Truth, Consequences and Culture: A Comparative Examination of Cheating and Attitudes about Cheating among U.S. and U.K. Students

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ABSTRACT. As Post (1996) observes, accounting firms are unique among multinationals. They are more likely than firms in almost any other category to go abroad. They also have less choice in location as their expansion is determined largely by the desired locations of their clients (Anderson and Gatignon, 1986). Given the widespread global presence of such firms, it can be argued that the global audit firm is uniquely at risk from variations in ethical perceptions across nations. This study extends the U.S. accounting literature on determinants of cheating among accounting students to the U.K. Based on the work of Cohen et al. (1993) it develops a model that suggests that students in lower "uncertainty avoidance" countries will be both less likely to cheat, and when they do cheat, will be driven by internal rather than external mode. Our results supported the model as proposed as our results indicated that U.S. students were more likely to cheat and were more responsive to external stimuli than were the U.K. students.

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As Post (1996) observes, accounting firms are unique among multinationals. They are more likely than firms in almost any other category to go abroad. They also have less choice in location as their expansion is determined largely by the desired locations of their clients (Anderson and Gatignon, 1986). Given the widespread global presence of such firms, it can be argued that the global audit firm is uniquely at risk from variations in ethical perceptions across nations. In addition, the structure of the global firm as a federation of semi-independent offices further increases the potential exposure. As Post (1996, p. 87) notes, "Within the professional structure, the operational units function as loosely coupled systems and essentially mini firms." Furthermore, "the flexibility inherent in relational contracting creates strong incentives to become involved with partners whose trustworthiness is beyond question" (Post, 1996, p. 88).

This exposure is exacerbated by the micro-

Journal of Business Ethics **31**: 37–50, 2001.

structure and nature of the audit industry. Global audit firms are professional organizations. As Post (1996) notes, global professional firms are uniquely at risk to ethical issues as they are dependent on the judgement, norms, and standards of their staff in each country. The values of a professional staff typically owe much more to the values, norms, ethical precepts and codes of the profession than from a managerial hierarchy (Miner, Crane and Vanderberg, 1992). If one incorporates the findings of Gray (1988) and Salter and Niswander (1995), these professional values on which the firms depend can, in turn, be shown to be significantly related to national culture values as defined by Hofstede (1991).

When are these professional values formed? When does a person set their ethical standards? Frankly we do not know. However evidence from Lysonski and Gaidis (1991), Dupont and Craig (1996) and Sierles et al. (1980) indicates that ethical views exhibited by college students form the basis of future ethical behavior by professional and managers. Lysonski and Gaidis (1991) and Dupont and Craig (1996) in fact provide evidence for a stronger hypothesis that there is no difference between the ethical views of college students and those of managers. Given professional certification and licensing rules, global audit firms perhaps even more than other multinationals must hire the preponderance of their professional staff from this pool of college students available in each country. The values of this pool determine the values of the professionals the firms depend on. While it may be possible to train persons to be more ethical, there are many that argue that basic ethical precepts cannot be changed by such training (e.g., Green and Weber (1997) and McCarthy (1997)). Thus, the ethical and eventual business and legal risk of the global audit firm can be seen as a derivative of the cultural pool from which its staff is drawn.

If culture constrains the ability of global audit firms ability to develop and enforce a single set of global ethical behavior what solutions can they seek? The simplest solution would be to accept the local standard whatever that may be. Indeed one of the authors observed exactly this variation in his roles as a management consultant and banker, interacting with global audit firms in the early 1980's. While such a solution may have been acceptable then it is unlikely to be acceptable now. The Economist Newspaper commenting on proposed mergers among global audit firms said, "Reputation has thus become a barrier to entry. . . . The Big 6 thus have an unassailable oligopoly in many fields. Their imprimatur is a prerequisite for a Russian municipality or a Mexican group to raise funds internationally (The Economist, 1999, pp. 1–2). Thus global audit firms command a premium fee in global markets, specifically because their imprimatur denotes high and consistent standards of auditing and levels of ethical practice. A high and consistent standard of auditing is incompatible with audit and ethical standards that fluctuate nationally.

