

Generative AI in Universities: Student Perceptions Regarding Ethical Use

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Abstract

Generative AI is extensively used in organizations. While students need exposure to this new technology before they enter the workforce, they must also understand ethical use. This study examines student perceptions regarding the ethical use of generative AI. Using a survey and scenarios, this study finds that personal and professional (or regulatory) environmental influencers, consequences, and a university AI discussion or policy positively influence perceived importance. Perceived importance and university AI discussion or policy negatively influence attitude. Attitude negatively influences personal normative beliefs, and perceived importance positively influences personal normative beliefs. Perceived importance, personal normative beliefs, and consequences are found to negatively influence behavioral intention, and attitude to positively influence behavioral intention. Additional findings are provided.

Keywords: generative AI, ethics, attitude, intention

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Lori N. K. Leonard and Kiku Jones

1. INTRODUCTION

Generative AI has created a new set of issues for universities. Plagiarism and cheating have always been a problem that became increasingly easier with the use of technology. However, generative AI has gone beyond this, with the creation of entire bodies of work that may not be as easy to identify. In a survey in BestColleges, half of the college students indicated that using AI for schoolwork constitutes plagiarism or cheating, but one in three of those students plan to use it anyway (Welding, 2023).

Watson and Rainie (2026) discussed how colleges and universities are navigating AI. Through a national survey completed by the AAC&U (American Association of Colleges and Universities) of 1057 faculty members, they found some concerning results. Seventy-eight percent of faculty reported substantial cheating on campus. They also felt that cheating had increased since the introduction of generative AI tools. Faculty have legitimate concerns about students becoming overly reliant on AI tools and diminishing students' critical thinking. It is also noted that faculty are uncertain if all student uses of AI constitute illegitimate use, which creates blurred lines regarding appropriate use.

As universities grapple with how to balance the importance of teaching students how to utilize generative AI to prepare them for an evolving workplace and ensuring work submitted is that of their students, they need to keep in mind how the student's behavior in this space will transfer to their post-graduation work environment. Guerrero-Dib et al. (2023) studied students' ethical behavior while at the university and their conduct in the workplace. They found significant correlations between their academic integrity behavior and the quality of the ethics program and the person's ethical work behavior. This suggests a link that needs to be considered in the current generative AI space.

This study seeks to examine student perceptions regarding the ethical use of generative AI in university assignments. Using a survey and scenarios, ethical behavior intention of generative AI use will be assessed.

2. LITERATURE REVIEW

2.1 IT Ethics

Researchers have examined individuals' behavior to determine if their behavioral intention is altered as a result of the use of IT, as it has been suggested that ethical issues increase as technology progresses (McCarthy et al., 2005; Moor, 2005), because ethics in IT is unique (Maner, 1996). Many studies have examined ethics and IT (as will be presented in the research model section). Here we introduce just a few studies that illustrate the importance of studying ethics, IT, and student perceptions.

Surveying students from five different academic locations, Molnar et al. (2008) found undergraduate students to believe cheating (in terms of intellectual property) was more acceptable using IT than without the use of IT. They also found undergraduate students to believe it is more acceptable for them personally to cheat with IT than for other students to cheat using IT.

Utilizing graduate and undergraduate students and a questionnaire of 11 statements describing activities that are most likely unethical in business and academia, Calluzzo and Cante (2004) found students to be confused about what is ethical in software and IT use. This suggests that the confusion students have will transfer into their professional careers as well.

Gutierrez (2004) found that undergraduate students had a difficult time identifying ethical issues in the cases. The students also do not know how to proceed when an ethical issue arises (i.e. what course of action should be taken).

Cillers (2017) showed that plagiarism was a huge problem. IT made both plagiarism and piracy easier for the students to accomplish.

2.2 AI Ethics

While IT and ethics have been studied for decades, ethical use of AI has only recently been examined. As stated above, since ethical issues tend to increase as technology progresses (McCarthy et al., 2005; Moor, 2005), it is important to investigate the impact of AI on student behavior.

Choi et al. (2024) assessed attitude and perceptions before an AI ethics education program and then again after. Their findings suggest that AI ethics education can improve ethical awareness and significantly enhance attitudes.

Acosta-Enriquez et al. (2024) found that ChatGPT makes writing text too easy for students and can stifle student ideas. They also indicate that ethical guidelines are needed for ChatGPT's use in universities, and so forth. Overall, they found that student use of ChatGPT influences perceptions of ethics.

Yang et al. (2025) found AI ethics knowledge can be attributed to fairness and inclusiveness, privacy protection, human-centricity, and responsibility/accountability; a student having AI ethical knowledge will positively impact attitude and competence in AI ethics; and a student's attitude and competence regarding AI ethics will improve a student's AI learning competence.

Finally, Gupta et al. (2026) studied ChatGPT users using three types of scenarios – academic, business, and social. They sampled doctoral students in two Indian business schools for the academic, middle-level IT professionals for the business, and citizens between the ages of 25 and 34 for the social. Interestingly, perceived risk was more important in the business scenario than the academic scenario. Academic scenario respondents focused on responsible use of ChatGPT and the need for compliance with institutional policies. They also conveyed concerns about ChatGPT hindering critical thinking and reasoning skills. This study emphasizes the need for future research studies that focus specifically on a given environment.

