

## Justifying academic dishonesty: A survey of Canadian university students

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### Abstract

Academic dishonesty is a growing problem in the higher education sector. Using a sample of 321 undergraduate students at a medium-sized Canadian university, this paper explores the respondents' acceptability of the various reasons for engagement in academically dishonest behaviour. The findings revealed that respondents displayed moderately negative attitudes toward academic dishonesty and that the top three circumstances under which academically dishonest behavior would be considered acceptable were pressure to maintain a scholarship, pressure from parents to perform well, and heavy academic work load.

Multiple ordinary least-squares regression analysis revealed that male respondents and those who reported a higher family income, enrolled in more classes, witnessed academic misconduct more frequently, expressed dissatisfaction with academic performance, indicated dissatisfaction with school life, placed less emphasis on intrinsic motivation to pursue higher education, and adopted a surface approach to learning were found to be associated with a greater likelihood of accepting the various justifications for academic dishonesty.

The results of this investigation may be utilized by university administrators, academic advisors, and academic counselors to aid in the design of support services and interventions (e.g., explicit guidelines and practical teaching/learning resources) that will serve to prevent academic misconduct and to promote academic integrity.

Submitted

01 July 2021

Revised

24 September 2021

Accepted

26 December 2021

### Keywords:

Justifying academic  
dishonesty,  
University students,  
Canada.

### Suggested Citation:

Chow, H.P.H., Jurdi-Hage, R., & Hage, H.S. (2021). Justifying academic dishonesty: A survey of Canadian university students. *International Journal of Academic Research in Education*, 7(1), 16-28 DOI: 10.17985/ijare.951714

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## INTRODUCTION

Academic dishonesty can be defined as “any deceitful or unfair act intended to produce a more desirable outcome on an exam, paper, homework assignment, or other assessment of learning” (Miller, Murdock, & Grotewiel, 2017: 121) and is undeniably a formidable challenge facing all institutions of higher education. Academic dishonesty can take different forms, such as cheating, plagiarism, and falsification. Notably, contract cheating (i.e., academic work being outsourced to a third party) has become a growing concern. Harper et al. (2018) have stressed that contract cheating takes place when a student submits academic work that has been completed by a third party, regardless of the involvement of monetary transaction and the student-third party relationship. Asking someone to write an assignment, purchasing a research paper from a website, or paying someone to sit an exam are examples of contract cheating.

As noted by Moore (2014), a survey of 54 Canadian universities revealed that 7,086 students were disciplined for cheating during the academic year of 2011-12. In fact, Eaton (2020a) has pointed out that cheating may be under-reported across Canada’s institutions of higher learning and estimated that over 70,000 post-secondary students may engage in contract cheating each academic year. This estimation was relied on findings from a meta-analysis revealing that about 3.5% of students engage in contract cheating annually. As well, Eaton (2020b) has also noted that cases of alleged unethical behaviour including rather unconventional cheating strategies (e.g., grade hacking, bribery, and theft of exams from offices) at universities across the nation have been widely publicized in the media (Eaton, 2020a, 2020b). Needless to say, these unfortunate incidents might tarnish the reputation of the institutions concerned and diminish the worth of the academic credentials that were granted.

Without a doubt, academic dishonesty is a critical issue that can seriously undermine the integrity of the education process. It may have detrimental consequences for the individuals who engage in such behaviour, the higher education sector, as well as the broader society. Previous studies have shown that academic dishonesty is associated with unethical behaviour in professional practice and in the workplace (Guerrero-Dib et al., 2020; Harding et al., 2004; Johnstone, 2016; LaDuke, 2013; Mulisa & Ebessa, 2021; Nonis & Swift, 2001) and engagement in other rule-violating behaviour (Blankenship & Whitley, 2000; Kerkvliet, 1994; Korn & Davidovitch, 2016; Lovett-Hooper et al., 2007).

In light of the fact that cheating on exams and written assignments has become rampant as a result of the burgeoning online paper and exam writing service sector, it is worth noting that some countries, such as Australia and New Zealand, have already resorted to legal means to tackle this problem, making it an offence to advertise or offer cheating services in higher education (Cosenza, 2020; Draper & Newton, 2017).

A growing body of literature has explored the correlates of academic dishonesty and revealed that a number of socio-demographic and contextual variables, including male students (Brunell et al., 2011; Eret & Ok, 2014; Eriksson, & McGee, 2015; Hensley et al., 2013), younger age (Rakovski & Levy, 2007; Vandehey et al., 2007), low self-esteem (David, 2015; Williamson & Assadi, 2005), aversive personality (Bacon et al., 2020; Esteves et al., 2021; Giluk, & Postlethwaite, 2015; Williams et al., 2010; Wilks et al., 2016), lack of language proficiency (Chien, 2017; Goh, 2015; McCabe et al., 2008; Yukhymenko-Lescroart, 2014; Yoshimura, 2018), low academic performance and scholastic attitudes (Park, et al., 2013; Pino & Smith, 2003; Smith et al., 2004; Whitley & Keith-Spiegel, 2002), fields of study such as business, science, and engineering (Khalid, 2015; Marsden et al., 2005; McCabe et al., 2006), participation in extra-curricular activities and intercollegiate/intramural sports (Ma et al., 2013; Jewett, 2006; Mustaine & Tewksbury, 2005), membership in fraternities or sororities (Storch & Storch 2002; Williams & Janosik, 2007), poor instructor-student relationships (Beasley, 2014; Coren, 2011; MacGregor & Stuebs, 2012; Maeda, 2021; Simkin & McLeod, 2010), perceived low risk of getting caught (Buckley et al., 1998; Lester & Diekhoff, 2002), lenient attitudes toward cheating (Park et al., 2013), and inconsistent enforcement of academic

integrity policy (Malesky et al., 2021; Schwartz et al., 2013) were significantly associated with an increased likelihood of engagement in academic cheating. As well, there is considerable evidence showing a steady rise in student acceptability of academic dishonesty (Anderman & Won, 2019; Kukolja, et al., 2012; McCabe & Trevino, 1993; Muñoz-García & Aviles-Herrera, 2014).

