

# **Factors Associated with College Cheating and Suggestions for Reducing Classroom Cheating**

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## **Abstract**

This research studies various methods to reduce cheating during in-class examinations. We surveyed 218 undergraduate-business students (133 men and 85 women) enrolled in introductory accounting and business law classes at a private university in the Northeast region of the United States. Our data indicate that cheating on minor examinations positively associated with having observed other students cheating and negatively associated with social desirability response bias, believing that cheating is wrong and that more should be done about cheating. Cheating on major examinations positively associated with having cheated on minor examinations and gender and negatively associated with believing that cheating is wrong. Students' history of cheating on both minor-and-major examinations and knowing other students who cheated positively associated with students' intent to cheat in the future and negatively associated with social desirability response bias. Only one suggestion for reducing cheating provided by students had significant differences among the three student cheating groups – bags and computers should not be accessible to students during examinations. Finally, while there was only one significant difference among the students' history of cheating, three recommendations for reducing cheating are consistent with prior research: closely monitor students, use different examinations and separate students; these suggestions indicate that professors are not heeding the findings of prior research.

## **Introduction**

Examining students' cheating behavior in college is crucial as students' propensity to cheat in college associates with students' attitudes about unethical behavior in business (Bratton & Strittmatter, 2013; Graves, 2008). Sayed & Lento (2016) indicate that about 75% of accounting faculty members who were surveyed indicated that the integrity of their classrooms is being compromised by academic dishonesty. Kennedy, Bisping, Patron and Roskelley (2008) indicated that instructors could cause an increase in the level of cheating when they do not closely monitor examinations and/or are reluctant to engage in formal disciplinary actions. Consequently, Grira and Jaeck (2019) believe that instructors must become more intolerant of cheating. Additionally, our classroom environments have changed in the last few years; Lento, Sayed, and Bujaki, (2018) reported that students use cell phones/other devices to cheat on examinations.

This research is a partial replication of these prior studies using selected questions on cheating on examinations and asking students to provide suggestions on how to combat/reduce cheating. While Salter et al.'s (2001), Bernardi and

Adamaitis' (2007) and Bernardi et al.'s (2008) samples included international students, the focus of this research is the behavior of students from the United States.<sup>1</sup> Burman, Reed and Alm (2010, p.789) noted that replication research "shows the original article's findings are robust and substantial extensions over time." Replication studies are also a "crucial test of the reliability and validity . . . lead[ing], when successful, to generalizable" results (Lindsay, 1995, p. 35).

Our findings are consistent with those of prior research for cheating on minor-and-major examinations as well as students' intent to cheat in the future and support the need to directly control for social desirability response bias (SDRB).<sup>2</sup> Only one suggestion for reducing cheating had significant differences among the three student cheating groups – bags and cell phones should not be accessible to students during examinations. While three suggestions for reducing cheating did not have significant differences among students' cheating history, they were consistent with prior research: closely monitor students, use different examinations and separate students, which indicate that professors are not responding to prior research findings.

## Literature Review

### Overview

The emphasis on education is important as cheating is increasing in elementary, high school, and college students and has been proven to be carried over to the professional level (Bratton & Strittmatter, 2013). However, Power (2009) reported that students lack a clear understanding of what constitutes academic misconduct; compounding this problem is that cheating has been defined differently by students, faculty members, and educational institutions (Jordan, 2001). Elias and Farag (2010, p. 278) found that accounting students "with a very positive attitude towards money were more likely to view" clear violations of GAAP as being ethical. For example, when a student is caught cheating, he/she typically indicates that they did not know their actions were wrong, dishonest or constituted cheating (O'Neill, 2012). Consequently, Dee and Jacob (2012) suggest that cheating can be reduced by making students aware of what constitutes academic misconduct.

Lexico (2020) defines cheating as acting "dishonestly or unfairly in order to gain an advantage, especially in a game or examination." An individual's decision to cheat is an ethical judgment that has been shown to associate with his/her behavioral intentions (Barnett and Vaicys, 2000). Consequently, the format of the literature review uses Ajzen and Fishbein's (1980, p. 8) model on the influence of individual attitudes and subjective norms on decision making (Figure 1) on students' decision to cheat. The literature review examines prior research on factors associated with cheating and whether recommendations for reducing the level of classroom cheating associate with students' prior cheating behavior.

Throughout this research, we will be using data from six articles in Table 1 that used all or parts of Ameen et al.'s (1996) survey; one common element for all six studies is that the samples were composed of students in accounting courses. While Ameen et al.'s (1996) sample were all students from the United States, Salter et al.'s (2001) sample

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<sup>1</sup> While there has been an increase in online/hybrid formats, which suggests new concerns for faculty, the sample for this research came from traditional in-person accounting classes in a pre-Covid-19 environment similar to those in the research we replicated. Consequently, these changes suggest a reexamination to determine whether the suggestions of prior research (Ameen, Guffey, and McMillan, 1996; Salter, Guffey, and McMillan, 2001; Bernardi and LaCross, 2004; Bernardi and Adamaitis, 2007; Bernardi, Baca, Landers and Witek, 2008; Bernardi, Banzhoff, Martino and Savasta, 2012) made a difference.

<sup>2</sup> Dalton & Ortegren (2011) found that self-reported data that can lead to spurious or misleading results caused by socially desirable responding, which Bernardi and Adamaitis (2007) and Bernardi and LaCross (2004) refer to as 'data contamination'. Consequently, including a direct measure of SDRB is a way to examine the 'truthfulness' of the data (Tormo-Carbo, Klimkiewicz & Seguí 2019, Lehnert, Park & Singh 2015, Valentine & Rittenbuerg 2007). However, a meta-analysis (Yang, Ming, Wang & Adams 2017) found that less than 12% of research includes controls for SDRB.

were from the United Kingdom and the United States. Bernardi and LaCross' (2004) contribution to the research stream was to include a direct measure of social desirability response bias (SDRB: Paulhus, 1991) as part of their methodology. Bernardi and Adamaitis' (2007) sample included students from Australia, China, Ireland and Japan along with data from Bernardi and LaCross (2004) included for comparison purposes. Bernardi, Banzhoff, Martino and Savasta (2012), Bernardi, Baca, Landers and Witek (2008) used some of Ameen et al.'s (1996) survey as well as Paulhus' (1991) direct measure of SDRB and asked students to indicate the methods that students used to cheat on examinations and suggestions for decreasing the level of cheating.

### *Attitude towards Cheating*

Ajzen and Fishbein's (1980, p. 7) theory indicates that individuals' attitudes are similar to a cost-benefit analysis when an individual "believes that performing a given behavior will lead to mostly positive outcomes an individual will hold a favorable attitude toward performing the behavior." Ameen et al. (1996), Salter et al. (2001), and Bernardi and Adamaitis (2007) found that students who perceived the likelihood of severe punishment (i.e., failing the course or suspension) were less likely to cheat than students who perceived a less severe punishment. Additionally, Kennedy et al. (2008) indicated that instructors who do not closely monitor examinations and/or are reluctant to engage in formal disciplinary actions could cause an increase in the level of cheating. Ajzen and Fishbein's (1980) theory suggests that students compare the benefits associated with cheating (i.e., higher grades) to the probability of being caught and formally punished (Yu, Glanzer, Johnson, Sriram, and Moore, 2018).