3. RESEARCH MODEL

Given the previous studies discussed as well as the following variable discussions, a research model is developed. The research model considers variables that impact ethical behavior. The model includes environmental influencers and consequences, perceived importance, attitude, personal normative beliefs, behavioral intention, prior AI use, prior work experience that involved an ethical dilemma, and university AI discussion/policy. The research model is given in Figure 1.

3.1 Environmental Influencers and Consequences

Kreie and Cronan (1998) studied factors from the environment that might influence ethical behavior. Building on the ethical decision-making model of Bommer et al. (1987), they examined eight factors: societal environment, belief system, personal values, personal environment, professional environment, legal environment, business environment, and consequences. The first seven factors are environmental; consequences are added as a potential additional influence.

Societal environment is the influence of social and cultural values on an individual. It represents society's values and the individual's culture. Belief system is one's religious beliefs and values. It represents an individual's spiritual values. Personal values are an individual's own values, goals, and experiences. Personal environment is the influence of peers, family, and others on an individual. Professional environment is the influence of professional expectations and codes of conduct within an individual's employment. Legal environment is the influence of laws, legislation, and government on an individual. Business environment is the influence of corporate goals. It reflects profit motive and goals in the individual's place of work. Finally, consequences represent the awareness that actions/behaviors may have penalties that affect the individual and potentially others (Leonard et al., 2004).

Kreie and Cronan (1998, 1999) examined five scenarios regarding information technology usage. They found that societal environment, belief system, personal values, legal environment, and awareness of

consequences influence an individual's evaluation of the situation as being ethically acceptable or unacceptable. Additionally, Leonard et al. (2004) examined five scenarios regarding information technology usage and found that significant factors depend on the situation, with belief system, personal values, personal environment, professional environment, legal environment, and consequences found to influence attitude in varying scenarios depending on if the individual perceives the scenario issue to be important or unimportant. Given these findings, the following hypothesis is given:

H1: Environmental influencers and consequences will influence a student's perceived importance of the issue.

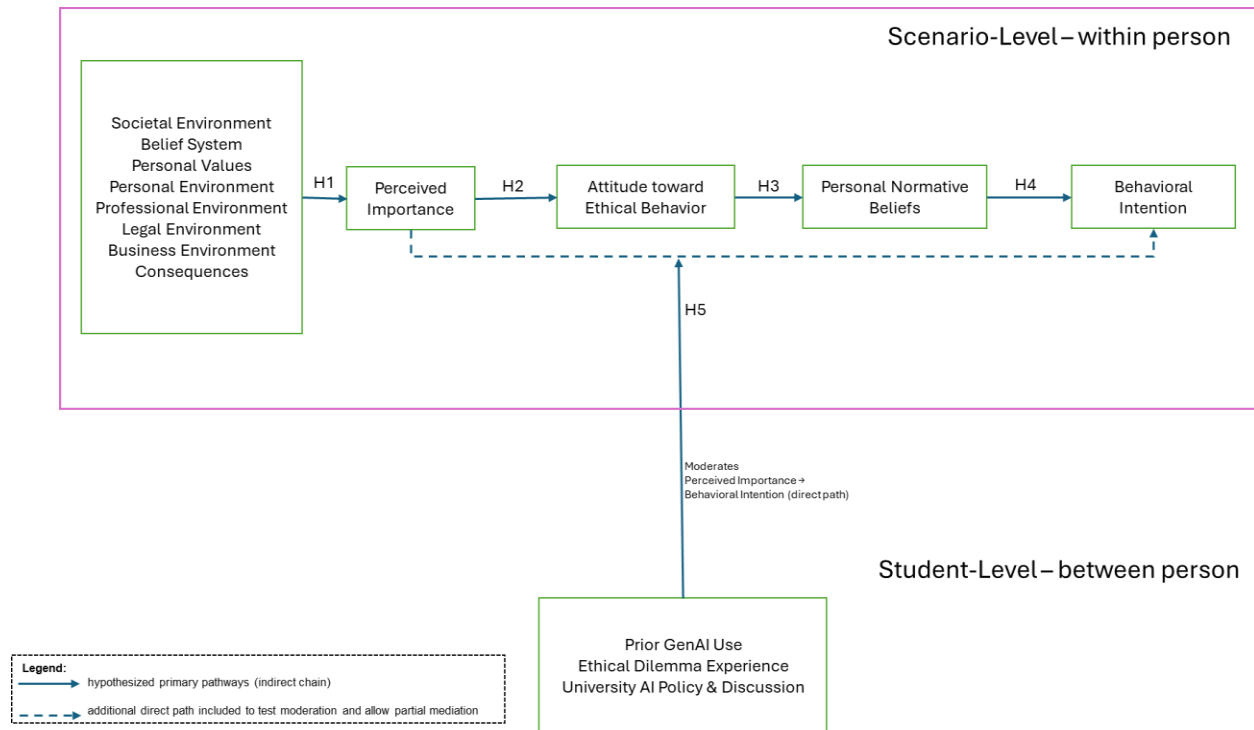


Figure 1. Research Model

3.2 Perceived Importance

Perceived importance is the individual's perception of the degree of importance of an ethical issue. Robin et al. (1996) were first to develop the perceived importance construct for an ethical issue. They found, using a scenario-based study, that perceived importance significantly impacted ethical judgment (i.e. attitude) and behavioral intention. More specifically, those individuals that perceived an issue to be of greater importance were less likely to have an unethical intent. Cronan et al. (2005) validated the Robin et al. (1996) perceived importance instrument by evaluating perceived importance in a different context, using different scenarios. They found perceived importance to significantly influence attitude and behavioral intention. Surveying university students and using a scenario-based approach, Leonard et al. (2004) found individuals to have a more ethical behavioral intention when the situation was perceived to be important, and a more unethical behavioral intention when the situation was perceived to be not important. Based on these findings, the following hypothesis is given:

H2: Perceived Importance will influence a student's attitude toward the issue.

