The relationship between accounting students' love of money and their ethical perception

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Abstract

Purpose – The purpose of this paper is to investigate how accounting students view cheating actions inside and outside the classroom. It relates the love of money, a psychological variable, to the ethical perceptions of accounting students by examining their cheating perceptions.

Design/methodology/approach – A survey is developed based on cheating actions and the love of money scales and administered to 213 undergraduate and graduate accounting students in two universities in the western US students' perceptions of cheating are measured. Students are classified according to their love of money as money-worshippers, money-repellants, or careless money-admirers.

Findings – Accounting students view cheating actions outside the classroom as more unethical than cheating actions inside the classroom. The love of money is significantly related to perceptions of cheating. Money worshippers view cheating actions as more ethical followed by money-admirers and money-repellants who view such actions as more unethical.

Research limitations/implications – The surveyed students may not be representative of all students in the USA. In addition, perceptions of cheating may not determine cheating behavior.

Practical implications – Instructors should continue to emphasize the importance of ethical behavior. Future employers should consider the love of money as an important psychological variable related to ethical perception in their hiring decisions.

Originality/value – Previous research founds that classroom cheating can be used to predict future workplace cheating among accounting employees. The study is the first to examine the relationship between the love of money and cheating among accounting students.

Keywords Accountancy, Ethics, Professional ethics, Money, Psychology, United States of America

Paper type Research paper

Introduction

The accounting profession has recently been affected by increased pressure from regulators and the public in response to corporate scandals that took place over the last decade. Robertson (2008) noted the recent moral collapse that generated the downfalls of firms such as Enron and WorldCom which led to a new wave of government legislation, such as the Sarbanes-Oxley (SOX) Act of 2002. The act was directed toward holding top corporate managers accountable for their actions and the actions of their colleagues.

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Currently, accounting professionals rely on codes of ethics to convey their responsibility towards the public. However, research has shown that ethical perceptions and intentions are related to several demographic (e.g. gender and age) and psychological variables (e.g. religiosity and *locus* of control) that are unique to each individual (Borkowski and Ugras (1998), for a review).

The current study examines a new psychological variable that has gained increased acceptance in the psychology literature: an individual's love of money. Recent research has started to investigate its impact in a business context (Tang *et al.*, 2008) and found a significant relationship between the love of money and job satisfaction, job turnover and the quality of life in general. The current study specifically examines accounting students, since they are future members of an accounting profession that is frequently shaken by corporate scandals. The study examines the relationship, if any, between accounting students' love of money and their ethical perceptions of several questionable accounting actions. The study should shed light on students' extent of love of money in general and how it impacts their ethical perceptions.

The paper is organized as follows: following this introduction is a literature review of accounting ethics and demographic and psychological determinants of ethical perceptions. This is followed by a review of the love of money as examined in the psychology literature and its impact on ethics. The current study's methodology and data analyses are presented followed by an explanation of the results. Finally, a discussion of the results is presented along with possible implications and opportunities for future research.

Literature review

The accounting profession and ethics

Since the bankruptcies of major corporations in the USA, the accounting profession has experienced a crisis of confidence in its ability to regulate members and provide reliable financial statements to the public. Preparers of the financial statements and auditors are frequently blamed for corporate collapse (Jackling *et al.*, 2007) and strong government action in the form of SOX was implemented in 2002 to prevent such failures. Recent research shows that SOX was having positive consequences. Canary and Jennings (2008) examined the similarities and differences in pre- and post-SOX corporate ethics codes of conduct and found that the code structures have changed over time, with an increased emphasis on compliance in post-SOX codes.

However, there are many instances where the code of ethics and SOX do not provide clear answers. In such ambiguous situations, accountants' personal ethical reasoning determined their professional judgment (Gibbins and Mason, 1988). Studies indicated that accountants with higher moral reasoning were more likely to perceive such situations as unethical compared to accountants with lower personal ethics. Ponemon and Gabhart (1993) found that USA and Canadian auditors with lower ethics scores were more likely to underreport time and prematurely sign-off on audit procedures compared to other auditors. Gul *et al.* (2003) reached a similar conclusion using a sample of Chinese auditors. Owing to the importance of ethics, the accounting profession has focused its attention on ethics perception among accounting students as a starting point in improving the profession's perception.