Baack, Fogliasso and Harris' (2000) theory suggests a student's ethical sensitivity is eroded (Carpenter, Ramaseshan, Ewing., 2004) when they do not report other students who they observed cheating, which can eventually lead students to believe that cheating is a socially acceptable behavior in college (Forkuor, Amarteifio, Attoh, and Buari, 2019; MacGregor, and Stuebs, 2012; Bernardi, Banzhoff, Martino, and Savasta, 2011; Noris and Smith, 2001). Ameen et al. (1996), Salter et al. (2001) and Bernardi and Adamaitis (2007) found that students who had observed other students cheating, which these authors defined as their environment variable, were more likely to cheat. Additionally, when students observe other students cheating, they may perceive cheating as an acceptable way to be more competitive and "level the playing field" in college (Yu et al., 2018, p. 560) – lower GPAs positively associate with cheating (O'Neill, and Pfeiffer, 2012). Burrus, McGoldrick, and Schuchmann, (2007). Furutan (2018) found a positive association between students' tolerance for dishonesty in college and their tolerance for dishonest work place practices.

Ameen et al. (1996), Salter et al. (2001), Bernardi and LaCross (2004) and Bernardi and Adamaitis (2007) found a positive association between students having observed other students cheating and not being caught and the likelihood of cheating. This is especially true as courses in their major become more difficult, but require higher grades to be competitive in the job market (Gira & Jaeck, 2019). Students reduce or negate the feelings of guilt about having cheated by rationalizing their behavior (MacGregor, and Stuebs, 2012; Murphy and Dacin, 2011). For example, Ameen et al. (1996), Salter et al. (2001) and Bernardi and Adamaitis (2007) reported that cynical students were more likely to cheat.<sup>3</sup> Jordan (2001) indicated that students who do not believe cheating is wrong observed a higher level of cheating and were more likely to believe that their peers cheated (i.e., having a cynical attitude). Bernardi and Adamaitis' (2007) data indicate a significant negative association between cynicism about cheating and wanting more to be done about cheating.

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<sup>3</sup> Ameen et al.'s (1996, p. 196) questionnaire included the following three questions to measure a student's level of cynicism (i.e., everyone cheats (Ives, 2020; Stephens, 2019; O'Neill, and Pfeiffer, 2012)): (1) people who say they have never cheated before are hypocrites; (2) everybody steals, cheats, or lies at least once in his/her lifetime; and, (3) people have to cheat in this "dog-eat-dog" world. Students respond to each of these three questions on a five-point Likert scale. Cynicism is the average of each student's responses for the three cynicism questions; this average has a range of zero to five.

### ***Subjective Norms***

Ajzen and Fishbein's (1980, p. 7) theory indicates that subjective norms are a function of what a student "believes that specific individuals or groups think he should or should not perform the behavior." Consequently, Ajzen and Fishbein's (1980) theory indicates that subjective norms could be described as socially desirable attributes that include: being intolerant of cheating; being less cynical about cheating; and, being less likely to cheat. Pressure for high grades (Boyle, Boyle and Carpenter, 2016) and the expectation for a good job upon graduation (i.e., expectations and outcomes: Kreitner and Kinicki, 2008) positively associated with students' desire to cheat (Sarita, 2015; Tinkelman, 2012; McCabe, Treviño, and Butterfield, 1999).<sup>4</sup>

Competing with other students and/or a fear of failing can also result in cheating (Burton and Near, 1995). While Yu et al. (2018) noted that academic preparation negatively associated with cheating, they also found that the lack of self-control negatively associated with academic preparation and positively associated with involvement with leisure activities and academic cheating. MacGregor and Stuebs (2012) found that the time students spent on academics was negatively associated with cheating. Cheating associated with the pressure for higher undergraduate GPAs was associated with the pressure for job offers from prestigious companies or acceptance into graduate schools (McCabe et al., 2001). The pressure for higher grades was the most important consideration at private institutions and institutions that were accredited by AACSB (Boyle et al., 2016). Combining Boyle et al.'s (2016) and McCabe et al.'s (2001) findings, one might hypothesize that the reason to attend a private or AACSB-accredited institution is a recognition associated with these institutions in the post-graduation world (i.e., the desire to increase one's chances for advancement (Simkin and McLeod, 2010)).

Bernardi (2006) found that, in an 11-country study, female subjects consistently scored higher on Paulhus' (1991) measure of SDRB. Bernardi and Adamaitis (2007) found that, for all five countries in their study, the more likely a student was to respond in a socially desirable manner, the more likely the student was to be intolerant of cheating. Bernardi and LaCross (2004) and Bernardi and Adamaitis (2007) reported that students' cynicism about cheating was negatively associated with SDRB. Students who scored higher measure of SDRB were more likely to report a lower level of cynicism. Bernardi and Adamaitis (2007) noted that the more likely a student was to respond in a socially desirable manner, the less likely the student was to report having cheated.

### ***Prior Cheating***

Ameen et al. (1996) and Salter et al. (2001) both noted that the most powerful variable in their modeling of prior cheating behavior was a student's tolerance of cheating, where the higher the average score for this variable the lower the tolerance for cheating. In both studies, the tolerance for cheating variable was negatively associated with a student's history of cheating in college. Ameen et al. (1996), Salter et al. (2001) and Bernardi and Adamaitis (2007) reported that students' level of cynicism positively associated with students' self-reported cheating behavior. Bernardi and LaCross' (2004) contribution to the research stream was to include a direct measure of social desirability response bias (SDRB: Paulhus, 1991) as part of the methodology used by Ameen et al. (1996) and Salter et al. (2001). Bernardi and LaCross' (2004) model for prior cheating behavior was similar to that of Ameen et al. (1996) and Salter et al. (2001); however, students' intent to cheat in the future was the most powerful variable followed by students' tolerance of cheating. Consequently, the more likely a student was to respond in a socially desirable manner (i.e., higher scores on Paulhus' (1991) measure of SDRB), the more likely the student was to be intolerant of cheating (i.e. higher scores on the tolerance variable). Given the research cited, our first research question can be stated:

**RQ1a:** *What current factors associate with cheating on minor or major examinations?*

**RQ1b:** *Are the current factors that associate with cheating on minor or major examinations similar to those reported in prior research?*

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<sup>4</sup> The finding of a positive association between parental pressure for high grades and the expectation acceptance at a desired university with students' cheating was also found in a study using high-school students (Sarita, 2015).

***Intent to Cheat in the Future***

Ameen et al. (1996) and Salter et al. (2001) noted that a students' intent to cheat in the future positively associated with their history of cheating.<sup>5</sup> In a five-country sample, Bernardi and Adamaitis (2007) found that students' intent to cheat in the future (SDRB) was positively associated with students' history of cheating. Bernardi et al. (2011, 2012) found that students' intent to cheat in the future was positively associated with their history of cheating and negatively associated with their belief about more needing to be done about cheating and SDRB. In Bernardi et al.'s (2012) model, students who had observed other students cheating and/or knew other students who regularly cheated were more likely to indicate that they intended to cheat in the future. Consequently, our second research question can be stated:

**RQ2a:** *What current factors associate with students' intent to cheat in the future?*

**RQ2b:** *Are the current factors that associate with students' intention to cheat in the future similar to those reported in prior research?*

***Ways to Reduce Cheating***

The three conditions referred to as the fraud triangle include: pressure, opportunity and rationalization (Bujaki, Lento, & Sayed, 2019; Burke & Sanney 2018; Scott, 2017; Dellaportas, 2013; MacGregor, and Stuebs, 2012; Albrecht, Albrecht & Albrecht, 2006). Little and Handel (2016, p. 38) indicate that one of the three conditions of the cheating triangle, which is an adaptation of the fraud triangle is instructors' lack of control of the testing environment. While Malgwi and Rakovski (2009) believe that the opportunity and rationalization corners of the fraud triangle are shared by students and faculty, Bujaki, Lento, and Sayed (2019, p. 43) argue that the opportunity corner of the fraud/cheating triangle is the faculty's domain (i.e., their responsibility to reduce or detect cheating). Murphy and Dacin (2011) noted that, while close supervision during examinations can reduce the opportunity component of the fraud triangle, ineffective supervision can lead to increasing the rationalization component of the fraud triangle.