3.3 Attitude

Attitude toward ethical behavior is the individual's extent of a favorable or unfavorable evaluation of the situation or behavior. The theory of reasoned action and the theory of planned behavior state attitude

as a predictor of behavior (Ajzen, 1991; Fishbein and Ajzen, 1975). Leonard et al. (2004) used five IT industry-based scenarios. Surveying students, they found that attitude and personal normative beliefs significantly influenced behavioral intention in all five scenarios. Additionally, Leonard et al. (2017) used two individual and two group situations in four academic-based scenarios involving IT. They found attitude and subjective norms (i.e. personal normative beliefs) to influence behavioral intention in all four scenarios. Leonard and Cronan (2005) also found that attitude toward ethical behavior in IT can shift over time. Given that the current study is examining generative AI, a shift could have occurred again. Given these findings, the following hypothesis is given:

H3: Attitude will influence a student's personal normative beliefs regarding the issue.

3.4 Personal Normative Beliefs

Personal normative beliefs, or subjective norms, are an individual's moral obligation to complete a particular action (Schwartz & Tessler, 1972). Personal normative beliefs have been found to explain behavioral intention (Ajzen, 1980). Considering seven scenarios and surveys of six organizations, Banerjee et al. (1998) found personal normative beliefs to significantly impact behavioral intention. As previously stated, personal normative beliefs have been found to influence behavioral intention in IT scenarios and in academic-based scenarios involving IT (Leonard et al., 2004; Leonard et al., 2017). Additionally, Leonard and Cronan (2001) used a scenario-based study to survey university students regarding IT industry situations. They found personal normative beliefs to influence behavioral intention. Given these findings, the following hypothesis is given:

H4: Personal Normative Beliefs will influence a student's behavioral intention on the issue.

3.5 Behavioral Intention

Behavioral Intention is the individual's intention to behave ethically or unethically. Ultimately, it is the intention to complete or not complete a particular action. Behavioral intention depicts the motivational influences that affect an action (Benerjee et al., 1998), and it has been found to predict actual behavior (Ajzen, 1991). As stated in the previous variables' discussions, behavioral intention has been found to be influenced by many factors.

3.6 Prior Generative AI Use, Prior Work Experience Involving an Ethical Dilemma, and University AI Discussion/Policy

A person's prior use of AI, his/her prior work experience that involved an ethical dilemma, and the university's AI policy can impact how issues involving AI are perceived. A student's specific experience with AI can be important.

Regarding student prior use of AI, Welding (2023) reported that 43% of college students have experience with AI tools. Obviously, how a student has used AI previously could alter how important they perceive the issue at hand as well as how they intend to behave in a future situation involving AI.

The work environment can also impact ethical perceptions. Having previous experience with a real-world ethical dilemma can influence perceptions in the future. For example, if a student has dealt with an ethical dilemma in a job, that experience can influence his/her perceptions in future ethical dilemmas (Welding, 2023).

A university discussing AI expectations for students and/or providing a clear AI policy can also impact student perceptions. University AI policies should address not only the potential learning benefits, but also the risk of plagiarism and more (Welding, 2023). Having expectations of students stated will influence the perceptions of those students. Given this discussion, the following hypothesis is given:

H5: Student-level items will moderate the relationship between perceived importance and behavioral intention.

H5a: Prior AI use

H5b: Prior work experience involving an ethical dilemma

H5c: University AI discussion/policy

The given research model (Figure 1) shows scenario-level variables and student-level variables. The scenario-level variables (environmental influencers, perceived importance, attitude, personal normative beliefs, and behavioral intention) are assessed for each of the six scenarios. The student-level variables (prior generative AI use, prior work experience involving an ethical dilemma, and university AI discussion/policy) are assessed only once in the survey.

4. METHOD AND SAMPLE

Student generative AI use scenarios dealing with ethical issues were created. The scenarios and the survey instrument were pilot tested and revisions were made to the scenarios and survey instrument for clarity. The variables and instruments are summarized in Appendix A. The scenarios are provided in Appendix B. Undergraduate students in a northeastern US university and a southwestern US university were selected as the study subjects. Selection was based on enrollment in a MIS/CIS course.

The instrument given to the respondents featured six different scenarios shown in Appendix B. Following each scenario were questions regarding the respondent's attitude toward the AI use, behavioral intention, perceived importance, environmental influencers, personal normative beliefs, and consequences providing scenario-specific judgements and behavioral responses (shown in Figure 1 as Scenario-Level variables).

Behavioral intention was measured with a single item: "If you were the student, what is the probability that you would have [done the same action. The action performed by the student in the scenario was used in the question. This varied by scenario.]?", Highly Probably vs. Highly Improbable, on a 7-point scale (Fishbein & Ajzen, 1975). This item was reverse coded: Highly improbable (1) to highly probable (7) where higher scores indicate a stronger intention to engage in the same actions.

