on the job. Leonard et al. (2004) sampled college students in a scenario-based evaluation of the information technology industry situations and they found attitude to influence behavioral intention. Using the TPB, they found attitude to be significantly related to the behavioral intention to steal time at work.

H1a: Attitude will influence behavioral intention in individual student situations.
H1b: Attitude will influence behavioral intention in group student situations.

Subjective Norm Subjective norm (SN), or personal normative beliefs (PNB), is a moral obligation to perform an act (Ajzen and Fishbein 1969; Schwartz and Tessler 1972), and has been found to predict behavioral intention in many studies (Banerjee et al. 1998; Leonard and Cronan 2001; Leonard et al. 2004; Henle et al. 2010; Simkin and McLeod 2010; Stone et al. 2009). For example, Leonard and Cronan (2001) surveyed university students using a scenario-based evaluation of the information technology



* not measured in this study

Fig. 2 Behavioral Intention Model for MES

industry situations and found personal normative beliefs to influence behavioral intention. Simkin and McLeod (2010) studied cheating by surveying students and found subjective norms to influence a student's behavioral intention to cheat. Stone et al. (2009) studied academic misconduct using the TPB. Surveying students, they found subjective norms to be related to a student's behavioral intention.

H2a: Subjective norm will influence behavioral intention in individual student situations.
H2b: Subjective norm will influence behavioral intention in group student situations.

Perceived Behavioral Control Perceived behavioral control is the perceived ease/difficulty of achieving the behavior in question (Ajzen 1991). Perceived behavioral control can be based on past experiences and projected obstacles (Ajzen 1991), and with advancements in technology, one may find behaviors easier to achieve. Perceived behavioral control can also be used to measure one's sense of control when faced with a difficult situation. Perceived behavioral control has been found to influence behavioral intention in many studies (Chen et al. 2009; Henle et al. 2010; Liao et al. 2010; Stone et al. 2009). Henle et al. (2010) surveyed employed undergraduate business students and found PBC to significantly relate to intention to steal time at work. Liao et al. (2010) used the TPB to study pirated software. They surveyed in Taiwan using a Web-based questionnaire and found perceived behavioral control to influence one's intention to use pirated software.

H3a: Perceived behavioral control will influence behavioral intention in individual student situations.
H3b: Perceived behavioral control will influence behavioral intention in group student situations.

Multidimensional Ethics Scale

The MES is used as a predictor of ethical judgment (Reidenbach and Robin 1990) and assumes that more than one justification is used when making an ethical judgment by an individual (Clark and Dawson 1996). The MES considers the work of five ethical philosophies – Justice Theory, Relativism, Deontology, Teleology-Egoism, and Teleology-Utilitarianism – and uses those five philosophies in the scale development. Starting with a 33-item instrument across the five philosophies, the MES was originally reduced to 14 items (Reidenbach and Robin 1998) and then to eight items (Reidenbach and Robin 1990). However, Shawver and Sennetti (2009) developed a 12-item scale that considers egoism and utilitarianism, which are not included in the eight-item scale. The eight-item scale has been found to be valid and reliable (Loo 2004); however, the lack of egoism and utilitarianism has been noted and Loo (2004) suggested that the short eight-item instrument be used when administration time is limited. Therefore, we chose to utilize the 12-item scale which is comprised of all five ethical dimensions – moral equity, relativism, egoism, utilitarianism, and contractualism. Those dimensions are proposed as influences on behavioral intention. Each of the five ethical dimensions is briefly explained below.

Moral Equity Moral equity is a broad-based dimension that can be thought of as part of Justice Theory (Rawls 1971) and deals with "inherent fairness, justice, goodness and rightness." It also implies a sense of family acceptance (Reidenbach and Robin 1990: 645–646). This suggests that the moral equity dimension begins in the home, with early childhood lessons regarding fairness as well as right and wrong. Moral equity has been found to be related to ethical behavioral intention in certain situations (Nguyen and Biderman 2008). Nguyen and Biderman (2008) measured hypothetical behaviors regarding retail, sales, and automobile repair in scenarios. Sampling undergraduate business students, they found moral equity to be related to ethical behavioral intention. Since the current study assesses individual and group situations in academic settings, the conditions will be used to assess how a student's sense of fairness influences behavioral intention under those circumstances.

H4a: Moral equity will influence behavioral intention in individual student situations.
H4b: Moral equity will influence behavioral intention in group student situations.

Relativism Relativism is concerned with the "guidelines, requirements, and parameters inherent in the social/cultural system" (Reidenbach and Robin 1990: 646), suggesting that society and culture are important in determining one's ethical beliefs and that no universal ethical rules exist that govern everyone (Reidenbach et al. 1991). Since society and cultural understanding come later in life, this dimension would also be acquired later in one's developmental stages. Since the current study is assessing academic situations for students, students should have acquired a greater sense of relativism or guidelines since many began school at the age of four or five. The situations presented will be common academic circumstances that students would be aware of.

H5a: Relativism will influence behavioral intention in individual student situations.
H5b: Relativism will influence behavioral intention in group student situations.

Egoism Egoism is concerned with an individual's self-promotion and personal satisfaction (Nguyen and Biderman 2008). It suggests that "it is possible for an individual to help others, help formulate and follow the rules of society, and even give gifts if that person feels that those actions are in his or her own best interests" (Reidenbach et al. 1991: 91). For the current study, individual and group situations will exist in the scenarios. A student's self-promotion could impact his intention to behave ethically when the situation impacts his immediate life.