There is conflicting research concerning the actions suggested by students on deterrents that can be used to reduce cheating (Wajda-Johnston, Handal, Brawer & Fabricatore, 2001), students' reports on instructors' precautions during examinations (Liebler, 2012) and professors' suggestions on how to reduce cheating (Boyle et al., 2016). Smith, Davy, Rosenberg and Haight (2002, p. 62) encouraged colleagues to increase their efforts to reduce cheating by using proven deterrents such as "physically separating students during exams, using different forms of the same test, [and] walking up and down the aisles." Wajda-Johnston et al. (2001, p. 298) reported that cheating could be reduced by 65% if instructors closely monitored students during tests and by 49.4% if instructors assigned seats and 36.6% by frequently changing tests.<sup>6</sup>

Over a decade after Wajda-Johnston et al.'s (2001) research, Liebler (2012, p. 329) found that only 24% of students indicated that proctors monitored students for the entire time they were in the classroom. Liebler (2012) also reported that only 16% of students indicated that their examination seating was randomly assigned and only 35%

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<sup>5</sup> While Ameen et al.'s (1996), Salter et al.'s (2001), Bernardi and LaCross (2004) and Bernardi and Adamaitis (2007) used students' intent to cheat in the future as an independent variable to explain past cheating behavior, later research in this stream used students' prior cheating behavior to model their intent to cheat in the future. Using either method, these two variables are significantly associated.

<sup>6</sup> Instructor's test-bank manuals can be obtained by students (Cheng, and Crumbley, 2018; Madara, Resha, Krol, Lacey, Martin, O'Sullivan, and Smith, 2017) from the web. Consequently, if an instructor uses test-bank questions, doing something as simple as paraphrasing the test-bank questions can reduce the advantage of memorizing these questions (Golden and Kohlbeck, 2020).

reported that their test was not the same as other sections taking the same course from the instructor.<sup>7</sup> Using a sample of college professors, Boyle et al. (2016, p. 49) reported that only 23.6% of professors suggested monitoring students during tests and only 21.3% suggested frequently changing tests as ways to reduce cheating. The research cited supports Grira and Jaeck (2019) belief that instructors must become more intolerant of cheating regardless of the time commitment involved (Scott, 2017).

Bernardi et al. (2008) indicated that students cheat using cheat sheets, note cards, writing notes on their body or clothing, programming answers into calculators and notes or books hidden in bathrooms. These authors also mention cell phones as a way to cheat; *USA TODAY* (2017) reported that one in three students use cellphones or other devices to cheat on examinations and that 60% of students have seen or know another student who has cheated using a cell phone or other device, which is consistent with earlier research (Ameen et al., 1996; and Salter et al., 2001). Chandler (2019) suggested that cell phones and smart watches should be banned from examinations as they give the student(s) using them an unfair advantage (Christensen, Cote, and Latham, 2010). Therefore, the third research question can be stated:

**RQ3a:** *Do the suggestions to decrease cheating vary by students' history of cheating?*

**RQ3b:** *Are the current suggestions to decrease cheating consistent with those provided in prior research?*

## Methodology

### *Participants*

The data for this research were gathered from surveys taken by 218 business students (133 men and 85 women – Panel A of Table 2) at one private university located in the Northeastern United States. Panel B shows the breakdown of class level: 53.6% sophomores, 32.6% juniors, and 13.8% seniors. The data in Panel C indicate whether a student had never cheated, cheated on minor examination only, or cheated on both minor and major examinations.

### *Survey Questions*

We limited our examination to cheating on minor and major examinations and therefore our research uses only seven of Bernardi et al.'s (2012) questions and replaces the remaining questions with a question about ways to reduce cheating. Our survey consisted of three parts: a short background questionnaire, which asked for information on age, gender, major, graduation year and home country (Appendix A). The information requested on age and home country was asked so that we did not include adult students and international students in our research. The reason for these exclusions was that neither the adult students nor the international students from specific countries had large enough sample sizes for analysis. Appendix B contains the seven questions from Bernardi et al.'s (2012) questionnaire on cheating and an open-ended question we added about suggestions for reducing cheating. Appendix C was Paulhus' (1991) Impression Management Subscale, which measures an individual's propensity to respond in a socially desirable manner. To ensure consistency, the students who administered the surveys provided the same instructions and informed the participants that their anonymity was assured. Instructors were asked to leave the classroom while the surveys were being filled out.

### *Variables*

The dependent variables (Appendix B) include cheating on minor (Q4) and major (Q3) examinations and students' intention to cheat in the future (Q5). The independent variables that were considered in this research include: having observed cheating (Q1); knowing someone who routinely cheats (Q2); should more be done about cheating (Q6); and, whether cheating is wrong, dishonest, or unethical (Q7). We coded these seven questions as one if answered

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<sup>7</sup> Smith, Davy and Easterling (2004) also suggest having an empty seat between students, which might not be possible at some institutions, and putting personal belongings (i.e., all books and backpacks) where they are not accessible. In the current COVID-19 environment, student spacing is more than what these authors suggest.

yes and zero if answered no. The final question (Q8) in Appendix B was an open-ended question that requested suggestions for reducing cheating; the number of responses on this question ranged from zero (no suggestions provided) to four (the maximum suggestions provided). Other independent variables were gender, which was coded one for male and zero for female students and social desirability response bias (SDRB).

The Impression Management Subscale (IMS: Appendix C) of Paulhus' (1991) Balanced Inventory of Desirable Responding (BIDR) was used to directly control for social desirability response bias (SDRB) for two reasons. The IMS is highly correlated to other social desirability measures and had a 0.88 correlation with scores on the full BIDR (Randall and Fernandes, 1991, p. 811); the IMS has an internal consistency of 0.80 in this study. The IMS provides participants with 20 statements and they respond using a seven-point Likert scale. The points are ranked one, not true, to seven, very true; a socially desirable response to odd statements is one or two and a socially desirable response to even statements is six or seven. For example, the first two statements on Paulhus' (1991, pp. 37-41) IMS are:

- (1) Sometimes I tell lies if I have to; and,
- (2) I never cover up my mistakes.

A socially desirable response for the first statement would be on the Not True side of the scale because telling a lie is not socially desirable behavior. Responding on the Very True side of the scale on the second statement would be a socially desirable answer because covering up mistakes is not a socially desirable behavior. The score on Paulhus' (1991) IMS, which has a range of zero to 20, measures a student's propensity to respond in a socially desirable manner. The number of socially desirable responses were identified and then tallied for each participant. Consistent with Bernardi (2006), female students scored significantly higher on Paulhus' measure of SDRB than male students (5.7 versus 5.1,  $p = 0.08$ ).

