

## **Does Academic Dishonesty Relate to Fraud Theory? A Comparative Analysis**

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### **Abstract**

*This paper demonstrates how the theoretical framework of white-collar crime, grounded in the "Fraud Triangle" provides a useful theoretical foundation for research in academic dishonesty. A review of recent literature on academic dishonesty reveals that the factors that are significantly correlated to cheating in higher education are in fact very similar to those factors that have been found to predict fraud in the corporate world.*

**Keywords:** academic dishonesty, fraud, cheating, moral integrity, ethics

### **1. Introduction**

A recent review of accounting literature highlighted the existence of simultaneous challenges --a significant increase in academic dishonesty *and* a serious global economic crises characterized by greed, immoral judgment, and fraud in business and finance. Fraud in the corporate world has been extensively studied, resulting in a well-established theoretical framework, but a theoretical basis has been lacking for the rigorous study of academic dishonesty (Apostolou et al., 2013). This paper will demonstrate how the theory of fraud, grounded in the "Fraud Triangle," provides a useful theoretical foundation for future research in the area of academic dishonesty.

Academic dishonesty, defined as all forms of cheating (e.g. plagiarism, unauthorized assistance on assignments and examinations) has increased substantially in higher education. According to McCabe et al. (2001), rates of cheating among accounting students in the U.S. nearly doubled from 39%, in the early 1960s, to 64% by 1993. Additionally, it appears that although most students (92%) believe that cheating is not ethical, almost half (45%) believe it to be socially acceptable. Further, several authors suggest that students who cheat in college are more likely to engage in unethical behaviors in their subsequent work life. If that is the case, the trend in academic dishonesty creates an even more dismal and fraudulent future for business, and a challenge for academicians who value ethical education and moral development in undergraduate education. The challenge holds especially true for accounting faculty whose students are future members of a profession for whom the public holds high expectations of integrity and high moral values (Saat, 2012).

The current global financial crisis resulting from failed financial institutions and corporate frauds exacerbates the crisis of social acceptability of academic dishonesty among future business leaders. Government interventions and increased public scrutiny highlight the breakdown in the ethical behaviors of business leaders, and make the role of business education even more critical. An article in the Wall Street Journal chastised academe with this quote, "By failing to teach the principles of corporate governance, our business schools have failed our students" (Jacobs, 2009). Poor corporate governance is charged with responsibility for adversely affecting corporate performance, financial reporting, and the potential to cause business failure and loss of public confidence (Rezaee, 2012). Further, in countries where the propensity for academic dishonesty is high, there is a positive correlation with corruption levels (Rocha, 2006). Because of the perceived failure of higher education regarding moral and ethical training of business students, academe faces the opportunity to step in preparing future business leaders to act with integrity. The academic challenge of instilling integrity in future business leaders is counter to the mindset of the growing number of college students who either engage in or accept academic dishonesty as acceptable.

The topic of academic dishonesty first appeared in accounting literature in a 2010 review, where it was included as a curricular issue (Apostolou et al., 2013). This recently updated accounting education literature review included academic dishonesty as a stand-alone topic, underscoring the pervasiveness of the problem in academia today. Recent studies on academic dishonesty examined concepts such as the student's understanding of what constitutes cheating (Ballantine and McCourt, 2011; O'Neill and Pfeiffer, 2012; Macfarlane et al., 2012), the antecedents of cheating (pressures, academic integration, awareness, moral capability, gender, age, academic performance, accounting education, technology, institutional support, cultural influences) (Guo, 2011; Canarutto et al., 2010), rationalizations (Macgregor and Steubs, 2012), and student intentions to cheat (based upon awareness of the behaviors of peers, prior cheating behaviors, and ethical sensitivity regarding cheating) (Bernardi et al., 2012). Reviewers of this literature cite lack of a theoretical framework for the study of academic dishonesty as a serious flaw that limits the generalizations that can be reasonably made.