H6a: Egoism will influence behavioral intention in individual student situations.
H6b: Egoism will influence behavioral intention in group student situations.

Utilitarianism Utilitarianism is concerned with the greatest good for the greatest number of people through a cost/benefit assessment (Nguyen and Biderman 2008). It also implies that individuals should behave as to create the best possible good to counter evil in society (Reidenbach et al. 1991). In the current study's scenarios, the "greatest good" will apply individually in some situations and collaboratively in others. It will be a measure of the greatest good to the individual in her academic career or to the group in the class setting.

H7a: Utilitarianism will influence behavioral intention in individual student situations.
H7b: Utilitarianism will influence behavioral intention in group student situations.

Contractualism Contractualism deals with "the idea of a 'social contract' that exists between business and society" (Reidenbach and Robin 1990: 646) and is part of Deontology theory (Ross 1930). It supports the notion of an implied obligation, rule, duty, or contract. Contractualism entails unspoken promises and unwritten contracts as well. Students being taught about contractualism ethics can result in students who are less likely to behave unethically (Nguyen et al. 2008). Contractualism can begin with the course syllabus and extend into individual assignment requirements or rules. This again can be assessed from an individual or group perspective.

H8a: Contractualism will influence behavioral intention in individual student situations.
H8b: Contractualism will influence behavioral intention in group student situations.

The hypotheses are summarized in Table 1. The next section presents the method used to test the hypotheses.

Method

This study utilizes both scenarios and an instrument to measure the constructs. In order to gather the material needed for this study, first, existing literature was examined for available scales and appropriate scenarios were developed. Next, researchers who had published articles relating to ethics and business professionals who had provided consulting and training in ethics reviewed a draft and a revision of the scenarios and instrument. Eight experts provided comments which were incorporated into the instrument and scenarios. Finally, the instrument and scenarios were pilot-tested on nine graduate student subjects who were enrolled in a graduate business ethics class. Further refinements were made to the scenarios and instrument based on the pilot study feedback.

In order to gather data, undergraduate students from two southwestern universities in the United States were asked to complete a survey which assessed their general perceptions about

Table 1 Summary of hypotheses

	Decision Context	
	Individual (2 scenarios)	Group (2 scenarios)
Attitude	H1a	H1b
Subjective Norm	H2a	H2b
Perceived Behavioral Control	H3a	H3b
Moral Equity	H4a	H4b
Relativism	H5a	H5b
Egoism	H6a	H6b
Utilitarianism	H7a	H7b
Contractualism	H8a	H8b

a series of scenarios presenting ethical situations in academic settings. Of the four scenarios being utilized, two dealt with individual student situations and two with group student situations. The survey contained all four scenarios and the TPB instrument and the MES instrument, including only one measure for behavioral intention.[2] The TPB and MES instrument items were presented in the same order for all four scenarios.

Students were informed that participation was completely voluntary and individual responses would be kept anonymous and only be reported in the aggregate. A total of 90 responses were collected, with 52 participants from one university and 38 participants from the other university. The participants were all students in sophomore or junior level business classes. Eighty-eight percent of the respondents were between the ages of 18 and 24, 92% were classified as sophomores and juniors, and 68% were male. Due to the nature of this study, the participants were asked about their usage of technology tools for communication purposes. The number of days per week as well as the number of hours per day of technology tool usage is reported to show the validity of the student sample and the ability of the students to make a valid judgement regarding the scenarios. Detailed demographic information is given in Table 2.

All instrument measures used have been adapted from previously validated scales. From the TPB, attitude consists of three measures on a 7-pt. scale from 'good' to' bad', 'right' to 'wrong', and 'acceptable' to 'unacceptable' (Banerjee et al. 1998; Schwartz and Tessler 1972); subjective norm consists of one item on a 7-pt. scale from 'no obligation' to 'strong obligation' (Banerjee et al. 1998; Schwartz and Tessler 1972); and perceived behavioral control consists of three items on a 7-pt. scale from 'easy' to 'difficult', 'simple' to 'complicated', and 'under my control' to 'out of my control' (Chen et al. 2009; Liao et al. 2010). From the MES, moral equity consists of three items on a 7-pt. scale from 'unjust' to 'just', 'unfair' to 'fair', and 'not morally right' to 'morally right' (Shawver and Sennetti 2009); relativism consists of three items on a 7-pt. scale from 'not acceptable to my family' to 'acceptable to my family', 'culturally unacceptable' to 'culturally acceptable', and 'traditionally unacceptable' to 'traditionally acceptable' (Shawver and Sennetti 2009); egoism consists of two items on a 7-pt. scale from 'not self-promoting for me' to 'self-promoting for me' and 'not personally satisfying for me' to 'personally satisfying for me' (Shawver and Sennetti 2009); utilitarianism consists of two items on a 7-pt. scale from 'produces the least utility' to 'produces the greatest utility' and 'minimizes benefits while maximizes harm' to 'maximizes benefits while minimizes harm' (Shawver and Sennetti 2009); and contractualism consists of two items on a 7-pt. scale from 'violates an unwritten contract' to 'does not violate an unwritten contract' and 'violates an unspoken promise' to 'does not violate an unspoken promise' (Shawver and Sennetti 2009). Finally, behavioral intention is measured by one item on a 7-pt. scale from 'highly probable' to 'highly improbable' (Fishbein and Ajzen 1975; Banerjee et al. 1998). Actual behavior is not measured in this study. Appendix 1 provides a summary of the sources for each construct instrument. Appendix 2 provides the specific measurement items for the TPB and the MES for each of the four scenarios. Finally, Appendix 3 summarizes the scenarios used in the study. Descriptive titles are provided for each scenario and will be referenced throughout the remainder of the paper.