A second solution would be to attempt to train auditors to achieve common standards of ethical behavior. Much literature has addressed the question of whether accountants and students can be trained to be ethical. Green and Weber (1997) and McCarthy (1997) for example argue that such training is ineffective. Hiltebeitel and Jones (1991, 1992) and Armstrong (1993) argue that ethical training improves the moral reasoning ability of accounting students. However, since ethical training is essentially behavior modification and behavior is culturally motivated (see Chee Chow et al., 1996 for a summary) it becomes imperative to understand whether different cultures adopt different attitudes about ethical behavior in general and cheating in particular. In addition, it is important to know whether or how training can affect such base attitudes. White and Rhodeback (1992) for example find that Taiwanese and U.S. managers are ethically quite different and react to ethical training by moving in opposite directions, with the Taiwanese subject making (by their standards) less ethical decisions after the training.

An alternate solution to the risks posed by cultural variations in ethical standards can be drawn from the work of Ouchi (1980). Ouchi (1980) proposes that in tasks such as auditing where the process of judgement formation is unclear and the outcome is difficult to measure "clan control" may be implemented as an appropriate risk reduction strategy. "Clan control" is

a scheme of control in which rather than trying to control employees formally, firms load the dice in their favor by selecting employees from groups that have similar values to those desired by the firm. Essentially a firm by restricting its recruiting pool is choosing only to hire from a subculture within a country. Only hiring from a particular university or group of universities could operationalize such a strategy. An alternate strategy could include selecting students who have studied in a country with which the firms are ethically comfortable. It need not be overt but rather be covert by making the atmosphere in the firm more conducive to "the clan" to be selected. Evidence of these practices has been found in results of Soeters and Schreuder (1988) in the Netherlands and Pratt et al. (1993) in the U.K. and Australia. Both studies find auditors in large multinational firms exhibit characteristics that are "transatlantic". Thus the values exhibited by staff in global audit firms mirror those of the home country of the global audit firm. Auditors in non-multinational firms do not appear to have such predilections. The results of both Soeters and Schreuder (1988) and Pratt et al. (1993) indicate self or deliberate selection.

Of the two possible solutions multinational firms can seek to mitigate cultural risks, group selection or training, both options require that one start the process by understanding the base premises of the recruiting pool it selects from. In most countries this requires an understanding of the morals, ethics, and attitudes of accounting students from which future accounting trainees and future accountants are selected. As Shaub (1994, p. 1) notes "accounting educators can influence the moral reasoning of the profession by recruiting and retaining bright students."

This study examines the attitudes about a variety of cheating scenarios displayed by accounting students in two similar and yet distinct cultures: the U.K. and the U.S.A. These countries are extremely important because they are each other's largest investment partners. In addition, the strength and number of the profession in both countries is likely to ensure that cross border investments will be monitored by nationals of the country where the investment is located. As the De Lorean case (Radebaugh and Gray, 1996) demonstrates, particularly for U.S. firms, the legal risk can be transferred across the Atlantic as easily as from state to state, making the auditing of investments abroad as risky as the auditing of investments within the U.S.

The paper begins with a brief review of the "cheating" and "culture" literature. It then proceeds to develop hypotheses, discusses the research methods used for data collection and analyses, and tests the results.

Ethics, cheating and culture: literature review

U.S. cheating literature

Many of the prior accounting articles dealing with ethics have focused on whether and how ethical issues can be better integrated into accounting curricula (Hiltebeitel and Jones, 1991; Karnes and Sterner, 1988; Loeb, 1988). While researchers have provided some examples of ethical reasoning by accounting students (Jeffrey, 1993; Ponemon and Glazer, 1990; St. Pierre et al., 1990) sufficient information along these lines is still lacking. For example, there is an paucity of information describing the ethical reasoning of U.S. accounting students as it relates to academic dishonesty (i.e., cheating).

Knowing how students feel about academic dishonesty is important. Sierles et al. (1980) found there was a continuum from cheating in college to cheating in medical school in didactic areas to cheating in clerkships in patient care. Dupont and Craig (1996) find similar results when comparing the ethical perspectives of college students of retail management and retail managers. Dupont and Craig (1996, p. 815) note "management training programs have little effect on the ethical perceptions of participants". They posit that a positive change of ethical perspective occurs only beyond middle management.