### ***Purpose of the study***

Based on a thorough literature review on studies exploring academic dishonesty within the Canadian context, Eaton & Edino (2018) have concluded that despite a recent increase in the number of academic publications, only very limited research has been undertaken to address this important subject. This paper contributes to the literature by investigating Canadian university students' views on acceptability of academically dishonest practices. The major determinants of students' justifications for engagement in academically dishonest behaviour will also be disentangled.

## **METHOD**

### **Sample**

Data for this study were drawn from a larger investigation that was undertaken to examine academic honesty, campus life, and views on justice issues among university students in a western Canadian city (see Chow et al., 2010; Jurdi et al., 2012, 2011). Using a convenience sampling method, a total of 321 undergraduate students took part in a self-administered questionnaire survey. With the assistance of the Sociology and Social Studies faculty members, questionnaires were distributed to their classes. Each prospective participant was provided with a cover letter specifying the primary purposes of the survey. The letter also emphasized that participation would be strictly on a voluntary basis, submission of a completed questionnaire would serve as consent to participate, and all information provided would remain anonymous and confidential. The participants, who received no compensation, filled out the survey during lecture time that took about 15-20 minutes to complete. Although the participants were recruited from Sociology and Social Studies classes, they were officially registered with various schools and faculties, including Administration, Arts, Education, Engineering, Fine Arts, Human Justice, Journalism, Kinesiology, Science, and Social Work. Ethical clearance for the research project was obtained from the Research Ethics Board of the University of Regina.

The sample consisted of 101 (31.9%) male and 216 (68.1%) female students, ranging in age from 17 to 57 years ( $M = 21.16$ ;  $SD = 4.45$ ). Canadian-born ( $n = 307$ , 96.8%) and Caucasian students ( $n = 270$ , 85.4%) constituted an overwhelming majority of the sample. Regarding marital status, over four-fifths were single or never married ( $n = 267$ , 84.2%). About half of the sample ( $n = 181$ , 52.8%) reported an annual family income between \$60,000 and \$100,000 ( $n = 110$ , 37.7%) or over \$100,000 ( $n = 97$ , 29.8%). Nearly three-fifths indicated Protestantism ( $n = 55$ , 17.67%) or Catholicism ( $n = 121$ , 38.8%) as their religious affiliation. Most respondents belonged to the Faculties of Arts ( $n = 177$ , 55.3%), Social Work ( $n = 42$ , 13.1%), Administration ( $n = 36$ , 11.3%), Education ( $n = 21$ , 6.6%), and Science ( $n = 19$ , 5.9%).

### **Measures of Key Variables**

#### ***Dependent Variable***

Acceptability of academically dishonest behaviour (i.e., cheating, plagiarism, and falsification) was a summated score ( $M = 10.44$ ,  $SD = 4.45$ ) based on the extent to which respondents considered the following five reasons acceptable or unacceptable: (1) The heavy academic work load at this university ( $M$

= 2.21, SD = 1.12), (2) Pressure to maintain a scholarship (M = 2.35, SD = 1.17), (3) Pressure from parents to perform well (M = 2.28, SD = 1.19), (4) Knowing that the chance of getting caught is minimal (M = 1.88, SD = .996), and (5) Other students are cheating without getting caught (M = 1.73, SD = 1.03). Response categories ranged from 1 (acceptable) to 5 (unacceptable). This additive scale has possible scores ranging from 5.0 to 25.0. It should be noted that the coding for these five items has been reversed for the subsequent multivariate analysis so that a higher score would reflect a more lenient attitude toward academic dishonesty.

### ***Predictor Variables***

To explore the major determinants of respondents' acceptability of academic dishonesty, a multiple OLS regression model was estimated using the following fifteen predictor variables:

Class enrollment was based on number of classes students were taking at the time of the survey (M = 4.08, SD = .94).

Frequency of witnessing academic cheating (M = 1.65, SD = .76) was based on the number of times respondents have witnessed someone cheating on exams since starting university (1 = 0 times; 2 = 1 to 3 times; 3 = 4 to 6 times; 4 = 7 or more times).

Satisfaction with school life (M = 3.60, SD = .91) was measured on a five-point scale (1 = very dissatisfied to 5 = very satisfied).

Satisfaction with academic performance (M = 3.28, SD = .99) was measured on a five-point scale (1 = very dissatisfied to 5 = very satisfied).

Satisfaction with quality of teaching (M = 3.73, SD = .83) was measured on a five-point scale (1 = very dissatisfied to 5 = very satisfied).

Grade point average (M = 3.79, SD = .87) was measured on a six-point scale (1 = under 50%; 2 = 50-59%; 3 = 60-69%; 4 = 70-79%; 5 = 80-89%; 6 = 90-100%).

