

# Students' Unethical Academic Behaviors: A Self-Determination Theory Approach

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Building on the Self-Determination Theory (SDT), the study examines the influence of intrinsic motivation, extrinsic motivation, and in-class deterrents on prior cheating, neutralization, and likelihood of cheating in the future. In addition, the model has been tested based on gender differences. To test the hypotheses, the data were collected from 324 undergraduate hospitality and tourism students. The proposed model was tested using structural equation modeling. Results of hypotheses testing showed that both extrinsic motivation and intrinsic motivation had negative relationships with prior cheating, which is consistent with previous research. In addition, neutralization showed a positive relationship with likelihood of cheating and prior cheating was positively related to likelihood of cheating. These findings can help hospitality and tourism instructors and administrators develop various strategies to prevent students' unethical behaviors. A discussion of implications is included along with limitations and recommendations for future research.

*Keywords:* cheating, unethical behaviors, motivation, hospitality and tourism, Self-Determination Theory (SDT)

## Introduction

Academic dishonesty has been studied regardless of disciplines for decades; however, cheating is still one of the biggest concerns on campuses throughout the nation. Fishbein (1994) presented survey data, collected by Donald McCabe, showing that 67% of students admitted to cheating at least once in college and that 19% cheated on four or more tests. In addition, there was an investigation of 125 students from Harvard University who were suspected of inappropriate collaboration on a take-home exam (Harris, 2012). Cheating has been reported at both the undergraduate and graduate levels. Another example of cheating occurred in 2006 when 34 MBA students from Duke University were caught cheating on an exam was considered the biggest cheating scandal in the university's history (Wright, 2007).

There have been studies claiming that students cheat because they lack time to study. Barron (2007) mentioned that it has become very common for students to work while they are in school; in fact, almost nine out of 10 students studying hospitality and tourism management either work part time or look for employment actively to support their education (Barron, 2007). In addition, hospitality and tourism schools

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have traditionally required students to work in the industry as part of their programs. Barron (2007) pointed out that working while in school has negative effects, such as less time to study and more absences which may adversely affect students' academic performance. Iyer and Eastman (2006) concluded that students who work a large number of hours are more likely to engage in cheating. In addition, there are several studies that linked unethical behaviors in school to such behaviors on the job (Tom & Borin, 1988; Sims, 1993).

Although previous research presented that students majoring in hospitality and tourism management may be at a higher risk for cheating because they work while in school, there are only a few studies focusing on cheating among hospitality and tourism undergraduates. Therefore, this study aims to identify factors influencing students' in-class cheating behaviors by applying the Self-Determination Theory (SDT).

## Literature Review

### Theoretical Background

Previous literature on cheating examined a number of theories; however, recently, motivation has been a growing interest to researchers who study cheating behaviors. Among several theories, Deci and Ryan's SDT (1985; 1991) was proven to be relevant within the educational domain (Davy, Kincaid, Smith, & Trawick, 2007). The SDT proposes that people inherently have a desire for stimulation and learning, and the desire can be either encouraged or discouraged within the environment they are in (Deci & Ryan, 1985; Fairchild, Horst, Finney, & Barron, 2005). Deci and Ryan (1985; 1991) suggested that behaviors can be amotivated, motivated intrinsically or extrinsically.

The SDT posits a continuum from amotivation (Gagne & Deci, 2005), which represents the behaviors that are neither intrinsically motivated nor extrinsically motivated (Davy et al., 2007). People who are amotivated do not have the intention to act or do not pursue the activity at all due to the absence of "a sense of efficacy or a sense of control with respect to a desired outcome" (Deci & Ryan, 2000, p. 237). Fortier, Vallerand, and Guay (1995) claimed that amotivation is a similar concept to learned helplessness as behaviors are not regulated or intentional—they are not controlled by the person.

Intrinsic motivation refers to doing an activity because of the enjoyment, pleasure, and satisfaction derived from the activity (Deci & Ryan, 1985; Fortier et al., 1995). Vallerand, Pelletier, Blais, Briere, Senecal, and Vallieres (1992) broke down intrinsic motivation into three separate subscales: intrinsic motivation to accomplish, intrinsic motivation to experience stimulation, and intrinsic motivation to know.

People who display intrinsic motivation to accomplish engage in an activity for the pleasure they experience when they attempt to accomplish or create something (Vallerand et al., 1992). Intrinsic motivation to experience stimulation refers to an individual's desire to engage in an activity to experience stimulating sensations such as intellectual or physical sensations (Fairchild et al., 2005; Vallerand et al., 1992). Finally, intrinsic motivation to know is the most frequently studied type and is closely related to the intrinsic motivation to learn (Davy et al., 2007; Vallerand et al., 1992). People who display the intrinsic motivation to know desire to perform an activity for the pleasure and the satisfaction while learning new things (Fairchild et al., 2005; Vallerand et al., 1992).