## Analysis

### Overview

Our study is an extension of a study from Bernardi et al. (2012). Consequently, we included the same three models that examined: cheating on minor and major examinations (RQ1) and intention to cheat in the future (RQ2). After analyzing these areas, we then analyze the suggestions students provided for deterring cheating by students' prior history of cheating. The data in Figure 2 compare students' self-reported cheating behavior between Bernardi et al.'s (2012) data and the current data. The data for students who reported never having cheated on either a minor-or-major examination indicate a 6.5% decline over time (49.1% versus 42.6%). However, the difference between the studies for those students who reported cheating on minor examinations increased by 10.7% (33.9% versus 44.6%). Finally, there was a small decrease of 4.2% (17.0% versus 12.8%) between the studies for the students who reported having cheated on both minor-and-major examinations.

The data in Table 3 provide comparisons between the current research in Panel A and Bernardi et al. (2012) in Panel B. The analyses include models for cheating on minor examinations (Panels A1 and B1), cheating on major examinations (Panels A2 and B2), and students' intent to cheat in the future (Panels A3 and B3). In the modeling processes, four independent variables were identified: having observed cheating, social desirability response bias (SDRB), students' belief that cheating is wrong, and the belief more should be done about cheating as well as our control variable gender. For cheating on major examinations, we added having cheated on a minor examination as an independent variable; for the intent to cheat in the future, we added having cheated on minor and/or major exams as independent variables.

### Cheating on Minor Examinations

The percent of students who reported cheating on minor examinations increased from 33.9% to 44.6% (Figure 2) during the time between Bernardi et al. (2012) and the current study. The data in Panel A1 indicate that students' self-reported cheating on minor examinations increased as having observed other students cheating increased.

Students' cynical attitudes (i.e., everyone cheats) and/or the belief that the benefits outweigh the costs of cheating especially if other students are not caught cheating could be increased by observing other students cheating (i.e., their rationalization for cheating). Students' self-reported cheating on minor examinations decreased as all of the following variables increased: SDRB; believing that cheating is wrong; and, that more should be done about cheating. As cheating is not a socially desirable behavior, the decrease in cheating with increases in SDRB is consistent with the literature. The model is significant ( $p < 0.00$ ) and has an estimated  $R^2$  of 0.232; almost half of the estimated  $R^2$  is explained by having observed other students cheating (partial  $R^2$  of 0.097). The model in Panel A1 is consistent with Bernardi et al.'s (2012) model in Panel B1, which consists of the combined variable of observing students cheating and knowing students who cheat as well as SDRB. While Bernardi et al.'s (2012) model is significant ( $p < 0.00$ ), the estimated  $R^2$  is 0.067 (i.e., about one-third of the current data's estimated  $R^2$ ).

### **Cheating on Minor Examinations**

The percent of students who reported cheating on major examinations decreased from 17.0% to 12.8% (Figure 2) during the time between Bernardi et al. (2011) and the current study. The data in Panel A2 indicates that students' self-reported cheating on major examinations increased for students who had cheated on minor examinations. Students' self-reported cheating on major examinations decreased for students who believed that more should be done about cheating. Gender was also significant; female students reported cheating on major examinations at a lower rate than male students. The model is significant ( $p < 0.00$ ) and has an estimated  $R^2$  of 0.282; about two-thirds of the estimated  $R^2$  is explained by having cheated on a minor examination (partial  $R^2$  of 0.199). The model in Panel A2 is consistent with Bernardi et al.'s model in Panel B2, which consists of the combined variable of observing students cheating and knowing students who cheat, having cheated on a minor examination, SDRB and gender. While Bernardi et al.'s (2012) model is significant ( $p < 0.00$ ), its estimated partial  $R^2$  was 0.345 (i.e., about one-fourth higher than the current data's estimated  $R^2$ ).

### ***Intention to Cheat in the Future (RQ2)***

The data in Figure 3 compare students' intention to cheat in the future by self-reported cheating category between Bernardi et al.'s (2012) data and the current data. The data for students who reported never having cheated on either a minor-or-major examination are essentially the same for both studies (i.e., about 2%). However, the difference between the studies for those students who reported cheating on one test was a substantial increase of 15.8% (43.7% versus 59.5%). There was a marginal increase of 2.4% (76.0% versus 78.4%) between the studies for the students who reported having cheated on both minor-and-major examinations.

The data in Panel A3 of Table 3 show the regression model for students' intention to cheat in the future; the model includes: having cheated on a major examination, having cheated on a minor examination, knowledge of students cheating and SDRB. The two variables used in both this study and Bernardi et al. (2012) were having cheated on a major examination and having cheated on a minor examination. The data indicate that having cheated on a minor examination was the most powerful variable in both the current study and Bernardi et al. (2012) with estimated partial  $R^2$ s of 0.325 and 0.255 respectively. The estimated partial  $R^2$  for cheating on minor examinations in the current study is almost one-fourth higher than in Bernardi et al.'s (2012) study. The estimated partial  $R^2$ s for having cheated on a major examination was similar in both studies - 0.031 in the current study and 0.056 in Bernardi et al (2012). While knowing a student(s) who had cheated had an estimated partial  $R^2$  of 0.044, SDRB had an estimated partial  $R^2$  of 0.015.

### ***Ways to Deter Cheating (RQ3)***

After entering the students' responses into an excel spreadsheet, the responses were separated into groups of identical/similar responses. Six groupings of suggestions for reducing cheating were identified (Table 4).<sup>8</sup> Panel A of Table 3 shows the breakout of the 218 students by their responses to our questions on having cheated on a minor-or-major examination and the students' 495 suggestions for reducing cheating. While 49.1% of the students in our

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<sup>8</sup> The 'other comment' category is made up of 17 suggestions that we could not separate into individual groups each had only one or two suggestions. Finally, 25 students did not provide any suggestions for reducing cheating.

sample reported never having cheated, 33.9% reported only having cheated on minor exams and 17.0% reported cheating on both minor-and-major examinations. We compared these percentages with the breakdown of the 495 suggestions for reducing cheating by students' prior history of cheating.<sup>9</sup> A contingency analysis indicated that the expected percentages (i.e., sample breakdown) were not significantly different ( $p = 0.38$ ) from the actual percentages of suggestions (i.e., suggestion breakdown) provided by each group of students. Consequently, we used the percentages in the suggestion breakdown in our remaining analyses in this section.

The differences among the three categories of self-reported cheating behavior were not significantly different for five of the six suggestions (Panel B): professors should watch closer; use different examinations; separate students; consequences/punishment; and, better prepare students. The one suggestion that had significant differences between the expected percentages (i.e., suggestion breakdown) and the actual percentages was for bags and phones up front in the classroom (i.e., not readily accessible). For the 'bags and phones stored in the front of the classroom' suggestion, one would have expected a rate of: 46.1% for the never cheated group; 36.4% for the cheated on minor examinations only group; and, 17.6% for the cheated on both minor-and-major examinations group. As shown in Panel B, the actual percentages were: 38.9% for the never cheated group; 45.8% for the cheated on minor examinations only group; and, 15.3% for the cheated on both minor-and-major examinations group. A contingency analysis indicated that the difference between the actual-and-expected percentages was significant ( $p = 0.005$ ); the highlighted data for the never cheated and cheated on minor examinations only groups were the reason for the significant difference.

