
Your Students are Cheating More Than You Think They Are. Why?

Bob Ives

University of Nevada, Reno

Abstract: *Neutralization Theory proposes that when people engage in behavior that they know is not approved by society, they neutralize, or justify, their behavior by applying one or more of several neutralization techniques. In this report we use data from a study that investigated self-reported reasons for academic misconduct from post-secondary students in Romania. We found that students offered reasons that range widely, and well beyond the options included in Neutralization Theory. Factor analysis of the responses also lead to the conclusion that reasons for committing academic misconduct may be unidimensional.*

Key Words: Academic misconduct, academic integrity, post-secondary students, Neutralization Theory

For decades, a substantial majority of post-secondary students have reported in anonymous surveys that they have committed some kind of academic misconduct (AM), such as plagiarism, cheating on tests, and cheating on assignments. This is true not only internationally (e.g. Ives et al., 2017; Ives & Guikin, in press; Northcutt, Ho, & Chuang, 2016; Orosz et al., 2015; Tatum & Schwartz, 2017), but also in the United States (e.g. Jones, 2011; McCabe, Butterfield, & Treviño, 2012; Yardley, Rodriguez, Bates, & Nelson, 2009). In order to reduce these rates of AM, researchers and teachers need to understand the reasons why students engage in AM, so that they can design interventions to reduce this behavior. In fact, scholars in the field have expressed about the lack of high quality, generalizable research in the effectiveness of such interventions in reducing AM (Baird & Clare, 2017; Cronan, McHaney, Douglas, & Mullins, 2016; Henslee, Goldsmith, Stone, & Krueger, 2015; Ives & Nehrkorn, 2019; Marshall & Vernon, 2017; Obeid & Hill, 2017).

Neutralization Theory (Sykes & Matza, 1957) has been applied to AM in an effort to better understand the reasons why students cheat and plagiarize. While Neutralization Theory was developed to address juvenile delinquency, it has been applied to AM at least as early as the 1980s (e.g. Haines, Diekhoff, LaBeff, & Clark, 1986). According to Neutralization Theory, people who engage in acts that they know to be counter to dominant cultural norms. The theory proposes five approaches to neutralization by which these people mitigate their own responsibility for committing these acts. As applied to AM, these would be approaches by which students mitigate their responsibility for engaging in cheating or plagiarism which they know to be wrong. The first approach is *Denial of Responsibility*. This approach involves justification because the act was

accidental or beyond the control of the student. The second is *Denial of Injury*, in which the student claims that no one was hurt by the act of AM. The third approach, called *Denial of Victim*, occurs when the student claims that the injured party was deserving of any damages or mistreatment. *Condemnation of the Condemner* is the fourth approach in Neutralization Theory. This might occur when student justifies cheating because the instructor is a poor teacher, for example. The fifth, and last, approach to neutralization is *Appeal to Higher Loyalties*. In this approach, the student may argue that the responsibility to help a friend overrides the responsibility for academic integrity.

Studies have consistently shown a positive relationship between AM and the use of neutralizations (e.g. Curasi, 2013; Diekhoff et al., 1996; Gallant, Van den Einde, Ouellette, & Lee, 2014; Haines et al., 1986; Hakim et al., 2018; Nonis & Swift, 1998; Smith, Davy, & Rosenberg, 2009; Stephens, Young, & Calabrese, 2007). However, the research on Neutralization Theory raises some concerns. As originally conceived, the theory was intended to offer a causal explanation for juvenile delinquency, and by extension, AM. In other words, these neutralization techniques “prepare the delinquent for delinquent acts” (Sykes & Matza, 1957, p. 669), and “precede deviant behavior and make deviant behavior possible” (p. 666). Storch, Storch and Clark (2002) applied the same argument to AM. Because the supporting evidence is correlational, others have pointed out that the neutralization techniques may be generated after the misconduct takes place, and may not have any causal relationship to those acts (Ball, 1966; Del Carlo & Bodner, 2006; Haines et al., 1986).