Intrinsic (intellectual) motivation to pursue higher education was a summated score (M = 11.82, SD = 2.30) based on the importance of various factors that motivated the respondents to pursue university studies, including (1) The will to expand my knowledge (M = 4.00, SD = .86), (2) Intellectual challenge and interest (M = 3.82, SD = .90), and (3) The desire for self-fulfillment (M = 4.00, SD = .90). The response categories ranged from 1 (very unimportant) to 5 (very important). This three-item scale has a Cronbach's alpha reliability coefficient of .828.

Extrinsic (instrumental) motivation to pursue higher education was a summated score (M = 12.92, SD = 2.27) based on the importance of various factors that motivated the respondents to pursue university studies: (1) The desire to acquire a profession (M = 4.52, SD = .81), (2) The desire to earn a university degree (M = 4.20, SD = .93), and (3) The desire to achieve a high-status and well-paid job (M = 4.20, SD = 1.07). Response categories ranged from 1 (very unimportant) to 5 (very important). This three-item scale has Cronbach's alpha reliability coefficient of .731.

Deep approach to learning was a composite score (M = 10.87, SD = 2.17) based on the respondents' degree of agreement or disagreement with the following three statements dealing with deep learning approach measured on a five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree): (1) I try to relate what I have learned in one subject to that in another (M = 3.84, SD = .91), (2) I find that I have to do enough work on a topic so that I can form my own point of view before I am satisfied (M = 3.44, SD = .92), and (3) While I am studying, I often think of real life situations to which the material that I am

learning would be useful ( $M = 3.59$ ,  $SD = 1.05$ ). This three-item scale has a Cronbach's alpha reliability coefficient of .619.

Surface approach to learning was a composite score ( $M = 5.73$ ,  $SD = 1.94$ ) based on the respondents' degree of agreement or disagreement with the following two statements measured on a five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree): (1) I think browsing around is a waste of time, so I only study seriously what is given out in class ( $M = 2.97$ ,  $SD = 1.11$ ) and (2) I generally restrict my study to what is specially set out as I think it is unnecessary to do anything extra ( $M = 2.76$ ,  $SD = 1.05$ ). This two-item scale has a Cronbach's alpha reliability coefficient of .761.

Regarding socio-demographic variables, sex was a dichotomous variable (1 = male; 0 = female). Age was measured in years ( $M = 21.16$ ,  $SD = 4.45$ ). Religious affiliation was dummy coded (1 = Protestant or Catholic; 0 = other). Family income ( $M = 4.21$ ,  $SD = 1.54$ ) was a continuous variable measured on a six-point scale (1 = \$ 20,000 or less; 2 = \$ 20,001 to 40,000; 3 = \$ 40,001 to 60,000; 4 = \$ 60,001 to 80,000; 5 = \$ 80,001 to 100,000; 6 = \$ 100,001 or more). Parents' education was a composite score ( $M = 7.85$ ,  $SD = 2.24$ ) based on the educational attainment of respondents' father ( $M = 3.91$ ,  $SD = 1.34$ ) and mother ( $M = 3.96$ ,  $SD = 1.25$ ) using a six-point scale (1 = no formal education to 6 = graduate school).

### Data Analysis

Statistical analyses were performed using the Statistical Package for the Social Sciences (IBM SPSS Statistics 26). The Cronbach's alpha reliability test was employed to assess the internal consistency of all scales used. Multiple ordinary least-squares (OLS) regression analysis was used to disentangle the key determinants of respondents' acceptability of academic dishonesty. This particular technique is commonly used to explore the relationship between a continuous variable and a set of independent variables which can be either continuous or dichotomous (Pallant, 2020). It generates several coefficients, including the correlation coefficient ( $R$ ), R-square ( $R^2$ ), adjusted R-square (adjusted  $R^2$ ), and unstandardized ( $b$ ) and standardized ( $\beta$ ) regression coefficients, in which each provides valuable information (Abu-Bader, 2016).

## FINDINGS

### *Justifications for Academic Dishonesty*

Respondents were asked to express their views on the acceptability of various reasons for engagement in academic misconduct (i.e., cheating, plagiarism, or falsification) on a five-point scale ranging from 1 (acceptable) to 5 (unacceptable). As shown in Table 1, the mean scores ranged between 3.65 and 4.27, demonstrating respondents' moderately negative attitudes toward academic dishonesty. The results revealed that the top three circumstances under which respondents considered academic dishonesty to be justifiable included "pressure to maintain a scholarship" ( $M = 3.65$ ,  $SD = 1.17$ ), "pressure from parents to perform well" ( $M = 3.72$ ,  $SD = 1.19$ ), and "heavy academic work load at this university" ( $M = 3.79$ ,  $SD = 1.12$ ).