Perceived importance was measured using four items in Table 1 on a 7-point scale (Robin et al., 1996). These items were reverse coded, indicating the higher scores reflected a stronger perceived seriousness/concern of the issue. When testing for moderation effects, the mean-centered perceived importance variable was used to create interaction variables.

Perceived Importance

"The student's use of Co-Pilot for the programming assignment was a(n):"

Extremely Important issue/Unimportant issue	0.78
Highly significant issue/Insignificant issue	0.90
Issue of considerable concern/Issue of no concern	0.87
Fundamental issue/trivial issue	0.76
Cronbach's alpha	0.93
Eigen value	3.31
Variance explained	82.81%

Table 1. Perceived Importance Construct Factor Analysis

Attitude toward the behavior in the scenario was coded as a binary variable where 1 indicated the respondent felt the behavior was acceptable and 0 indicated unacceptable (Ajzen, 1985). Personal normative beliefs were measured with a single item: "How morally obligated would you feel to take corrective action in this case?". It was coded as no obligation (1) to strong obligation (5) (Schwartz & Tessler, 1972).

Environmental influencers were measured using the seven items in Table 2 on a 5-point scale (Kreie & Cronan, 1998). These were reverse coded as none (1) to great (5) indicating the degree of influence each item had in the respondent's assessment of the actions. Consequences was measured using a single item: "If the student knew that, if discovered, he would be punished by the University, he", Should have vs. Should not have, "[done the action. The action performed by the student in the scenario was

used in the question. This varied by scenario.]” This was rated using a 5-point scale, should have (1) to should not have (5) (Kreie & Cronan, 1998).

Environmental Influencers

“What was the degree of influence for each factor in your assessment of the student’s use of an AI tool for the assignment?”

	Personal	Professional/Regulatory	Consequences
Societal environment (Society’s values, our culture)	0.68		
Belief system (Religious values & beliefs developed in one’s spiritual or religious environment)	0.54		
Personal values (Your personal values & experience)	0.81		
Personal environment (Family, significant others, peer group)	0.80		
Professional environment (Codes of conduct, professional expectations)		0.63	
Legal environment (Law, legislation & legal issues)		0.81	
Business environment (Corporate goals & profit motive)		0.84	

Consequences

“If the student knew that, if discovered, he would be punished by the University, he used an AI tool for the assignment.”

Should have/Should not have

Cronbach’s alpha	0.71	0.71	0.66
Eigen value	2.2	1.89	1.12
Variance explained	27.50%	23.62%	14.00%

Table 2. Environmental Influencers & Consequences Construct Factor Analysis

Student level (between-person) items (as shown in Figure 1) examined included prior use of generative AI and prior work experience involving an ethical dilemma. In addition, respondents answered three questions (Table 3) regarding AI discussion and policies for their university. These were all coded as binary responses, 1 is Yes, 0 is No (there was a third option of “I Don’t Know”, but no respondents selected that option). The university AI discussion and policy items were indexed as a sum of the three items (scores between 0 and 3). Cross-level interaction variables were created using the mean-centered perceived importance and each of the three student-level variables. Appendix A contains a summary of the variable and instrument reference.

University AI Policy/Discussion

My instructors have openly discussed AI tools.

My instructors, class syllabi, course materials, or school honor code have prohibited the use of AI tools.

My instructors, class syllabi, course materials, or school honor code have specified how to use AI tools ethically or responsibly.

Table 3. University AI Discussion/Policy Items

Participation in the study was anonymous and voluntary. One hundred and fifty-four responses were collected. Appendix C provides demographic information from the sample. Much of the sample was between the ages of 18 and 24 (95.5%). Gender was evenly split between male (48.7%) and female (48.7%). The remaining respondents selected other or preferred not to answer. Respondents were mostly white (55.8%). The largest number of respondents were Freshmen (40.3%) with the next largest level being Seniors (26%).

In terms of prior generative AI Use, most of the respondents indicated they have used it in the past (97.4%). Most of the respondents had less than 1-year full-time work experience and 52% stated they had encountered a work situation where they needed to deal with an ethical dilemma.

4.1 Data Analysis and Results

Harman's (1967) single-factor test was used to look for common method variance. This test is used to determine if all variables load onto one factor accounting for all the variance, or a factor accounting for the majority of the variance. All variables were entered together. Sixteen factors were found with Eigenvalues greater than 1.0. The variance explained ranged from 1.25% to 24.31% of the total. These results indicate that common method variance is not a concern. Long format was used with one record per respondent per scenario. The respondent ID was used to link the repeated observations within individuals.

The multi-item constructs (perceived importance and environmental influencers including consequences) were tested for construct validity and reliability. Principle components analysis (PCA) with a Varimax rotation was used to extract factors. Factors with eigenvalues greater than 1.0 were retained. A .50 cutoff threshold was used to determine high item correlation. All perceived importance items loaded on one factor. A Cronbach's alpha threshold of .50 was used (Nunnally, 1967). The Cronbach's alpha was .93, well above the threshold. The percent variance explained was 82.81%. Table 1 provides the results from the PCA for the perceived importance construct. A perceived importance variable was calculated for each respondent for each scenario.