Another concern arises because of the design of instruments to assess the use of Neutralization Theory. Typically these instruments are developed by generating statements that align with the five approaches to neutralization, and giving participants an opportunity to select statements that best match their reasons for engaging in AM (Arvidson, 2004; Ball, 1966; Polding, 1995; Poltorak, 1995). However, if participants are only permitted to select from a list of statements that align with the five approaches of Neutralization Theory, then other reasons for committing AM will not appear in the data. It is not impossible, with these instruments, to determine if Neutralization Theory is a comprehensive model of reasons for committing AM.

Research to confirm the structure of the five approaches to neutralization points to a third concern. Some researchers developed instruments without confirming the distinctness of the five approaches by factor analysis (Ball, 1966; Polding, 1995). Polding did calculate internal consistency (Cronbach’s alpha) on responses for the five approaches that were represented by more than one item. The internal consistency coefficients ranged from .844 down to .253, with three of them below .8. These results do not provide support for the five factor structure of Neutralization Theory. Subsequently Arvidson (2004) collected data from 527 post-secondary students using Polding’s instrument. Factor analysis failed to confirm the five approach structure. Brown’s (1995, 1996) Reasons for Unethical Behavior Scale was used by Iyer and Eastman (2008) to collect data from a sample of 301 students. Iyer and Eastman concluded that the “scale is both unidimensional and has good reliability” (p. 27) with a coefficient alpha of 0.94.

Some scholars have recommended that Neutralization Theory be used to guide development of interventions to reduce AM (Eriksson & McGee, 2015; Rettinger, 2017). However, given the concerns raised by the research on Neutralization Theory, this recommendation may be premature. In this study, I address two of these concerns empirically using a sample of 972 students from six public universities in Romania.

RESEARCH QUESTIONS

1. Given the opportunity, do post-secondary students who engage in Academic Misconduct, give reasons for their misconduct that extend beyond the five approaches of Neutralization Theory.
2. Is the five factor structure of Neutralization Theory confirmed by students' reasons for engaging in Academic Misconduct.

METHODS

I developed an instrument based on a review of eight studies that invited students to give reasons for engaging in AM (Eastman, Iyer, & Reisenwitz, 2008; Iyer & Eastman, 2006; Jensen, Arnett, Feldman, & Cauffman, 2002; Naghdipour & Emeagwali, 2013; Park, Park, & Jang, 2013; Passow, 2006; Schmelkin, Gilbert, Spencer, Pincus, & Silva, 2008; Sendag, Duran, & Fraser, 2012). From these previous studies, I identified a list of 23 different reasons for committing AM. These reasons were listed as part of a more extensive instrument that has been used on other studies (Ives et al., 2017; Ives & Guikin, in press). Participants were invited to rate each of these reasons on a seven-point Likert scale in terms of the importance each reason had in their decisions to engage in AM. Of 1,127 total participants, 972 confirmed engaging in some type of AM while in their post-secondary programs, and these 972 participants are the sample for this report. All surveys were completed anonymously and online.

RESULTS

The following table lists the 23 reasons in order from highest rating (greatest importance) to lowest ratings (least importance).