Next on the continuum is extrinsic motivation. According to Deci and Ryan (1985), there are four types of extrinsic motivation: external regulation, introjected regulation, identified regulation, and integrated regulation. Behaviors that are externally regulated are intentionally directed at "either obtaining a positive outcome (e.g., a

test grade) or avoiding a negative outcome (e.g., a missed deadline)" (Davy et al., 2007, p. 283). Among the four types of extrinsic motivation, literature indicates that external regulation represents extrinsic motivation the most (Fortier et al., 1995).

### **Antecedents of Cheating**

There are several studies that have examined factors influencing college students' cheating behavior. Among them, some have focused on the relationship between motivation and cheating behavior, others focused more on the relationship between socio-demographic factors and cheating behavior.

Literature discussing motivation and cheating behavior distinguishes intrinsic motivation from extrinsic motivation. People who are intrinsically motivated show a desire to learn and to demonstrate knowledge; thus, they are less likely to feel the needs to cheat (Jordan, 2001). Therefore, the likelihood of intrinsically motivated individuals engaging in cheating behaviors is lower. However, those who are extrinsically motivated will find the potential for gain by cheating, because they are motivated to get positive outcomes (e.g., a high test score) or to avoid negative outcomes (e.g., failing the class). Thus, extrinsically motivated individuals are more likely to engage in cheating behaviors.

Neutralization and in-class deterrents are two of the most often studied variables that influence students' cheating behaviors (Smith, Davy, Rosenberg, & Haight, 2002). Neutralization refers to rationalization prior to, during, or after cheating behaviors in order to avoid peer disapproval and feelings of guilt (Nonis & Swift, 1998; Sykes & Matza, 1957). Students neutralize to reduce internal moral conflicts and to eliminate the feeling that they are inherently dishonest (Daniel, Blount, & Ferrell, 1991; Haines, Diekhoff, LaBeff, & Clark, 1986; Nonis & Swift, 1998). Students who do not engage in cheating behaviors do not neutralize or rationalize, because they do not need to avoid anyone's disapproval (Nonis & Swift, 1998). Previous studies have found that students often use the difficulty of the subject, lack of time to study, and peer pressure when they rationalize their cheating behaviors (Daniel et al., 1991; Haines et al., 1986).

In-class deterrents are known to reduce students' cheating behaviors (Barnett & Dalton, 1981; Hill & Kochendorfer, 1969; Singhal & Johnson, 1983). Nonis and Swift (1998) indicated that there are two types of in-class deterrents: "sanction threats" and "a high risk of detection" (p. 190). Sanction threats include announcing penalties for cheating before an exam or encouraging students to report cheating during an exam (Davis, Grover, Becker, & McGregor, 1992; Nonis & Swift, 1998). High risk of detection deterrents include the instructor walking up and down the aisles or watching students closely during an exam (Nonis & Swift, 1998; Singhal & Johnson, 1983). Although Smith et al. (2002) questioned the effectiveness of in-class deterrents compared to moral education, there is sufficient research supporting the effectiveness of in-class deterrents in reducing cheating behaviors (Davis & Ludvigson, 1995; Davy et al., 2007). Moreover, research indicates that the presence of in-class deterrents reinforced the perception that cheating is unethical; therefore, individuals would neutralize their cheating behaviors more with the existence of in-class deterrents.

Prior cheating has been considered a good predictor for future cheating behaviors (Davy et al., 2007; Smith et al., 2002). Davis and Ludvigson (1995) and Nonis and Swift (1998) reported that students who had cheated before were more likely to cheat in the future. Moreover, individuals who are intrinsically motivated are less likely to have any cheating experiences in the past, whereas extrinsically motivated students are more likely to have cheating experiences (Davy et al., 2007). Lastly, individuals who have cheated in the past would need higher levels of neutralization to rationalize cheating behaviors (Smith et al., 2002).

### Hospitality Education

There are only a few studies regarding cheating behaviors in a hospitality and tourism education context; however, they focused on the relationships between socio-demographic factors and cheating behaviors. Kincaid and Zemke (2006) surveyed students taking hospitality management classes with 39 statements about cheating from several previous studies and included them in a survey to measure the relationships of gender, ethnic origin, and age to each statement. They concluded that male students believe that they should do whatever they can to get ahead, whereas females showed stronger ethical attitudes. They also found that Asians tend to agree more strongly with more of the statements than other ethnic groups, which they attributed to cultural differences. Finally, Kincaid and Zemke (2006) showed that students who are in the 22 to 29 years old range agree with the statements more than students who are 21 years old or less and students who are 30 years old or older.