#### *Additional Analyses*

Our additional analyses used a median-split procedure to divide the sample into students whose score on Paulhus' (1991) measure of SDRB was relatively low and students whose SDRB score was relatively high; Bernardi and LaCross (2004) and Bernardi and Adamaitis (2007) conducted similar analyses. The median SDRB score was 5; students with this score were not considered in this part of our analysis. The median-split procedure resulted in students with scores of 0 through 4 ( $n = 103$ ) being classified as low SDRB, while students with scores from 6 through 14 ( $n = 94$ ) being classified as high SDRB.

The data in Table 5 indicate that all but Question 6 of our first seven survey questions from Appendix B were significantly affected by SDRB. For each of the first five survey questions, the high SDRB group reported a lower average. Having cheated on a minor-or-major examination and the intent to cheat in the future are not socially desirable behaviors. The high SDRB group also reported lower average for having observed someone cheating and/or knowing someone who regularly cheats. Responding in a positive manner to these questions could elicit a question of whether the student reported the cheating behavior to authorities. Finally, the high SDRB group reported a significantly higher average to the seventh question about whether cheating was wrong, dishonest or unethical (i.e., socially desirable responses).

#### **Discussion**

This study extended the work of Bernardi et al. (2008) and replicated Bernardi et al. (2012) by examining the factors associated with cheating and methods to decrease cheating. We analyzed the variables associated with cheating in the current sample and compared these to the variables that Bernardi et al. (2012) found significant. We also analyzed the suggestions provided by 218 students about ways to decrease cheating for differences among students' cheating behavior. While five of our six groups of suggestions for reducing cheating were not significant, having students place their bags and cell phones in the front of the classroom (i.e., not accessible) was significant.

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<sup>9</sup> We used this procedure because Ameen et al. (1996) noted significant differences between the responses of students who had/had not cheated for: copying from another student; using crib notes; sitting next to another with the intention to copy; giving answers to another student; and, asking for answers from another student.

Table 3 and Figure 2 suggest that the level of cheating on minor examinations will probably increase in the future. Figure 2 shows that the percent of students who reported that they had not cheated decreased by 6.5% from 49.1% to 42.6% between Bernardi et al.'s (2012) study and the current research with an increase in cheating on minor examinations of 10.7% from 33.9% to 44.6%. Additionally, the percent of students who intended to cheat in the future (Figure 3) increased between these two studies for students who had cheated on minor examinations by 15.5% from 43.7% to 59.9%. There was a marginal decrease 4.2% of students who cheated on both minor-and-major examinations. One might posit that, if instructors were more vigilant when monitoring examinations, students would be concerned about the increased risk of being caught; however, this was not part of the current research's questionnaire. Consequently, this suggests an area for future research that extends the current data (i.e., another replication study).

Bernardi et al. (2008) reported that students cheat using cheat sheets, note cards, writing notes on their body or clothing, programming answers into calculators, and using cell phones; *USA TODAY* (2017) reported that one in three students use cell phones or other devices to cheat on examinations. Consequently, our finding that students who reported never having cheated or cheated on minor examinations only indicated that bags and cell phones should not be accessible during examinations is especially important. Placing bags and cell phones in the front of the classroom during examinations should resolve part of the problem.<sup>10</sup> Each of these methods of cheating should be evident if the instructor is closely monitoring his/her students during an examination. Equally disturbing is the fact that, while 80.3% of our sample thought cheating was wrong, dishonest or unethical (Appendix B – Question 7), only 42.2% of our sample thought more should be done about cheating (Appendix B – Question 6).

Prior research (Boyle et al., 2016; Liebler, 2012) indicated that cheating could be reduced by closely monitoring students during examinations. Wajda-Johnston et al. (2001) also reported that cheating could be reduced by 36.6% by frequently changing tests and 49.4% by assigning seats randomly. In fact, Kennedy et al. (2008) suggested that instructors who do not closely monitor examinations and/or are reluctant to engage in formal disciplinary actions could be causing an increase in the level of cheating. We found no significant differences among the cheating categories for five of the recommendations to reduce cheating (Table 4); however, four of these recommendations for reducing cheating are unfortunately consistent with prior research: professors should monitor students closer, use different examinations, separate students and punishment (i.e., engage in formal disciplinary actions). Our finding that none of these differed among the cheating categories is disturbing as it indicates that instructors are not heeding prior research results.

Our analysis also indicates that students' history of cheating significantly associates with students' intent to cheat in the future, which is consistent with prior studies. The most powerful variable in predicting students' intent to cheat in the future was having cheated on a minor examination(s); this variable explained 0.325 of the model's 0.412 (79.8%) estimated R<sup>2</sup>. Having cheated on a minor examination was the most powerful variable when modeling cheating on major examinations; this variable explained 0.199 of the model's 0.281 (70.8%) estimated R<sup>2</sup>. Additionally, 78.9% (39.0%) of the students in our sample indicated that they had observed another student cheating (knew a student who regularly cheated (Appendix B - Questions 1 and 2). Having observed another student cheating was the most powerful variable in the model for cheating on minor examinations and explained 0.097 of the model's 0.232 (41.8%) estimated R<sup>2</sup>. If students who are taking the examination notice other students cheating, then one could hypothesize that an instructor, whose primary role during an examination should be monitoring the students taking the examination, should also be capable of detecting cheating.

The challenge facing the professorate is to decrease the level of cheating on minor examinations as it appears to be the critical component in the slippery slope of cheating (Baack et al. 2000). The data in Table 3 suggest that, by reducing the level of cheating on minor examinations, level of cheating on major examinations and the intent to

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<sup>10</sup> The lead author also requires students to turn off their cell phones so as not to create distractions during examinations and indicates that any student caught using a cell phone during an examination is presumed to be cheating.

cheat in the future should be reduced. Rewording Kennedy et al.'s (2008) concern, the level of cheating can be reduced by instructors closely monitoring examinations and engaging in disciplinary actions.

Using the responses from a sample of 571 faculty members, Boyle et al. (2016, p.49) reported that their participants suggested that faculty members should enforce academic dishonesty policies - 48.3%, monitor students for cheating especially during exams - 23.6%, change/use multiple versions of exams - 21.3%. Boyle et al.'s (2016, p.49) sample also indicated that institutions should support faculty who report cheating - 26.7% and discipline cheaters with consistent and severe consequences - 37.0%.<sup>11</sup> Given these findings, the question of why 40.3% of the faculty surveyed routinely ignored instances of cheating (Coren, 2011, p. 297) and only about 53.1% of students caught cheating were reported to university officials (Boyle et al., 2016, p. 46) remains unanswered. One possible explanation is that some professors feared retaliation if they accused a student of cheating (McCabe, 1993); for example, retaliation in the form of bad teaching evaluations (Keith-Spiegel et al., 1998). Fender and Godbey (2016, p. 71) noted that faculty fail to punish cheaters because:

Accusing, prosecuting and convicting cheaters are time intensive, stressful and potentially costly activities for which faculty members receive few rewards.

Additionally, Ameen et al. (1996), Salter et al. (2001), and Bernardi and Adamaitis (2007) all found that students who perceived the likelihood of severe punishment (i.e., failing the course or suspension) were less likely to cheat than students who perceived a less severe punishment. Boyle et al. (2016, p.49) noted that 48.3% participants suggested that faculty members should enforce academic dishonesty policies; however, Coren (2011, p. 300) noted "that 48.7% of the faculty had never referred a suspected case of cheating to the chair, dean or another body."<sup>12</sup> Lento et al. (2018, p. 20) found that only 21.1% of their sample (n = 327 professors) would fail a student for the course who was caught cheating. Additionally, these authors also found that only 36.4% would fail a student for the examination the student was caught cheating on.