Cohen *et al.* (2001) compared the ethical reasoning of accounting students and certified public accountants (CPAs) using several business vignettes and found

that CPAs viewed many questionable actions as less ethical compared to students. Communale *et al.* (2006) investigated the effect of accounting scandals, such as Enron, on students' perception of accountants and the profession in general. They found that students had low opinions of corporate managers and accounting students were less interested in working for the Big 4 firms after the scandals. Madison (2002) argued that current accounting students are future professionals and that ethics education can benefit the profession in the long-run. Mantzke *et al.* (2005) proposed a modular approach that incorporated ethics in conjunction with the technical course work. This approach can achieve a range of educational goals related to ethics education without sacrificing the major technical content of each course.

Madison and Schmidt (2006) found that most institutions incorporated ethics education into the accounting curriculum instead of having a separate ethics class. Ethics research has focused on the determinants of ethical perceptions among students in order to potentially affect such determinants. Several demographic and psychological determinants of ethical perceptions were identified.

Determinants of ethical perceptions

Research exploring how ethical attitudes are related to demographic characteristics of an individual used three categories of determinants: gender, education, and age. There has always been a debate on whether men and women differ in the way they make ethical decisions. Empirical studies concerning gender association with ethical decisions are mixed. Some studies found that women are more ethical than men (Arlow, 1991; Crow *et al.*, 1991; Deshpande, 1997). However, other studies found little or no significant differences (Derry, 1987, 1989; Kidwell *et al.*, 1987; Trevino, 1992). In a more recent study, Lam and Shi (2008) analyzed the impact of various factors on ethical attitudes of working professionals in China. They found that females had lower acceptability of unethical behaviors compared to males. Studies concerning age also reached mixed conclusions. Kohlberg's (1981) model of ethical reasoning suggested that individuals become more ethical as they age. Borkowski and Ugras (1998) conducted a meta-analysis of such studies and found 29 percent of the studies supporting Kohlberg's theory, 20 percent reaching the opposite conclusion and 51 percent finding no difference based on age. Lopez *et al.* (2005) examined the effect of business school education and other individual-level factors, such as intra-national culture, area of specialization within business, and gender on ethical perception. The authors found significant effects of business education, self-reported intra-national culture, area of specialization within business, and gender on some areas of ethics, like dishonesty and fraud. Furthermore, they found that tolerance for unethical behavior decreased with formal business education. Owing to the mixed conclusions reached by previous studies regarding demographics, the current study tests the following hypothesis in the null form:

H1. There are no significant differences in accounting students' ethical perceptions based on gender, age, and class grade.

Research concerning students' ethics focused on cheating and its consequences. Pino and Smith (2003) explained the concept of "academic ethic" and argued that students possessing such ethic were less likely to cheat compared to other students. Perry *et al.* (1990) found that students with a type A personality, characterized by impatience and competition, were more likely to cheat compared to other students.

Iyer and Eastman (2006) also found that students with high self-esteem were less likely to cheat compared to those with low self-esteem.

In a professional context, Elias (2006) found that accounting students with higher professional commitment and anticipatory socialization were more likely to view questionable actions as unethical compared to other students. The current study examines a psychological variable that has recently received increased attention in the psychology literature: an individual's love of money.

The love of money and its impact on ethics

Money is a very important aspect of daily life. Rubenstein (1981) argued that in the USA, success is measured by money and income. Although money is used universally, the meaning and importance of money is not universally accepted (McClelland, 1967). Tang *et al.* (2005) argued that attitudes toward money were learned through the socialization process established in childhood and maintained through adult life. In the business world, managers use money to attract, retain, and motivate employees (Milkovich and Newman, 2002). The lack of it results in high turnover, low commitment, and counterproductive behavior (Tang and Chiu, 2003).