Calvert, Martin, Beck, and Lin (2008) also focused on academic dishonesty in hospitality education. They developed 30 statements, based on previous studies, investigating not only cheating behaviors but also unethical academic behaviors in general. Calvert et al. (2008) surveyed college seniors who studied food service, hospitality, tourism, and culinary arts in order to determine the likelihood that they would participate in academically dishonest behaviors. Among college seniors, the researchers found significant differences between male and female students. The data for seniors were also compared to the data for freshmen; however, they did not find any significant differences.

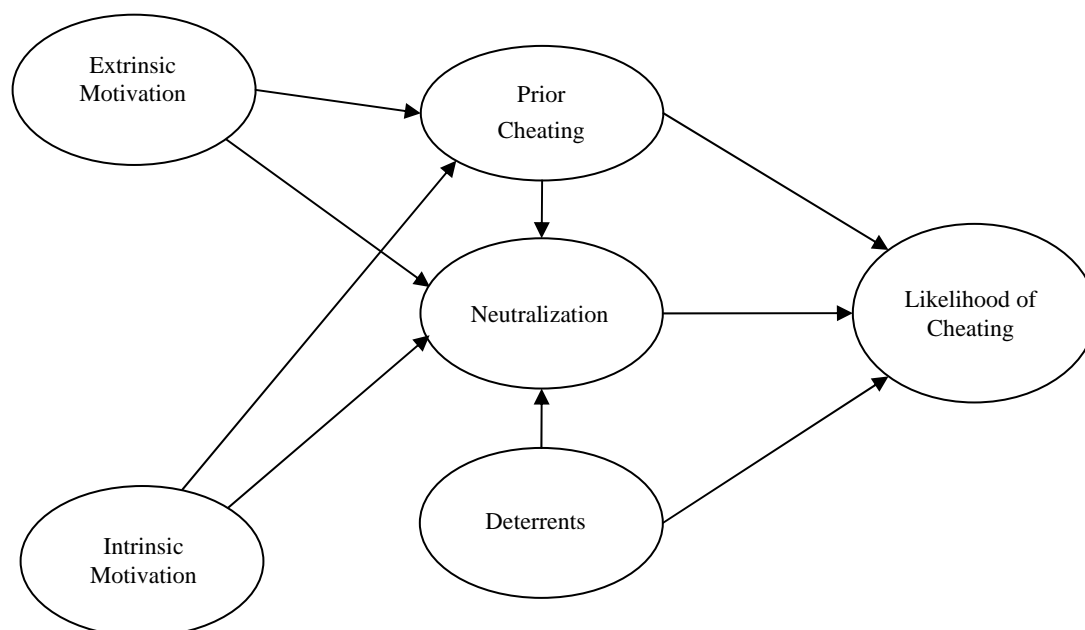


Figure 1. Theoretical model.

### Methodology

#### Data Collection

The data were collected using a convenience sampling method. Self-administered questionnaires were distributed to hospitality and tourism students in a university located in the Southwestern US. The researchers visited classrooms, made an announcement about the survey, and distributed the survey to students. The survey was distributed to every student in the classroom so the researchers would not know who participated and who

did not. After distributing the questionnaires, the researchers left the classroom, and students were asked to drop the surveys in a box by the main entrance when the class was over. A total of 400 surveys were distributed, and 324 were collected and used as valid data for the study.

### **Measurement**

The survey was developed based on a comprehensive review of previous literature and SDT and modified to fit the hospitality context. The survey consisted of six parts to measure the influence of attitudinal factors, self-reported prior cheating behavior, and the tendency to neutralize cheating behaviors on likelihood of cheating behaviors. All the measurement items used a 5-point Likert scale except the demographic information items.

Part one included a total of eight questions regarding extrinsic motivation and intrinsic motivation adapted from Vallerand et al. (1992). For items in part one, respondents were asked to “indicate the extent to which each response is similar to your own” on questions such as “Why do you go to college?”. Items used a 5-point Likert scale, ranging from 1 (does not correspond at all) to 5 (corresponds exactly). In this study, extrinsic motivation and intrinsic motivation represented the students’ motivation to come to college.

The second part of the questionnaire adapted 12 questions from Davis et al. (1992) and Singhal and Johnson (1983) to assess the frequency of in-class deterrents implemented by the students’ instructors. Respondents were asked to “think of all the exams you have taken in college. How frequently have you seen the following implemented by the instructor?”. Examples included were: “making sure there is an empty seat between each student” and “giving all essay-type exams”. Items used a 5-point Likert scale, ranging from 1 (never) to 5 (very often).

Part three of the survey contained 11 questions regarding students’ neutralization behaviors to examine the degree of justification of dishonest behaviors. Items were adapted from Haines et al. (1986), and respondents were prompted to “indicate the extent to which you agree that a student is justified in cheating in each of the following circumstances”. Some of the circumstances listed were: “The student is in danger of losing a scholarship due to low grades” and “Everyone else in the room seems to be cheating”. They rated each item based on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Part four included 12 questions regarding prior cheating experiences adapted from Tom and Borin (1988). For items in part four, students were asked to “think of all the exams you have taken in college. How often have you participated in each of these activities during exams?”. Activities included were: “took an exam for someone else” and “obtained a copy of the test prior to taking it in class”. They rated the frequency of the questions based on a 5-point Likert scale ranging from 1 (never) to 5 (very often).

