



Same Life, Different Behaviors? Accounting Practitioners’ Cheating Behavior and their Personal, Academic, and Professional Lives in Light of Utilitarianism

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Abstract

In this study, we examine the accounting practitioners’ perception of cheating actions and its relationship with cheating in their personal, academic, and professional lives based on utilitarianism. Furthermore, we investigate how their personal information is associated with cheating in these three life dimensions. We administered online surveys to 262 participants during the first two weeks of February 2022. Our data were analyzed through descriptive statistics, Cochran’s Q test and McNemar’s post-hoc tests, Mann-Whitney’s tests, and binary regression models. Our results show that accounting practitioners perceive cheating practices as unacceptable. However, more than a half of them have nonetheless engaged in personal or academic cheating and about one out of four in professional cheating. It supports that accounting practitioners assume distinct cheating behaviors depending on the life dimension. We particularly found that the proportions of academic and professional cheating are significantly distinct. This differs from prior studies that suggest academic and professional behaviors are associated. We also observe that cheaters have a higher level of acceptance toward cheating compared to noncheaters. This is consistent with prior studies. Overall, our results are compatible with utilitarianism under the assumption that cheating benefits a few at the expense of many. And finally, we observe that different variables predict cheating in personal, academic, and professional life. For personal cheating, religious people and CRC holders are negatively associated with it. For academic cheating, males and the middle family income bracket (four to six minimum wages) are negatively associated with it. And for professional cheating, no personal information was relevant ($p > .10$). Thus, we do not recommend particular attention to any specific public. Instead, we encourage regulators and companies to create and fortify their norms and policies to *prevent* cheating. Other moral-related variables should then be considered to predict cheating in professional settings.

Keywords: Cheating; Behavior; Accounting; Life dimensions; Utilitarianism.

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1. INTRODUCTION

Accounting practitionersⁱ deal with key financial information of companies from multiple industries, with different sizes, and that have distinct purposes. They are responsible for preparing their financial statements, calculating taxes, analyzing costs and expenses, assisting in price formation, tracking investments, creating budgets, and so forth. For this reason, the public particularly expects high levels of honesty and integrity from accounting professionals (K. J. Smith, Davy, Rosenberg, & Haight, 2002). Professional bodies have also been advocating for moral conduct at the workplace, especially through their code of ethics (Conselho Federal de Contabilidade, 2019; IESBA, 2018).

When accounting professionals fail to present behaviors that are consistent with the code of ethics and legislation, it can result in devastating damages for the company and themselves. Enron, WorldCom, and Valeant Pharmaceuticals are some of the many examples of accounting scandals in which abusive and unallowed practices were used (Brickey, 2003; Lyke & Jickling, 2002; Pandey & Verma, 2004). They usually occur because personal interests prevail over public ones. Also, corporates may create individualistic cultures, such as the one at WorldCom (Pandey & Verma, 2004). Additionally, some aggressive policies (e.g., “at all costs,” “whatever it takes,” “do as I say,” and “everyone does it”) adopted by corporations may encourage greed and deceit in order to increase their earnings. In this environment, a cheating culture starts to be acceptable and justifiable as long as it brings more money to the company.

Cheating has become a global phenomenon and the rule rather than the exception in some contexts (Crittenden, Hanna, & Peterson, 2009). Due to its serious consequences and wide dissemination, accounting researchers have been paying additional attention to it. Albeit most research was conducted at the academic level, past studies have been suggesting that academic and professional behaviors are associated (C. J. Crawford & Stellenwerf, 2011; Lawson, 2004b; Nonis & Swift, 2001). Given that, it seems reasonable to presume that cheating permeates different life dimensions of people, including accounting practitioners. Also, since cheaters are more likely to engage in future cheating actions (Ameen, Guffey, & McMillan, 1996a; Lawson, 2004b; Salter, Guffey, & McMillan, 2001), examining cheating across life dimensions might produce a general picture of how it occurs and whether they are significantly related. Thus, in addition to the academic and professional dimensions that prior literature has been addressing, we consider the personal one as well.

People can engage in cheating practices for a number of reasons, but an influential moral theory that can guide people’s decisions on their moral conduct is utilitarianism. It argues that people’s actions should be measured by the pleasure or pain they cause (Bentham, 2000). The focus is on the consequences of an act. Therefore, good actions represent those that produce good outcomes (pleasure) and bad actions are the ones that cause bad outcomes (pain). The aim is to maximize utility (pleasure) and, conversely, minimize pain (Bentham, 2000). Utilitarianism is, however, a theory that takes into account the collective good. A person not only should seek pleasure for him/herself but also collectively. In this vein, the principle of utility supports that we should always behave in ways to produce the greatest good for the greatest number. This study adopts a utilitarianist lens to look at cheating.

Once cheating involves putting personal needs and desires before the public ones, it is morally reprehensible from the perspective of the principle of utility. Cheaters should have considered the consequences of their actions to other parties involved before having taken them. By analyzing what accounting professionals think of cheating using utilitarianism as the theoretical support, we are able to observe whether their thought is closer or further from a common good perspective. Given these considerations, the objective of this study is to

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examine the relationship between accounting practitioners’ perception of cheating actions and cheating in their personal, academic, and professional lives based on utilitarianism.

This study has three contributions. First, different from prior studies, we included the personal dimension in the analysis. Cheating in the personal life might affect the individual on his/her other life domains. De Stefano and Oala (2008), for example, observe that a discovery of a love affair has been associated with occupational and professional performance problems along with parenting ones. Second, we designed ten cheating items based on the code of ethics for Brazilian Certified Public Accountants (CPAs) to collect data (Conselho Federal de Contabilidade, 2019). Future studies can explore this set of questions using different samples (e.g., accounting students) and techniques (e.g., factor analysis) from the present study. And third, we amplified and tried to move forward the discussion on cheating within the accounting area by interpreting our results based on utilitarianism. However influential, utilitarianism has appeared in accounting-cheating studies timidly.

The remainder of this work is structured as follows. BACKGROUND discusses the background, focusing on cheating, life dimensions, and utilitarianism. METHOD describes the research method and procedures. RESULTS presents the results. And CONCLUDING REMARKS concludes.

2. BACKGROUND

2.1. Cheating and life dimensions

Despite its many examples, it is hard to find a simple definition of cheating (Sheard, Markham, & Dick, 2003). This might be due to its complexity and presence across different fields and under multiple forms. We noted that some studies on cheating do not report a clear concept of it (e.g., Ameen et al., 1996a; Ameen, Guffey, & McMillan, 1996b; Jordan, 2001; Salter et al., 2001), although it is a central point of them. Others resort to dictionaries to define it (Ballantine, Larres, & Mulgrew, 2014; Haswell & Jubb, 1999). Haswell and Jubb (1999), for instance, observe that, according to the Concise Oxford Dictionary, cheating means “fraud, deception, trick, imposition.” And Ballantine et al. (2014), based on the Oxford Online Dictionary, determine that cheating is a dishonest or unfair action to gain an advantage. In educational contexts, cheating often represents a range of actions that are “illegal, unethical, immoral, or against the regulations of the course or institution” (Sheard et al., 2003, p. 92).