Owing to the importance of money and its different interpretation, Tang (1992) introduced the concept of "the love of money" to the psychology literature. It measures one's subjective feeling about money. Research has shown that the love of money is related to several desirable and undesirable organizational behaviors. Tang *et al.* (2000) found that mental health professionals with the lowest love of money had the lowest voluntary turnover, even with low job satisfaction. Tang and Chiu (2003) theorized that the "love of money" construct was strongly related to the concept of "greed." They found that Hong Kong employees with higher love of money were less satisfied with their jobs compared to their peers. Chen and Tang (2006) suggested that such a relationship can lead to unethical behavior. In fact, Tang and Chiu (2003) also found a direct path between the love of money and unethical behavior among Hong Kong employees.

The relationship between the love of money and unethical behavior has been further examined in several countries. Tang and Chiu (2003) argued that one's money ethic had a significant and direct impact on unethical behavior. They labeled the money ethic as "greed" and unethical behavior as "evil" and argued that "The love of money is the root of all evil." Kochan (2002) attributed corporate scandals in the USA to American corporations' overemphasis on maximizing shareholders' value without regard to other stakeholders. Luna-Arocas and Tang (2004) argued that the love of money helped us predict and control unethical behavior because money did not motivate USA and Spanish professors equally. An individual's love of money predicted his/her job satisfaction and potential unethical behavior. Using a sample of 127 US consumers, Vitell *et al.* (2006, 2007) found that consumers with a strong money ethic were less likely to view questionable consumer behavior as unethical. In a study using US business and psychology students, Tang and Chen (2008) found that the love of money predicted unethical behavior for business students but not for psychology students. Wong (2008) examined the ethical perceptions of Malaysian Christians in business. The author concluded that even with a somewhat homogenous religious group, there were different money profiles resulting in significant differences in ethical attitudes. Those with a love of money were more accepting of unethical business scenarios.

Given the previous findings and the importance attached to the love of money and ethics in business, this paper is the first to examine this relationship in an accounting context. The following hypothesis is presented and tested in the null form:

H2. The love of money is not significantly related to the perception of questionable accounting actions among accounting students.

Research concerning demographics and the love of money has been limited. Tang *et al.* (2000) found that women employees tended to place lower importance on money than did men. This paper extends this research among accounting students and also examines other demographic factors such as age and class grade as possible determinants of the love of money. The following hypothesis is tested in the null form:

H3. There are no significant differences in the love of money among accounting students based on gender, age, or class grade.

Study method

Sampling

The sample for this study consisted of senior and graduate accounting students in two large AACSB-accredited universities in the western US survey was developed based on published scales and administered to the students in many auditing sections taught by five different instructors over a one year period. Auditing students were selected since they were close to graduation and have completed most of their accounting education. Instructors teaching the surveyed classes were interviewed and confirmed that all students were exposed to ethics education in their courses. Graduate students were currently enrolled in the Graduate Auditing course in one university's Master of Accountancy program and were also exposed to ethics education in this course. The survey took approximately 15 minutes to complete and anonymity was guaranteed. A total of 221 surveys were issued in class and collected. After eliminating surveys with missing responses, the useable sample consisted of 213 students (141 in one university and 72 in the other one).

Scale measures

In order to measure ethical perception, the scenarios used by Uddin and Gillett (2002) were used. In their study, they examined the relationship between chief financial officers' (CFOs') moral reasoning and self-monitoring on their ethical perceptions of questionable accounting practices. They found that CFOs with lower personal ethics and higher self-monitoring (i.e. more likely to be concerned about others' opinions) were less likely to believe these actions were unethical. The study had five independent scenarios. However, one scenario was specifically about the Asian economic crisis a decade ago, and was dropped from the current survey. The current study used the other four scenarios as follows: scenario 1 dealt with early recognition of revenues (an example of earnings management), scenario 2 dealt with classifying long-term marketable securities as current to improve the current ratio, scenario 3 dealt with including some of the consigned inventory as assets (both scenarios clear violations of generally accepted accounting principles (GAAP)), and scenario 4 dealt with not reporting contingent liabilities (a violation of the conservatism principle). Respondents record their perception of the ethics of such actions on a seven-point scale ranging from 1 (highly ethical) to 7 (highly unethical).