Table 1. *Justifications for academically dishonest behaviour*

Items	1	2	3	4	5	M (SD)
	n (%)	n (%)	n (%)	n (%)	n (%)	
1. The heavy academic workload at this university	10 (3.1)	36 (11.2)	72 (22.5)	96 (30.0)	106 (33.1)	3.79 (1.116)
2. Pressure to maintain a scholarship	13 (4.1)	50 (15.7)	65 (20.4)	99 (31.0)	92 (28.8)	3.65 (1.169)
3. Pressure from parents to perform well	14 (4.4)	46 (14.4)	59 (18.4)	96 (30.0)	105 (32.8)	3.72 (1.187)
4. Knowing that the chance of getting caught is minimal	6 (1.9)	19 (5.9)	49 (15.3)	104 (32.5)	142 (44.4)	4.12 (.996)
5. Other students are cheating without getting caught	7 (2.2)	19 (5.9)	39 (12.2)	72 (22.5)	183 (57.2)	4.27 (1.030)

(1 = Acceptable; 2 = Somewhat acceptable; 3 = Uncertain/Not applicable; 4 = Somewhat unacceptable; 5 = Unacceptable)

### **Major Determinants of Students' Justifications for Academically Dishonest Behaviour**

The multiple OLS regression model predicting justifications for academic dishonesty, as displayed in Table 2, was found to be significant ( $F(15, 305) = 7.212, p < .001$ ), accounting for 22.6% of the variation. Eight predictor variables, including sex ( $\beta = .103, p < .05$ ), family income, ( $\beta = .112, p < .05$ ), class enrollment ( $\beta = .107, p < .05$ ), frequency of witnessing academic misconduct ( $\beta = .178, p < .001$ ), satisfaction with school performance ( $\beta = -.160, p < .01$ ), satisfaction with school life ( $\beta = -.131, p < .05$ ), intrinsic motivation to pursue higher education ( $\beta = -.164, p < .01$ ), and surface approach to learning ( $\beta = .192, p < .001$ ) were significantly related to respondents' views on acceptability of academic dishonesty.

More specifically, male respondents and those who reported a higher family income, enrolled in more classes, witnessed academic misconduct more frequently, expressed dissatisfaction with academic performance, indicated dissatisfaction with school life, placed less emphasis on intrinsic motivation to pursue higher education, and adopted a surface approach to learning were found to be associated with a greater likelihood of accepting the various justifications for academic dishonesty. It is worth mentioning that two additional variables came close as significant predictors at the  $p < .05$  level. If the  $p < .10$  level of significance was used, the results would suggest that respondents who were less satisfied with the quality of teaching and placed greater emphasis on extrinsic motivation to pursue university education would be more likely to accept academically dishonest behaviour.

Table 2. Multiple OLS regression model predicting justifications for academic dishonesty

Predictor variables	b	$\beta$
1. Sex	.985	.103 *
2. Age	-.070	-.070
3. Religious affiliation	.589	.066
4. Family income	.339	.112 *
5. Parents' education	-.099	-.049
6. Class enrollment	.503	.107 *
7. Frequency of witnessing cheating	1.051	.178 ***
8. Grade point average	-.496	-.044
9. Satisfaction with academic performance	-.713	-.160 **
10. Satisfaction with school life	-.641	-.131 *
11. Satisfaction with quality of teaching	-.527	-.098 +
12. Motivation to pursue higher education		
Intrinsic motivation	-.316	-.164 **
Extrinsic motivation	.179	.091 +
13. Learning style		
Deep learning approach	.104	.051
Surface learning approach	.439	.192 ***
(Constant)	11.343 ***	
F	(15, 305) = 7.212 ***	
R <sup>2</sup>	.262	
Adjusted R <sup>2</sup>	.226	
N	320	

+  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

## DISCUSSION & CONCLUSION

### Discussion

Drawing on data obtained from a questionnaire survey of Canadian undergraduate students, this paper examines respondents' acceptability of academically dishonest behaviour and factors that contributed to the variations in their endorsement. The results revealed that respondents displayed moderately negative attitudes toward academic dishonesty. The multiple regression analysis ascertained the significance earlier studies have attributed to a range of socio-demographic and contextual variables in shaping students' views.

Among the socio-demographic variables, sex and family income emerged to be significant predictors. With respect to sex, male respondents were found to display more accepting attitudes toward academically dishonest behaviour. This is not unexpected as Whitley et al.'s (1999) meta-analysis of studies focusing on sex differences showed that males admitted to having cheated more, viewed cheating more positively than females, and cheated more frequently as assessed in classroom observations. It should, however, be noted that conflicting results have been reported in the literature. Specifically, studies have also shown that either males (Eriksson & McGee, 2015; Hadjar, 2019; Hensley et al., 2013; McCabe & Trevino, 1997; Yang et al., 2017) or females (DePalma et al., 1995; Graham et al., 1994) could be more likely to engage in academically dishonest behaviour, depending on the specific circumstances and forms of cheating. Regarding family income, respondents who reported a higher family income were found to have a greater likelihood of endorsing academically dishonest behaviour. In fact, there is empirical evidence showing the strong connection between high social class and unethical behaviour (Balakrishnan et al., 2017; Dubois et al., 2015; Piff et al., 2012).

In line with previous studies which have identified not only the linkage between academic dishonesty and psychological well-being, but also the association between satisfaction with life and learning (Muñoz-García & Aviles-Herrera, 2014; Pulvers & Diekhoff, 1999), this analysis has shown that students who were less satisfied with school life tended to be more likely to endorse academically dishonest behaviour. Respondents who reported a higher frequency of witnessing academic misconduct were also found to be associated with a greater likelihood of accepting academic dishonesty. This finding corroborates earlier studies showing the strong effects of witnessing others' cheating on engagement in academically dishonest behaviour (Bernardi et al., 2012; Carrell et al., 2008; O'Rourke et al., 2010; Yang et al., 2017). Consistent with findings from past research (Hadjar, 2019; Kristin & Frone, 2004; Hensley et al., 2013; Ma et al., 2013; McCabe & Trevino, 1997; Teodorescu & Andrei, 2009), this study has demonstrated an inverse relationship between school performance and endorsement of academically dishonest behaviour.