In this study, we adopt a general concept of cheating in order to encompass its occurrence in distinct life domains. We define cheating as *any dishonest or unfair act that aims to gain an advantage for oneself or a third party and that may or may not involve legal consequences*. This broad definition allows us to accommodate many cheating actions taken in multiple life dimensions. Its last part (i.e., may or may not involve legal consequences) is also crucial because it indicates that our definition is not exclusively attached to the law. Cutting in line for getting a hot dog, for example, would be a cheating act and morally reprehensible, but one would probably not suffer legal punishment.

Cheating permeates multiple life domains of an individual. A well-known cheating behavior in people’s personal life is the extramarital affair. Even though most Americans do not approve of infidelity, about 2-4% of American spouses cheat on their partners every year (Fincham & May, 2017). In academic settings, cheating is widespread. Prior research offers an extensive analysis of types and practices of academic cheating. Some of them are copying answers during an exam, plagiarizing a paper, bribing and blackmailing a colleague or a professor, taking a test for a friend, and so forth (Ameen et al., 1996a; Lawson, 2004b). In the professional domain, cheating is notable across fields, such as Accounting (Lyke & Jickling,

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2002; Pandey & Verma, 2004), Sports (Carstairs, 2003), and Social Security (Autor & Duggan, 2006), to cite a few.

Previous research suggests that there is a link between academic and professional behaviors (C. J. Crawford & Stellenwerf, 2011; Lawson, 2004b; Nonis & Swift, 2001). If one cheats at school, he/she would probably reproduce this behavior later at his/her workplace. For accounting practitioners, the link between these dimensions and the personal one is yet to be explored. Since there is evidence to support that cheaters are more likely to cheat in the future (Ameen et al., 1996a; Lawson, 2004b; Salter et al., 2001), accountants who have cheated in their personal life would probably be more inclined to cheat in their academic and professional lives as well. Moreover, a person’s personal life might affect his/her professional life. The extramarital affair has been associated with occupational impairment (De Stefano & Oala, 2008). Also, Ciulla (2020) describes a case where the former CEO of Centerplate Desmond Hague was caught on an elevator’s camera kicking a dog. This footage went viral on the Internet and he ended up getting fired. Figure 1 shows aspects related to one’s personal, academic, and professional life and cheating examples.

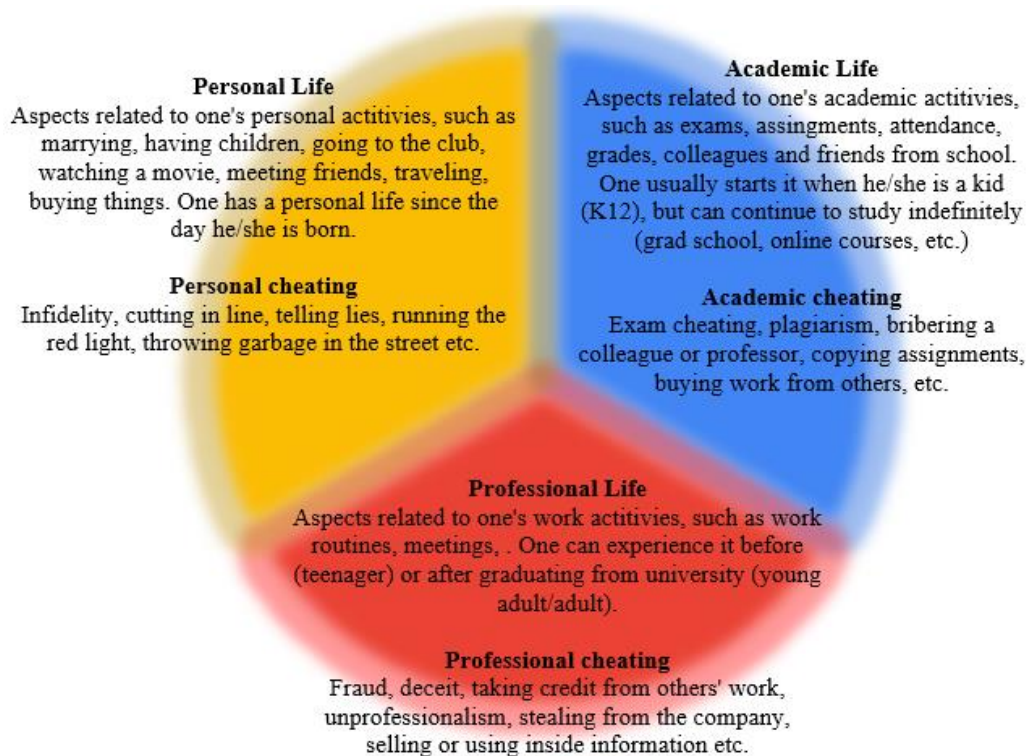


Figure 1 - Life dimensions and examples of cheating
Source: The authors.

Cheating has many types and degrees and can involve, many times, more than one life dimension. Suppose that an inventory worker is stealing goods from his/her company because he/she needs to feed his/her children. Therefore, this worker is practicing professional cheating to achieve a personal dimension need. Classifying into personal cheating, academic cheating, and professional cheating might be confusing at times. For example, Santoso and Cahaya (2019) have examined plagiarism by accounting lecturers. Would this be academic cheating because a lecturer is copying the material from his/her peer and they both are inserted in academic settings or would it be professional cheating because lecturing is his/her profession? To categorize the type of cheating when it is not immediate, one must select key criteria and weigh them accordingly. Regardless of the type or dimension that a cheating act



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belongs to, it often benefits one (a few) to the detriment of others (many) and should not have been taken in the first place.

2.2. Utilitarianism

Utilitarianism is one of the most acceptable, predominant moral theories (Driver, 2014). Some attribute its foundation to Jeremy Bentham (1748-1832), who was the first to provide a systematic work on utilitarianism (Driver, 2014). His disciple, John Stuart Mill (1806-1873), was also a prominent utilitarian thinker. The idea behind utilitarianism is that we are governed by two sovereign and supreme masters: pleasure and pain (Bentham, 2000). While we seek the former, we avoid the latter. We usually behave to reach happiness, benefits, pleasure. And we work to avoid unhappiness, evil, pain.

By utility is meant that property in any object, whereby it tends to produce benefit, advantage, pleasure, good, or happiness, (all this in the present case comes to the same thing) or (what comes again to the same thing) to prevent the happening of mischief, pain, evil, or unhappiness to the party whose interest is considered: if that party be the community in general, then the happiness of the community: if a particular individual, then the happiness of that individual (Bentham, 2000, p. 15).