In order to measure the love of money, the original money ethics scale (MES) developed by Tang (1992) was used. This scale measures the ethical meanings that people ascribe to money. Although there have been several other money scales, Mitchell and Mickel (1999) have considered MES a well-developed survey to measure attitudes toward money. Tang and his associates later developed several shorter versions of the scale but this study uses the original scale due to its depth and complete coverage of the attitudes toward money. The 30-item questionnaire was translated to many languages and successfully used in many studies since its original publication. The questionnaire yields six factors identified as follows: good, evil, achievement, respect (self-esteem), budget, and freedom (power). Respondents recorded their agreement or disagreement with each statement on a seven-point scale ranging from 1 (strongly disagree) to 7 (strongly agree) and a separate score for each factor is calculated.

A person believing that money was "good" indicated a positive attitude toward money. On the other hand, a person believing that money was "evil" had the notion that the love of money was the root of all evil. An individual scoring high on the "achievement" factor believed that wealth represented success and an individual scoring high on the "respect" factor believed that money earned respect and self-esteem. A person scoring high on the "budget" factor used money wisely and effectively for planning and another person scoring high on the "freedom" factor believed that wealth resulted in power and the ability to influence others. The factors had Cronbach's alpha ranging from 0.69 to 0.81 and exhibited high test-retest reliability (Tang, 1992).

Study results

The first step in data analysis is to examine accounting students' perceptions of the ethics cases. The mean results are presented in Table I.

The results indicate that accounting students felt all cases were unethical. However, standard deviations are high indicating significant differences in perception among the students. The case with the highest unethical perception was Case 3 which dealt with recording consigned inventory as assets (mean 5.93 out of 7.00) and the least unethical case was Case 1 dealing with early recognition of revenues (mean 5.58 out of 7.00). Regarding demographic factors, there were significant differences based on gender only. Contrary to most previous significant research, male accounting students viewed Cases 3 and 4 as more unethical compared to females. There were no significant differences on Cases 1 and 2 or differences based on age or class grade.

The mean results of the love of money factors are also presented in Table I. Overall, students agreed that money is good (5.87), represents good budgeting (5.21), and yields freedom and power (5.12). They disagreed that money was evil (3.59), represents achievement (3.90), and yields respect (3.84). Standard deviations (except for the "good" factor) were also high indicating differences of opinions about the meaning of money, consistent with previous research in this area.

The second step in data analysis was to perform correlation analysis using the four ethics cases and the six love of money factors. This will help determine the relationship between the love of money and ethical perceptions. The results are presented in Table II.

The results indicate significant positive correlation among the four ethics cases. This indicates that students' unethical perception was consistent among the cases. Regarding the love of money and the ethics cases, correlation significance

Panel A: means and standard deviations		
	Mean (SD)	
Case 1	5.58 (1.4)	
Case 2	5.67 (1.33)	
Case 3	5.93 (1.4)	
Case 4	5.74 (1.45)	
Money is "good"	5.87 (0.7)	
Money is "evil"	3.59 (1.07)	
Money represents "achievement"	3.90 (1.42)	
Money gives "respect"	3.84 (1.24)	
Money is "budget"	5.21 (1.3)	
Money yields "freedom"	5.12 (1.17)	
Panel B: demographics' impact on ethical perceptions (males n = *78 and females* n = *135)*		
	Male	Female
Case 1	5.76	5.47
Case 2	5.81	5.59
Case 3	6.28*	5.73*
Case 4	6.04**	5.56**

Notes: Significant at the *0.01 level and **0.05 level. Case 1: early recognition of revenues; Case 2: reclassifying long-term assets as current; Case 3: reporting consigned inventory as assets; Case 4: not reporting contingent liabilities. For cases: 1 (highly ethical) and 7 (highly unethical); for love of money: 1 (strongly disagree) and 7 (strongly agree); $n = 213$

Table I. Means and demographic factors

varied by case. For Case 1 (early recognition of revenues), students who believed that money represented achievement felt the case was more ethical and those students who budgeted wisely felt it was unethical. Regarding Case 2 (reclassifying long-term assets as current), students who viewed money as good, and represented achievement and respect, were more likely to view it as ethical compared to those who budgeted wisely who viewed it as unethical. Regarding Case 3 (recording consigned inventory as assets), students who viewed money as representing achievement and respect viewed it as ethical whereas those with good budgeting skills viewed the case as unethical. Regarding Case 4 (not reporting contingent liabilities), students who believed money represented achievement viewed it as ethical. Overall, there was a significant relationship between the love of money and ethical perception.