In a cross cultural study of managers in the U.S., Denmark and New Zealand Lysonski and Gaidis (1991) and Dupont and Craig (1996) find that the ethical judgements of students are not

statistically different of those by managers faced with the same hypothetical dilemmas. Thus, both in U.S. domestic and cross-cultural literature, very little change occurs in ethical perspectives as students become managers.

Why do students cheat? The propensity to cheat has been explained in a number of ways, these include:

1. Perceived severity of the act
2. Degree of cynicism about the education process/life experiences.
3. Demographic and cultural issues.

Examining the role of perceived severity of the act in a U.S. context, Tom and Borin (1988) found that the more severe an individual judges an act of cheating to be, the less likely the individual is to commit the act. Students who judged various questionable academic practices as less severe were more likely to have cheated while in college than students who judged the same practices as more severe. In addition, the students' intention to engage in future academic dishonesty was indirectly related to how severe they judged the questionable practices to be. Therefore, a major research issue investigated in this study was whether accounting students' perceptions of questionable academic practices related to their cheating history and their attitude toward engaging in academic dishonesty in the future.

Sierles et al. (1980) examine the relationship between cheating and cynicism. A cynic is one who is distrustful of human nature and believes human conduct is motivated wholly by self-interest. Sierles et al.'s (1980) results suggest that accounting students who have engaged in questionable academic practices will be more cynical than those that have not.

The existence of systematic relationships between certain demographic variables and accounting students' propensity to cheat was explored in a U.S. setting by Cloninger and Hodgin (1986) and Bunn et al. (1992). They find that cheating is related to the overall environment of cheating in undergraduate business study at an institution. Shaub (1994) found that certain demographic variables were associated with auditing students' and auditors' moral reasoning in the same way that they have been found to be associated with the moral reasoning of other populations. Drawing together these themes in a U.S. setting, Ameen et al. (1996) find that cheating is common among U.S. accounting students. Furthermore, they find that cheating is tolerated almost as normal by the cheaters' fellow students. Ameen et al. (1996) also find that the propensity to cheat can be explained by a tolerance for cheating among others, a general attitude of cynicism and an environment which is not opposed to cheating. It can be minimized by better monitoring of students and enforcement of rules by instructors. The one demographic variable used, gender, was not significant.

Cross cultural examinations of academic dishonesty

As the review above demonstrates, considerable literature exists on cheating among U.S. students. On the other hand there is almost very little cross cultural literature in the area. At a theoretical level Cohen et al. (1993) use the work of Hofstede (1980) to develop a model linking culture and ethics. Hofstede (1980) defined culture as the collective mental programming that distinguishes one group from another. The programming manifests itself in the values and beliefs of a society, values being the tendency of an individual to prefer certain states of affairs over others. For any number of social behaviors, societies put different weights on different outcomes. As Cohen et al. (1993) point out, Hofstede identified four work-related values that differed systematically across cultures. The major value which differs within the Anglo group of countries (U.S., U.K., Canada, Australia, New Zealand) is uncertainty avoidance. Uncertainty avoidance measures the way cultures face an unknown future with differing anxiety levels, need for security, and dependence upon experts. Society's response to ambiguity is exhibited by attempts to reduce the level of the unknown through extending the domains of technology, law, and religion. In work-related situations, the greater the degree of uncertainty avoidance in a society, the greater the need for predictability, rules and job stability. Cohen et al. (1993) argue

that the response of organizations and individuals is less related to an absolute or objective level of uncertainty in a situation than to perceptions about the level of uncertainty. For a profession, where the environment is perceived as the source of uncertainties Salter and Niswander (1995) find that in societies that are lower in uncertainty avoidance, professionals tend to be self regulating and make their own judgements.

Cohen et al. (1993), in describing the ethical implications of higher levels of uncertainty avoidance, suggest that in the international auditing environment the uncertainty avoidance construct has particularly interesting implications for ethical decision making. They argue that the rapid innovation of complex business and financial transactions has developed faster than accounting rule-makers have been able to respond to them (e.g., software development, cross-border financing contracts). This lag results in inadequate or nonexistent accounting rules, leading to an even greater dependence on auditor judgment. Auditors from cultures with a higher tolerance for ambiguity (low uncertainty avoidance) focus on the content of the issue rather than on the form alone. As Cohen et al. (1993) argue, auditors from strong uncertainty avoidant cultures are likely to equate "legal" with "ethical" responsibilities, in the absence of legal guidelines or punishments these auditors are more susceptible to the path of least resistance or that which gives the most advantage. When specific legal sanctions are missing, those in low uncertainty avoidant cultures would apply a broader ethical framework to decisions and refrain from questionable actions even if they were legal.