Based on these two supreme figures and the meaning of utility, our actions should then be measured by the consequences they produce. A morally good action produces good consequences (happiness or pleasure), and a morally bad action has bad consequences (unhappiness or pain) (Driver, 2014). This leads us to the principle of utility, which is commonly thought as follows: we should act always with the intent of producing the greatest good for the greatest number (Bentham, 2000).

This principle serves as a criterion to observe and assess whether an action is good or bad based on its consequences to those involved, as well as to decide what is the right thing to do. In addition, utilitarianism was also known for its impartiality and agent-neutrality (Driver, 2014). It means that everybody's happiness counts the same. “My good counts for no more than anyone else's good. Further, the reason I have to promote the overall good is the same reason anyone else has to so promote the good. It is not peculiar to me” (Driver, 2014, p. 1). At first, these utilitarian characteristics seem to be fair but thought experiments and moral conundrums revealed points of criticism toward this form (classical) of utilitarianism.

A strong objection to classical utilitarianism (also known as act utilitarianism) is that it justifies and permits any type of crime, including killing, in an effort to maximize utility. For example, it would be justifiable to conduct abusive medical experiments with a few people because their results would benefit a larger group of people. Take a simplification of the survival lottery problem designed by John Harris (Singer, 1977), for another example. Suppose a physician has five patients, each one needing a different organ (e.g., heart, lung, liver, right kidney, and left kidney). Right next door there is a healthy person who happens to match the criteria for transplanting the required organs to all these five patients. Should this physician kill the healthy person to save his/her five patients? From a utilitarian perspective, if saving five lives outweighs the killing of a person, then the answer is “yes.” However, as a moral theory, making killing acceptable seems just wrong. Other moral dilemmas, such as the trolley problem (Thomson, 1976) and George's and Jim's cases (Williams, 2005), illustrate that utilitarianism leaves no space for personal integrity (Williams, 2005).

Due to objections like this, classical utilitarianism has suffered many adjustments. A more updated version is the rule utilitarianism. According to Harsanyi (1977), even though the terms “act utilitarianism” and “rule utilitarianism” first appeared in Brandt (1959), the basis of the latter comes from the work of Harrod (1936). Harrod (1936) proposes that, instead of individual actions, the utilitarian criterion should be applied to the moral rule that

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governs these actions. A *correct moral rule* for a particular behavior is the one that would produce the highest possible utility in the long-term if everyone were to follow it in the particular situation to what it is being applied (Harsanyi, 1977). And a *morally correct act* conforms to its moral rule, regardless of whether it is the act per se that will produce the highest possible utility (Harsanyi, 1977). Therefore, rule utilitarianism supports that we should live by rules that will probably result in the greatest good for the greatest number, particularly in the long run.

When revisiting the physician case under the perspective of a rule utilitarian, the answer to the question would be “no” because, albeit killing an innocent person to save five would be beneficial in the short term, killing innocent people would produce less utility in the long term since they would be living with the constant fear of having their organs harvested. Either act or rule, utilitarianism provides us with a simple yet powerful principle to make decisions about our actions.

2.3. Previous research

In this subsection, we highlight some pertinent studies that shed additional light on the topic and will help us in discussing our findings. Ameen et al. (1996a) administered survey questionnaires to examine accounting students’ perceptions of questionable academic practices and their propensity to cheat. A total of 320 students took part in the study. Results show that cheating is negatively associated with tolerance, GPA, and punishment, as well as positively associated with the intention to cheat in the future, cynicism, and environment (whether a student had witnessed another one cheating).

With a sample of 285 accounting majors from four public institutions, Ameen et al. (1996b) explored gender differences regarding ethical sensitivity using survey questionnaires. Results indicated that males were more tolerant toward cheating, have higher levels of cynicism, and were more engaged in dishonest academic actions when compared to their female colleagues.

In a survey-based study (n = 237), Lawson (2004b) sought to verify whether business students’ attitudes toward moral behavior in academic and non-academic (“real world”) settings are linked. Results show that, in general, females held more ethical beliefs than men, and GPA is positively associated with ethical beliefs. Limited evidence to support a positive relationship between grade level and ethical beliefs was found. Moreover, students who had cheated on exams were less likely to be upset with plagiarism. And those who had plagiarized were less likely to be upset with cheating on exams.

Lawson (2004a) also administered surveys to evaluate business students’ propensity to exhibit dishonest academic behavior and to whistle-blow. Both undergraduate and graduate students participated in the study (n = 237). Results support that a relevant part of the students engage in cheating actions, even though they are generally upset with it. Additionally, they were reluctant to whistle-blow (peer reporting) their cheating colleagues. Nonetheless, their propensity to whistle-blow increased for those who were more upset with cheating, believed that the course instructor will take adequate action, and had not cheated before.

Emerson, Conroy, and Stanley (2007) examined accounting students’ and practitioners’ ethical attitudes. They surveyed students (n = 61) at two Southern United States (US) universities in the subsequent period after the Enron collapse. They also selected a sample from the population of the AICPA population of 5,000 accounting practitioners, to which they sent their survey via mail and got a 10.4% response rate (n = 520). Results show no significant differences overall. Despite that, practitioners seem to accept easier vignettes that involved physical harm and were legal (but morally questionable). In addition, no



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material differences were found between auditors and institutional practitioners in comparison to other categories of accountants.

In three Irish universities, Ballantine et al. (2014) investigated accounting students' intolerance toward academic cheating as a variable to explain future immoral practices. Results support that females are significantly more intolerant than males when it comes to cheating. Also, while idealism was positively associated with intolerance, relativism did not present a significant association with it. To help in restoring the profession's reputation, the authors conclude that admitting more women into the accounting career along with educational interventions to promote idealism is an alternative.

In Malaysia, Ismail and Yussof (2016) surveyed a total of 435 accounting students to assess their cheating behavior and the extent of neutralization of cheating. They also investigated the effectiveness of deterrents to cheating. Results support that cheaters had greater excuses (neutralization) for cheating than noncheaters. Likewise, males presented higher levels of neutralization than females. With respect to deterrents of cheating, two measures (guilt and social stigma) were different for males and females. And all three measures (punishment, guilt, and social stigma) were different for cheaters and noncheaters.

Mubako, Bagchi, Udo, and Marinovic (2021) proposed and tested an integrated model to explain how Schwartz's higher-order personal values are associated with accountants' moral behavior. They surveyed 252 accounting students and data were examined through structural equation modeling. Results indicated that three higher-order values (Conservation, Self-Transcendence, and Self-Enhancement) were relevant to predict moral behavior. Gender and ethical training were also relevant predictors of it.