In addition, course enrollment emerged as another significant predictor. Respondents who enrolled in more courses were more likely to justify academically dishonest practices. Those who had to deal with a heavier workload would undeniably face a higher level of stress (Miller et al., 2017; Okoye et al., 2018). Congruent with prior studies (Bacon et al., 2020; Ballantine et al., 2018; Delgado et al., 2018; Xin, 2011), this research has provided further evidence that students who adopted a surface approach to learning, as compared to those who used a deep approach, were revealed to be more likely to accept academic dishonesty. A final significant finding is that students who placed greater emphasis on intrinsic motivation to attend university were found to have a lesser likelihood of accepting academic dishonesty. Indeed, it has been well-documented that students who adopted intrinsic goals such as understanding the course material because of personal interest were less likely to cheat than those who set extrinsic goals such as academic standing, grades, or admission to a high-ranking graduate schools (Alt & Geiger, 2012; Orosz et al., 2013; Anderman et al., 1998; Pulvers & Diekhoff, 1999; Jordan, 2001).

### **Conclusion**

This study explored the acceptability of academically dishonest behaviour using a sample of undergraduate students at a medium-sized Canadian university. The results revealed that respondents held moderately negative attitudes toward academic dishonesty and identified the circumstances under which academically dishonest behaviour would be considered acceptable. As well, multiple OLS regression analysis has disentangled the various socio-demographic and contextual variables that were significantly associated with a greater likelihood of justifying academic dishonesty. Understanding these factors can surely support efforts by educational institutions to combat the problem. The findings underscore the vitality of helping students to cultivate intrinsic motivation and supporting the



development of deep learning approaches. Strenuous efforts must also be made to educate students that “the end justifies the means” attitude toward academic cheating is unacceptable and to elevate the perceived risk of being caught. It is worth noting that the strong interaction effect between deterrence (i.e., perceived certainty) and morality (i.e., levels of integrity) in the explanation of rule-violating behaviour has received empirical support (e.g., Svensson, 2015; Wikström, 2011).

Given the growing popularity of on-line learning in this digital age, it is anticipated that academic dishonesty would be a more challenging issue facing the higher education sector. A growing body of work has explored the extent to which academic cheating might have been facilitated by the Internet and the association between online learning and academically dishonest behaviour (e.g., Pell, 2018; Stogner et al., 2013; Young, 2013).

The findings from the present investigation have policy and practical implications for university administrators, instructors, and academic counsellors who are concerned about the widespread problem of academic dishonesty. As academic integrity is essential to teaching, learning, and knowledge creation in institutions of higher learning, the results can be used as basic information for the development of intervention policies and support services (e.g., explicit academic integrity guidelines and practical teaching & learning resources) that will serve to promote academic integrity and prevent academic misconduct.

Despite its strengths, this research is not without limitations. As this study was carried out on a limited group of undergraduate students at a single university in a western Canadian city utilizing a cross-sectional design, caution should be exercised in interpreting the results. The reliance on cross-sectional data precludes direct interpretation of causal relationships. Additional research is needed with post-secondary student populations in other geographical locations. Variation across types of both students (e.g., full-time vs. part-time) and institutions (e.g., universities vs. colleges and public vs. private) would be informative. A qualitative study with in-depth interviews could also shed more light on students’ views on academic dishonesty.

## References

- Abu-Bader, S.H. (2016). *Using statistical methods in social science research with a complete SPSS guide*. NY: Oxford University Press.
- Alt, D., & Geiger, B. (2012). Goal orientations and tendency to neutralize academic cheating: An ecological perspective. *Psychological Studies, 57*(4), 404-416.
- Anderman, E.M., Griesinger, T., & Westerfield, G. (1998). Motivation and cheating during early adolescence. *Journal of Educational Psychology, 90*(1), 84-93.
- Anderman, E.M., & Won, S. (2019) Academic cheating in disliked classes. *Ethics & Behavior, 29*(1), 1-22.
- Bacon, A.M., McDaid, C., Williams, N., & Corr, P.J. (2020). What motivates academic dishonesty in students? A reinforcement sensitivity theory explanation. *British Journal of Educational Psychology, 90*(1), 152-166.
- Balakrishnan, A., Palma, P.A., Patenaude, J., & Campbell, L. (2017). A 4-study replication of the moderating effects of greed on socioeconomic status and unethical behaviour. *Scientific Data, 4*(1), 1-7.
- Ballantine, J.A., Guo, X., Larres, P., & Larres, P. (2018). Can future managers and business executives be influenced to behave more ethically in the workplace? The impact of approaches to learning on business students’ cheating behavior. *Journal of Business Ethics, 149*(1), 245-258.
- Beasley, E.M. (2014). Students reported for cheating explain what they think would have stopped them. *Ethics & Behavior, 24*(3), 229-52.