Extending Cohen et al. (1993) in matters of cheating, a number of propositions can be made on the links between culture and ethics in students as follows:

1. Students from higher uncertainty avoidance countries will be more likely to cheat. This is likely to be true even after controlling for variables found to influence cheating in the previous studies.
2. Since punishment rules are usually an integral part of any set of rules indicating which rules are most important, students from higher uncertainty avoidance countries will be more likely to respond to punishment and monitoring.
3. Students from countries with lower uncertainty avoidance who cheat are more likely to do so for internal reasons, such as intent or personal tolerance of cheating, rather the environment or cynicism about the world around them.
4. Even small differences in uncertainty avoidance can define countries relative to each other. Thus for the purposes of this study the U.K. is likely to assume the role of a relatively low uncertainty avoidance country relative to the U.S.

At an empirical level Schultz et al. (1993) compares corporate managers propensity to report questionable activities using samples of managers in the U.S., Norway, and France. The results indicate that national culture and propensity to report are linked. By contrast Clarke et al. (1996) find Irish and U.S. auditors show no statistical difference in Moral reasoning ability using the DIT scales. Thus while the Cohen et al. (1993) model is specific, it is untested and such tests of cross cultural ethical differences are inconclusive. We therefore propose in this paper to test our extension the Cohen et al. (1993) propositions. Our hypotheses in the alternate form are:

Ha1. Students from higher uncertainty avoidance countries will be more likely to cheat. This is true even after controlling for variables found to influence cheating in previous studies.

Ha2. Since punishment rules are usually an integral part of any set of rules indicating which rules are most important, students from higher uncertainty avoidance countries will be more likely to respond to punishment and monitoring.

Ha3. Students from countries with lower uncertainty avoidance who cheat are more likely to do so for internal reasons, such as intent or personal tolerance of cheating, rather the environment or cynicism about the world around them.

Independent Variable	How Measured	Hypothesized relationship with CHEAT
TOLERANC	Each subject's mean severity rating across all 23 questionable academic practices. The higher the average, the less tolerant the student was of cheating.	Negative
INTENT	An indicator variable of whether the student expected (1) or did not expect (0) to cheat in the future	Positive
CYNIC	The average response given by each student for the three questions on cynicism. It was a continuous independent variable ranging from 0 to 5.	Positive
ENVIRON	Dummy variable valued 1 if the student had witnessed another student cheating on an exam, valued 0 otherwise. Students who see others cheat without getting caught may feel they also can cheat without being caught; therefore, a positive relationship was hypothesized.	Positive
PUNISH	A 0/1 indicator variable valued 1 if the student expected severe punishments (i.e., receive an F in the course or be suspended) if caught cheating, valued 0 otherwise.	Negative
GENDER	A 1/0 indicator variable. Females were assigned a value of 1 and Males a value of 0. Based on prior literature, a negative relationship was expected for gender (i.e., females would be less likely to cheat)	Negative
U.K.	A 1/0 indicator variable. U.K. students were assigned a value of 1 and U.S. students a value of 0. Based on the Cohen et al. (1993) and Hofstede (1981) literature, a negative relationship was expected for nationality (i.e., U.K. students would be less likely to cheat)	Negative

Research methodology

Variables and hypothesized relationships

The dependent variable is the self-reported past cheating of the students (CHEAT). Based on the prior work of Ameen et al. (1996) and Cohen et al. (1993) the following independent variables and relationships were developed, all measured through a questionnaire survey (see the *Research Instrument* section below)

Research instrument

A survey questionnaire[1] was used to collect the research data. The students were told that their participation was voluntary and that their responses would remain anonymous. The subjects were first requested to provide basic demographic data such as classification, gender, age, major and GPA.[2] The students then provided the following groups of items.

1. *Group I – perceptions of questionable academic practices*: the students were asked for their perceptions of 23 questionable academic practices related to exams, project, and written assignments (the practices are listed in Appendix I).[3] Students rated the severity of each practice using the following six-point scale: (0) "not cheating", (1) "least severe", (2) "somewhat severe", (3) "moderately severe", (4) "quite severe", (5)

"most severe". The descriptive modifiers for each anchor point have been shown to produce approximately equal intervals along the response range (Bass et al., 1974).