[2] Even though MES can be used to assess three dependent variables – behavioral intention, peer intention, and ethical awareness – only behavioral intention was gathered for this study since behavioral intention is the common dependent variable between the MES and TPB.

Table 2 Demographic data

Demographic Variable		Survey (n = 90)
Age	18 to 24	88%
	25 and over	12%
Gender	Male	68%
	Female	32%
Major	Accounting	20%
	Finance	24%
	Management	16%
	Marketing	7%
	MIS	9%
	Other/Unknown	24%
Race	African American	10%
	Asian	31%
	Caucasian	44%
	Other/Unknown	15%
Classification	Sophomore	48%
	Junior	44%
	Senior	7%
	Other/Unknown	1%
Days per week using technology tools for communication	Mean	6.28 days
	Std. dev.	2.55 days
Hours per day using technology tools for communication	Mean	2.22 h
	Std. dev.	2.11 h

SmartPLS Version 2.0 was used to analyze the data for each of the models, following guidelines outlined by Chin (1998) for reflective measures to evaluate construct reliabilities as well as the discriminant and convergent validity of the model. SmartPLS was chosen because it is well-suited for model comparisons since it shares the same sample size and distribution requirements as ordinary least squares regression (Gefen et al. 2011). SmartPLS is also appropriate for small sample sizes, does not require multivariate normality, and is good for prediction (Chin and Newsted 1999). Based on the guidelines of Hair et al. (2011) that the sample size be at least ten times the largest number of structural paths, the sample in this study is appropriate (n = 90 versus requirement of 50 minimum based on model for testing MES with five structural paths). Construct validity is assessed by using nomological, convergent, and discriminant validity. Nomological validity was assessed by using previously validated scales for all of the constructs; convergent validity was assessed using factor loadings, composite reliability (CR), the average variance extracted (AVE), and Cronbach's alpha. The factor loadings and cross loadings were analyzed for each of the four scenarios and all loadings were greater than 0.70 as recommended by Hair et al. (2006), indicating appropriate convergence of the item to its factors. Each construct had a Cronbach's alpha and/or composite reliability greater than 0.7 (Fornell and Larcker 1981), as well as an average variance extracted greater than 0.5 as recommended by Chin (1998). See Table 3 for the descriptive statistics and psychometric measurement validation for each of the scenarios. In order to show the mean and standard deviation in Table 3 for each construct, an average of the individual items for that particular construct was calculated. For the placement essay, chat room, and collaborative programming scenarios, a low behavioral intention value indicates a higher probability of engaging in unethical behavior. For the Internet plagiarism scenario, a low behavioral intention value indicates a higher probability of engaging in ethical behavior. The mean for attitude in the placement essay scenario was 4.53, indicating that the average of the respondents leaned

Table 3 Descriptive statistics and psychometric measurement validation

	Mean*	Standard Deviation	AVE	Composite Reliability	Cronbach's Alpha
Placement Essay					
Attitude+	4.53	1.74	0.85	0.94	0.91
Subjective Norm	4.23	1.98	1.00	1.00	1.00
Perceived Behavioral Control	3.38	1.56	0.60	0.71	0.61
Moral Equity	3.22	1.59	0.85	0.96	0.94
Relativism	3.56	1.62	0.89	0.94	0.88
Egoism	3.32	1.71	0.77	0.87	0.72
Utilitarianism	3.73	1.68	0.78	0.88	0.72
Contractualism	3.11	1.81	0.98	0.99	0.98
Behavioral Intention	4.36	2.11	1.00	1.00	1.00
Internet Plagiarism					
Attitude	2.31	1.33	0.87	0.95	0.92
Subjective Norm	5.80	1.41	1.00	1.00	1.00
Perceived Behavioral Control	3.05	1.54	0.65	0.85	0.72
Moral Equity	5.05	1.45	0.89	0.97	0.96
Relativism	5.16	1.41	0.83	0.91	0.82
Egoism	4.15	1.45	0.81	0.89	0.82
Utilitarianism	4.19	1.43	0.84	0.91	0.81
Contractualism	4.83	1.78	0.97	0.98	0.97
Behavioral Intention	2.78	1.62	1.00	1.00	1.00
Chat Room					
Attitude	3.39	1.48	0.76	0.90	0.84
Subjective Norm	4.01	1.69	1.00	1.00	1.00
Perceived Behavioral Control	3.76	1.49	0.65	0.84	0.72
Moral Equity	3.65	1.21	0.61	0.86	0.78
Relativism	4.46	1.53	0.84	0.91	0.80
Egoism	3.17	1.41	0.87	0.93	0.85
Utilitarianism	4.00	1.33	0.82	0.90	0.78
Contractualism	3.13	1.59	0.95	0.98	0.95
Behavioral Intention	2.51	1.72	1.00	1.00	1.00
Collaborative Programming					
Attitude	4.83	1.77	0.88	0.96	0.93
Subjective Norm	4.14	1.92	1.00	1.00	1.00
Perceived Behavioral Control	3.44	1.56	0.65	0.82	0.75
Moral Equity	3.13	1.34	0.79	0.94	0.91
Relativism	3.79	1.56	0.87	0.93	0.85
Egoism	3.47	1.54	0.84	0.91	0.81
Utilitarianism	3.86	1.50	0.83	0.90	0.79
Contractualism	2.70	1.49	0.96	0.98	0.96
Behavioral Intention	4.34	1.91	1.00	1.00	1.00

+all items for each variable are on a scale of 1 to 7

*represents the average of the measures used for each variable

toward Sara's decision to submit the edited essay as bad, wrong and unacceptable. Using this same scenario, the mean for moral equity was 3.22, indicating that the average of the respondents leaned toward Sara's action being unjust, unfair, and not morally right.