Cluster analysis

The objective of cluster analysis is to arrive at clusters of people who display small within-cluster variation and large between-cluster variation (Tang *et al.*, 2004). The current study uses cluster analysis to identify individuals with similar money personalities and beliefs. Identifying such clusters allows for a study of the relationship between money personality and ethical perceptions. The objective is to determine if certain individuals are more likely to perceive actions as unethical based on their overall money personality. This concept has been applied in previous research (Luna-Arocas and Tang, 2004). In the current study, a solution based on two, three, four, or five clusters was explored. Based on the data and theory, a three-cluster solution was identified as best fitting the data. The three clusters have the following characteristics:

Table II. Correlation between love of money and ethics cases

	Case 1	Case 2	Case 3	Case 4	Good	Evil	Achieve	Respect	Budget	Freedom
Case 1		0.61***	0.61***	0.47***	−0.05	0.03	−0.17***	−0.07	0.16***	−0.03
Case 2			0.68***	0.60***	−0.09*	0.01	−0.19***	−0.17***	0.16***	−0.05
Case 3				0.64***	−0.07	0.06	−0.21***	−0.10*	0.14*	0.0
Case 4					−0.01	0.06	−0.11**	0.0	0.0	0.08
Good						0.04	0.41***	0.37***	0.0	0.41***
Evil							0.18***	0.10*	0.01	−0.06
Achieve								0.57***	−0.10*	0.33***
Respect									−0.05	0.43***
Budget										0.15**

Notes: Significant at: *0.10, **0.05, and ***0.01 levels. Case 1: early recognition of revenues; Case 2: reclassifying long-term assets as current; Case 3: reporting consigned inventory as assets; Case 4: not reporting contingent liabilities. For cases: 1 (highly ethical) and 7 (highly unethical); for love of money: 1 (strongly disagree) and 7 (strongly agree)

(1) Money worshippers which represented 24.4 percent of the student population. These individuals scored highest on the good, achievement, respect and freedom (power) factors, and low on the evil factor and lowest on the budget factor. These individuals had the most positive attitudes toward money and the highest overall love of money. However, they have poor budgeting skills.

(2) Money repellents which represented 40.8 percent of the student population. These students scored the highest on the evil factor and medium on the achievement and respect factors. These individuals consider money as evil and have a negative attitude toward money. However, they have good budgeting skills.

(3) Money admirers which represented 34.7 percent of the student population. These students scored medium on the good and budget factors but the lowest on the evil, achievement, and respect factors. These individuals generally admire money but do not think it has many positive consequences such as earning respect and freedom.

The next step in data analysis is to examine the relationship between the individual clusters and the ethical perceptions of accounting students. Recent research found that money worshippers were more accepting of unethical business behavior, while money repellants had better ethical attitudes. Money admirers had middle ethical perceptions (Wong, 2008). In the current study, multivariate analysis of variance (MANOVA) was conducted with the three clusters as independent variables and the responses on the four ethics cases as the dependent variables. The results are presented in Table III.

Overall, there is a significant relationship between these clusters of students and their ethical perception (Wilks' lambda 0.923; $p = 0.03$). Follow-up analysis of variance was conducted with each case being the dependent variable separately. The results are also presented in Table III. There were significant differences on Cases 2 and 3. In both cases, money worshippers viewed the actions as more ethical, followed by money