Our literature review shows that many aspects of cheating have been explored. Most studies utilized students rather than professionals. As cheating is a sensitive topic to study, particularly in professional settings, this is understandable. Despite that, efforts have been made to understand it from a professional angle (e.g., Emerson et al., 2007) and must continue to be made so we can better understand it where accounting practices really happen. Academic cheating should also keep being explored as current students will be tomorrow's professionals and students' beliefs will probably shape their behavior at their workplace (Lawson, 2004b).

3. METHOD

3.1. Data and participants

Consistently with our objective and following similar studies (Ameen et al., 1996a, 1996b; Ismail & Yussof, 2016; Lawson, 2004a, 2004b), we administered surveys. A survey is a tool that asks people about themselves and is a useful research strategy to study people's behavior (Cozby & Bates, 2012). A key advantage of surveys is that they can be designed specifically to meet the needs to answer the research question. However, Fowler Jr (2014) notes that designing a special-purpose survey is an expensive process and, for this reason, one should verify whether the required information is already available or can be obtained by other means. We believe that the data and variables used in this study were not previously available on other sources nor were they similar to existing ones. Thus, the adoption of a survey approach was necessary.

According to M. Smith (2015), the size of the population of accounting research projects is usually unknown. This is the case of the present study. Even though the Conselho Federal de Contabilidade (CFC) reports the number of accountants and accounting technicians registered under the CRC system, the latter were no longer able to obtain their CRC licenses since 2015. Only accountants are allowed to obtain it from 2015 on. For this reason, there are

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accounting practitioners who do not hold a CRC license. We then took a purposive sampling procedure that corresponds to a non-probabilistic procedure to select the participants (Cozby & Bates, 2012). “The *purpose* is to obtain a sample of people who meet some predetermined criterion” (Cozby & Bates, 2012, p. 147), i.e. accounting practitioners. Opportunistic or convenience samples are common in prior accounting literature (M. Smith, 2015).

We designed our survey to be self-administered online (Google Forms) by the potential participants. Self-administration usually involves low costs, a short timeframe, a large number of respondents, attractive protocol, and confidentiality/anonymity (Johnson & Morgan, 2016). On the other hand, Fowler Jr (2014) raises some concerns about the self-administration approach. First, it places more responsibility on the respondent’s writing and reading skills and may be particularly problematic when the participants are not well educated. We believe this is not the case for our participants once they had to complete at least high school to become accounting technicians and an undergraduate program to become accountants. Second, impersonality might decrease the potential participants’ motivation to take part in the study. For this reason, we made our survey available on different channels on the Internet – including specific accounting groups on social networks (Facebook and LinkedIn) – and asked repeatedly for participation.

Because our study involves sensitive information (accounting practitioners’ cheating), our research project was submitted to and got approved by an Institutional Review Board (IRB). Moreover, prior to answering our survey, participants had to agree with an informed consent form, in which we had specified the study’s objective, method, risks and benefits, confidentiality, and the author’s and the IRB’s contact information. This work reports the results that include 262 responses that were gathered while the survey was available during the first two weeks of February 2022.

3.2. Study’s variables

Our survey was structured into two parts. In the first one, we designed ten cheating items based on the code of ethics for Brazilian CPAs (Conselho Federal de Contabilidade, 2019). On a scale from one (totally unacceptable) to five (totally acceptable), participants had to evaluate how acceptable these cheating practices were. Complementarily, we asked participants whether they had ever cheated in their personal, academic, and professional lives (yes or no). Prior studies have also used this form of measuring cheating (Ameen et al., 1996a; Lawson, 2004b; Salter et al., 2001; Woodbine & Amirthalingam, 2013). When it comes to questioning order, Bryman (2012) indicates that the relevant questions should be asked first. Ismail and Yussof (2016), for example, asked firstly questions that were directly associated with their study’s main topic and then participants’ demographic information. As a result, we decided to present the cheating questions first since they are directly related to our research topic. Table 1 shows our survey’s first part.

Table 1 - Survey's first part: cheating items

Item	Description	Measurement
CHT1	Recognize a lower figure of allowance for doubtful accounts just because you want your department to get a bonus.	1 to 5 points.
CHT2	Share information about your former employer with the management of your current firm to promote yourself.	1 to 5 points.
CHT3	Forge a document that you have lost that the auditors are requiring.	1 to 5 points.
CHT4	Consume the company’s resources without permission, even if they are of low value.	1 to 5 points.
CHT5	Post depreciative messages toward the accounting profession on social networks because you are dissatisfied with the work of its professional bodies.	1 to 5 points.
CHT6	Accept money offers in exchange for financial inside information.	1 to 5 points.

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CHT7	Use a lower-than-usual rate to depreciate fixed assets with no documentation to support it just because your superior told you so.	1 to 5 points.
CHT8	Remain quiet when you notice a relevant error in the financial statements that was caused by your accountant friend.	1 to 5 points.
CHT9	Do not report conflict of interest for fear of losing your client.	1 to 5 points.
CHT10	Do nothing about your client who buys and sells goods without fiscal invoices.	1 to 5 points.
PER	Have you ever cheated in your personal life?	1 = Yes; 0 = No.
ACA	Have you ever cheated in your academic life?	1 = Yes; 0 = No.
PRO	Have you ever cheated in your professional life?	1 = Yes; 0 = No.

In the second part of our survey, participants were asked to provide their personal information, namely sex, race, religion, family income per month, CRC, age, and work experience. Albeit both open- and closed-ended questions are applicable (Cozby & Bates, 2012), Fowler Jr (2014) recommends the use of objective questions that can be answered by clicking or checking a box in order to facilitate the answering process and consequently maximize the number of responses. Findings from Crawford, Couper, and Lamias (2001) support that respondents were more likely to abandon their questionnaire when they faced a series of open-ended questions in the middle of it. Given these considerations, most of our questions were closed-ended ones or required only a short answer (e.g., age). Table 2 shows the variables collected in the second part of our survey.

Table 2 - Survey's second part: personal information

Item	Description	Measurement
SEX	Sex.	1 = Male; 0 = Female.
RCE	Race.	1 = White; - = Non-white.
RLG	Religiosity.	1 = Religion; 0 = No religion.
INC	Family income per month.	0-3 Minimum wages (MW); 4-6 MW; Above 6 MW.
CRC	CRC (Brazilian certification)	1 = Yes; 0 = No.
AGE	Age.	In years.
EXP	Work experience in accounting.	In years.

Prior literature indicates that pilot-testing the instrument of data collection is important to identify potential errors and points that deserve improvement (Cozby & Bates, 2012; M. Smith, 2015). It allows the researchers to modify the instrument before its definitive administration (Cozby & Bates, 2012). Previously to its administration, we pilot-tested our survey with seven subjects, of which six were Ph.D. in accounting. We adopted most of the suggestions we had received.