Table 1: Reasons for Academic Misconduct in Order of Importance

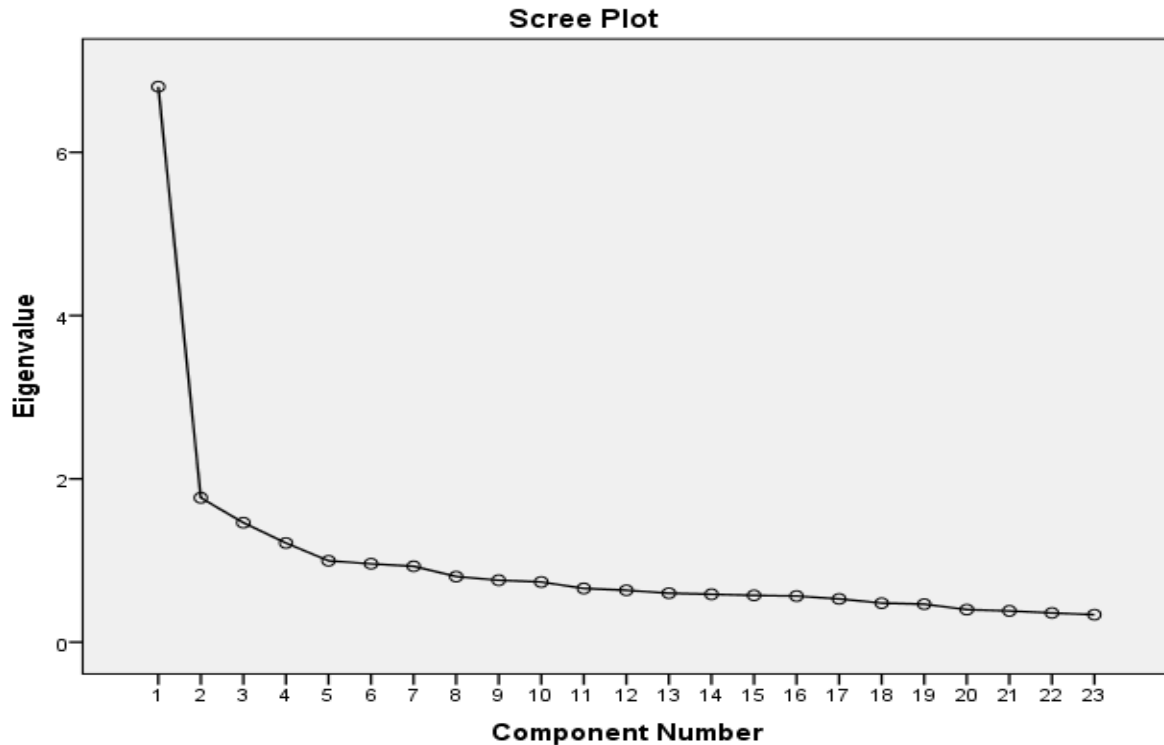
<i>Reasons</i>	<i>Mean</i>	<i>Std. Deviation</i>
You needed to keep your scholarship or financial aid.	3.557	2.4915
Grades were more important than learning.	3.481	1.9523
You did not like the instructor.	3.402	1.8585
There was nothing wrong with engaging in this academic behavior.	3.329	2.0787
Your behavior did not hurt anyone else.	3.237	2.1037
You needed to do well in school to get a good job.	3.120	1.9386
You were anxious about the assignment or test.	3.009	2.1185
You were depressed.	2.929	2.1784
You were very competitive.	2.899	2.2000
You were pressured by other students.	2.882	2.4155
You liked the challenge and excitement of getting away with it.	2.757	2.0398
The instructor's teaching was uninteresting.	2.751	2.3187
You had difficulty understanding the material.	2.516	2.0748
The topic of the test or assignment was uninteresting.	2.380	2.0037

The content of the test or assignment was not related to your major.	2.270	1.8965
The penalties for getting caught were small.	2.229	2.0215
The likelihood if getting caught was small.	2.196	2.1720
You had enough time to prepare, but spent the time on other things.	2.075	1.8639
You did not have enough time to prepare for the test or do the assignment.	2.072	2.0355
The exam or assignment was unfair.	2.057	1.8366
You do not want to disappoint others, such as your family.	1.672	1.9282
Many other students cheat.	1.328	1.6733
You needed to get a good grade.	1.301	1.7403

For these students, the most important reason given was “You needed to keep your scholarship or financial aid.” This reason does not fit well with any of the five approaches to neutralization. The second most important reason, “Grades were more important than learning” might be considered an example of an Appeal to Higher Loyalties in a cynical way. Third was, “You did not like the instructor,” which aligns with Condemnation of the Condemner. The fourth most important reason was “There was nothing wrong with engaging in this academic behavior.” This reason falls outside the range of Neutralization Theory because the theory is based on the assumption that people neutralize because of their “(d)isapproval flowing from internalized norms and conforming others in the social environment” (Sykes & Matza, 1957, p. 668). In other words, neutralization is not necessary if the behavior is not seen as a violation of norms. The fifth reason is “Your behavior did not hurt anyone else,” which aligns with the approach of Denial of Injury. The sixth most important reason is “You needed to do well in school to get a good job.” This reason does not align well with any of the five approaches to neutralization, except for the cynical view of Appeal to Higher Loyalties. This list indicates that students justify their AM through neutralization techniques, as well as other explanations that do not align well with neutralization approaches. These results address my first research question (Given the opportunity, do post-secondary students who engage in Academic Misconduct, give reasons for their misconduct that extend beyond the five approaches of Neutralization Theory.) by showing that student do report reasons for their AM beyond those that align with Neutralization Theory.