The fifth part of the survey consisted of 12 questions about the likelihood of future cheating adapted from Davis et al. (1992) and Singhal and Johnson (1983). Students were asked to answer the following question: “You are taking a course that is difficult but important and there is a possibility that you may or may not make the desired grade if you do not cheat. Please indicate how likely or unlikely you are to cheat if the instructor does the following”. Examples of the instructor’s behavior were: “assigning seats to students” and “encouraging students to report cheating incidents during an exam”. Items used a 5-point Likert scale, ranging from 1 (very unlikely) to 5 (very likely).

The last part of the questionnaire obtained respondents’ demographic information such as age, gender, class standing, and overall grade point average. The demographic information was collected and used to check for differences when the variables were controlled.

## Data Analysis

The data collected were formatted for use with SPSS 19.0 and the Mplus 6.0 statistical modeling program. Descriptive statistics analysis was conducted to check for missing data and data entry errors. Cronbach's alpha was utilized to determine the reliability, and all of the alpha values were found to be exceeding the acceptable level of 0.6 (Tabachnick & Fidell, 1996).

## Results

### Descriptive Statistics

Of the students who participated in this study, females comprised 61.4% and male respondents were 38.6%. Approximately 76.0% of the respondents were upper-classmen (juniors and seniors), while 24.0% were lower-classmen (freshmen and sophomores). One of the main reasons why there were more upper-classmen than lower-classmen is because that the university had a large number of transfer students from community colleges. The average age of the respondents was 21 years old, the oldest respondent was 51 years old, and the youngest was 17 years old. More than half of the respondents had a 3.0 or higher GPA. Detailed respondent demographic data are displayed in Table 1.

Table 1

#### *Demographic Profile*

Variable	Item	<i>N</i>	%
Gender ( <i>N</i> = 308)	Male	119	38.6
	Female	189	61.4
Class standing ( <i>N</i> = 308)	Freshman	28	9.1
	Sophomore	46	14.9
	Junior	100	32.5
	Senior	134	43.5
Age ( <i>N</i> = 304)	20 years old or younger	128	42.1
	21-30 years old	170	55.9
	31 years old and older	6	2.0
Overall GPA ( <i>N</i> = 221)	2.0 or lower	2	0.9
	2.01-3.0	88	39.8
	3.01-4.0	131	59.3

### Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA)

A CFA was executed using Mplus 6.0 on the original factor structure. The model was not satisfactory, as  $\chi^2 = 3,235.152$  [ $df = 1,415$ ,  $p < 0.01$ ], Comparative Fit Index (CFI) = 0.836, Tucker-Lewis Index (TLI) = 0.828, and Root Mean Square Error of Approximation (RMSEA) = 0.109 with a 90% confidence interval of 0.103-0.114. In order to determine a more viable factor structure, an EFA was run in SPSS 19.0 using principal axis factoring with varimax rotation. Multiple EFAs were run until a congeneric factor structure was found with at least three variables loading at 0.4 or higher (Gorsuch, 1997).

After several CFAs were run, it was revealed that the model was not a good fit, as  $\chi^2 = 1,416.298$  [ $df = 293$ ,  $p < 0.001$ ], CFI = 0.699, TLI = 0.666, and RMSEA = 0.063 with a 90% confidence interval of 0.060-0.066. The model was retained with deletion of variables and modifications to the model. The final statistics of model fit were  $\chi^2 = 277.912$  [ $df = 166$ ,  $p < 0.001$ ], CFI = 0.961, TLI = 0.951, and RMSEA = 0.046 with a 90% confidence interval of 0.036-0.055. The final results from the CFAs are shown in Table 2, and the mean score,

the standard deviation, and Cronbach's alpha for each predicted latent variable are shown in Table 3. In addition, the correlations among the main constructs are displayed in Table 4.

Table 2

*Factors and Indicators*

Construct	Item
Intrinsic motivation (IM)	For the pleasure I experience in broadening my knowledge about subjects that appeal to me (IM1).
	Because my studies allow me to continue to learn about many things that interest me (IM2).
	For the pleasure I experience when I discover new things never seen before (IM3).
	Because I experience pleasure and satisfaction while learning new things (IM4).
Extrinsic motivation (EM)	In order to obtain a more prestigious job later on (EM1).
	In order to have a better salary later on (EM2).
	Because I want to have "a good life" later on (EM3).
Deterrents (DT)	Walk up and down aisles throughout the exam (DT1).
	Distribute different forms of the same test (DT2).
	Constantly watch students during the exam (DT3).
Neutralization (NT)	The student does not have time to study because he/she is working to pay for school (NT1).
	The student's cheating is not hurting anyone (NT2).
	The instructor does not seem to care if he/she learns the material (NT3).
Prior cheating (PC)	Took an exam for someone else (PC1).
	Changed answers to an exam and submitted it for regrading (PC2).
	Exchanged papers (answers) during an exam (PC3).
Likelihood of cheating (LC)	Announce penalties for cheating prior to the test (LC1).
	Request that students do not cheat (LC2).
	Distribute different forms of the same test (LC3).