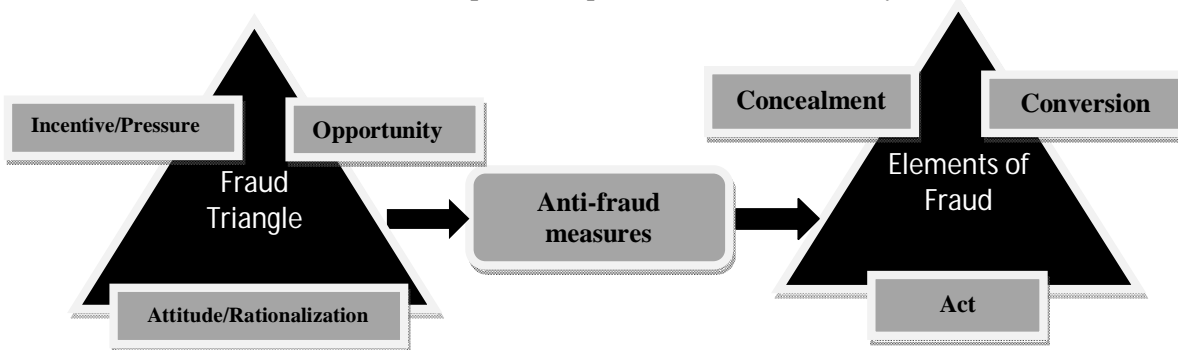
The evolution of a theory of fraud began with what is referred to as the Fraud Triangle (the Triangle), which first appeared in sociology literature over sixty years ago (Creasey, 1953; 1950). These seminal works on the antecedents of white-collar crime hypothesized three necessary conditions: (1) opportunity, (2) rationalization, and (3) motive. The Triangle provided an adequate model for examining fraudulent activity for several decades until studies began to suggest that, as both financial markets and fraud schemes grew in complexity, it likely failed to capture emerging antecedents for fraud (Albrecht, 1984). Eventually a corollary /expanded model to the Triangle, included a focus on the crime/fraud act itself (Trompeter et al., 2013)The Trompeter model added three elements of fraud action to the Triangle: the act (execution and methodology of the fraud), concealment, and conversion (how the gain is made legitimate for personal use).

## 2. Methodology

This paper correlates the findings from academic dishonesty research to the fraud theory model used by auditors to predict, detect, and prevent fraud in financial reporting. By organizing existing findings into a cohesive framework, we suggest that a theoretical grounding for more rigorous future study of academic dishonesty is available using an adaptation of the Triangle.

**Figure 1: The Auditor's Model with Respect to Fraud**

Trompeter, Carpenter, Desal, Jones, Riley (2013)

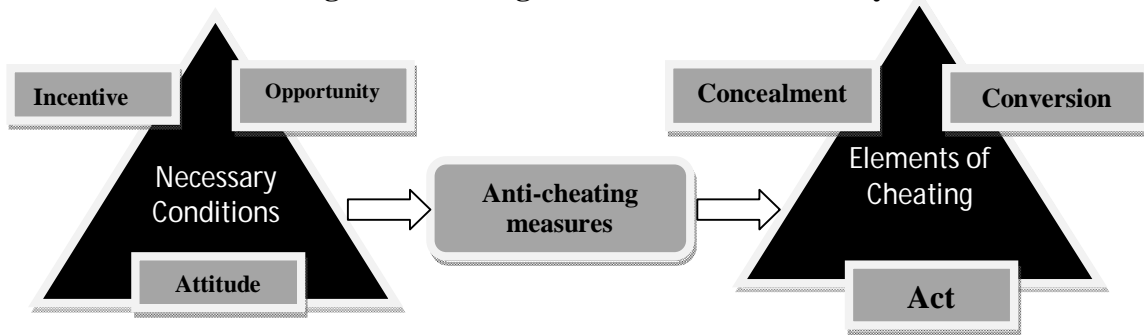


**The Fraud Triangle:** the left-hand triangle in Figure 1 represents the theoretical framework of white-collar crime, describing the necessary conditions for fraud to occur: incentive, opportunity, and the individual ability to rationalize deviant behavior (Creasey, 1950).

Trompeter et al, 2013, expanded the model to include elements of fraud, depicted in the right-hand triangle: the ability to conceal the defalcation, the ability to convert the spoils to personal gain, and the nature of the act/crime itself. Anti-fraud measures to mitigate the risk between the propensity to defraud and the act itself have been designed and refined over half a century by auditors and managers.

**Academic Dishonesty Literature:** The review of this literature suggests that the results of major studies on academic dishonesty overlay the elements of the Fraud Triangle quite nicely, which we propose reframing in the context of Academic Dishonesty (Figure 2).The literature on academic dishonesty reviewed for this paper, the cited literature, includes studies that demonstrate how the research overlays the Fraud Triangle framework; and is intended to be illustrative rather than exhaustive.

**Figure 2: Triangle of Academic Dishonesty**



Numerous studies on academic dishonesty have been published over the past two decades that have examined various disparate elements of the “Triangle of Academic Dishonesty.” The findings of those studies have been mapped (see Table 1) over the elements of the proposed Triangle of Academic Dishonesty Model from Figure 2.