3.3. Analysis techniques

We took three steps to analyze our data. First, we conducted a descriptive analysis of the cheating questions and the participants' personal information, including histograms (not reported). As a second step, we conducted Cochran's (1950) Q test to observe significant differences in the proportions of the PER, ACA, and PRO questions. And we used McNemar's post-hoc tests with Bonferroni's correction to precisely identify which pairs presented material differences (Hochberg, 1988; Westfall, Troendle, & Pennello, 2010). Still in this second step, we wanted to compare the participants' perception regarding the cheating actions (CHT1 through CHT10) by PER, ACA, and PRO. We used Shapiro-Francia's W tests to examine the cheating items' normality (Royston, 1983). Virtually all items were found to be non-normal ($p < .05$). Therefore, we decided to compare the participants' perception

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toward cheating through Mann-Whitney’s U tests for independent samples (Mann & Whitney, 1947; Wilcoxon, 1945).

The third and final step corresponded to the regression analysis. Due to the nature of our response variables (PER, ACA, and PRO), we designed binary regression models. This type of regression model is employed when the response variable assumes a binary characterization (Fávero & Belfiore, 2019; Hosmer, Lemeshow, & Sturdivant, 2013). Next, we specify in Equation (1) our general binary model that is valid for our three response variables:

$$\text{logit}(p_{ijklm}) = \alpha + \beta + \gamma + \lambda_i + \nu_j + \phi_k + \eta_l + \omega_m \quad (1)$$

with $i = 1, 2; j = 1, 2; k = 1, 2; l = 1, 2, 3; \text{ and } m = 1, 2$, and where α is the global effect, β is the effect of AGE, γ is the effect of EXP, λ is the effect of SEX, ν is the effect of RCE, ϕ is the effect of RLG, η is the effect of INC, and ω is the effect of CRC. The baselines for SEX, RCE, RLG, INC, and CRC are, respectively, Female, Non-white, No religion, 0-3 MW, and No (CRC non-holders).

We evaluated the quality of the regression models using the Hosmer-Lemeshow’s test (Hosmer et al., 2013) and Pearson’s residuals (Cordeiro & Simas, 2009). According to their results ($p > .05$), our regression models did not present any significant problems. For more details, see the APPENDIX. Our analyses were conducted using the R software (R Core Team, 2020).

4. RESULTS

Our sample was composed of 50.96% males, 68.08% white people, 89.23% religious people, and 54.23% CRC holders. Also, 15% of the participants earned from zero to three Brazilian MW, 34.62% earned from four to six MW, and 50.38% earned above six MW. The average age and work experience are, respectively, 34.73 years (standard deviation = 9.88 years) and 8.12 years (standard deviation = 7.39 years).

Table 3 shows the descriptive statistics of the cheating items. When observing the mean and median values, we note that accounting practitioners consider all cheating practices to be more unacceptable than acceptable. CHT6 (mean = 1.11) was the most unacceptable cheating action and indicates that accepting money in exchange for inside information is strongly reprehensible. Likewise, forging a document that the auditors are requiring (CHT3) and recognizing a lower figure of allowance for doubtful accounts to get a bonus (CHT1) are morally unacceptable. Even though CHT10 received a low mean value, it is the highest of the cheating items. It means that doing nothing about a client who buys and sells goods without fiscal invoices is unacceptable, but more permissible than the other cheating practices. Maximum values for almost all items are five. It indicates that at least one accounting professional considers that these cheating practices are totally acceptable. These particular respondents might be more inclined to engage in questionable actions.

Table 3 - Descriptive statistics of the cheating items

Item	Observations	Mean	Std. Dev.	Median	Minimum	Maximum
CHT1	262	1.41	0.75	1.00	1.00	5.00
CHT2	262	1.67	0.95	1.00	1.00	5.00
CHT3	262	1.22	0.61	1.00	1.00	5.00
CHT4	262	1.61	0.96	1.00	1.00	5.00
CHT5	262	1.66	1.10	1.00	1.00	5.00

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CHT6	262	1.11	0.42	1.00	1.00	4.00
CHT7	261	1.63	0.97	1.00	1.00	5.00
CHT8	262	1.52	0.82	1.00	1.00	5.00
CHT9	261	1.69	0.92	1.00	1.00	5.00
CHT10	260	2.07	1.16	2.00	1.00	5.00

These initial findings are consistent with utilitarianism (Bentham, 2000). Assuming that cheating actions benefit a few rather than a larger number of people, one could anticipate based on the principle of utility that accounting practitioners would rate them as unacceptable. Recognizing a lower figure of allowance for doubtful accounts to get a bonus (CHT1) seems egoistic conduct where one benefits his/her department regardless of its implications for the rest of his/her company and its investors. Likewise, accepting money in exchange for inside information (CHT6) will probably benefit a few investors and put the rest of the market at disadvantage. Another example is not reporting conflict of interest when this is the case for the fear of losing a client (CHT9). For example, providing both consulting and external auditing services at the same time for the same company might have negative effects on its investors, especially if the company is cheating. Using mechanisms to prevent cheating should be taken as seriously as identifying and sanctioning it.

Table 4 reports the frequencies for the PER, ACA, and PRO questions, as well as the Cochran's Q test and McNemar's post-hoc tests with Bonferroni's correction. We observe that most accounting practitioners (50.2%) declared to have cheated in their personal life. Most of them (54.4%) has also admitted to cheating in their academic life. On the other hand, 25.8% of our respondents reported having cheated in their professional life. The Cochran's Q test ($p < .01$), which only utilizes paired observations ($n = 257$), supports that there is at least a significant difference between these proportions. Results of McNemar's post-hoc tests ($p < .01$) allowed us to specifically visualize that all three proportions are relevantly different from each other. These results suggest that the most common form of cheating is the academic one since it presented the highest proportion. Personal cheating is the second and cheating in professional settings is the last one. It shows that Brazilian accounting practitioners assume different behaviors when it comes to life dimensions. They tend to display good behavior in work-related contexts, but less in non-work-related ones. Perhaps, when it comes to work, accounting practitioners seem to be extra cautious as its proportion of cheating is significantly smaller than the personal and academic ones.

Table 4 - Frequencies, percentages, Cochran's Q test, and post-hoc tests

Life dimension	Personal (PER)		Academic (ACA)		Professional (PRO)	
	Yes	No	Yes	No	Yes	No
Frequency	130	129	141	118	67	193
%	50.2	49.8	54.4	45.6	25.8	74.2
Cochran's Q test	Observations	257	chi2(2)	79.948	p	0.000
McNemar's post-hoc tests¹	PER-ACA	$p < .01$	PER-PRO	$p < .01$	ACA-PRO	$p < .01$

Prior research suggests that cheating behaviors in academic and professional settings are connected (C. J. Crawford & Stellenwerf, 2011; Lawson, 2004b; Nonis & Swift, 2001). While our results support that cheating occurs in all life dimensions (PER, ACA, and PRO), their magnitudes are significantly different. In medical education, Dyrbye et al. (2010) observed that academic cheating was rare among US medical students (less than 10% of the sample). However, unprofessional behavior with respect to patient care was as high as 43% (Dyrbye et al., 2010). Our results are consistent with this finding and indicate that the

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frequency of academic and professional cheating is distinct. Therefore, for Brazilian CPAs, academic and professional cheating actions are not too correlated as one could have anticipated.