Two other similarities between Bernardi and Adamaitis (2007) and the current research address students' views on whether cheating is wrong, dishonest or unethical (Appendix B – Question 7) and whether more should be done about cheating (Appendix B – Question 6). While 80.3% of the current sample thought cheating was wrong, dishonest or unethical, only 42.2% believed that more should be done about cheating. This data are consistent with Bernardi and Adamaitis (2007) who found that, while 83.9% of their sample thought cheating was wrong, dishonest or unethical, only 43.1% believed that more should be done about cheating. Finally, our additional analysis indicates that our results with respect to SDRB are consistent with Bernardi and Adamaitis (2007) and Bernardi and LaCross (2004).

This research has four limitations. First, the data were collected from one university located in the Northeast region of the United States, which suggests that our results may not be generalizable. Second, while the sample included sophomores through seniors, freshmen were not included as the first accounting class students take at this institution is in the sophomore year. The third limitation is that the survey was administered only once. Finally, this paper does not address the question of why professors do not address classroom cheating more vigorously.

Future research should focus on institutions from other areas of the United States or other countries and/or include students from other countries. Authors should include Paulhus' (1991) SDRB measure because of its significance in this research and because Bernardi (2006) found differences among the average SDRB scores of his 11-country

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<sup>11</sup> Two of Boyle et al.'s (2016) suggestions have been mentioned frequently in prior research: monitoring students for cheating especially during exams and changing/using multiple versions of exams (Liebler, 2012; Rosenberg and Haight, 2002; Wajda-Johnston et al., 2001).

<sup>12</sup> It is interesting to note the similar percentages reported in these two studies; while Boyle et al. (2016, p.49) noted that 48.3% should enforce policies, Coren (2011, p. 300) noted that 48.7% had never referred suspected case.

study. Second, while freshmen were not included in our sample, more complete examination of cheating would result if future research included freshmen in the sample. Research should also include cheating in the post Covid-19 environment of online instruction and testing. Future research should also examine why 40.3% of the faculty routinely ignored instances of cheating (Coren, 2011, p. 297) or only reported 53.1% of the cheating to university officials (Boyle et al., 2016, p. 46). Other possible reasons why faculty ignore or fail to report cheating include: pressure to maintain retention rates, student satisfaction, fear of litigation challenging accusations of cheating, and faculty fear of low teaching evaluations.

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**APPENDIX A  
BACKGROUND QUESTIONS**

**Gender (please circle):**    **Male**                      **Female**

**Age:** \_\_\_\_\_

**Home Country:** \_\_\_\_\_

**Have you taken or are you currently taking a college ethics course? (circle one) Yes No**

**Year in College:** \_\_\_\_\_

**Major:** \_\_\_\_\_

**APPENDIX B  
SURVEY QUESTIONNAIRE**

**Circle Yes or No for the following:**

1. Have you ever observed another student cheating on an exam in college?  
Yes                      No
2. Do you know anyone who routinely cheats on exams in college?  
Yes                      No
3. Have you ever cheated on a major exam (20% or more of the final grade) in college?  
Yes                      No
4. Have you ever cheated on a minor exam (less than 20% of the final grade) in college?  
Yes                      No
5. Do you think you will cheat on an examination in college in the future?  
Yes                      No
6. Do you think more should be done to stop cheating?  
Yes                      No
7. Do you believe cheating is wrong, dishonest, or unethical?  
Yes                      No
8. Please indicate the ways you would suggest to reduce cheating on examinations.
  - 1.
  - 2.
  - 3.
  - 4.

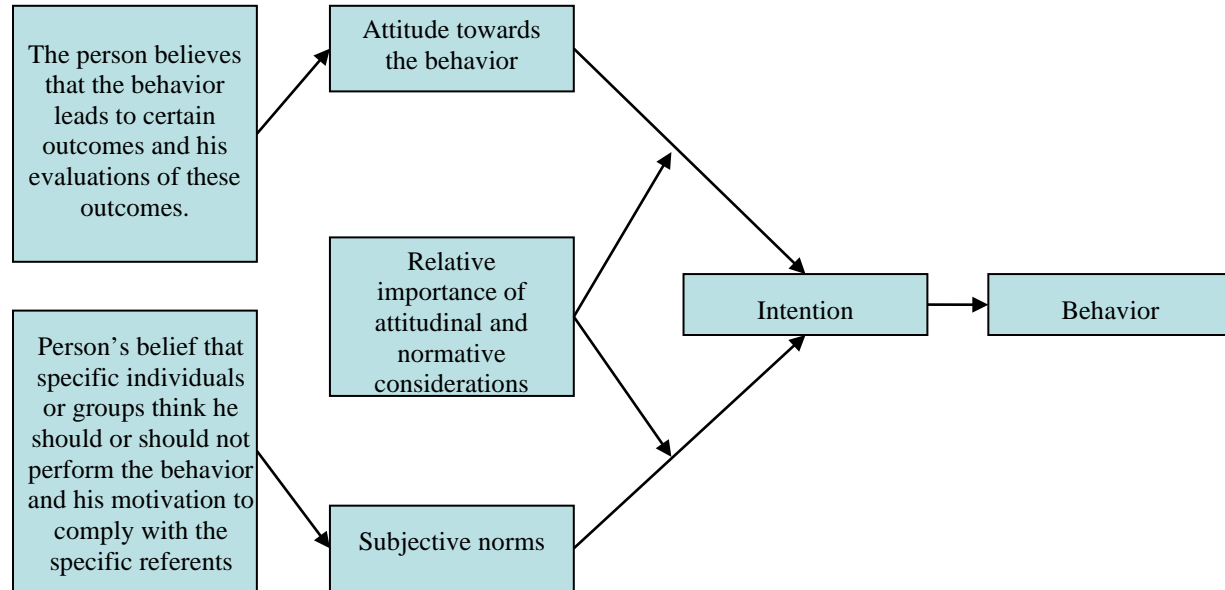
**APPENDIX C  
PAULHUS' (1991) IMPRESSION MANAGEMENT SUBSCALE**

Using the scale below as a guide, write a number beside each statement to indicate how much you agree with it.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>Not True</b>			<b>Somewhat True</b>			<b>Very True</b>