2. *Group II – Cynicism*: the students were asked to evaluate three statements taken from Sierles et al. (1980) designed to measure each student's level of cynicism (the statements are listed in Appendix II). The students indicated how truthful they felt each statement was using a six-point scale that ranged from (0) "no truth" to (5) "extremely truthful".
3. *Group III – methods to deter cheating*: the students were asked to rate the effectiveness of four commonly used methods to deter cheating on exams (Appendix III). The same descriptive modifiers used for the severity rating scale were used to produce a six-point effectiveness scale that ranged from (0) "no effect" to (5) "most effective".
4. *Group IV – environment*: the students were asked questions designed to gather information about the conditions surrounding academic dishonesty at their university. These questions solicited the students' perceptions of the incidence of cheating, the frequency of cheating, and the observance of cheating, whether they had ever witnessed anyone caught cheating, and what penalties they felt would be imposed for cheating.
5. *Group V – Cheating Behavior*, finally and most important, the students were asked whether they had cheated on exams, projects or written assignments while in college and whether they felt they would cheat in the future.

Subjects

Three hundred and seventy students (junior, senior and graduate) in upper-level accounting courses participated in the study. The subjects were enrolled in large public universities in the United States[4] and in the U.K. The U.K. was selected as the test site because it is a major U.S. investment partner. While Hofstede (1980) placed both countries in the same theoretical cluster, Hofstede and Schreuder (1987, p. 30) noted that "in view of the large number of respondents, differences of two or three points on the scales [i.e. Hofstede's scales] are already statistically significant". Thus, the apparently small differences between the U.S. and U.K. (about eleven points on uncertainty avoidance, the relevant culture dimension in this study) should be sufficient to test our culture-based hypotheses. For the purposes of this study the U.K. assumes the role of a relatively low uncertainty avoidance country relative to the U.S.[5]

All other dimensions are virtually identical. The U.S. sample was tested and no significant difference was found between the students from U.S. schools even though they were geographically dispersed in the southeast and the southwest.

The overall sample of accounting subjects was composed of 200 females (54%) and 170 males (46%). The British sample had proportionately more males (68%) than the U.S. (43%). The majority of the subjects has performed well in the classroom and appear ready to assume positions within accounting firms, industry, or government.

Analysis

The first tests examined cross-national differences between countries. These tests were conducted using parametric and non-parametric tests. A subsequent test was conducted for the whole sample group using a logistic regression in the form:

$$\begin{aligned} CHEAT = {} & \alpha + \beta_1 TOLERANC + \\ & \beta_2 INTENT + \beta_3 CYNIC + \\ & \beta_4 ENVIRON + \beta_5 PUNISH + \\ & \beta_6 GENDER + \beta_7 UK + \varepsilon \end{aligned}$$

Similar tests were also conducted within the subsamples, although for logit purposes the last term was of necessity excluded.

Results

Cross national t-tests

As Table I illustrates both the parametric and non parametric tests show that the U.K. sample is significantly less likely to cheat at the $\alpha < 0.05$ level. In fact only 40 percent of the British students admitted to cheating versus 55.69% of the U.S. sample. This supports Hypothesis 1. It is particularly interesting in that the U.K. sample is significantly more cynical, tolerant of cheating, and male, all of which have been associated in the past with weaker moral development and greater levels of cheating. There was no significant difference between groups in their intent to cheat in the future, had observed prior cheating or expected punishment for cheating.