More than half of accounting practitioners reported having cheated in their personal and academic life domains. This result shows that the majority did not follow utilitarianism and got involved in cheating whose implications are presumably more bad than good to those involved. Responses for professional cheating seem to be more aligned with utilitarianism. Most of them have not engaged in cheating behavior (74.2%). This is also consistent with their responses to the cheating items, which are about cheating in professional settings. But, 25.8% have engaged in professional cheating and represent a fairly portion of the participants.

Next, we present the descriptive statistics of the cheating items by PER, ACA, and PRO, and we tested their median values using Mann-Whitney's U tests. Participants who had answered "Yes" for the PER, ACA, and PRO questions were considered cheaters and those who had answered "No" were considered noncheaters. Table 5 shows the results by PER. Accounting practitioners who had admitted to cheating reported higher mean values than those who had not. This evidence supports that cheaters seem to accept cheating easier than noncheaters. In particular, sharing information with a current employer about a former employer for promoting oneself (CHT2), consuming the company's resources (CHT4), and doing nothing about a client who commercializes without issuing fiscal invoices (CHT10) are cheating practices that deserve closer attention.

Results from the Mann-Whitney's tests show significant differences in cheaters' and noncheaters' perceptions for the CHT2 ($p < .01$), CHT4 ($p < .01$), CHT5 ($p < .10$), CHT9 ($p < .10$), and CHT10 ($p < .05$) items. Given these results, relatively to noncheaters, cheaters perceive some cheating actions to be significantly more acceptable. Prior studies have also found that cheaters tend to be more tolerant toward cheating than noncheaters (Ameen et al., 1996a; Ismail & Yussof, 2016; Jordan, 2001; Lawson, 2004b, 2004a; Salter et al., 2001). Lawson's (2004a) results support that noncheaters are more likely to whistle-blow their peers due to dishonesty behavior. This is an indication that noncheaters have lower levels of tolerance toward cheating. Cheating would thus be more unacceptable in their view.

Table 5 – Descriptive statistics and comparative analysis by PER

Item	Cheaters (n = 130)			Noncheaters (n = 129)			Exact p
	Mean	Std. Dev.	Median	Mean	Std. Dev.	Median	
CHT1	1.51	0.86	1.00	1.32	0.61	1.00	0.1315
CHT2	1.84	1.06	1.00	1.50	0.79	1.00	0.0094
CHT3	1.26	0.70	1.00	1.16	0.49	1.00	0.2900
CHT4	1.82	1.08	1.00	1.41	0.77	1.00	0.0013
CHT5	1.74	1.12	1.00	1.57	1.07	1.00	0.0745
CHT6	1.14	0.46	1.00	1.07	0.36	1.00	0.1279
CHT7	1.71	1.02	1.00	1.57	0.93	1.00	0.1956
CHT8	1.56	0.85	1.00	1.48	0.80	1.00	0.4079
CHT9	1.78	0.94	2.00	1.61	0.91	1.00	0.0815
CHT10	2.25	1.21	2.00	1.89	1.08	1.50	0.0123

Table 6 reports the results by ACA. Similar to the previous analysis, cheaters reported higher mean values for all items in comparison to their noncheater colleagues. In particular, using a lower rate to depreciate fixed assets only because a superior determined it (CHT7) seems to be more acceptable by cheaters than noncheaters. Results from Mann-Whitney's tests support material differences for all items ($p < .10$), except for CHT3. It suggests that cheaters are more tolerant of these cheating actions and might be more prone to engage in immoral conduct again. This finding is congruent with prior studies (Ameen et al., 1996a;

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Ismail & Yussof, 2016; Jordan, 2001; Lawson, 2004b; Salter et al., 2001). Lawson (2004b), for example, found that students who cheated on examinations were less upset by plagiarism than those who did not cheat, and students who plagiarized papers were less upset by cheating on exams than those who did not plagiarize.

Table 6 - Descriptive statistics and comparative analysis by ACA

Item	Cheaters (n = 141)			Noncheaters (n = 118)			Exact p
	Mean	Std. Dev.	Median	Mean	Std. Dev.	Median	
CHT1	1.48	0.81	1.00	1.32	0.68	1.00	0.0836
CHT2	1.75	0.96	1.00	1.54	0.90	1.00	0.0451
CHT3	1.25	0.67	1.00	1.14	0.49	1.00	0.1681
CHT4	1.79	1.05	1.00	1.36	0.75	1.00	0.0001
CHT5	1.77	1.15	1.00	1.47	0.98	1.00	0.0125
CHT6	1.16	0.51	1.00	1.03	0.22	1.00	0.0115
CHT7	1.88	1.11	1.00	1.35	0.70	1.00	0.0000
CHT8	1.65	0.95	1.00	1.36	0.62	1.00	0.0201
CHT9	1.84	1.01	1.50	1.51	0.77	1.00	0.0073
CHT10	2.29	1.19	2.00	1.78	1.06	1.00	0.0002

Table 7 shows the results by PRO. Following prior analyses, cheaters presented higher mean values than noncheaters. In general, cheaters seem to accept cheating easier than noncheaters since they had done it already. This result was expected and aligned with previous research (Ameen et al., 1996a; Ismail & Yussof, 2016; Jordan, 2001; Lawson, 2004b, 2004a; Salter et al., 2001). Cheaters' and noncheaters' views were significantly different for all cheating practices ($p < .10$), except for CHT1. The perception between these two groups was especially distinct for CHT6. Noncheaters tend to be more intolerant toward the action of accepting money in exchange for inside information as opposed to their cheater counterparts.

Table 7 - Descriptive statistics and comparative analysis by PRO

Item	Cheaters (n = 67)			Noncheaters (n = 193)			Exact p
	Mean	Std. Dev.	Median	Mean	Std. Dev.	Median	
CHT1	1.55	0.89	1.00	1.36	0.69	1.00	0.1183
CHT2	1.93	1.00	2.00	1.58	0.92	1.00	0.0059
CHT3	1.37	0.85	1.00	1.16	0.49	1.00	0.0555
CHT4	1.96	1.16	2.00	1.49	0.85	1.00	0.0024
CHT5	1.97	1.29	1.00	1.54	0.99	1.00	0.0066
CHT6	1.25	0.61	1.00	1.05	0.30	1.00	0.0005
CHT7	1.91	1.16	1.00	1.54	0.89	1.00	0.0216
CHT8	1.70	0.95	1.00	1.46	0.77	1.00	0.0697
CHT9	1.89	1.01	2.00	1.63	0.89	1.00	0.0566
CHT10	2.46	1.21	2.00	1.93	1.11	2.00	0.0008

Results from Table 5, Table 6, and Table 7 continue to be consistent with utilitarianism as the answers kept showing that the cheating items were unacceptable by groups of accounting practitioners. Even groups of cheaters have reported mean values closer to one (totally unacceptable). It suggests that they are aware that cheating is morally wrong, but nonetheless engage in it. In classical utilitarianism terms, everyone's happiness counts the same (Bentham, 2000; Driver, 2014). It would then be, from this perspective, morally wrong for one to put his/her personal pleasures above the others'. Cheating usually involves benefiting a few at the expense of many. Hence, it is morally wrong from a utilitarian view.