Table 3

*Factor Loadings in the Measurement Model*

Factor	Item	Loading	Mean	SD	$\alpha$
IM	IM1	0.829	3.912	0.666	0.837
	IM2	0.740			
	IM3	0.685			
	IM4	0.621			
EM	EM1	0.834	4.581	0.631	0.847
	EM2	0.737			
	EM3	0.659			
DT	DT1	0.721	4.066	0.693	0.700
	DT2	0.626			
	DT3	0.644			
NT	NT1	0.815	2.157	0.981	0.802
	NT2	0.734			
	NT3	0.730			
PC	PC1	0.893	1.263	0.554	0.797
	PC2	0.857			
	PC3	0.668			
LC	LC1	0.926	1.928	0.926	0.881
	LC2	0.839			
	LC3	0.730			

Table 4

*Correlations Among Constructs Following a CFA*

Factor	IM	EM	DT	NT	PC	LC
IM	-					
EM	0.207	-				
DT	0.124	0.198	-			
NT	-0.101	-0.073	-0.067	-		
PC	-0.114	-0.148	-0.052	0.408	-	
LC	-0.104	-0.021	-0.136	0.504	0.515	-

**Structural Equation Modeling**

In order to empirically validate the proposed model (see Figure 1) presented earlier, a structural model was estimated. The structural equation modeling results provided by Mplus indicated that the model fits the data well ( $\chi^2 = 220.2131$  [df = 131,  $p < 0.01$ ], CFI = 0.967, TLI = 0.956, RMSEA = 0.046 with a 90% confidence interval of 0.035-0.056, and Standardized Root Mean Square Residual (SRMR) = 0.044). This shows that the model is a good fit for the data.

The standardized path coefficients for the accepted structural model are illustrated in Figure 2. Students reporting higher levels of intrinsic motivation reported lower levels of prior cheating (-0.126); however, unlike the previous literature, there was a significant negative relationship between extrinsic motivation and prior cheating (-0.189). In addition, prior cheating showed a significant positive influence on likelihood of cheating (0.288) and neutralization (0.462). Neutralization also has a positive relationship with likelihood of cheating (0.480). Deterrents also has a positive relationship with likelihood of cheating (0.480). The remaining paths were not supported (see Figure 2).