- Bernardi, R.A., Banzhoff, C.A., Martino, A.M., & Savasta, K.J. (2012). Challenges to academic integrity: Identifying the factors associated with the cheating chain. *Accounting Education*, 21, 247-263.
- Blankenship, K.L., & Whitley, B.E. (2000). Relation of general deviance to academic dishonesty. *Ethics and Behavior*, 10(1), 1-12.
- Brunell, A., Staats, S., Barden, J., & Hupp, J. (2011). Narcissism and academic dishonesty: The exhibitionism dimension and the lack of guilt. *Personality and Individual Differences*, 50(3), 323-328.
- Buckley, M.R., Weiss, D., & Harvey, M. (1998). An investigation into the dimensions of unethical behavior. *Journal of Education for Business*, 73(5), 284-290.
- Carrell, S.E., Malmstrom, F.V., & West, J.E. (2008). Peer effects in academic cheating. *The Journal of Human Resources*, 43(1), 173-207.
- Chien, S.C. (2017). Taiwanese college students' perceptions of plagiarism: Cultural and educational considerations, *Ethics & Behavior*, 27(2), 118-139.
- Chow, H.P.H., Hage, S., & Jurdi, R. (2010). *Academic integrity, campus life, and perceptions of the criminal justice system: A survey of university students in Regina*. Regina, SK: University of Regina.
- Coren, A. (2011). Turning a blind eye: Faculty who ignore student cheating. *Journal of Academic Ethics*, 9(4), 291-305.
- Cosenza, E. (2020, September 4). New laws passed could see cheaters who sell services to university students jailed. *The Australian*. <https://www.theaustralian.com.au/news/latest-news/new-laws-passed-could-see-cheaters-who-sell-services-to-university-students-jailed/news-story/599e268e4e5ff39e0766544688274092>.
- David, L.T. (2015). Academic cheating in college students: Relations among personal values, self-esteem and mastery. *Procedia, Social and Behavioral Sciences*, 187, 88-92.
- Delgado, Á.H.A, Almeida, J.P.R., Mendes, L.S.B., Oliveira, I.N., Ezequiel, O.D.S., Lucchetti, A.L.G., & Lucchetti, G. (2018). Are surface and deep learning approaches associated with study patterns and choices among medical students? A cross-sectional study. *São Paulo Medical Journal*, 136(5), 414-420.
- DePalma, M.T., Madey, S.F., & Bornschein, S. (1995). Individual differences and cheating behavior: Guilt and cheating in competitive situations. *Personality and Individual Differences*, 18, 761-769.
- Draper, M.J., & Newton, P.M. (2017). A legal approach to tackling contract cheating?. *International Journal of Educational Integrity*, 13:11, Doi 10.1007/s40979-017-0022-5.
- Dubois, D., Rucker, D.D., & Galinsky, A.D. (2015). Social class, power, and selfishness: When and why upper and lower class individuals behave unethically. *Journal of Personality and Social Psychology*, 108(3), 436-449.
- Eaton, S.E. (2020a, January 15). Cheating may be under-reported across Canada's universities and colleges. *CBC News*. <https://www.universityaffairs.ca/opinion/in-my-opinion/cheating-may-be-under-reported-across-canadas-universities-and-colleges/>
- Eaton, S.E. (2020b). *An inquiry into major academic integrity violations in Canada: 2010-2019*. Calgary, AB: University of Calgary.
- Eaton, S.E., & Edino, R.I. (2018). Strengthening the research agenda of educational integrity in Canada: A review of the research literature and call to action. *International Journal for Educational Integrity*, 14(1), 1-21.
- Eret, E., & Ok, A. (2014). Internet plagiarism in higher education: tendencies, triggering factors and reasons among teacher candidates. *Assessment & Evaluation in Higher Education*, 39, 1002-1016.
- Eriksson, L., & McGee, T.R. (2015). Academic dishonesty amongst Australian criminal justice and policing university students: Individual and contextual factors. *International Journal for Educational Integrity*, 11(1), 1-15.
- Esteves, G.G.L., Oliveira, L.S., De Andrade, J.M., & Menezes, M.P. (2021). Dark triad predicts academic cheating. *Personality and Individual Differences*, 171, 1-3.
- Giluk, T.L., & Postlethwaite, B.E. (2015). Big five personality and academic dishonesty: A meta-analytic review. *Personality and Individual Differences*, 72, 59-67.
- Goh, E. (2015). Exploring underlying motivations behind extreme cases of plagiarism in tourism and hospitality education. *Journal of Hospitality & Tourism Education*, 27(2), 80-84.
- Graham, M., Monday, J., O'Brien, K., & Steffen, S. (1994). Cheating at small colleges: An examination of student and faculty attitudes and behaviors, *Journal of College Student Development*, 35, 255-260.
- Guerrero-Dib, J., Portales, L., & Heredia-Escorza, Y. (2020). Impact of academic integrity on workplace ethical behaviour. *International Journal for Educational Integrity*, 16(1), 1-18.