When applying Smart PLS, each individual item is used initially for assessing the measurement model. As long as each item meets the guidelines for sound psychometric properties, it is retained and used in the structural model. Discriminant validity can be assessed by comparing the square root of the AVE to the correlations. Since the square root of the AVE is larger for each construct than any of the corresponding factor correlations, discriminant

validity of the constructs is shown. Based on these results of various tests, our model meets or exceeds the rigorous standards expected in information systems research (Straub et al. 2004). As the measurement model demonstrated adequate validity, the structural model was evaluated next and the results are presented. All of the individual items for each construct were retained for the structural model assessment of each scenario.

Results

The hypotheses were assessed using structural models. In order to test the structural models for TPB and MES, the standard bootstrap resampling procedure in SmartPLS was used, with each construct being analyzed as a reflective construct. In PLS, R^2 is a measure of the prediction quality of the structural model and gives an indication of the percentage of explained variance of that latent construct as driven by the indicator constructs. Table 3 provides details regarding the structural model results for the survey. The mean values reported in Table 3 represent the average score of the measures for each variable. For example, for the attitude variable in the placement essay, the reported mean is the average of the three questions used to measure attitude (refer to Appendix 2 for the construct questions).

The results of the analysis indicate varying levels of support for the hypotheses. For clarity, the subscript "a" on the hypothesis number symbolizes the individual decision context scenarios while the subscript "b" on the hypothesis number symbolizes the group decision context scenarios. TPB is evaluated by assessing attitude (H1a), subjective norm (H2a), and perceived behavioral control (H3a) in the two scenarios using individual context (placement essay, Internet plagiarism). The estimations for both scenarios are significant with strong predictive ability (R^2 = 0.60, placement essay; R^2 = 0.52, Internet plagiarism). Attitude (H1a) is found to be positive and significant in both scenarios and subjective norm (H2a) is found to be positive and significant in one scenario. No support is found for H3a (perceived behavioral control) in either scenario.

TPB variables are also tested in the two scenarios using group context (chat room, collaborative programming). The results from those two estimations show good predictive ability (R^2 = 0.43, chat room; R^2 = 0.47, collaborative programming). Attitude (H1b) is found to be a positive and significant predictor of behavioral intention in both scenarios. No significance is found for H2b (subjective norm) and H3b (perceived behavioral control).

For the MES and the individual context scenarios (placement essay, Internet plagiarism), moral equity (H4a), relativism (H5a), egoism (H6a), utilitarianism (H7a), and contractualism (H8a) are assessed. The two scenarios are significant but with lower predictive ability (R^2 = 0.38, placement essay; R^2 = 0.13, Internet plagiarism) than the results applying the TPB. Utilitarianism (H7a) is found to significantly relate to behavioral intention with a negative coefficient in one scenario. This indicates that students who employ greater degrees of utilitarian thinking responded with less ethical behavioral intent. The only significant independent variable in the Internet plagiarism scenario is moral equity (H4a) which has a negative coefficient. As students rely more on moral equity in evaluating the scenario, their scores on behavioral intention decrease (low value indicates ethical behavior). H5a, H6a, and H8a are not found to be supported, where as H4a and H7a are partially supported. The models are significant, but the R^2 and the number of significant variables are both relatively low.

The MES is also tested in the group context scenarios (chat room, collaborative programming). The estimation for the chat room scenario did not produce a significant model

indicating the MES predictors do not significantly relate to behavioral intention. The results for the collaborative programming show a significant model with $R^2 = .23$. Two of the predictors are significant. Moral equity (H4b) negatively relates to behavioral intention while relativism (H5b) positively relates to behavioral intention. Therefore, H4b and H5b are partially supported, and H6b, H7b, and H8b are not supported.

Table 4 details the results for the hypotheses. Table 5 summarizes those findings. Additionally, mean behavioral intention scores were recorded for the survey. As previously discussed, higher values represent more ethical behavioral intention for three of the scenarios, while a high value on the Internet plagiarism scenario represents unethical behavioral intention; these values are presented in Table 3. Further assessment of these findings will be provided in the next section.