The seven environmental influencers and consequences items loaded onto three components, two multi-item components and consequences as a separate construct. The percent variance explained ranged from 14% to 27.50%. Table 2 provides the results from the PCA. One multi-item component was focused on a personal context (societal environment, belief system, personal values, and personal environment). Cronbach's alpha for the personal environmental influencers component was .71 exceeding the threshold of .50 (Nunnally, 1967). A personal environmental influencer variable was calculated for each respondent for each scenario. The second multi-item construct was focused on a professional/regulatory context (professional environment, legal environment, and business environment). Cronbach's alpha for the professional/regulatory environmental influencers was also .71 exceeding the threshold of .50 (Nunnally, 1967). A professional environmental influencer variable was calculated for each respondent for each scenario.

4.2 Model Testing

All primary models considered the repeated-measures design by estimating mixed-effects models using the respondent ID to link observations within individual respondents (for the six scenarios). Scenario number was included as a fixed effect using deviation contrasts to control for differences in the mean across scenarios. In all the model tests, the three student-level variables were included as background covariates to control for between-person differences. They were also included in the moderation model as main effects with the interaction variables.

A linear mixed model was estimated using REML (restricted maximum likelihood) with a random intercept for respondent ID to test the first relationship between perceived importance and the environmental influencers and consequences controlling for scenario and student-level covariates. The results indicate that perceived importance increases as personal ($B = 0.204, p < .001$) and professional ($B = 0.260, p < .001$) environmental influencer variables increased, as well as when consequences ($B = 0.163, p < .001$) increased supporting H1 (Table 5). The student-level background covariate university AI discussion/policy was also positively related to perceived importance ($B = 0.185, p = .002$). Scenarios

2 ($B = -0.578$, $p < .001$) and 5 ($B = -0.594$, $p < .001$) were found to be below the across-scenario perceived importance mean and the implied deviation for Scenario 6 was approximately $+0.991$ showing that it was above the across-scenario perceived importance.

Predictor ^a	B	SE	p	95% CI [LL, UL]
Scenario 1 (vs grand mean)	0.128	0.135	.342	[-0.136, 0.393]
Scenario 2 (vs grand mean)	-0.578	0.135	< .001**	[-0.843, -0.313]
Scenario 3 (vs grand mean)	-0.029	0.135	.829	[-0.294, 0.236]
Scenario 4 (vs grand mean)	0.082	0.135	.545	[-0.183, 0.347]
Scenario 5 (vs grand mean)	-0.594	0.136	< .001**	[-0.860, -0.328]
Personal Env Influencers	0.204	0.047	< .001**	[0.111, 0.296]
Professional Env Influencers	0.260	0.044	< .001**	[0.175, 0.346]
Consequences	0.163	0.032	< .001**	[0.100, 0.226]
Prior GenAI Use	0.109	0.235	.644	[-0.353, 0.570]
Work Exp. w/ Ethical Issues	0.071	0.078	.365	[-0.082, 0.223]
Univ. AI Discussion/Policy	0.185	0.060	.002*	[0.068, 0.302]

* $p < .05$; ** $p < .001$

^a Scenario 6 was omitted by SPSS as a redundant parameter (its implied deviation equals the negative sum of Scenarios 1–5) (this applies for tables 5–9). Model accounts for repeated measures clustered within respondent ID via a random intercept (this applies for tables 5–9). Controlled for scenarios and student-level variables.

Table 5. Dependent Variable Perceived Importance (H1)

A generalized linear mixed model with binomial distribution and logit link was estimated to test the relationship between perceived importance and attitude controlling for scenario and student-level covariates. In this test, B represents effects on the log odds. The results showed a significant negative relationship ($B = -1.075$, $p < .001$) supporting H2 (Table 6). In addition, University AI discussion/policy was found to be negatively significant with attitude ($B = -0.805$, $p < .001$). Scenario 2 ($B = 0.885$, $p = .019$) and Scenario 5 ($B = 1.807$, $p < .001$) were associated with higher-than-average log-odds of approving the unethical behavior compared to the across-scenario attitude mean. The implied deviation for Scenario 6 was lower-than-average log odds with the $B = -1.684$.

Predictor ^a	B (effects on the log odds)	SE	p	95% CI [LL, UL]
Scenario 1 (vs grand mean)	-0.942	0.5354	0.079	[-1.992, 0.109]
Scenario 2 (vs grand mean)	0.885	0.3761	0.019*	[0.147, 1.623]
Scenario 3 (vs grand mean)	-0.06	0.4285	0.888	[-0.902, 0.781]
Scenario 4 (vs grand mean)	-0.006	0.4478	0.989	[-0.885, 0.873]
Scenario 5 (vs grand mean)	1.807	0.37	< .001**	[1.081, 2.534]
Perceived Importance	-1.075	0.1238	< .001**	[-1.318, -0.832]
Prior GenAI Use	-1.318	0.7926	0.097	[-2.874, 0.237]
Work Exp. w/ Ethical Issues	-0.396	0.322	0.22	[-1.028, 0.236]
Univ. AI Discussion/Policy	-0.805	0.234	< .001**	[-1.265, -0.346]

* $p < .05$; ** $p < .001$

^a Controlled for scenarios and student-level variables.