	Cluster 1: money worshippers ($n = 52$; 24.4%) Means	Cluster 2: money repellent ($n = 87$; 40.8%) Means	Cluster 3: money admirers ($n = 74$; 34.7%) Means
Good	6.50	5.92	5.37
Evil	3.67	3.69	3.41
Achieve	5.21	4.10	2.75
Respect	5.01	4.10	2.71
Budget	4.30	5.92	5.02
Freedom	5.90	5.37	4.28
MANOVA results (the impact of money profile clusters on ethical perceptions) Wilks' lambda (0.923; $F = 2.11$; $p = 0.03$)			
Case 1	5.25	5.67	5.70
Case 2	5.17*	5.89*	5.76*
Case 3	5.54**	6.09**	6.03**
Case 4	5.67	5.87	5.62

Notes: Significant at: *0.01 and **0.10 levels. Case 1: Early recognition of revenues; Case 2: Reclassifying long-term assets as current; Case 3: Reporting consigned inventory as assets; Case 4: Not reporting contingent liabilities. For cases: 1 (highly ethical) and 7 (highly unethical); for love of money: 1 (strongly disagree) and 7 (strongly agree)

Table III. Clusters and ethical perceptions

admirers while money repellents viewed the actions as unethical. There were no significant differences based on Case 1 or 4. Demographic factors such as gender, age, and class grade were not significant explanatory variables for the love of money or the different clusters.

Discussion and implications

The current study revealed significant results useful to accounting educators and employers. Overall, accounting students viewed questionable accounting actions as unethical. These are positive results since these students are future professionals and it seems that ethics education (emphasized throughout the curriculum in both universities) had a positive impact on students' perceptions. The study also showed that accounting students had a positive attitude toward money, which is consistent with previous research concerning business students in general (Tang and Chen, 2008). Students believed that money was good, and was a symbol of freedom. The students also budgeted their finances wisely. They did not, however, agree that money was evil or that it allowed respect or was a signal of high achievement. These findings can be explained by a self-selection process and/or a socialization process. McCabe *et al.* (2006) argued that business majors select their major because of its potential future financial rewards and therefore, these students specifically selected accounting for the love of money, which affected their perception. Elias (2006) argued that accounting students experienced a socialization process during their undergraduate education and it is possible that these students have developed a love of money based on their socialization with accounting professors and visiting professionals as well as through the business media.

The most interesting results appeared when the love of money was significantly related to ethical perceptions among accounting students. Generally, money worshippers, with a very positive attitude toward money, were more likely to view Cases 2 and 3 (both clear violations of GAAP) as ethical and money repellents viewed them as more unethical compared to money worshippers. However, no significant differences were found in Cases 1 and 4 (both representing questionable earnings management). These results indicate that the love of money had an effect on ethical perception only for clearly illegal activities, but had no effect on questionable actions. These alarming findings indicate that the love of money may have a potential negative effect on accounting students' ethical behavior in the workplace especially regarding illegal accounting activities. However, when the activity is more questionable, it seems the relationship was more complicated. Thorne (2000) distinguished between prescriptive reasoning and deliberative reasoning among accountants. The latter referred to an accountant's formulation of his/her best professional ethics judgment while the former referred to his/her intention to exercise it. Thorne (2001) found that accounting students did not use their full moral capacity when making ethical decisions. Based on the current study's results that accounting students were generally ethical, it seems that other factors, not studied in this paper, may have an additional influence on students' perceptions that may interact with or even replace the love of money.

Dellaportas (2006) found that ethics education had a significant positive effect on accounting students' ethics. The current study's results confirm these findings and show the need for accounting instructors to maintain ethics education in the classroom since many accounting students were generally sensitive to accounting issues. However, instructors should emphasize that companies should make business decisions not solely

based on money. Many authors (Kochan, 2002) argued that overemphasis on financial goals is the root of all corporate scandals. Employers should also mitigate the effect of students' love of money by acting as role models and showing that the love of money should not result in unethical behavior. This can be accomplished during recruitment and in training seminars.

The study has an important limitation. The sample was selected from accounting students in two universities who may not be representative of all graduating accounting students. In this study, demographic factors such as gender, age and class grade were not significantly related to the love of money. Future research should examine other factors such as students' economic status, work experience, and ethnic backgrounds as potential determinants of the love of money. Such factors might also moderate the relationship between the love of money and unethical behavior. Future research can also examine students with internship experience compared to others, to determine if their actual work experience has changed their love of money and their ethical perception.

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