Discussion

This study examines a previously utilized theoretical model, the TPB, and a previously utilized scale, the MES that can be used to explain behavioral intention. The findings indicate that the TPB model and the MES may be used to explain a portion of behavioral intention for all four scenarios examined. From Table 3, the mean for behavioral intention for the internet plagiarism scenario (mean = 2.78, low value indicates ethical behavior) is the strongest followed by the placement essay scenario (mean = 4.36, high value indicates ethical behavior), and then the collaborative programming scenario (mean = 4.34, high value indicates ethical behavior), indicating that the respondents' behavioral intention leaned toward the ethical side of the scale for these three scenarios. However, the opposite occurred with the chat room (mean = 2.51, high value indicates ethical behavior) scenario; the mean is closer to the unethical behavioral intention side of the scale. For the individual student situations for the TPB, attitude (H1a) is found to influence behavioral intention in both scenarios, subjective norm (H2a) in one scenario, and perceived behavioral control (H3a) in neither scenario. For the group student situations for TPB, attitude (H1b) is found to influence behavioral intention in both scenarios, and subjective norm (H2b) and perceived behavioral control (H3b) in neither. Therefore, given these findings and the previously indicated predictive ability for each, H1a and H1b are fully supported; attitude is a significant predictor of behavioral intention in all four scenarios, for both individual and group situations. This result is similar to Chen et al. (2009), Henle et al. (2010), and Leonard et al. (2004). H2a, the relationship between subjective norm and behavioral intention was supported in one scenario only, the placement essay scenario. H2b was not supported. One potential explanation for only one scenario having a significant subjective norm was this scenario represented future employment while the other three scenarios were illustrations of academic settings. Students did feel morally obligated to take corrective action with an employer, but there was not any moral obligation for corrective action with the student who plagiarized from the Internet, the student who was a freeloader on a group assignment or the student who collaborated on an individual programming project. This finding is insightful in that it illustrates student perceptions of moral obligation differ based upon the scenario. It is revealing that based on these findings faculty should not expect students to be forthcoming or take corrective action when students witness academic dishonesty. This finding provides a great opportunity for faculty to discuss in the classroom why students may exhibit this behavior. In a study conducted by Woodbine and Amirthalingam (2013, p. 321), they captured the following student comment, "Things that you do wrong at

Table 4 Structural model results

Decision Context	Scenario	Model or Scale	Hypothesis	Relationship	β (t-statistic)	Result	R^2
Individual	Placement Essay	TPB	H1a	attitude - > BI	0.545 (6.059)	Significant***	0.598
			H2a	subjective norm - > BI	0.257 (2.519)	Significant*	
			H3a	perceived behavioral control - > BI	0.127 (1.447)	Not Significant	
		MES	H4a	moral equity - > BI	-0.389 (1.708)	Not Significant	0.381
			H5a	relativism - > BI	0.157 (1.237)	Not Significant	
			H6a	egoism - > BI	-0.039 (0.219)	Not Significant	
			H7a	utilitarianism - > BI	-0.310 (2.113)	Significant*	
			H8a	contractualism - > BI	-0.073 (0.437)	Not Significant	
	Internet Plagiarism	TPB	H1a	attitude - > BI	0.696 (8.392)	Significant***	0.515
			H2a	subjective norm - > BI	-0.038 (0.512)	Not Significant	
			H3a	perceived behavioral control - > BI	0.075 (0.910)	Not Significant	
		MES	H4a	moral equity - > BI	-0.460 (2.708)	Significant**	0.129
			H5a	relativism - > BI	0.194 (1.296)	Not Significant	
			H6a	egoism - > BI	-0.116 (0.665)	Not Significant	
			H7a	utilitarianism - > BI	0.016 (0.124)	Not Significant	
			H8a	contractualism - > BI	0.097(0.787)	Not Significant	
Group	Chat Room	TPB	H1b	attitude - > BI	0.496 (5.042)	Significant**	0.428
			H2b	subjective norm - > BI	0.122 (1.404)	Not Significant	
			H3b	perceived behavioral control - > BI	0.182 (1.586)	Not Significant	
		MES	H4b	moral equity - > BI	-0.148 (1.123)	Not Significant	N/A
			H5b	relativism - > BI	-0.025 (0.237)	Not Significant	
			H6b	egoism - > BI	-0.151 (1.494)	Not Significant	
			H7b	utilitarianism - > BI	-0.117 (0.877)	Not Significant	
			H8b	contractualism - > BI	-0.092 (0.619)	Not Significant	
	Collaborative Programming	TPB	H1b	attitude - > BI	0.526 (5.286)	Significant***	0.469
			H2b	subjective norm - > BI	0.200 (1.607)	Not Significant	
			H3b	perceived behavioral control - > BI	0.074 (0.733)	Not Significant	
		MES	H4b	moral equity - > BI	-0.397 (2.203)	Significant*	0.233
			H5b	relativism - > BI	0.322 (2.270)	Significant*	
			H6b	egoism - > BI	-0.209 (1.385)	Not Significant	
			H7b	utilitarianism - > BI	-0.216 (1.541)	Not Significant	
			H8b	contractualism - > BI	0.134 (0.947)	Not Significant	

*** $p < .001$, ** $p < .01$, * $p < .05$

Table 5 Summary of hypotheses results

	Decision Context	
Model or Scale	Individual (Placement Essay, Internet Plagiarism Scenarios)	Group (Chat Room, Collaborative Programming Scenarios)
TPB	H1a (Attitude) Supported	H1b (Attitude) Supported
	H2a (Subjective Norm) Partially Supported	H2b (Subjective Norm) Not Supported
	H3a (Perceived Behavioral Control) Not Supported	H3b (Perceived Behavioral Control) Not Supported
MES	H4a (Moral Equity) Partially Supported	H4b (Moral Equity) Partially Supported
	H5a (Relativism) Not Supported	H5b (Relativism) Partially Supported
	H6a (Egoism) Not Supported	H6b (Egoism) Not Supported
	H7a (Utilitarianism) Partially Supported	H7b (Utilitarianism) Not Supported
	H8a (Contractualism) Not Supported	H8b (Contractualism) Not Supported

school are not as important as when you do it in the workplace, where it can affect your career." This specific student sentiment is confirmed by the findings in this study.