To address the second research question (Is the five factor structure of Neutralization Theory confirmed by students’ reasons for engaging in Academic Misconduct.) I ran a factor analysis of the students’ responses. The decision about how many factors are appropriate in any given factor analysis is not an objective process. Instead, the goal is to find an optimal balance between the guidance of the statistics, and a factorization that yields interpretable factors (DeVellis, 2012). One statistical approach is to apply a visual analysis to the scree plot as shown in the figure below.

Figure 1: Scree Plot of academic Misconduct Reasons



Interpreting a scree plot involves looking for a bend or *elbow* in the graph. In this case, the first factor clearly accounts for far more variance in the responses than any of the other factors. Each of the additional factors only explains a small amount of additional variance. This plot would be consistent with a set of data with only one factor. I also calculated the internal consistency across all 23 items and found Cronbach's alpha equaled .898. Removal of individual items failed to improve the internal consistency. This result is similar to the internal consistency of .94 found by Iyer and Eastman (2008) when they concluded that reasons for academic misconduct are a univariate construct. My findings support the Iyer and Eastman conclusion, and indicate that the answer to my second research question is that the data do not support a five factor result.

DISCUSSION

These data support the conclusions that the Neutralization Theory does not provide a comprehensive description of reasons for students to engage in AM, and that reasons for engaging in AM do not conform to a five factor model. For these reasons, I suggest that Neutralization Theory may not be an adequate model to guide the development of interventions to reduce AM.

Another theoretical approach to explaining the causes of AM may be more helpful. Urdan (1997) recommended applying Achievement Goal Theory. Broadly speaking, this theory proposes that when students are motivated by external goals, such as money, jobs, and the approval of others, they are more likely to engage in AM in order to achieve those goals. When students are motivated by internal goals, such as self-improvement, helping others, and interest in the content, they are less likely to engage in AM. These predictions are supported by recent studies (e.g. Kauffman & Young, 2015; Miller, Shoptaugh, & Wooldridge, 2011; Yang, Huang, & Chen, 2013). Almost all of the items in the list of reasons used in this study align with external goals, including income, jobs, pressure from colleagues, and a desire not to disappoint parents. In this sense, Achievement

Goals Theory subsumes Neutralization Theory under a broader model. The two possible exceptions to Achievement Goal Theory in the list of reason might be “You liked the challenge and excitement of getting away with it” and “There was nothing wrong with engaging in this academic behavior.” The first statement could be construed as an example of internal motivation. The second statement indicates that no reason need be given for the behavior because there is nothing wrong with it.

To conclude, I would make three recommendations. One is to investigate the manifestation of broader theories of motivation for AM in the reasons students give for AM. The second is that researchers should give more open-ended opportunities for students to indicate their reasons for engaging in AM to allow for identification of explanations that may not be in the literature yet. The Third is that researchers look for models that are broader than Neutralization Theory when designing interventions to reduce AM.