**Table 1: Mapping Research over Triangle of Academic Dishonesty**

Research	Factors examined
<b>Incentive</b>	
Ameen et al, 1996; Duff, 1998; Abdolmohammadi& Baker, 2007	Fear of failure/pressure to succeed
Bennett, 2005	Financial difficulty (need to work)
Introna et al, 2003; McCabe et al, 2001; Haines et al, 1986;	Financial support from family/government/loans/grants
Park, 2003; Franklyn-Stokes & Newstead, 1995; Errey, 2002	Lack of time (due to social activities, family demands, work requirements, poor time-management skills, unrealistic assignment deadlines)
Burris et al, 2007	Social pressures (gaining favor, avoiding disapproval)
Guo, 2011	Institutional support
Grasgreen 2012;p Burris et al, 2007	Facing expulsion, risk of losing scholarship, lack of time, and maintaining GPA are most significant incentives to cheat
Carrell et al, 2008	Awareness of peers cheating
<b>Opportunity</b>	
Guo, 2011	Technology and internet
Smith et al, 2002	Absence of in-class deterrents
Bernardi et al, 2008	Strategies to minimize perceived opportunity (multiple exam formats, scrambled seating, increased supervision, provision of calculators)
Keith-Spiegel et al, 1998	Lack of faculty resources (evidence, time/effort, courage) to act
<b>Attitude</b>	
Yu & Zhang 2006	Business vs. non-business students
Guo, 2011	Awareness of what constitutes cheating
Baack et al, 2000; Abdolmohammadi& Baker, 2007; Trevino, 1986	Ethical sensitivity
MacGregor&Steubs, 2012; Carroll & Appleton, 2001;Ashworth et al, 1997	Quality of teaching (alienation, poor pedagogy, unrealistic expectations)
MacGregor&Steubs, 2012	Perceived insignificance of behavior
MacGregor&Steubs, 2012	Time constraints and sense of justice
MacGregor&Steubs, 2012; Rettinger et al, 2009; McCabe et al, 2006	Peer behaviors
Ashworth et al, 1997; Carroll & Appleton, 2001	Alienation (lack of contact with faculty, large classes), poor teaching, and perception of insignificance of subject matter contribute to attitudes about cheating

<b>Anti-cheating Interventions</b>	
O'Neill & Pfeiffer, 2012	Existence of an honor code
McCabe & Trevino, 2001, 1993; Verschoor, 2004	Culture of integrity and codes of conduct
MacGregor&Steubs, 2012; Burris et al, 2007	Communication; caring relationships with instructors
Bernardi et al, 2008	Classroom interventions
Grasgreen, 2012	Early interventions
Bloodgood et al, 2008; Earley& Kelly, 2004; Shaub, 1994	Ethics education
<b>Concealment</b>	
Ameen, 1996	Expectations of punishment if caught
Bernardi et al, 2008	Strategies to minimize concealment (multiple exam formats, scrambled seating, increased supervision, provision of calculators)
<b>Conversion</b>	
McCabe et al, 2002	Faculty non-reporting
Sierles et al, 1980	Lack of possible sanctions
Bernardi&Adamaitis, 2006	Prior successful cheating future intention to cheat
<b>Act</b>	
McCabe, 2002	Index of academic integrity
O'Neill & Pfeiffer, 2012	Ranking seriousness of types of cheating

### 3. Conclusions and Recommendations

Regarding the limitations of extant research, results from most studies on academic dishonesty rely on self-reporting data, and therefore are likely to understate the problem. Numerous empirical studies examined a variety of factors relating to cheating (moral capability, demographics, environmental factors, etc.), yet each included only a limited number of factors, without a cogent theoretical framework to explain their interactions. Most studies to date have tested linear relationships between constructs rather than the construct validity of a model using appropriate statistical techniques.

The Academic Dishonesty Triangle helps define the interaction among the elements of cheating and it also helps to frame a variety of research questions. For example, does faculty propensity for reporting cheating predict a student's intention to act by lowering expectations about the probability of being caught, or by influencing the ability to rationalize the behavior based on the perceived seriousness of the infraction, or both? Do students who cheat on quizzes already have financial/social/time pressures or does their ethical sensitivity more accurately predict their likelihood to commit a "minor infraction" leading to a more serious infraction, e.g. cheating on a major exam or assignment? Given a particular mix of anti-cheating interventions, which might be the most efficacious. In what institutional environments would those interventions work? What role do various demographics play in influencing the ability to justify cheating? How does the ability to justify cheating develop? What are the most important components of attitude relative to cheating? These insights into how students decide to cheat, and what determines their attitudes about cheating would provide much needed guidance in higher education for supporting the moral and ethical development of our students. Utilizing the Triangle of Academic Dishonesty would make it possible to overcome limitations in academic dishonesty literature by utilizing appropriate multi-variable modeling techniques with factors that have been heretofore identified as having a correlation with cheating behaviors.

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