As previously stated, the context or action of the behavior may influence which antecedent(s) are significant (Ajzen and Fishbein 1980). Regarding the differences found in this study depending on the scenario, Loch and Conger (1996) state that an individual's attitude and ethical behavioral intention can vary by different situations. McNichols and Zimmerer (1985) and Hoffman (1998) found differences in an individual's attitude based on the situation, where attitude was influential in some situations but not all. Banerjee et al. (1998) examined seven different scenarios/situations and Leonard and Cronan (2001) examined five different scenarios. They found that the scenario itself did significantly influence ethical behavioral intention. Finally, Leonard et al. (2004) studied the situation (in five scenarios) and found the variables of significance to vary depending on the scenario. These studies show that the scenario itself plays a part in determining factors of importance to measuring ethical behavioral intention. The current study confirms these previous findings. Teaching ethics is difficult; the instructor must modify discussions based on the situational context and on the comments from students. Therefore, some preparation can be made prior to class but also the instructor has to be able to adjust discussion based on student comments on a topic.

H3a and H3b were not supported in any of the scenarios. The insignificance of perceived behavioral control is not consistent with extant literature. Liao et al. (2010) and Chen et al. (2009) found perceived behavioral control to be significant in predicting behavioral intention to use pirated software while Henle et al. (2010) found it significant for behavioral intention to steal time from an employer. One potential explanation for our lack of findings of significant perceived behavioral control is the possibility of potential financial benefits associated with software piracy and time theft; none of the four scenarios used in this study contained financial benefits. Based on the findings from the TPB applied to both individual and group decision contexts of ethical behavior, attitude is the best predictor of behavioral intention.

For the individual student situations for MES, moral equity (H4a) is found to influence behavioral intention in one scenario, utilitarianism (H7a) in one scenario, and relativism, egoism, and contractualism in neither scenario. For the group student situations for MES, moral equity (H4b) and relativism (H5b) are found to influence behavioral intention for one scenario, while egoism, utilitarianism, and contractualism are not significant. Therefore, partial support is found for H4a, H4b, H5b, and H7a. The sense of fairness, goodness, and justice as represented by moral equity influenced behavioral intention for the group collaborative programming and individual

Internet plagiarism scenarios. Even though these scenarios are different in context, individual versus group, in essence they represent the use of another person's work as one's own. For the chat room scenario, none of the antecedents for MES predicting behavioral intention were significant. It is possible that the lack of any significance may be due to the low mean for behavioral intention indicating the students would be likely to put all four names on the group project, thus not revealing the freeloading student. Since the students in this study did not perceive the action of the group to be unethical, this finding provides an opportunity for faculty to present this scenario for class discussion and emphasize the reasoning why the action of the group in the scenario is unethical. The influence of moral equity on behavioral intention is consistent with Nguyen and Biderman (2008). Moral equity was significant in predicting ethical actions in all eight vignettes in Kara et al.'s., (2016) study of Turkish business students, though only the software scenario was similar in context to those used in this study.

Relativism was also significant in influencing behavioral intention in the collaborative programming scenario. Considering the scenario indicates from the syllabus that the programming is to be completed individually, this represents the guidelines or requirements of the assignment, which symbolizes relativism. Due to the significance of relativism, students recognize the role of the syllabus and the guidelines and boundaries presented therein. This finding is reassuring to academic educators and further validates the importance of stating explicitly the requirements and expectations of each course in the respective syllabus. However, due to the direct relationship between relativism and behavioral intention, the students perceived the collaborative work for the programming assignment to be culturally and traditionally acceptable. This finding illustrates the need for educators to be explicit and clear regarding the appropriateness/inappropriateness of collaborative work on assignments. For those students studying information systems in particular and business in general, group projects are often assigned and collaboration is allowed, thus potentially influencing the perception that collaboration is culturally acceptable. Based on this finding, it is imperative for an instructor to spend class time discussing the appropriateness/inappropriateness of collaboration and to put consequences in place for violation of course policy since the group situation introduces new concerns.

For the placement essay scenario, utilitarianism was the only significant antecedent in predicting behavioral intention indicating that considering the good for society at large impacted ethical behavior. From Table 3, note the utilitarianism mean was lowest in the placement essay scenario compared to utilitarianism in the other three scenarios. Since this scenario was a future oriented employment scenario, it is plausible that the desire to counter evil in society along with previously mentioned student perceptions about workplace importance played a role in this finding. Neither moral equity or relativism were significant for the placement essay scenario indicating that justice, fairness, cultural acceptability and family acceptability were not influential to the students in this study for predicting behavioral intention. For each of the hypotheses that were partially or fully supported in applying the TPB and the MES, we conducted a t-test to see if there was a difference between the male and female students; at alpha = .05, there were no significant differences between the two groups. This finding is not consistent with Klein et al. (2007) who found that female students generally have higher ethical behaviors and attitudes than male students.

This study provides a theoretical contribution to the existing ethics literature. The findings indicate that the TPB and the MES are needed to predict behavioral intention in academic settings. Both the TPB and MES provide some explanatory power and variables of influence depending on the scenario in question. TPB is generally good when predicting behaviors; however, when studying ethics, other scales such as MES and the theories supporting the scale

development should be considered. What works today may not work tomorrow. Behavioral intention will have to be continually assessed as to influencers and the explanatory power of the TPB and the MES. Therefore, considering multiple scales to predict behavioral intention will help researchers to further modify theories and instruments to address the evolving technology perceptions. Additionally, the findings indicate that different influences exist for individual versus group situations in academia. For the individual decision context scenarios, attitude, subjective norm, utilitarianism and moral equity were significant in at least once scenario. For the group decision context scenarios, attitude, moral equity and relativism were significant in at least one scenario. This research shows that attitude and moral equity are both influential in predicting behavioral intention, no matter whether the setting is individual or group. Though we hypothesized differences based upon individual or group setting from prior research (Taft and White 2007), perhaps the findings from this study are more insightful regarding the academic setting or the more futuristic employment setting; utilitarianism and subjective norm were both significant for the future employment placement essay scenario. Conceivably the moral obligation and the concern for the good of society are stronger in business students when they are considering future employment and ethical behavior in the workplace than in an academic setting. Educators can use this knowledge to incorporate more future employment role plays in the classroom; they can also invite guest speakers from industry to address the consequences of unethical behavior in the workplace.