TABLE I
Initial result of inter country differences

Variable	How measured	Mean score U.K.	Mean score U.S.	Hypothesized relationship with CHEAT
CHEAT	Indication that they have cheated (1) or not (0).	0.4000	0.5569*,+	N/A
TOLERANC	Each subject's mean severity rating across all 23 questionable academic practices. The higher the average, the less tolerant the student was of cheating range 1 to 5.	2.8937	3.3394*,+	Negative
INTENT	An indicator variable of whether the student expected (1) or did not expect (0) to cheat in the future	0.2667	0.2031	Positive
CYNIC	The average response given by each student for the three questions on cynicism. It was a continuous independent variable ranging from 0 to 5.	3.000	2.4113*,+	Positive
ENVIRON	Dummy variable valued 1 if the student had witnessed another student Cheating on an exam, valued 0 otherwise. Students who see others cheat without getting caught may feel they also can cheat without being caught; therefore, a positive relationship was hypothesized.	0.8444	0.8215	Positive
PUNISH	A 0/1 indicator variable valued 1 if the student expected severe punishments (i.e., receive an F in the course or be suspended) if caught cheating, valued 0 otherwise.	0.5333	0.4554	Negative
GENDER	A 1/0 indicator variable. Females were assigned a value of 1 and Males a value of 0. Based on prior literature, a negative relationship was expected for gender (i.e., females would be less likely to cheat)	0.3111	0.5723*,+	Negative

Note: * indicates significantly different in a t-test at $p < 0.05$.
+ indicates significantly different in a Mann-Whitney test at $p < 0.05$.

Thus, the overall lower level of cheating in the U.K. group appears at first pass to be driven primarily by the cultural ethos that was contained in items other than those historically used to explain cheating.

Logistic regression between countries

Table II presents a logistic regression, for the whole sample. The culture variable (U.K.) was negatively related to propensity to cheat. Since the U.K. was coded as a 1 and the U.S. 0, this indicates that U.K. students were significantly less likely to cheat even after controlling for other variables. This behooves us to examine the individual within country logistic regressions to determine which, if any, of the traditional items influence cheating in all countries.

The balance of the significant results support many of the relationships found in Ameen et al. (1996). Of the six variables used in previous U.S. cheating studies (TOLERANC, INTENT, ENVIRON, AND GENDER) three are identical in sign and significance to Ameen et al. (1996). The mean severity with which cheating is perceived (TOLERANC) has the highest R-square value of the prior variables. Thus, the more often students perceive questionable actions as being a severe form of cheating the less likely they are to cheat themselves. For the sample as a whole expectation, future cheating (INTENT), Cynicism (CYNIC) and perceived acceptability of cheating in the students' school (ENVIRON) are positively related to the students' willingness to cheat. The results for the two remaining variables are not significant. Punishment (PUNISH) which Ameen et al. (1996) found to be negatively related to CHEAT is in the direction proposed but the relationship is insignificant at $\alpha = 0.06$ level. As with the Ameen et al. (1996) study GENDER is insignificant.

Within country results – U.S.

As Table III shows, the U.S. sample behaved exactly as predicted from Ameen et al. (1996) with all variables signed as hypothesized and all variables are significant except gender.

Within country results – U.K.

As Table IV reveals, British students do not follow the same pattern as the U.S. students. As

TABLE II
Logistic regression

$$CHEAT = \alpha + \beta_1 TOLERANC + \beta_2 INTENT + \beta_3 CYNIC + \beta_4 ENVIRON + \beta_5 PUNISH + \beta_6 GENDER + \beta_7 K + \varepsilon$$

Variable	Expected sign	B	Significance (p-value)[1]	R^2
CONSTANT	None	2.1201	0.0000	
TOLERANC	–	–1.0827	0.0000	–0.2183
INTENT	+	2.4085	0.0000	0.1952
CYNIC	+	0.3925	0.0048	0.1079
ENVIRON	+	1.0277	0.0034	0.1135
PUNISH	–	–0.4843	0.0617	–0.0540
GENDER	+	–0.0500	0.8537	0.0000
U.K.	–	–1.9454	0.0000	–0.1738

[1] Overall R^2.
• Cox & Snell method 0.330.
• Nagelkerke method 0.441.

TABLE III
Logistic regression – U.S.

$CHEAT = \alpha + \beta_1 TOLERANC + \beta_2 INTENT + \beta_3 CYNIC + \beta_4 ENVIRON + \beta_5 PUNISH + \beta_6 GENDER$

Variable	Expected sign	B	Significance (p-value)[1]	R^2
CONSTANT	None	4.9311	0.0000	
TOLERANC	–	–1.1444	0.0000	–0.2221
INTENT	+	2.7182	0.0002	0.1655
CYNIC	+	0.4643	0.0026	0.1256
ENVIRON	+	0.8392	0.0258	0.0816
PUNISH	–	–0.5708	0.0438	–0.0680
GENDER	+	0.0227	0.9381	0.0000

[1] Overall R^2.
• Cox & Snell method 354.
• Nagelkerke method 0.474.