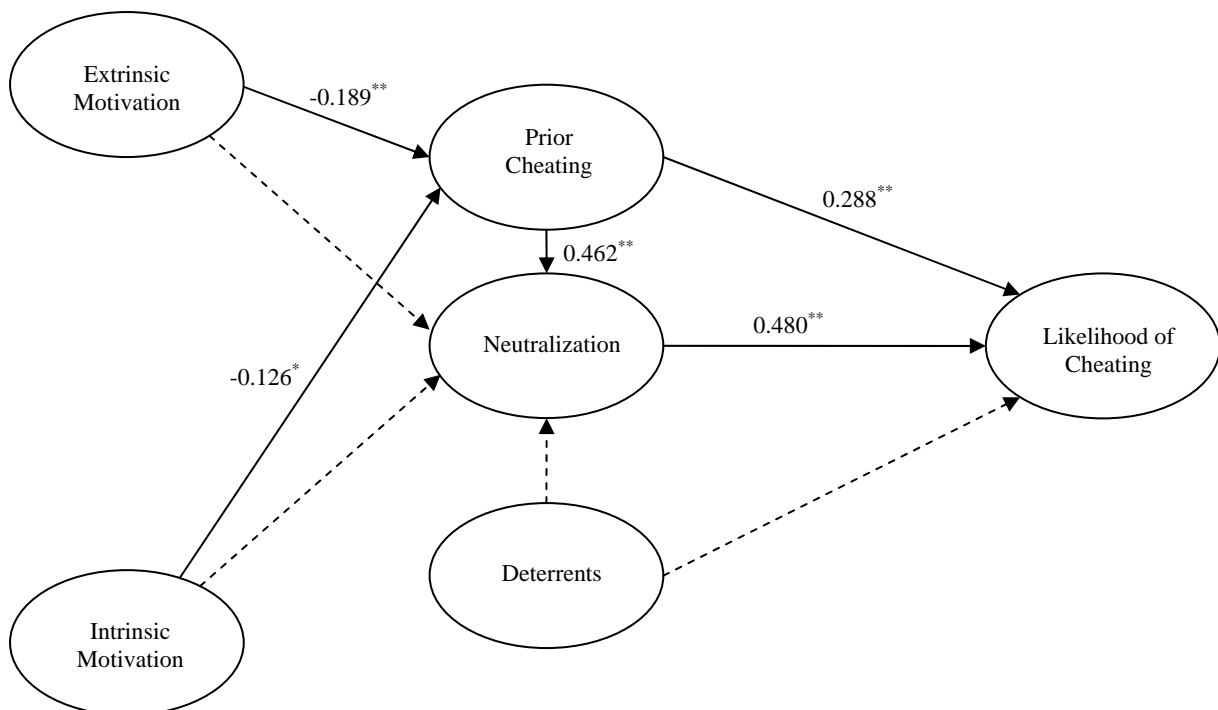


Figure 2. Accepted structural model. Note. \*:  $p < 0.05$ ; \*\*:  $p < 0.01$ .

Further, extrinsic motivation shows an indirect negative relationship with likelihood of cheating through prior cheating (-0.054) and an indirect negative relationship with likelihood of cheating through prior cheating and neutralization (-0.042). For all of the model results, statistically significant relationships are illustrated with solid lines while non-significant relationships are represented by dotted lines.

The theoretical model was also tested based on gender differences. The structural equation modeling results for female students indicated that the model fits the data well ( $\chi^2 = 189.236$  [df = 131,  $p < 0.01$ ], CFI = 0.939, TLI = 0.924, RMSEA = 0.055 with a 90% confidence interval of 0.041-0.068, and SRMR = 0.052). This shows that the model is a good fit for the data. The standardized path coefficients for the accepted structural model for females are illustrated in Figure 3. There was a significant negative relationship between intrinsic motivation and neutralization (-0.182). Prior cheating showed a significant positive influence on neutralization (0.241). Neutralization also had a positive relationship on likelihood of cheating (0.517). The remaining paths were not supported (see Figure 3).

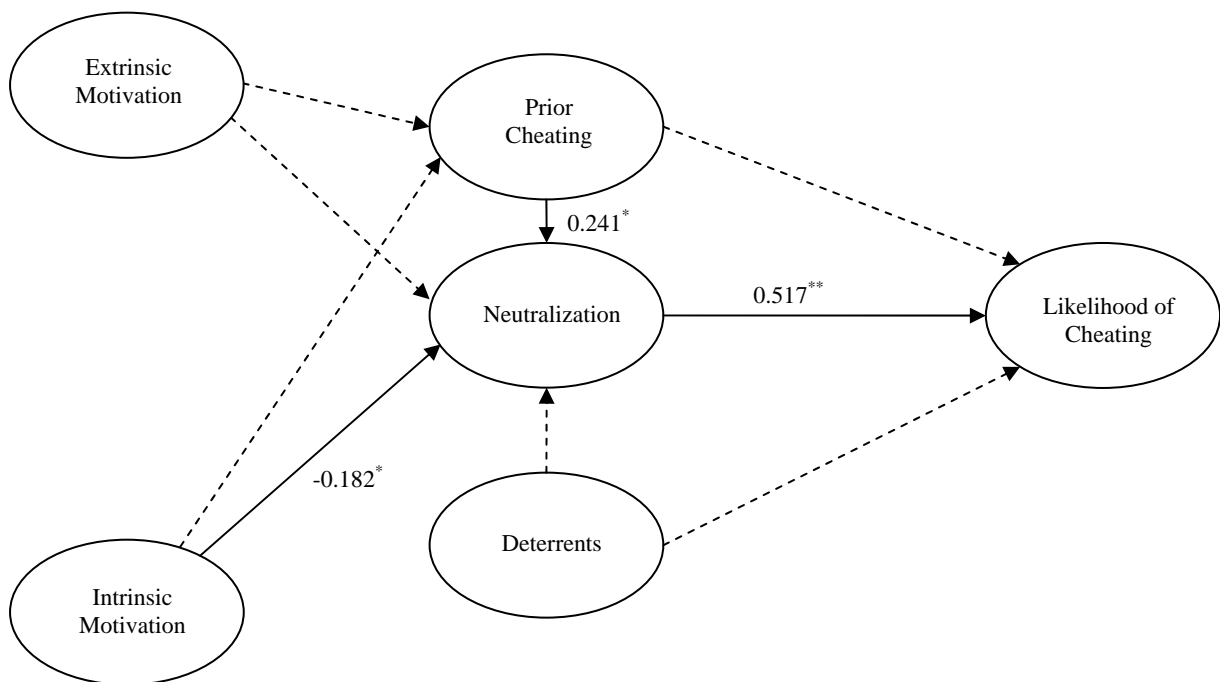


Figure 3. Accepted structural model for female students. Note. \*:  $p < 0.05$ ; \*\*:  $p < 0.01$ .