There are implications from this study for researchers and educators. Researchers can use these results to justify the use of TPB and MES in future studies. TPB and MES both have influential constructs on behavioral intention. Previous researchers have indicated differences in findings depending on the situation (for example, Banerjee et al. 1998); however, categories such as group and individual were not assessed in those studies. Additional studies have indicated that group decision-making can be a factor (Taft and White 2007); therefore, more attention should be given with regards to differences in ethical behavior when individual versus group situations are involved. Researchers should also further refine scenarios and models in future studies and be sure to include both academic setting and future employment setting scenarios.

"Just because you know what your morals should be doesn't mean that you employ them personally" and "All of us in this group copied the answer" – are examples of student comments (Woodbine and Amirthalingam 2013, p. 321). Educators can use this study's results to formulate discussions in class. Students must be made aware that behaviors do matter in academia. Universities must emphasize moral development instead of simply managing misbehavior (Woodbine and Amirthalingam 2013). The four scenarios used in this study can be utilized to generate discussion and to create what-if assessments in order to further emphasize the importance of ethical behavior in all facets of academia. Faculty could facilitate role play scenarios with the students during class to address the unethical/ethical issues that may occur in a group setting. Additionally, faculty must emphasize that peer behavior does not have to be one's own behavior. Some students behaving unethically should not be justification for other students' unethical behavior. Potential scenarios from university life, such as hazing in a student organization or competition between students at different universities regarding danger or harm in response to outcomes of athletic events, could be used as an example for class discussion. Faculty should use the student feedback to develop further refinements to the factors of influence on behavioral intention at both the individual and group level.

The use of student subjects brings with it limitations. Student participants provide self-reported judgments regarding behavior; actual behaviors were neither observed nor reported. Additionally, the student subjects were taken from universities in geographically similar locations. This could

create cultural influences that affect one's judgment. However, both universities have students from across the United States and internationally, which hopefully lessens the issue. This study assessed four academic situations. While these situations were appropriate for this study, additional situations should be used in future studies since varying constructs are found significant in the given situations in this study and the scenario itself has been found to impact behavioral intention in prior research (Haines and Leonard 2007; Leonard and Cronan 2001).

Future research should focus on diversifying the sample by soliciting participants from universities beyond the southwestern United States; a comparison of ethical behavior of students across a variety of countries and across different majors could be included. Comparing students from different majors could provide insight to determine if the ethical position of students varies by major or comparison could be made across graduate or undergraduate programs. Researchers could gain insight from comparing graduate (MBA) versus executive graduate programs (EMBA). This might provide important information regarding the applicable accreditation for varying programs.

Additionally, a combined behavioral intention model should be developed which considers further constructs. The TPB and the MES do help to explain behavioral intention but further factors should be addressed. Extensions to the TPB and MES should be considered. In particular, moral judgment has been studied as an influence on behavioral intention (Banerjee et al. 1998) and could prove fruitful as an addition to the current model and scale.

Studies should also consider addressing situations not assessed in the current study; for example, new ethical scenarios should be developed including the use of iphones, ipads, and vision technology screens attached to viewing glasses. As technology continues to change and new innovations are developed, the ethical use of these technologies and the implications of their use in the academic classroom should be explored and studied. Technology changes every day which warrants the continuous evaluation of factors of influence on behavioral intention.

Conclusion

This study examined behavioral intention in an academic-setting by applying the TPB and the MES. Specifically, a survey was used to explore influencers on behavioral intention in both individual and group situations in an academic setting. By studying these theories, researchers are able to discern the influencers on behavioral intention and can use that knowledge to develop a more comprehensive model of behavioral intention. Researchers can use the findings to further refine the models, instruments, and scenarios used in ethics research. Educators should be aware of differing student perceptions regarding ethical behavior of the future workplace versus the current academic setting. Instructors should also be explicit regarding the appropriateness/inappropriateness of group collaboration on the varying assignments, projects, and take-home exams that may be used in a semester. Educators can use these findings and scenarios to create in-class discussions that will further enhance a student's evaluation of both individual and group situations.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

Appendix 1

Table 6 Instrument Sources

Variable	Model or Scale	Source (adapted from)
Attitude	TPB	Banerjee et al. 1998; Schwartz and Tessler 1972
Behavioral Intention	TPB, MES	Fishbein and Ajzen 1975; Banerjee et al. 1998
Contractualism	MES	Shawver and Sennetti 2009
Egoism	MES	Shawver and Sennetti 2009
Moral Equity	MES	Shawver and Sennetti 2009
Perceived Behavioral Control	TPB	Chen et al. 2009; Liao et al. 2010
Relativism	MES	Shawver and Sennetti 2009
Subjective Norm	TPB	Banerjee et al. 1998; Schwartz and Tessler 1972
Utilitarianism	MES	Shawver and Sennetti 2009

Appendix 2 Instrument Items

Table 7 Placement Essay scenario instrument (see Appendix 3 for the exact scenario)