REFERENCES

- Arvidson, C. J. (2004). *The anatomy of academic dishonesty: Cognitive development, self-concept, neutralization techniques and attitudes toward cheating*. (Doctor of Philosophy). University of North Texas,
- Baird, M., & Clare, J. (2017). Removing the opportunity for contract cheating in business capstones: a crime prevention case study. *International Journal for Educational Integrity*, 13. doi:10.1007/s40979-017-0018-1
- Ball, R. A. (1966). An empirical exploration of Neutralization Theory *Criminologica*, 22, 22-32.
- Brown, B. S. (1995). The academic ethics of graduate business students: A survey *Journal of Education for Business*, 70(3), 151-156.
- Brown, B. S. (1996). A comparison of the academic ethics of graduate business, education, and engineering students. *College Student Journal*, 30(3), 294-301.
- Cronan, T. P., McHaney, R., Douglas, D. E., & Mullins, J. K. (2016). Changing the academic integrity climate on campus using a technology-based intervention. *Ethics & Behavior*, 27(2), 89-105. doi:10.1080/10508422.2016.1161514
- Curasi, C. F. (2013). The relative influences of neutralizing behavior and subcultural values on academic dishonesty. *Journal of Education for Business*, 88(3), 167-175. doi:10.1080/08832323.2012.668145
- Del Carlo, D., & Bodner, G. (2006). Dishonesty in the Biochemistry Classroom Laboratory. *Biochemistry and Molecular Biology Education*, 34(5), 338-342.
- DeVellis, R. F. (2012). *Scale Development Theory and Applications* (Third ed. ed.). Los Angeles: Sage.
- Diekhoff, G. M., LaBeff, E. E., Clark, R. E., Williams, L. E., Francis, B., & Haines, V. J. (1996). College cheating: Ten years later *Research in Higher Education* 37(4), 487-502.
- Eastman, J. K., Iyer, R., & Reisenwitz, T. H. (2008). The impact of unethical reasoning on different types of academic dishonesty: An exploratory study. *Journal of College Teaching & Learning*, 5(12), 7-15.
- 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(5). doi:10.1007/s40979-015-0005-3

- Gallant, T. B., Van den Einde, L., Ouellette, S., & Lee, S. (2014). A systematic analysis of cheating in an undergraduate engineering mechanics course. *Science and Engineering Ethics, 20*, 277-298. doi:10.1007/s11948-013-9435-6
- Haines, V. J., Diekhoff, G. M., LaBeff, E. E., & Clark, R. E. (1986). College cheating: Immaturity, lack of commitment, and the neutralizing attitude. *Research in Higher Education, 25*(4), 342-354.
- Hakim, L., Soesatyo, Y., Dwiharja, L. M., Prakoso, A. F., Kurniawan, R. Y., Marlana, N., & Widayati, E. (2018). The impact of alienation through neutralization on students' academic dishonesty. *Journal of Teaching in International Business, 29*(2), 161-179. doi:10.1080/08975930.2018.1480990
- Henslee, A., Goldsmith, J., Stone, N. J., & Krueger, M. (2015). An online tutorial vs. pre-recorded lecture for reducing incidents of plagiarism. *American Journal of Engineering Education, 6*(1), 27-32.
- Ives, B., Alama, M., Mosora, L. C., Mosora, M., Grosu-Radulescu, L., Clinciu, A. I., . . . Dutu, A. (2017). Patterns and predictors of academic dishonesty in Romanian university students. *Higher Education, 74*(5), 815-831. doi:10.1007/s10734-016-0079-8
- Ives, B., & Guikin, L. (in press). Patterns and Predictors of Academic Dishonesty in Moldovan University Students. *Journal of Academic Ethics*. doi:10.1007/s10805-019-09347-z
- Ives, B., & Nehrkorn, A. (2019). A Research Review: Post-Secondary Interventions to Improve Academic Integrity. In D. Velliaris (Ed.), *Prevention and Detection of Academic Misconduct in Higher Education*. Hershey, PA: IGI Global.
- Iyer, R., & Eastman, J. K. (2006). Academic dishonesty: Are business students different from other college students? . *Journal of Education for Business, 82*(2), 101-110.
- Iyer, R., & Eastman, J. K. (2008). The impact of unethical reasoning on academic dishonesty: Exploring the moderating effect of social desirability. *Marketing Education Review, 18*(2), 21-33. doi:10.1080/10528008.2008.11489034
- Jensen, L. A., Arnett, J. J., Feldman, S. S., & Cauffman, E. (2002). It's wrong, but everybody does it: Academic dishonesty among high school and college students. *Contemporary Educational Psychology, 27*, 209-228. doi:10.1006/ceps.2001.1088
- Jones, D. L. R. (2011). Academic dishonesty: Are more students cheating? *Business Communication Quarterly, 74*(2), 141-150. doi:10.1177/1080569911404059
- Marshall, L. L., & Vernon, A. W. (2017). Attack on academic dishonesty: What 'lies' ahead? . *Journal of Academic Administration in Higher Education, 13*(2), 31-40.
- McCabe, D. L., Butterfield, K. D., & Treviño, L. K. (2012). *Cheating in College: Why Students Do It and What Educators Can Do about It*. Baltimore, MD: Johns Hopkins University Press.
- Naghdi-pour, B., & Emeagwali, O. L. (2013). Students' Justifications for Academic Dishonesty: Call for Action. *2nd World Conference on Educational Technology Research, 83*, 261-265. doi:10.1016/j.sbspro.2013.06.051
- Nonis, S. A., & Swift, C. O. (1998). Deterring cheating behavior in the marketing classroom: An analysis of the effects of demographics, attitudes, and in-class deterrent strategies. *Journal of Marketing Education, 20*(3), 188-199.
- Northcutt, C. G., Ho, A. D., & Chuang, I. L. (2016). Detecting and preventing "multiple-account" cheating in massive open online courses. *Computers & Education, 100*, 71-81. doi:10.1016/j.compedu.2016.04.008