Table 6. Dependent Variable Attitude (approved of unethical behavior) (H2)

A linear mixed model was estimated using REML with a random intercept for respondent ID to test the relationship between attitude and personal normative beliefs while controlling for perceived importance

and scenario and the student-level covariates. Attitude was found to be a significant negative predictor of personal normative beliefs ($B = -0.474$, $p < .001$) supporting H3 (Table 7). In addition, perceived importance had a positive significant relationship with personal normative beliefs ($B = 0.303$, $p < .001$). Scenario 1 ($B = -0.215$, $p = .004$) and 2 ($B = -0.236$, $p = .002$) were below the across-scenario personal normative beliefs mean. The implied deviation for Scenario 6 was approximately $+0.587$, showing that it was above the across-scenario personal normative beliefs mean.

Predictor ^a	B	SE	p	95% CI [LL, UL]
Scenario 1 (vs grand mean)	-0.215	0.075	0.004*	[-0.363, -0.068]
Scenario 2 (vs grand mean)	-0.236	0.077	0.002*	[-0.388, -0.085]
Scenario 3 (vs grand mean)	-0.042	0.075	0.572	[-0.190, 0.105]
Scenario 4 (vs grand mean)	0.025	0.075	0.741	[-0.123, 0.172]
Scenario 5 (vs grand mean)	-0.119	0.08	0.137	[-0.276, 0.038]
Perceived Importance	0.303	0.029	< .001**	[0.247, 0.359]
Attitude	-0.474	0.083	< .001**	[-0.636, -0.311]
Prior GenAI Use	-0.058	0.437	0.895	[-0.916, 0.801]
Work Exp. w/ Ethical Issues	-0.096	0.144	0.506	[-0.378, 0.187]
Univ. AI Discussion/Policy	0.123	0.111	0.269	[-0.095, 0.340]

* $p < .01$; ** $p < .001$

^a Controlled for perceived importance, scenarios and student-level variables.

Table 7. Dependent Variable Personal Normative Beliefs (H3)

In the main model test (no moderation), a linear mixed model was estimated using REML with a random intercept for respondent ID to test the relationship between personal normative beliefs and behavioral intention controlling for all other variables including scenario and student-level covariates. Personal normative beliefs had a negative significant relationship with behavioral intention ($B = -0.326$, $p < .001$) supporting H4 (Table 8). In addition, perceived importance ($B = -0.169$, $p = .004$) also had a negative significant relationship with behavioral intention. Attitude ($B = 1.031$, $p < .001$) had a positive significant relationship with behavioral intention. Consequences also had a negative significant relationship with behavioral intention ($B = -0.420$, $p < .001$). The other environmental influencers and student-level covariates did not have a significant direct relationship with behavioral intention. Scenario 2 ($B = 0.696$, $p < .001$) was above the across-scenario behavioral intention mean. The implied deviation for Scenario 6 was approximately -0.576 , showing it is below the across-scenario mean.

The final model test was for moderation on the relationship between perceived importance and behavioral intention controlling for all other variables including scenario and student-level covariates. A linear mixed model was estimated using REML with a random intercept for respondent ID for this test. Cross-level interactions between the centered perceived importance and student-level variables were added to the previous tested model. Perceived importance remained significant, but it showed a positive relationship rather than a negative one. Two of the moderation effects, (centered perceived importance*prior AI use [$B = -1.413$, $p = .002$] and centered perceived importance*university AI discussion/policy [$B = -0.200$, $p = .001$]) were found to be negatively significant with behavioral intention, supporting H5a and H5c. The third moderation effect, centered perceived importance*Prior work ethical dilemma ($B = -0.090$, $p = .316$), was not significant (H5b) indicating only partial support for H5 (Table 9). In addition, the previous significant relationships between behavioral intention and attitude ($B = 1.030$, $p < .001$), personal normative beliefs ($B = -0.32$, $p < .001$), and consequences ($B = -0.425$, $p < .001$) remained. This moderation model showed improved fit relative to the non-moderation model (Akaike's Information Criterion (AIC): 3278.58 to 3265.26; Schwarz's Bayesian Criterion (BIC): 3288.03 to 3274.70). Scenario 2 ($B = 0.705$, $p < .001$) was higher than the across-scenario mean. The implied deviation for Scenario 6 was approximately -0.664 , showing it had lower behavioral intention than the across-scenario mean.

Predictor ^a	B	SE	p	95% CI [LL, UL]
Scenario 1 (vs grand mean)	0.029	0.197	0.883	[-0.357, 0.415]
Scenario 2 (vs grand mean)	0.696	0.2	< .001**	[0.303, 1.088]
Scenario 3 (vs grand mean)	-0.161	0.196	0.413	[-0.546, 0.225]
Scenario 4 (vs grand mean)	-0.112	0.196	0.569	[-0.497, 0.274]
Scenario 5 (vs grand mean)	0.124	0.205	0.545	[-0.278, 0.526]
Personal Env Influencers	0.038	0.07	0.582	[-0.175, 0.098]
Professional Env Influencers	0.014	0.065	0.824	[-0.113, 0.142]
Consequences	-0.42	0.048	< .001**	[-0.515, -0.326]
Perceived Importance	-0.169	0.059	0.004*	[-0.284, -0.053]
Attitude	1.031	0.182	< .001**	[0.673, 1.388]
Personal Normative Beliefs	-0.326	0.056	< .001**	[-0.435, -0.216]
Prior GenAI Use	0.636	0.344	0.064	[-0.038, 1.311]
Work Exp. w/ Ethical Issues	-0.075	0.114	0.512	[-0.298, 0.149]
Univ. AI Discussion/Policy	0.029	0.089	0.745	[-0.146, 0.203]

* $p < .01$; ** $p < .001$

^a Controlled for perceived importance, attitude, scenarios and student-level variables.