Behavioral Intention: If you were writing an essay for a job application, what is the probability that you would have used the edited essay?	highly probable	1	2	3	4	5	6	7	highly improbable
TPB:									
Attitude: Sara's decision to submit the edited essay was:	good	1	2	3	4	5	6	7	bad
	right	1	2	3	4	5	6	7	wrong
	acceptable	1	2	3	4	5	6	7	unacceptable
Subjective Norms: How morally obligated would you feel to take corrective action in this case and tell the employer that you had used an edited essay?	no obligation	1	2	3	4	5	6	7	strong obligation
Perceived Behavioral Control: Using the edited essay in my job application would be:	easy	1	2	3	4	5	6	7	difficult
	simple	1	2	3	4	5	6	7	complicated
	under my control	1	2	3	4	5	6	7	out of my control
MES:									
With respect to the action by Sara, 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									

Table 8 Internet plagiarism scenario instrument

Behavioral Intention: If you were reviewing the turnitin.com reports, what is the probability you would have given Jason a zero on the paper and reported him for academic misconduct?	highly probable	1	2	3	4	5	6	7	highly improbable
TPB:									
Attitude: Professor Smith's decision to use the turnitin.com report to give Jason a zero on the paper and report him for academic misconduct was:	good	1	2	3	4	5	6	7	bad
	right	1	2	3	4	5	6	7	wrong
	acceptable	1	2	3	4	5	6	7	unacceptable
Subjective Norms: How morally obligated would you feel to take corrective action in this case and call the student into your office to discuss the situation?	no obligation	1	2	3	4	5	6	7	strong obligation
Perceived Behavioral Control: Using the turnitin.com report to give Jason a zero and report him for academic misconduct would be:	easy	1	2	3	4	5	6	7	difficult
	simple	1	2	3	4	5	6	7	complicated
	under my control	1	2	3	4	5	6	7	out of my control
MES:									
With respect to the action by Professor Smith, 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									

Table 9 Chat room scenario instrument

Behavioral Intention: If you were turning in the group assignment, what is the probability that you would have put all four names on the project?	highly probable	1	2	3	4	5	6	7	highly improbable
TPB:									
Attitude: The group's decision to turn in the project with all four names on it was:	good	1	2	3	4	5	6	7	bad
	right	1	2	3	4	5	6	7	wrong
	acceptable	1	2	3	4	5	6	7	unacceptable
Subjective Norms: How morally obligated would you feel to take corrective action in this case and tell the instructor that Alyssa should not receive equal credit?	no obligation	1	2	3	4	5	6	7	strong obligation
Perceived Behavioral Control: The group's decision to turn in the project with all four names would be:	easy	1	2	3	4	5	6	7	difficult
	simple	1	2	3	4	5	6	7	complicated
	under my control	1	2	3	4	5	6	7	out of my control

Table 9 (continued)

MES:
With respect to the action by the group, 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

Table 10 Collaborative programming scenario instrument

Behavioral Intention: If you were having difficulty with a project, what is the probability that you would have combined your work with another student's?	highly probable	1	2	3	4	5	6	7	highly improbable
TPB:									
Attitude: Sam and Ginger's decision to combine their efforts but turn in individual projects was:	good	1	2	3	4	5	6	7	bad
	right	1	2	3	4	5	6	7	wrong
	acceptable	1	2	3	4	5	6	7	unacceptable
Subjective Norms: How morally obligated would you feel to take corrective action in this case and tell the instructor that you had worked with someone on the project?	no obligation	1	2	3	4	5	6	7	strong obligation
Perceived Behavioral Control: Working with someone on the project but turning in an individual project would be:	easy	1	2	3	4	5	6	7	difficult
	simple	1	2	3	4	5	6	7	complicated
	under my control	1	2	3	4	5	6	7	out of my control

MES:
With respect to the action by Sam and Ginger, 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

Appendix 3

Table 11 Summary of scenarios

Placement Essay (individual situation, illustrating a student misrepresenting her work)
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.
Internet Plagiarism (individual situation, representing student plagiarism)
Professor Smith is reviewing the final papers in his management class. He turned the papers into turnitin.com to check for plagiarism prior to reading them. When reviewing the turnitin.com reports, he learns that Jason has 42% of his paper copied directly from various Internet sites. As a result, Professor Smith gives Jason a zero on the paper and reports him to the college on charges of academic misconduct.
Chat Room (group situation, representing student free-loading)
Students in Professor Ziegler's management information systems class are required to complete a group project via a chat room as one of their assignments. Professor Ziegler announces to the class that it is important that each member of the group work on the project equally as the group will receive only one grade, and only those teammates that do contribute equally should receive credit for the assignment. Group One consists of four members, Alyssa, Brian, Carole, and David. One week before the project is due, all four members met electronically in a chat room, each individually participated, and together they completed half of the project. The night before the project is due, the members meet via chat room again to complete their project. Brian, Carole, and David each contribute equally during the session. Alyssa logs into the chat room but does not contribute. The other members work for over two hours and send her repeated messages, but she never responds. The next day, Alyssa arrives to class with no excuse for her lack of contribution during the online chat session. The group turns in the assignment with all four names on the cover page.
Collaborative Programming (group situation, representing individual work completed in a group)
Sam and Ginger are both taking an advanced visual basic programming class this semester. According to the class syllabus, each assignment is to be done individually and not in groups. They have been working individually on a project for the class for several days and are having difficulty getting either of their own programs to run correctly. Around 2 am on the day the project is due, they agree via a text message to work together. They decide to combine their efforts and skills, pull the best parts from each individual project, debug the problem spots and turn in the project as their individual work.

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