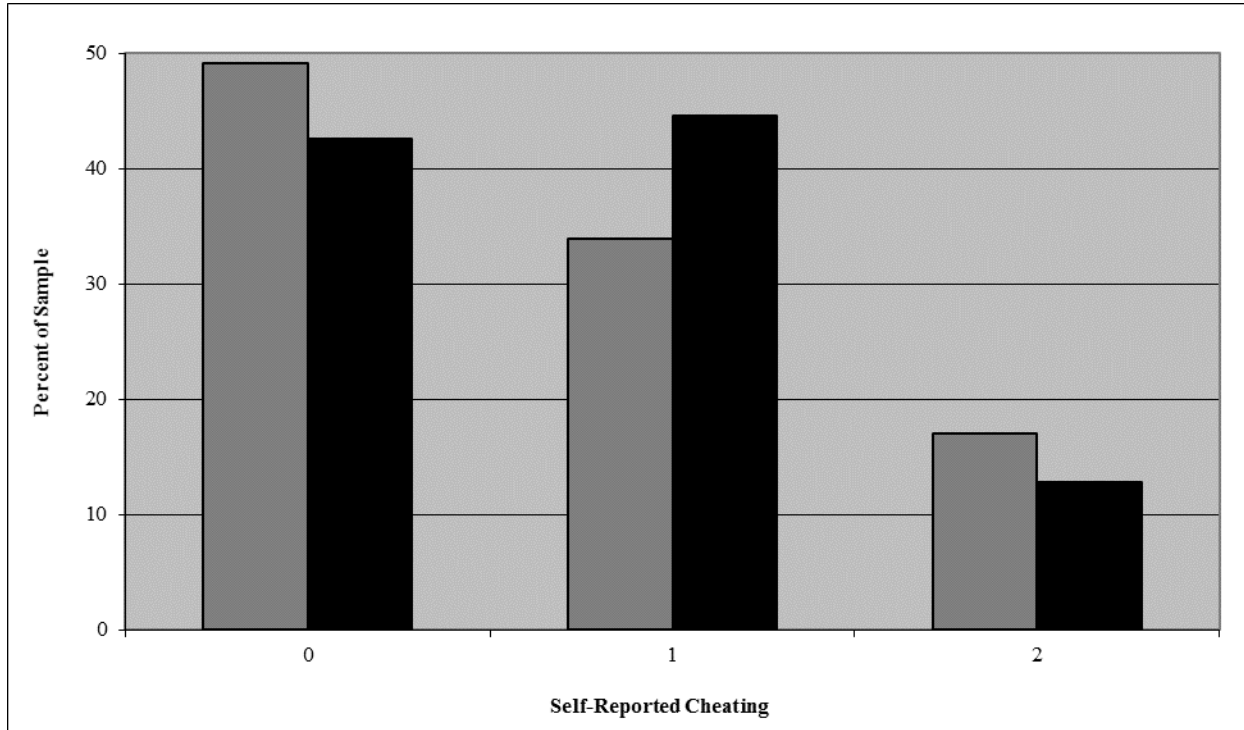
1. Sometimes I tell lies if I have to.
2. I never cover up my mistakes.
3. There have been occasions when I have taken advantage of someone.
4. I never swear.
5. I sometimes try to get even rather than forgive and forget.
6. I always obey laws, even if I am unlikely to get caught.
7. I have said something bad about a friend behind his/her back.
8. When I hear people talking privately, I avoid listening.
9. I have received too much change from a salesperson without telling him or her.
10. I always declare everything at customs.
11. When I was young, I sometimes stole things.
12. I have never dropped litter on the street.
13. I sometimes drive faster than the speed limit.
14. I never read sexy books or magazines.
15. I have done things that I don't tell other people about.
16. I never take things that don't belong to me.
17. I have taken sick leave from work or school even though I wasn't really sick.
18. I have never damaged a library book or store merchandise without reporting it.
19. I have some pretty awful habits.
20. I don't gossip about other people's business.

**Figure 1. The Influence Attitudes and Subjective Norms on Decision Making**



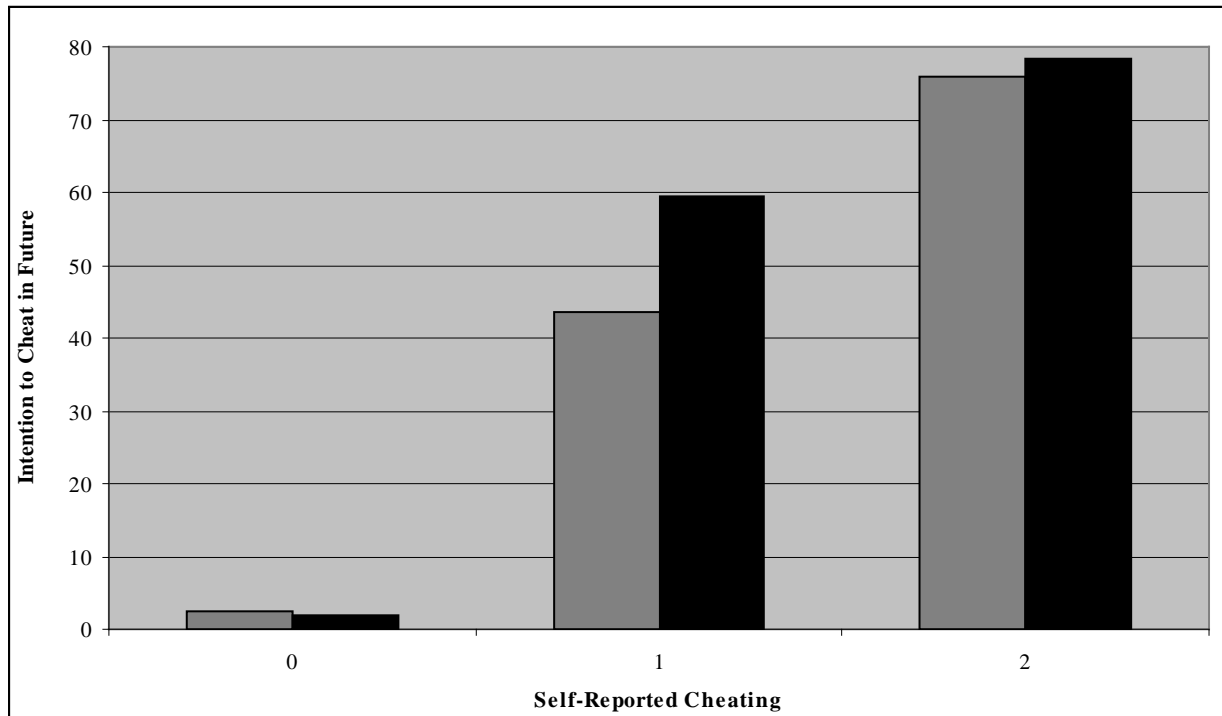
From: Ajzen and Fishbein (1980, p. 8)

Figure 2. Percent of Students by Past Cheating Behavior



Self- Reported Cheating	Sum of individual's responses to the two cheating questions on survey (Appendix B: Questions 3 and 4): 0 – Never cheated 1 – Cheated on minor examination 2 – Cheated on both minor and major examinations
Column Shading	Dark Grey      Bernardi et al.'s (2011) data Black            Current data
Column Shading	Individual's response to the question on intention to cheat in the future (Appendix B: Question 5) as a percent.

**Figure 3.** Percent of Students Who Intend to Cheat in the Future by Past Cheating Behavior



Self- Reported Cheating	Sum of individual's responses to the two cheating questions on survey (Appendix B: Questions 3 and 4): 0 – Never cheated 1 – Cheated on minor examination 2 – Cheated on both minor and major examinations
Column Shading	Dark Grey      Bernardi et al.'s (2011) data Black            Current data
Column Shading	Individual's response to the question on intention to cheat in the future (Appendix B: Question 5) as a percent.