- Hadjar, I. (2019). To cheat or not to cheat? Sex differences and academic performance as factors of cheating behavior, *Sawwa: Jurnal Studi Gender*, 14(1), 1-20.
- Harper, R., Bretag, T., Ellis, C., Newton, P., Rozenberg, P., Saddiqui, S., & van Haeringen, K. (2018). Contract cheating: A survey of Australian university staff. *Studies in Higher Education*, 44(11), 1-17.
- Harding T.S., Carpenter, D.D., Finelli, C.J., & Passow, H.J. (2004). Does academic dishonesty relate to unethical behavior in professional practice? An exploratory study. *Science and Engineering Ethics*, 10(2), 311-24.
- Hensley, L.C., Kirkpatrick, K.M., & Burgoon, J.M. (2013). Relation of gender, course enrollment, and grades to distinct forms of academic dishonesty. *Teaching in Higher Education*, 18(8), 895-907.
- Jewett, A.V. (2006). *Academic dishonesty among division III college athletes*. Unpublished Ed.D. dissertation, Johnson and Wales University.
- Johnstone, M.J. (2016). Academic dishonesty and unethical behaviour in the workplace. *Australian Nursing & Midwifery Journal*, 23(11), 33.
- Jordan, A. (2001). College student cheating: The role of motivation, perceived norms, attitudes, and knowledge of institutional policy. *Ethics and Behavior*, 11, 233-247.
- Jurdi, R., Hage, S., & Chow, H.P.H. (2012). What behaviours do students consider academically dishonest? Findings from a survey of Canadian undergraduate students. *Social Psychology of Education: An International Journal*, 15, 1-23.
- Jurdi, R., Hage, S., & Chow, H.P.H. (2011). Academic dishonesty in the Canadian classroom: Examination of the behaviours of a sample of university students in Regina. *Canadian Journal of Higher Education*, 41(3), 1-35.
- Khalid, A. (2015). Comparison of academic misconduct across disciplines - Faculty and student perspectives. *Universal Journal of Educational Research*, 3, 258-268.
- Kerkvliet, J. (1994). Cheating by Economics students: A comparison of survey results. *Journal of Economic Education*, 25, 121-133.
- Korn, L., & Davidovitch, N. (2016). The profile of academic offenders: Features of students who admit to academic dishonesty. *Medical Science Monitor*, 22, 3043-3055.
- Kristin, V.F., & Frone, M.R. (2004). Academic performance and cheating: Moderating role of school identification and self-efficacy. *The Journal of Educational Research*, 97(3), 115-121.
- Kukolja T.S., Taradi, M., & Đogaš, Z. (2012). Croatian medical students see academic dishonesty as an acceptable behaviour: A cross-sectional multicampus study. *Journal of Medical Ethics*, 38(6), 376-379.
- LaDuke, R.D. (2013). Academic dishonesty today, unethical practices tomorrow? *Journal of Professional Nursing*, 29(6), 402-406.
- Lester, M.C., & Diekhoff, G.M. (2002). A comparison of traditional and internet cheaters. *Journal of College Student Development*, 43, 906-911.
- Lovett-Hooper, G., Komaraju, M., Weston, R., & Dollinger, S.J. (2007). Is plagiarism a forerunner of other deviance? Imagined futures of academically dishonest students. *Ethics & Behavior*, 17(3), 323-336.
- Ma, Y., McCabe, D.L., & Liu, R. (2013). Students' academic cheating in Chinese universities: Prevalence, influencing factors, and proposed action. *Journal of Academic Ethics*, 11(3), 169-184.
- MacGregor, J., & Stuebs, M. (2012). To cheat or not to cheat: rationalizing academic impropriety. *Accounting Education*, 21(3), 265-87.
- Maeda, M. (2021). Exam cheating among Cambodian students: When, how, and why it happens, *Compare: A Journal of Comparative and International Education*, 51(3), 337-355.
- Malesky, A., Grist, C., Poovey, K., & Dennis, N. (2021). The effects of peer influence, honor codes, and personality traits on cheating behavior in a university setting. *Ethics & Behavior*, Doi: 10.1080/10508422.2020.1869006.
- Marsden, H., Carroll, M., & Neill, J.T. (2005). Who cheats at university? A self-report study of dishonest academic behaviours in a sample of Australian university students. *Australian Journal of Psychology*, 57, 1-10.
- McCabe, D.L., Butterfield, K.D., & Trevino, L.K. (2006). Academic dishonesty in graduate business programs: Prevalence, causes, and proposed action. *Academy of Management Learning and Education*, 5, 294-305.
- McCabe, D.L., & Trevino, L.K. (1997). Individual and contextual influences on academic dishonesty: A multicampus investigation. *Research in Higher Education*, 38(3), 379-396.