TABLE IV
Logistic regression – U.K.

$CHEAT = \alpha + \beta_1 TOLERANC + \beta_2 INTENT + \beta_3 CYNIC + \beta_4 ENVIRON + \beta_5 PUNISH + \beta_6 GENDER$

Variable	Expected sign	B	Significance (p-value)[1]	R^2
CONSTANT	None	4.8775	0.8839	
TOLERANC	–	–2.0166	0.0268	–0.2191
INTENT	+	2.4678	0.0344	0.2021
CYNIC	+	0.0542	0.9075	0.0000
ENVIRON	+	9.4388	0.7772	0.0000
PUNISH	–	0.2521	0.7836	0.0000
GENDER	+	0.4632	0.6756	0.0000

[1] Overall R^2.
• Cox & Snell method 0.447.
• Nagelkerke method 0.604.

with the U.S. students the major predictor of propensity to cheat is their tolerance for cheating and intent to cheat in the future. The mean severity with which cheating is perceived (TOLERANC) has the highest R-square value of the prior variables. Thus, the more often students perceive questionable actions as being a severe form of cheating the less likely they are to cheat themselves. In contrast for the British students, certainty and severity of punishment are not a significant deterrent. Furthermore, an ambient environment in which cheating appears to be condoned or even encouraged does not significantly influence the British student to cheat. The British students seem to be more self contained than their U.S. counterparts making the decisions on internal criteria such as their own moral views and intention. This is very much in tune with the Cohen et al.'s (1993) view that when specific legal sanctions are missing, those in lower uncertainty avoidant cultures apply a broader ethical framework to decisions and

refrain from questionable actions even if they were legal. Thus, hypothesis two is rejected and we find evidence to support the alternative view that since punishment rules are usually an integral part of any set of rules indicating which rules are most important, students from higher uncertainty avoidance countries will be more likely to respond to punishment and monitoring. Finally the evidence for hypothesis three is mixed. First the British students do seem to be internally driven and not directly influenced by the environment, but rather by their own tolerances for cheating. The American students while they are motivated significantly by avoidance of punishment and the environment of the university, also rely on their personal tolerance or lack thereof to determine whether to cheat. In the U.K. however, personal tolerance and intent explain 100 percent of explained variance, in the U.S. by contrast they explain slightly less than 75 percent. In addition, punishment is a significant mediating factor in the U.S. but not in the U.K. On balance, we feel the results argue quite strongly to reject the null on Hypothesis 3. Therefore with some comfort we argue that, students from countries with lower uncertainty avoidance who cheat are more likely to do so for internal reasons, such as intent or personal tolerance of cheating, rather the environment or cynicism about the world around them.

Conclusions and limitations and future avenues for research

The essential findings of this study are that U.S. students are significantly more likely to cheat than their British counterparts. Further, we find that punishment and the threat of punishment is effective in the U.S. but not the U.K. Both of these findings are in agreement with our hypothesis that individuals within a more uncertainty avoidant culture are more likely to cheat and will seek the certainty of sanction as a guide to making decisions of an ethical nature.

Furthermore, as the findings are in essence a joint test of ethics and culture we believe that these results provide support for a "close culture" perspective. Such a perspective argues as Hofstede and Schreuder (1987, p. 30) do that "in view of the large number of respondents, differences of two or three points on the scales [i.e. Hofstede's scales] are statistically significant". Thus, the apparently small differences between the U.S. and U.K. (about eleven points on uncertainty avoidance, the relevant culture dimension in this study) were sufficient to cause significant differences in propensity to cheat and stimuli that encourage and retard.

This study indicates that much of the research that has been done on ethics training in the U.S. needs to be tested on the international level. In future work for example, it would be worthwhile to assess the extent of cheating in countries such as Singapore or Hong Kong where uncertainty avoidance is very low or France, where it is fifty points higher than the U.K.