Table 8. Dependent Variable Behavioral Intention (H4)

4.3 Additional Tests

Three additional tests were performed to clarify the role of perceived importance relative to attitude and personal normative beliefs, and to determine the total association of perceived importance with behavioral intention versus conditional/direct association in the full behavioral intention models. As with the other tests, these controlled for scenario and student-level covariate main effects. The first of these tests found that the centralized perceived importance negatively predicted behavioral intention in the reduced model without attitude or personal normative beliefs ($B = -0.392$, $p < .001$). The second test found that perceived importance negatively predicted attitude. And finally, the third test found that perceived importance positively predicted personal normative beliefs ($B = 0.481$, $p < .001$). These findings support that perceived importance reduces behavioral intention mainly through lower acceptance of the behavior and increased obligation to take corrective action – consistent with the proposed indirect pathway. The perceived importance coefficient in the full behavioral intention model should therefore be considered as a conditional/direct effect after accounting for attitude and personal normative beliefs.

Predictor ^a	B	SE	p	95% CI [LL, UL]
Scenario 1 (vs grand mean)	0.056	0.2	0.773	[-0.326, 0.439]
Scenario 2 (vs grand mean)	0.705	0.2	< .001**	[0.316, 1.094]
Scenario 3 (vs grand mean)	-0.14	0.19	0.471	[-0.522, 0.241]
Scenario 4 (vs grand mean)	-0.08	0.2	0.676	[-0.463, 0.300]
Scenario 5 (vs grand mean)	0.124	0.2	0.541	[-0.274, 0.523]
Personal Env Influencers	-0.03	0.07	0.707	[-0.162, 0.110]
Professional Env Influencers	0.041	0.07	0.523	[-0.086, 0.168]
Consequences	-0.425	0.05	< .001**	[-0.519, -0.332]
Perceived Importance (centered)	1.725	0.48	< .001**	[0.791, 2.659]
Attitude	1.03	0.18	< .001**	[0.676, 1.384]
Personal Normative Beliefs	-0.32	0.06	< .001**	[-0.425, -0.208]
Prior GenAI Use	0.231	0.36	0.526	[-0.484, 0.945]
Work Exp. w/ Ethical Issues	-0.06	0.11	0.603	[-0.280, 0.163]
Univ. AI Discussion/Policy	-0.04	0.09	0.681	[-0.214, 0.140]
Perceived Importance (centered)*Prior GenAI Use	-1.413	0.45	0.002*	[-2.286, -0.540]
Perceived Importance (centered)*Work Exp. w/ Ethical Issues	-0.09	0.09	0.316	[-0.267, 0.086]
Perceived Importance (centered)*Univ. AI Discussion/Policy	-0.2	0.06	0.001*	[-0.319, -0.080]

* $p < .01$; ** $p < .001$

^a Included interaction effects between perceived importance and student-level variables. Controlled for all other variables including scenarios and student-level variables.

Table 9. Dependent Variable Behavioral Intention (with moderation) (H5)

5. DISCUSSION

The study results indicate full or partial support for all hypotheses. Personal and professional/regulatory environmental influencers and consequences were found to positively influence a student's perceived importance of a generative AI ethical scenario (H1). This indicates that a student with high personal values and professional expectations will be more likely to find the scenario to be of higher significance/concern. In addition, when there are known negative consequences to the actions in the scenario, the person is likely to find the scenarios to be more significant/concerning. University AI discussion/policy, a student-level background covariate, was also found to be positively significant. Having discussions and clear policies leading to higher perceived importance makes logical sense here.

Perceived importance was found to negatively influence a student's attitude regarding whether the scenario actions were acceptable or not (H2). This indicates that the more important the scenario issues are to the student, the more likely they are to deem the actions unacceptable. In addition, university AI discussion/policy was found to be negatively significant, indicating that a stronger university AI discussion/policy was associated with a lower likelihood of finding the actions acceptable.

Attitude was found to negatively influence a student's personal normative beliefs (H3). This indicates that approving of the actions in the scenario was associated with lower moral obligation to correct the actions. In addition, perceived importance was found to positively influence personal normative beliefs.

This finding indicates that the more significant/concerning the issue is perceived, the stronger obligation the student feels to take corrective action.

Perceived importance, personal normative beliefs, and consequences were all found to negatively influence behavioral intention (H4). This indicates that the more significant/concerning the scenario actions, the stronger the moral obligation to correct the actions, and the knowledge of consequences for the actions each lead to a reduced intention of the person to conduct the same actions in the scenario. Attitude was found to positively influence behavioral intention, meaning when finding the actions acceptable, the student has an increased intention to conduct the same actions. The personal and professional environmental influencers were not found to be a significant influencer of behavioral intention. This indicates that these items primarily influence at the beginning of the chain by impacting perceived importance instead of a directly affecting behavioral intention.

The interactions between perceived importance and prior generative AI use, and perceived importance and university AI discussion/policy, were both found to negatively influence behavioral intention (H5a, H5c). This indicates that the relationship between perceived importance and behavioral intention is diminished with prior generative AI users and those with stronger university AI discussion/policy. However, the interaction between perceived importance and work experience with an ethical dilemma was not found to be a significant influencer to behavioral intention (H5b).