The structural equation modeling results for male students indicated that the model fits the data well ( $\chi^2 = 198.896$  [df = 131,  $p < 0.01$ ], CFI = 0.938, TLI = 0.918, RMSEA = 0.066 with a 90% confidence interval of 0.046-0.084, and SRMR = 0.059). This shows that the model is a good fit for the data.

The standardized path coefficients for the accepted structural model for male students are illustrated in Figure 4. Students reporting higher levels of extrinsic motivation reported lower levels of prior cheating (-0.296), which is not consistent with previous literature. Prior cheating had a significant positive influence on likelihood of cheating (0.390), and neutralization also showed a positive influence on likelihood of cheating (0.401).

Further, extrinsic motivation showed an indirect negative relationship with likelihood of cheating through prior cheating (-0.115) and an indirect negative relationship with the likelihood of cheating through prior cheating and neutralization (-0.064). The remaining paths were not supported (see Figure 4).

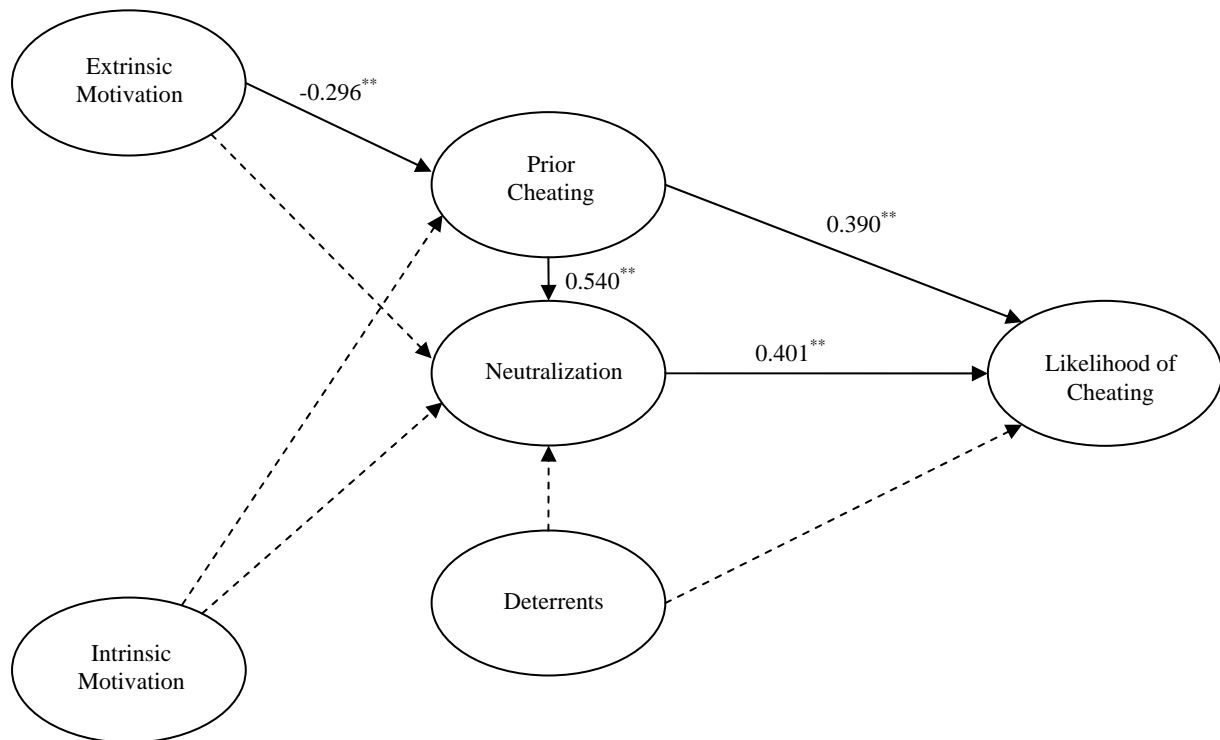


Figure 4. Accepted structural model for male students. Note. \*:  $p < 0.05$ ; \*\*:  $p < 0.01$ .

The theoretical model was also tested based on age differences, academic performance, and class differences in addition to gender differences. However, there were no significant relationships with the demographic information items except gender.

## Conclusions

### Discussion

This study provides findings with regard to cheating behaviors among hospitality and tourism undergraduate students. First of all, extrinsic motivation had a negative relationship with prior cheating. Extrinsic motivation showed an indirect negative effect on likelihood of cheating through prior cheating and an indirect negative effect on likelihood of cheating through prior cheating and neutralization.

These results were not consistent with those from previous studies which found a positive relationship between extrinsic motivation and likelihood of cheating and prior cheating. One possible explanation is that hospitality and tourism schools focus more on hands-on learning and less on academic performance than business schools. For example, students work in the kitchen and dining halls in food courses and work at the front desk and housekeeping in lodging courses. Therefore, hospitality and tourism students may perceive that their courses are directly related to their careers and believe that these courses will help them find a job after graduation.