**Table 1.** Studies Examined in the Literature Review

Author(s)	Year	(n)	Int'l	SDRB	Minor	Major	Intent	Cyn	Obs	Know
Ameen et al.	1996	320			X	X	X	X	X	X
Salter et al.	2001	370	X		X	X	X	X	X	X
Bernardi & LaCross	2004	174	X	X	X	X	X	X	X	X
Bernardi & Adamaitis	2007	464	X	X	X	X	X	X	X	X
Bernardi et al.	2008	417	X		X	X				
Bernardi et al.	2012	195		X	X	X	X		X	X
Int'l	International sample									
Minor	Have you ever cheated on a minor exam (less than 20% of the final grade)?									
Major	Have you ever cheated on a major exam (20% or more of the final grade)?									
Intent	Do you think you will cheat in the future?									
Cyn	Total of three questions on Cynicism:									
	1. People who say they have never cheated before are hypocrites.									
	2. Everybody steals, cheats, or lies at least once in his/her lifetime.									
	3. People have to cheat in this "dog-eat-dog" world.									
Obs	Have you ever observed another student cheating on an exam?									
Know	Do you know anyone who routinely cheats on exams?									

**Table 2.** Sample Demographics

	Men	Women	Total
Panel A: Sample demographics			
Gender	133	85	218
Age	19.9	19.9	19.9
College level	2.6	2.6	2.6
SDRB	5.7	5.1	5.3
Panel B: Sample composition by level and gender			
Sophomore	73	44	117
Junior	44	27	71
Senior	16	14	30
Panel C: Sample Composition by cheating activity on examinations			
Never	60	47	107
Minor only	44	30	74
Minor and major	29	8	37
College level	Students in this research were Sophomores (2), Juniors (3), or Seniors (4)		
SDRB	Social Desirability Response Bias Score		

**Table 3.** Models for proposed associations among cheating behaviors

Panel A: Current data (n = 218)

A1: Model for Cheating on Minor Examinations

<u>Model</u>	<u>Est R<sup>2</sup></u>	<u>ChiSq</u>	<u>P &gt; ChiSq</u>	
<u>Term</u>	<u>Coeff</u>	<u>ChiSq</u>	<u>P &gt; ChiSq</u>	<u>Part EstR<sup>2</sup></u>
Regress	0.232	70.00	< 0.000	
Observed	1.13	20.63	< 0.000	.097
SDRB	-0.23	15.75	< 0.000	.069
Wrong	-0.71	9.68	0.002	.048
DoMore	-0.36	4.85	0.028	.018

A2: Model for Cheating on Major Examinations

<u>Model</u>	<u>Est R<sup>2</sup></u>	<u>ChiSq</u>	<u>P &gt; ChiSq</u>	
<u>Term</u>	<u>Coeff</u>	<u>ChiSq</u>	<u>P &gt; ChiSq</u>	<u>Part EstR<sup>2</sup></u>
Regress	0.281	57.40	< 0.000	
Minor	1.33	17.55	< 0.000	.199
Wrong	-0.66	9.24	0.002	.064
Gender	0.46	3.49	0.062	.018

A3: Model for Intention to Cheat in the Future

<u>Model</u>	<u>Est R<sup>2</sup></u>	<u>ChiSq</u>	<u>P &gt; ChiSq</u>	
<u>Term</u>	<u>Coeff</u>	<u>ChiSq</u>	<u>P &gt; ChiSq</u>	<u>Part EstR<sup>2</sup></u>
Regress	0.412	116.61	< 0.000	
Minor	1.43	36.42	< 0.000	.325
Know	0.56	7.86	0.005	.044
Major	0.94	15.50	0.004	.031
SDRB	-0.23	15.75	0.043	.015

Panel B: Bernardi et al. (2012) (n = 195)

B1: Model for Cheating on Minor Examinations

<u>Model</u>	<u>Est R<sup>2</sup></u>	<u>ChiSq</u>	<u>P &gt; ChiSq</u>	
<u>Term</u>	<u>Coeff</u>	<u>ChiSq</u>	<u>P &gt; ChiSq</u>	<u>Part EstR<sup>2</sup></u>
Regress	0.067	18.02	< 0.000	
Ob+Kn	0.74	7.79	0.005	.044
SDRB	-0.12	5.90	0.015	.023

B2: Model for Cheating on Major Examinations

<u>Model</u>	<u>Est R<sup>2</sup></u>	<u>ChiSq</u>	<u>P &gt; ChiSq</u>	
<u>Term</u>	<u>Coeff</u>	<u>ChiSq</u>	<u>P &gt; ChiSq</u>	<u>Part EstR<sup>2</sup></u>
Regress	0.345	65.38	< 0.000	
Minor	1.89	13.03	< 0.000	.230
SDRB	-0.26	6.99	0.008	.063
Ob+Kn	1.07	6.02	0.014	.029
Gender	0.53	4.03	0.045	.023

B3: Model for Intention to Cheat in the Future

<u>Model</u>	<u>Est R<sup>2</sup></u>	<u>ChiSq</u>	<u>P &gt; ChiSq</u>	
<u>Term</u>	<u>Coeff</u>	<u>ChiSq</u>	<u>P &gt; ChiSq</u>	<u>Part EstR<sup>2</sup></u>
Regress	0.331	79.02	< 0.000	
Minor	1.31	21.58	< 0.000	.255
Major	0.94	15.50	< 0.000	.056

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DoMore	Student's belief that more should be done about cheating.
Gender	Coded as one (zero) for male (female) students.
Know	Student (does not) knows another student one who routinely cheats on exams in college – coded one (zero).
Major	Coded as one (zero) if the student reported having cheated (not having cheated) on a major examination.
Minor	Coded as one (zero) if the student reported having cheated (not having cheated) on a minor examination.
Observed	Student has (not) observed another student cheating on exams in college – coded one (zero).
SDRB	Social Desirability Response Bias Score
Wrong	Student's belief that cheating is (not) wrong, dishonest, or unethical coded one (zero)

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**Table 4.** Ways to Deter Cheating

Sample Description	Sample Size		Never Cheated	Self-reported cheating behavior		ChiSq Stat P > ChiSq
				Only Minor	Both Minor and Major	
Sample Breakdown	218	n %	107 49.1	74 33.9	37 17.0	
Reasons Breakdown	495	(n) %	228 46.1	180 36.4	87 17.6	0.38 NS
<u>Ways to deter cheating</u>						
Professors Watch Closer	117	n %	57 48.7	38 32.5	22 18.8	0.26 NS
Different Examinations	89	n %	40 44.9	33 37.1	16 18.0	0.70 NS
Separate Students	104	n %	46 44.2	39 37.5	19 18.3	0.95 NS
Consequences –Punishment	16	n %	7 43.8	6 37.5	3 18.8	1.14 NS
Better Prepare Students	55	n %	24 43.6	19 34.5	12 21.8	2.00 NS
Bags and Phones	72	n %	28 38.9	33 45.8	11 15.3	6.45 0.025
No Comment	25	n %	15 60.0	8 32.0	2 8.0	7.28 0.001
Other Comments	17	n %	11 64.7	4 23.5	2 11.8	9.77 0.0005
NS - Not Significant	<b>Highlighting</b> – Expected percentages are significantly different than actual percentages					

**Table 5.** Differences on Appendix B questions by median split of SDRB

Questions from Appendix B	Statistic	Low SDRB	High SDRB
1. Observed anyone cheating	Average Prob t	0.84	0.71 0.027
2. Know someone who regularly cheats	Average Prob t	0.51	0.28 0.001
3. Cheated on a major examination	Average Prob t	0.25	0.11 0.007
4. Cheated on a minor examination	Average Prob t	0.63	0.36 0.000
5. Intent to cheat in the future	Average Prob t	0.48	0.20 < 0.000
6. More should be done to stop cheating	Average Prob t	0.40	0.45 0.492
7. Cheating is wrong, dishonest or unethical	Average Prob t	0.77	0.87 0.054