- McCabe, D.L., & Trevino, L.K. (1993). Academic dishonesty: Honor codes and other contextual influences. *The Journal of Higher Education*, 64(5), 522-538.
- McCabe, D.L., Feghali, T., & Abdallah, H. (2008). Academic dishonesty in the Middle East: Individual and contextual factors. *Research in Higher Education*, 49(5), 451-467.
- Miller, A.D., Murdock, T.B., & Grotewiel, M.M. (2017). Addressing academic dishonesty among the highest achievers. *Theory into Practice*, 56(2), 121-128.
- Moore, H. (2014, February 25). Cheating students punished by the 1000s, but many more go undetected. *CBC News*. <http://www.cbc.ca/news/canada/manitoba/cheating-students-punished-by-the-1000s-but-many-more-go-undetected-1.2549621>
- Mulisa, F., & Ebessa, A. (2021). The carryover effects of college dishonesty on the professional workplace dishonest behaviors: A systematic review. *Cogent Education*, 8(1), 1935408.
- Mustaine, E.E., & Tewksbury, R. (2005). Southern college students' cheating behaviors: An examination of problem behavior correlates. *Deviant Behavior*, 26(5), 439-461.
- Muñoz-García, A., & Aviles-Herrera, M.J. (2014). Effects of academic dishonesty on dimensions of spiritual well-being and satisfaction: A comparative study of secondary school and university students. *Assessment and Evaluation in Higher Education*, 39(3), 349-363.
- Nonis, S., & Swift, C.O. (2001). An examination of the relationship between academic dishonesty and workplace dishonesty: A multi campus investigation. *The Journal of Education for Business*, 77, 69-77.
- Okoye, O.I., Maduka-Okafor, F., Matthias, R.C., Udejaja, A., & Chuku, A.I. (2018). Academic misconduct in Nigerian medical schools-A Report from focus group discussions among house officers. *Journal of Academic Ethics*, 16(3), 275-285.
- O'Rourke, J., Barnes, J., Deaton, A., Fulks, K., Ryan, K., & Rettinger, D.A. (2010). Imitation is the sincerest form of cheating: The influence of direct knowledge and attitudes on academic dishonesty. *Ethics & Behavior*, 20, 47-64.
- Orosz, G., Farkas, D., & Roland-Levy, C. (2013). Are competition and extrinsic motivation reliable predictors of academic cheating? *Frontiers in Psychology*, 4, 1-16.
- Pallant, J. (2020). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS*. 7<sup>th</sup> edition. London, UK: Open University Press.
- Park, E.J., Park, S., & Jang, I.S. (2013). Academic cheating among nursing students. *Nurse Education Today*, 33(4), 346-352.
- Pell, D.J. (2018). That's cheating: The (online) academic cheating 'epidemic' and what we should do about it. In *Creativity and critique in online learning* (pp. 123-147). Cham: Springer International Publishing.
- Piff, P.K., Stancato, D.M., Cote, S., Mendoza-Denton, R., & Keltner, D. (2012). Higher social class predicts increased unethical behavior. *Proceedings of the National Academy of Sciences - PNAS*, 109(11), 4086-4091.
- Pino, N.W., & Smith, W.L. (2003). College students and academic dishonesty. *College Student Journal*, 37(4), 490-500.
- Pulvers, K., & Diekhoff, G.M. (1999). The relationship between academic dishonesty and college classroom environment. *Research in Higher Education*, 40(4), 487-498.
- Rakovski, C.C., & Levy, E.S. (2007). Academic dishonesty: Perceptions of business students. *College Student Journal*, 41(2), 466-481.
- Schwartz, B.M., Tatum, H.E., & Hageman, M.C. (2013). College students' perceptions of and responses to cheating at traditional, modified, and non-honor system institutions. *Ethics & Behavior*, 23, 463-476.
- Simkin, M.G., & McLeod, A. (2010). Why do college students cheat? *Journal of Business Ethics*, 94(3), 441-453.
- Smith, K.J., Davy, J.A., & Easterling, D. (2004). An explanation of cheating and its antecedents among marketing and management majors. *Journal of Business Ethics*, 50, 63-80.
- Stogner, J.M., Miller, B.L., & Marcum, C.D. (2013). Learning to E-cheat: A criminological test of internet facilitated academic cheating. *Journal of Criminal Justice Education*, 24(2), 175-199.
- Storch, J.B., Storch, E.A., & Clark, P. (2002). Academic dishonesty and neutralization theory: A comparison of intercollegiate athletes and nonathletes. *Journal of College Student Development*, 43(6), 921-930.
- Svensson, R. (2015). An examination of the interaction between morality and deterrence in offending. *Crime and Delinquency*, 61(1), 3-18.
- Teodorescu, D., & Andrei, T. (2009). Faculty and peer influences on academic integrity: College cheating in Romania. *Higher Education*, 57, 267-282.

- Vandehey, M.A., Diekhoff, G.M., & LaBeff, E.E. (2007). College cheating: A twenty-year follow-up and the addition of an honor code. *Journal of College Student Development, 48*(4), 468-480.
- Whitley, B.E., Nelson, A.B., & Jones, C.J. (1999). Gender differences in cheating attitudes and classroom cheating behavior: A meta analysis. *Sex Roles, 41*(9/10), 657-680.
- Whitley, B.E., Jr., & Keith-Spiegel, P. (2002). *Academic dishonesty: An educator's guide*. Mahwah, NJ: Erlbaum.
- Wikström, P-O. H., Tseloni, A., & Karlis, D. (2011). Do people comply by the law because they fear getting caught? *European Journal of Criminology, 8*, 401-420.
- Wilks, D.C., Cruz, J.N., & Sousa, P. (2016). Personality traits and plagiarism: An empirical study with Portuguese undergraduate students. *Journal of Academic Ethics, 14*(3), 231-241.
- Williams, K.M., Nathanson, C., & Paulhus, D.L. (2010). Identifying and profiling scholastic cheaters: Their personality, cognitive ability, and motivation. *Journal of Experimental Psychology: Applied, 16*, 293-307.
- Williams, A.E., & Janosik, S.M. (2007). An examination of academic dishonesty among sorority and nonsorority women. *Journal of College Student Development, 48*(6), 706-714.
- Williamson, W.P., & Assadi, A. (2005). Religious orientation, incentive, self-esteem, and gender as predictors of academic dishonesty: An experimental approach. *Archive for the Psychology of Religion, 27*, 137-158.
- Xin, G. (2011). Understanding student plagiarism: An empirical study in accounting education. *Accounting Education International Journal, 20*, 17-37.
- Yang, S.C., Chiang, F.K., & Huang, C.L. (2017). A comparative study of academic dishonesty among university students in Mainland China and Taiwan. *Asia Pacific Education Review, 18*(3), 385-399.
- Yoshimura, F. (2018). Another possible reason for plagiarism: Task representations of summary writing. *TESL-EJ, 22*(3), 1-17.
- Young, J.R. (2013). Online classes see cheating go high tech. *The Education Digest, 78*(5), 4-13.
- Yukhymenko-Lescroart, M.A. (2014). Ethical beliefs toward academic dishonesty: A cross-cultural comparison of undergraduate students in Ukraine and the United States. *Journal of Academic Ethics, 12*(1), 29-41.