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Subsequently, Table 8 reports the results regarding the binary regression models. We estimated the chance of occurrence of the accounting practitioners' cheating behavior in their personal, academic, and professional lives using their personal information as explanatory variables. The first model (PER) indicates that SEX, RCE, INC, AGE, and EXP are not significantly associated with personal cheating ($p > .10$). However, RLG and CRC were found to be positively associated with it ($p < .10$). More specifically, religious accounting practitioners have a 51% (Odds ratio = .49) less chance of engaging in personal cheating in comparison with no religious ones. Prior research has shown mixed results with respect to religion. While Abdolmohammadi (2005) did not identify a relevant relationship between religion and ethical reasoning, Conroy and Emerson (2004) and Emerson et al. (2007) observed that religiosity was relevant for many ethical scenarios. In addition, CRC holders have a 38% (Odds ratio = .62) less chance of presenting cheating behavior in their personal lives compared to non-CRC holders. As personal scandals can impact one's professional career (Ciulla, 2020), CRC holders seem to pay additional attention to avoid committing personal cheating.

Table 8 - Binary regression results

Model	PER	ACA	PRO
Explanatory variables	Odds ratio (95% CI)	Odds ratio (95% CI)	Odds ratio (95% CI)
Intercept	3.78* (0.90; 16.96)	15.2*** (3.30; 79.24)	0.53 (0.10; 2.65)
SEX - Male	0.91 (0.52; 1.56)	0.53** (0.30; 0.93)	1.02 (0.55; 1.89)
RCE - White	0.97 (0.55; 1.70)	1.07 (0.60; 1.92)	0.74 (0.39; 1.40)
RLG - Religion	0.49* (0.19; 1.14)	0.51 (0.20; 1.21)	1.10 (0.45; 3.00)
INC - 3-6 MW	0.81 (0.36; 1.82)	0.35** (0.14; 0.81)	0.82 (0.33; 2.12)
INC - Above 6 MW	1.15 (0.51; 2.61)	0.62 (0.25; 1.46)	1.33 (0.55; 3.40)
CRC - Yes	0.62* (0.36; 1.07)	0.74 (0.42; 1.30)	0.63 (0.34; 1.18)
AGE	0.99 (0.95; 1.02)	0.97* (0.93; 1.00)	0.99 (0.95; 1.03)
EXP	0.99 (0.95; 1.04)	1.00 (0.95; 1.05)	0.99 (0.94; 1.04)
n	243	243	244
Log-likelihood (LL)	-164.35	-157.90	-135.85
McFadden's R2	0.02	0.06	0.02
Cox & Snell's R2	0.03	0.08	0.02
Nagelkerke's R2	0.04	0.10	0.03

Note. *** $p < .01$; ** $p < .05$; * $p < .10$.

Regarding the second model (ACA), RCE, RLG, INC – Above 6 MW, AGE, and EXP were not relevantly correlated with academic cheating ($p > .10$). Interestingly, academic cheating was determined by other explanatory variables when compared to those that predict personal cheating. Participants' sex is relevant to explain academic cheating ($p < .05$). Male accounting practitioners have a 47% (Odds ratio = .53) less chance to cheat in comparison to their female colleagues. This result is intriguing and contradicts most prior studies. Borkowski and Ugras's (1998) meta-analysis found that females are more inclined to exhibit ethical attitudes than males. Ameen et al. (1996b) and Ballantine et al. (2014) found that females are

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more intolerant of cheating conduct than males. According to Ismail and Yussof's (2016) findings, males tend to find greater excuses for cheating than females. Galbraith and Stephenson (1993) explain that men and women use different decision rules when it comes to cheating. Usually, men have a narrower set of rules than women (Galbraith & Stephenson, 1993). Even so, this might represent a potential explanation for our result. Another explanation is that women had answered our survey more honestly than men had. Therefore, female accounting practitioners were more likely to admit to cheating than males.

Accounting practitioners who earn from four to six MW have a 65% (Odds ratio = .35) less chance to engage in academic cheating in comparison to those who earn from zero to three MW ($p < .05$). And there is no difference between those who earn from zero to three MW and those who earn above six MW. Thus, earning too little or too much money is associated with cheating. Study shows that students believe that, to get a good job, grade point average (GPA) matters more than skills (Punjab, Quraishi, & Aziz, 2017). Students whose family income is low would then cheat to get higher GPAs, which in turn would get greater jobs and increase their income. And students whose family income is already high would also cheat to get good GPAs and maintain high-level job positions and earn as much money as (or more money than) their parents. Punjab et al. (2017) also found that a significant part of the students (31.7%) reported that their parents exert pressure on them to get good GPAs, leading to exam cheating.

Age is the last predictor of academic cheating ($p < .10$). An increase of one year is related to 3% (Odds ratio = .97) less chance to present academic cheating behavior. Older accounting practitioners would then be less likely to engage in academic cheating. This finding is consistent with the results of Borkowski and Ugras (1998) and Conroy and Emerson (2004). They found that older business students are more inclined to present ethical attitudes than younger ones. Similarly, Emerson et al. (2007) also observed that older accountants are more intolerant toward cheating than their younger colleagues. Research also suggests that age is positively associated with moral development (Haswell & Jubb, 1999). Taking as a whole, these results would thus explain why older people are less likely to cheat.

Our third model (PRO) indicates that all explanatory variables are not significant to explain the chance of occurrence of professional cheating ($p > .10$). Even though the model did not present fitting problems (see APPENDIX), accounting practitioners' personal information seems to have no explanation power over professional cheating. This result has serious implications. First, we were not able to detect a clear profile of professional-life cheaters. People with or without different demographic backgrounds might engage in professional cheating. It means that companies have to invest in preventing measures and policies to avoid professional cheating. Second, professional cheating may be determined by other variables rather than demographic ones, such as moral awareness (Lowry, 2003), moral sensitivity (Ameen et al., 1996b), values (Mubako et al., 2021), and other moral-related variables. Future investigations should include them to examine the accounting practitioners' propensity to cheat in professional contexts.