6. LIMITATIONS AND CONCLUSION

As with all studies, limitations exist. Nearly all the survey respondents have prior generative AI use. Perhaps breaking down the generative AI use into different levels/types would provide a better look into the potential moderating effects. The scenarios used were all academic in nature. There may be benefits in creating scenarios based on a business environment. Additionally, this study only examined students from the United States. A more diverse sample could lead to different results as cultural differences can impact perceptions.

Future studies should take a closer look at the scenarios. In each of the models tested, Scenario 2 was significantly different than the across-scenario mean. In two of the models, Scenario 5 was also significantly different. In both scenarios 2 and 5, use of generative AI tools was acceptable to “assist” in the assignment. Even though most of the assignments were completed by AI, respondents felt it was not as important/concerning, not as unethical, and felt less of an obligation to take corrective action. In the other scenarios, either the use of generative AI tools was completely prohibited or the instructions stated that the work must be written by the student. This suggests that when there is an ability to use AI tools without explicit instruction of degree of use, respondents felt comfortable with the scenario action even when the assignment was mostly completed by AI.

Given the findings in this study, actions need to be taken at universities. Blau et al. (2017) found that 31% of faculty respondents did not know the academic integrity procedures. Faculty will need to be trained in the academic integrity policy and process for submitting violations. Faculty discussion of the AI policy is important to students. Clear AI usage policies should be provided to students. Additionally, all syllabi should state what is AI acceptable use for a single class and the consequences if violations occur. This will help students to understand what is considered ethical or unethical behavior regarding AI in that class.

Organizations can also benefit from this study’s results by implementing policies and having clear guidelines for employees. Training sessions should be implemented to help employees learn the responsible way to utilize generative AI in their role. This study is a first step in showing that university education can impact AI ethics in corporations.

7. GENERATIVE AI DISCLOSURE STATEMENT

Generative AI tools were used in some areas of the manuscript. This was to support the identification of appropriate statistical tests to evaluate the models, provide suggestions for grammar correctness, and offer refinements to style to improve readability. All generative AI output was reviewed, verified, and revised by the authors. Full responsibility for the accuracy of the content, methodological and analytical decisions, and all final interpretations presented in the manuscript belong to the authors.

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APPENDIX A. VARIABLE AND INSTRUMENT SUMMARY

<u>Variable</u>	<u>Instrument</u>
Behavioral Intention	Fishbein and Ajzen's (1975) one item on a seven-point scale
Attitude	Ajzen's (1985) one item ^a
Personal Normative Beliefs	Schwartz and Tessler's (1972) one item on a five-point scale
Perceived Importance	Robin et al.'s (1996) four items on a seven-point scale
Environmental Influencers and Consequences	Kreie and Cronan's (1998) eight items on a five-point scale
Prior Generative AI Use, Prior Work Experience Involving an Ethical Dilemma, and University AI Discussion/Policy	Welding (2023)

^a Banerjee et al. (1998) used three questions on a seven-point scale where this study utilized only one question on a dichotomous scale for efficiency. A subsequent validation of the one question of attitude when compared to the three-question measure indicated a strong correlation, hence one question was used to measure attitude.

APPENDIX B. SCENARIOS

<u>Scenario</u>
[1] A student realizes they have a research paper due tomorrow for class. The class syllabus indicates that AI tools cannot be used for class assignments. However, the student does not want to fail so they use ChatGPT to write the paper.
[2] A student realizes they have a research paper due tomorrow for class. The class syllabus indicates that AI tools are acceptable to assist in class assignments. The student uses AI to write their paper, with a few adjustments to content. However, most of the paper was written by the AI tool.
[3] A student realizes they have a research paper due tomorrow for class. The class syllabus indicates that AI tools are acceptable to assist in class assignments, but it also indicates that the assignment must be written in the student's own words. The student uses Co-Pilot to write the paper without placing it in their own words.
[4] A student realizes that a programming assignment is due tomorrow for class. The class syllabus indicates that AI tools may not be used to write programming assignments. However, the student does not want to fail so they use ChatGPT to write the program.
[5] A student realizes a programming assignment is due tomorrow for class. The class syllabus indicates that AI tools are acceptable to assist in programming assignments. The student uses AI to write the program, with a few adjustments to the code. However, most of the program was written by the AI tool.
[6] A student realizes that a programming assignment is due tomorrow for class. The class syllabus indicates that AI tools are acceptable to assist in class assignments, such as checking the validation of their code, but it also indicates that the assignment must be written by the student. The student uses Co-Pilot to write the program code without making adjustments to the code.

APPENDIX C. DEMOGRAPHIC INFORMATION

Demographic Variable		%
Age	18-24	96
	25-31	3
	32-38	1
	39-45	1
Gender	Male	49
	Female	49
	Other	2
	Prefer Not to Answer	1
Race/Ethnicity	African American	3
	Asian	10
	Caucasian	56
	Hispanic	16
	Middle Eastern	1
	Native American	6
	Other	8
College Level	Freshman	40
	Sophomore	17
	Junior	17
	Senior	26
Years of full-time work experience	<1 year	76
	1-2 years	10
	3-4 years	8
	5-6 years	2
	>6 years	3
Work experience with ethical dilemma	Yes	53
	No	47
Prior Generative AI Use	Yes	97
	No	3