Secondly, intrinsic motivation showed a negative relationship with prior cheating which is consistent with previous research. Students who are intrinsically motivated do not feel the need to cheat, because they care more about learning than the grade. This result supports the previous studies claiming that intrinsic motivation is positively related to student learning.

Thirdly, neutralization had a positive relationship with likelihood of cheating, which is in line with prior research. This result suggests that the more students neutralize and justify their cheating behaviors, the more likely they are to engage in cheating behaviors in the future. Previous studies have argued that students understand that cheating is wrong and, thus, invest a great amount of effort in rationalizing their behaviors in order to cheat in the future and avoid feeling guilty.

Lastly, this research showed that prior cheating was positively related to likelihood of cheating. Hospitality and tourism students who have cheated in the past are more likely to cheat in the future, because they have done it before and feel more comfortable doing it. Additionally, prior cheating was positively related to neutralization, confirming that students who had engaged in cheating behaviors would need to neutralize their continued cheating behaviors more (Davy et al., 2007).

In the current study, in-class deterrents did not play a significant role in relation to likelihood of cheating. Previous studies have argued that deterrents have a negative relationship with likelihood of cheating and have recommended using more than one in-class deterrents to effectively prevent and reduce cheating behaviors. However, this study showed that there is no significant relationship between deterrents and likelihood of cheating.

Gender was used as a moderator to check the differences in cheating behaviors between male students and female students. For females, intrinsic motivation was negatively related to neutralization; however, extrinsic motivation did not influence their prior cheating and likelihood of cheating. This supports the previous studies claiming that females are more likely to rationalize than male students, because they generally take the higher moral ground.

On the other hand, extrinsic motivation was negatively related to prior cheating among males. Previous research claimed that males are more competitive and tend to believe that they should do whatever it takes to get ahead. Therefore, male students are more likely to present a higher level of extrinsic motivation than female students. In addition, males who had cheated in the past were more likely to cheat in the future, while prior cheating was not a significant indicator for likelihood of cheating among females.

### **Limitations**

There are several limitations present in this research study. Due to the sensitive nature of the study, it was presumed that the respondents underreported their prior cheating, likelihood of cheating, and neutralization. Therefore, it was explained in detail, during the recruitment process, that participant responses were completely anonymous and that no one would be able to be identified by any faculty members or the researchers.

Another limitation is the reduced generalizability of this study due to the sampling method. The respondents of the research are from one university in the Southwestern US and may not represent broader populations. The results may differ if this study is conducted in other regions of the US or even in other countries. Future research could attempt to replicate this study in a wider sample of hospitality and tourism program students throughout the world to increase the generalizability of the results.

Lastly, this research employed a few factors as dependent variables to examine the likelihood of cheating. There are many other attitudinal and behavioral factors affecting students' cheating behaviors, and future studies can employ these factors. In addition, this study strictly focused on cheating behaviors during exams. There are studies about cheating in online classes or plagiarism on papers or projects. As there are a growing number of online programs in hospitality and tourism management, future research can apply this study to students taking online classes to examine any differences between cheating in traditional and online classes.

## Implications

In spite of the limitations, this study suggests several implications for hospitality and tourism instructors and administrators. The results show that both intrinsic motivation and extrinsic motivation have significant positive relationships with cheating behaviors. This argues that instructors and administrators should emphasize how important it is to learn the course materials and how much the courses are related to the jobs in the industry. Developing lab courses and expanding opportunities to have hands-on experiences in the industry may reduce students' cheating.

This research shows that neutralization has a significant positive relationship with likelihood of cheating. In order to reduce the rationalization, instructors should be as well-prepared for their classes as they expect their students to be. Students may feel more obligated and responsible for classes when they see that their instructors are well prepared, which will reduce rationalizing behaviors. For female students, encouraging learning and the desire to learn would reduce their rationalization behaviors and cheating behaviors, whereas emphasizing the connection between the courses and the jobs that are done in the industry would significantly reduce male students' likelihood of engaging in cheating behaviors.

As reported in previous research, students who have cheated in the past are more likely to cheat in the future than students who have not cheated. Therefore, instructors should consistently enforce policies about cheating and report to the university if cheating behaviors have been detected in the classroom (Nonis & Swift, 1998). Fishbein (1994) claimed that faculty members and administrators are hesitant to report cheating or deal with cheating on their own, as the formal process has become very cumbersome. However, students' behavior in the classroom is believed to be extended into their professional lives (Tom & Borin, 1988). Faculty members should not only educate their students on class content but also prepare students for society by explaining that cheating behaviors as students or as industry professionals cannot be allowed (Nonis & Swift, 1998).

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