- Obeid, R., & Hill, D. B. (2017). An Intervention Designed to Reduce Plagiarism in a Research Methods Classroom. *Teaching of Psychology, 44*(2), 155-159. doi:10.1177/0098628317692620
- Orosz, G., Toth-Kiraly, I., Bothe, B., Kusztor, A., Kovacs, Z. U., & Janvari, M. (2015). Teacher enthusiasm: A potential cure of academic cheating. *Frontiers in Psychology, 6*(Article 318). doi:10.3389/fpsyg.2015.00318
- Park, E.-J., Park, S., & Jang, I.-S. (2013). Academic cheating among nursing students. *Nurse Education Today, 33*, 346-352.
- Passow, H. J. M., Matthew J.Finelli, Cynthia J.Harding, Trevor S.Carpenter, Donald D. (2006). Factors influencing engineering students' decisions to cheat by type of assessment. *Research in Higher Education, 47*(6), 643-684. doi:10.1007/s11162-006-9010-y
- Polding, B. E. (1995). *The extension of neutralization theory to the academic dishonesty of college students*. (Doctor of Philosophy). University of Florida,
- Poltorak, Y. (1995). Cheating behavior among students of four Moscow institutes *Higher Education, 30*(2).
- Rettinger, D. A. (2017). The role of emotions and attitudes in causing and preventing cheating. *Theory Into Practice, 56*(2), 103-110. doi:10.1080/00405841.2017.1308174
- Schmelkin, L. P., Gilbert, K., Spencer, K. J., Pincus, H. S., & Silva, R. (2008). A multidimensional scaling of college students' perceptions of academic dishonesty *The Journal of Higher Education, 79*(5), 587-607.
- Sendag, S., Duran, M., & Fraser, M. R. (2012). Surveying the extent of involvement in online academic dishonesty (e-dishonesty) related practices among university students and the rationale students provide: One university's experience. *Computers in Human Behavior, 28*(3), 849-860. doi:10.1016/j.chb.2011.12.004
- Smith, K. J., Davy, J. A., & Rosenberg, D. L. (2009). The influence of motivation on cheating behavior among accounting majors. *Advances in Accounting Education: Teaching and Curriculum Innovations, 10*, 169-188. doi:10.1108/S1085-4622(2009)0000010011
- Stephens, J. M., Young, M. F., & Calabrese, T. (2007). Does moral judgment go offline when students are online? A comparative analysis of undergraduates' beliefs and behaviors related to conventional and digital cheating *Ethics & Behavior, 17*(3), 233-254. doi:10.1080/10508420701519197
- 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.
- Sykes, G., & Matza, D. (1957). Techniques of neutralization: A theory of delinquency. *American Sociological Review, 22*, 664-670.
- Tatum, H. E., & Schwartz, B. M. (2017). Honor codes: Evidence based strategies for improving academic integrity *Theory into Practice, 56*(2), 129-135. doi: 10.1080/00405841.2017.1308175
- Urduan, T. (1997). Achievement goal theory: Past results, future directions. In *Advances in Motivation and Achievement* (Vol. 10, pp. 99-141). Greenwich, CT: JAI.
- Yardley, J., Rodriguez, M., Bates, S. C., & Nelson, J. (2009). True confessions?: Alumni's retrospective reports on undergraduate cheating behaviors. *Ethics & Behavior, 19*(1), 1-14. doi:10.1080/10508420802487096