Our results and any future comparison would appear to have significant impact in the design of audit and firm control systems. If we are to presume that U.S. accounting students have a high propensity to cheat, this would imply the need for rigorous and well documented systems of rules in the U.S. and other higher uncertainty avoidance countries. It is also perhaps not surprising that high uncertainty avoidance countries such as France and Germany have strict accounting rules and codes whereas the U.K. relies much more on the judgement of auditors. As an aside it should be noted that such rules or consequences may already be in place in the U.S. through the tort system and firm training policies. We also wonder if the high liberal arts content of British degrees or the pre-college "A" level grades have influenced the student position as U.S. authors have found non-accounting majors to be more ethical. Finally, in a future study the authors or others could address the potential weaknesses of this study: a small sample and a certain element of gender imbalance.

We believe that the question of cheating is so serious for audit firms as they grow globally, that further work needs to be done. In addition the questions raised by these results go beyond this simple comparison between two countries. The results imply that when adopting a "clan solution" auditors need to be aware of the values of the indigenous population. This has significant

implications particularly for the more standardized members of the global audit leaders. Finally in terms of international business (IB) it confirms for the authors the key elements from which IB issues arise. They are the two C's: "Culture and Currency"

Appendix I

Questionable Academic Practices in Ascending Order of Mean Perceived Severity (item 23 is the most severe) using the U.S. Sample as a Base

1. Failing to report grading errors when the professor has not approved ignoring error in the student's favor.
2. Studying from someone else's notes without their approval.
3. Asking someone who has already taken an exam what the questions are.
4. Visiting a professor after exam with the sole intention of biasing one's exam grade.
5. Copying homework from another student.
6. Obtaining an old test from a fraternity/sorority file or from a student who took the class in a previous semester when the professor has expressly prohibited the release of old tests.
7. Not contributing one's fair share in a group project for which all the members will be given the same grade.
8. Rephrasing words or ideas from a book, journal or magazine and presenting them without giving their source.
9. Lying to an instructor about illness, etc., when an exam or assignment is due.
10. Having someone else write a speech, report or paper for you after you have done the basic research.
11. Writing a speech, report, paper, etc., for someone else.
12. Falsifying or fabricating a bibliography.
13. Borrowing another person's speech, report or paper and presenting it as one's own work.
14. Turning in work or a paper purchased from a fellow student or a commercial research firm.
15. Obtaining a copy of the exam prior to taking it in class.
16. Looking at another student's exam paper during tests.
17. Arranging to sit next to someone in order to copy off that individual's test paper.
18. Using unauthorized "crib" notes during an exam.
19. Giving answers to someone else during an exam.
20. Bribing or blackmailing a fellow student or a professor to provide unauthorized assistance.
21. Asking someone for the answers during an exam.
22. Taking a test for a friend.
23. Exchanging papers during an exam.

Appendix II

Computing Cynicism-Students were asked the following questions

C1 People who say they have never cheated are hypocrites
C2 Everybody steals, cheats, or lies at least once in his/her lifetime
C3 People have to cheat in this "dog eat dog" world

Notes:

1. Responses were on a 0 to 5 scale, 0 – no truth, 1 – mildly truthful, 2 – somewhat truthful, 3 – fairly truthful, 4 – quite truthful, 5 – extremely truthful
2. Cynicism is computed as the mean scalar score

Appendix III

Deterrent Value Of Possible Punishments in Ascending Order of Mean Perceived Severity (item D4 is the most severe) using the U.S. Sample as a Base

D1 Knowing that the order of the questions are scrambled on versions of a multiple choice test
D2 Knowing that the multiple choice answers as well as the questions were scrambled on versions of the test
D3 Giving problems/short answers/essay questions instead of multiple choice questions
D4 Knowing that the given information for problem/short answer questions is not the same on all test versions

Notes

[1] The questionnaire was identical to that used in Ameen et al. (1996).
[2] GPA was not relevant to the British students who did not provide this data but rather an indication of level of the final degree.
[3] The 23 questionable practices were modeled after

those used by Tom and Borin (1988). The complete instrument was pre-tested on graduate students, undergraduate students, and accounting faculty and then revised based on comments received.

[4] The responses of a subset of the U.S. subjects had been used by two of the authors of this paper in a previously published domestic paper. All of the data was collected within the same twelve month span.

[5] The scores for the U.S. and U.K. on Hofstede (1981) dimensions are:

Country	Uncertainty avoidance	Power distance	Masculinity	Individualism
U.S.	46	40	62	91
U.K.	35	36	66	89

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