Finally, we observe that our models have low explanatory power as the values of Cox & Snell's R^2 and Nagelkerke's R^2 are low. While it does not necessarily mean that our models are inadequate, it does indicate that they have very limited prediction powers. For this reason, we encourage, again, that future investigations consider other explanatory variables as well or keep the same personal variables but vary the context. McFadden's R^2 and LL are reported so that other researchers can use them as criteria for comparing different models (theirs with ours).

5. CONCLUDING REMARKS

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This study investigated the accounting practitioners’ perception of cheating actions and its relationship with cheating in their personal, academic, and professional lives based on utilitarianism. And we further investigated how their personal information is associated with cheating in these three life dimensions. We administered online surveys to 262 participants during the first two weeks of February 2022. Our data were analyzed through descriptive statistics, Cochran’s Q test and McNemar’s post-hoc tests, Mann-Whitney’s tests, and binary regression models.

Based on our findings, we conclude that accounting practitioners see cheating practices as unacceptable. However, most of them have already engaged in personal and academic cheating, and about one out of four in professional cheating. We particularly found that the proportions of academic and professional cheating are significantly distinct. This differs from prior studies that suggest they are connected (C. J. Crawford & Stellenwerf, 2011; Lawson, 2004b; Nonis & Swift, 2001). We also conclude that cheaters have a higher level of acceptance toward cheating compared to noncheaters. Overall, our results are compatible with utilitarianism under the assumption that cheating brings more costs than benefits. And finally, we observe that different variables predict cheating in personal, academic, and professional life. For personal cheating, RLG and CRC variables were significant. For academic cheating, SEX and INC - 4-6 MW were significant. And for professional cheating, no personal information was relevant. We highlight that our models have low prediction power and, for this reason, the inclusion of other explanatory variables can be considered in future opportunities.

Our conclusions lead us to serious implications for accounting theory and practice. First, although accounting practitioners seem to be aware that cheating is unacceptable, a fair portion of them has engaged in professional cheating. Ethical training at universities and institutional policies at work might need incremental improvements with the purpose of decreasing cheating even more. Prior literature discusses some of its deterrents (e.g., Ismail & Yussof, 2016; McCabe, Trevino, & Butterfield, 1996). Second, participants tended to declare different behaviors when we analyzed the data by life dimension. Future investigations might explore how cheating in multiple life dimensions is related to the professional one and whether it affects the image of the accounting profession. Third, different variables drive cheating in accounting practitioners’ personal, academic, and professional life. We call for attention to the last one, in which no personal information was relevant to explain cheating. People with different backgrounds commit it and, therefore, we were not able to identify a clear profile of cheaters in this life dimension. Thus, we do not recommend particular attention to any specific public. Instead, we encourage regulators and companies to create and fortify their norms and policies to *prevent* cheating. Fourth, we use a utilitarian lens to frame and explain our results. Despite its importance, our literature review indicates that its usage can be expanded.

Our main limitations are related to (i) the research strategy (i.e., online survey). “An assumption that underlies the use of questionnaires and interviews is that people are willing and able to provide truthful and accurate answers” (Cozby & Bates, 2012, p. 130). We took appropriate measures to conduct this research – including the project’s approval by an IRB, voluntary participation, and confidentiality – so that the participants would feel comfortable providing adequate answers; (ii) the sampling procedure (purposive sampling). Our criterion was that the participant was required to be an accounting practitioner (see endnote 1). We also made our survey available online. We acknowledge that our sample may not match the criteria to be representative of the population of accounting practitioners in Brazil. We then emphasize that our results must be looked at given these limitations.

Besides those described previously, we suggest for future investigations the analysis of cheating considering two or more moral theories and models at the same time. Moral theories

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have different assumptions and merits. We think accounting would benefit from them when considered concomitantly, especially for comparison purposes. Another recommendation is the use of a more detailed measure of personal, academic, and professional cheating. Even though we followed prior studies, we recognize that the binary measurement is a simple way to look at the phenomenon. We believe that a more specific measure would equally be useful to provide complementary evidence and discussions.

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APPENDIX

This APPENDIX reports the results regarding the adequacy of the binary regression models. As described in METHOD, we utilized the Hosmer-Lemeshow’s test and Pearson’s residuals to identify potential problems. According to their results (Table 9), there is no evidence that the models are inadequate as the p-values are higher than .05.

Table 9 - Hosmer-Lemeshow's test and Pearson's residuals

Model	Hosmer-Lemeshow		Pearson's residuals	
	χ^2	p-value	χ^2	p-value
PER	4.79	0.77	242.88	0.33
ACA	8.14	0.41	243.53	0.32
PRO	5.62	0.68	242.95	0.35

We also report Pearson’s residuals graphically (Figure 2). Consistently with the test’s result, Pearson’s residuals seem to be randomly distributed and we cannot identify a clear pattern. It reinforces that the models are appropriate.

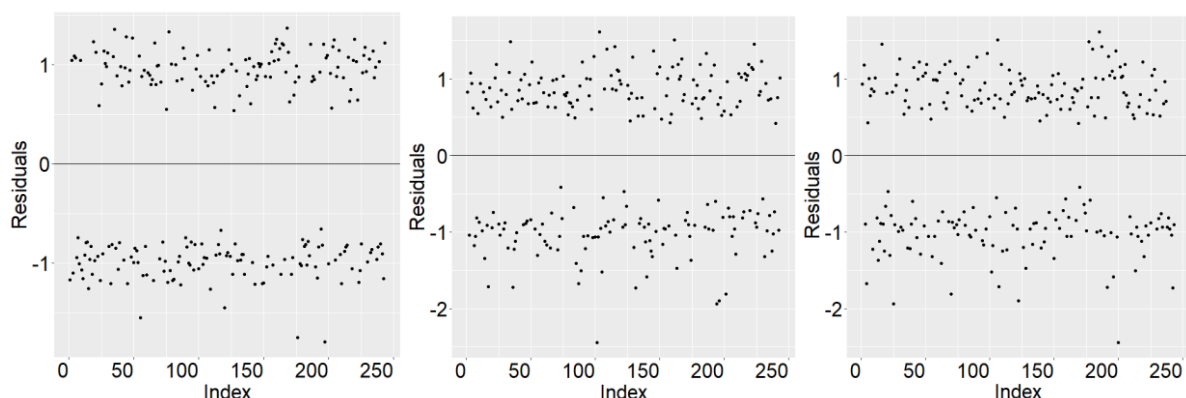


Figure 2. Pearson’s residuals for the PER (left), ACA (center), and PRO (right) models.
Source: Research data.

ⁱ In this study, an accounting practitioner is an accounting technician or an accountant who holds or not a CRC license or, still, who works under the supervision of a CRC holder. CRC is the Brazilian version of the Certified Public Accountant (CPA) license.