

Relationship between Cynicism and Expected Cheating in Academic and Professional Life: A Study involving *Lato Sensu* Graduate Students in Accounting

Vitor Hideo Nasu

<https://orcid.org/0000-0002-5176-6634> | E-mail: vnasu@usp.br

Luis Eduardo Afonso

<https://orcid.org/0000-0003-4639-8299> | E-mail: lafonso@usp.br

Abstract

Objective: To analyze the relationship between cynicism and the expectation that cheating will be necessary in the academic and professional life of *lato sensu* graduate students in accounting.

Method: Electronic and on-site questionnaires were used, with the participation of 92 students from two higher education institutions in the South of Brazil. The questionnaire was divided into three parts: (i) sociodemographic information of the participant; (ii) questions to measure the construct of cynicism, measured in two ways and called CIN1 and CIN2; and (iii) questions about the behavior and expectation that cheating will be necessary in the participants' academic and professional life.

Results: The initial tests indicated that the participants' level of cynicism is similar when analyzed by gender, area in which they work and academic background. The binary logistic regression models indicated that there is a positive relationship between cynicism and the expectation that cheating will be necessary, in academic and in professional life.

Contribution: This study contributes to the discussion, which is still scarce, on the trait of cynicism in the Brazilian accounting context; it provides evidence that a positive relationship exists between cynicism in academic life, but also in professional life; and it alerts to individual cynicism for the adoption of policies and codes of conduct in order to reduce cheating as a result of cynicism.

Key words: Cynicism; Cheating; Academic and professional life; Personality; Accounting.

Published in Portuguese and English. Original Version in Portuguese.

Received in 5/29/2020. Ask to Revise on 6/22/2020. Resubmitted on 7/16/2020. Accepted on 7/20/2020 by Dr. Andson Braga de Aguiar (Assistant Editor) and by Dr. Gerlando Augusto Sampaio Franco de Lima (Editor). Published on 9/30/2020. Organization responsible for the journal: Abracicon.

1. Introduction

Case reports of financial fraud that probably involves an accountant are not rare in the media. Therefore, behavioral elements of business professionals have stood out on the agenda of accounting research in Brazil. Studies focusing on how personality traits affect the behavior and decision-making of managers, accountants and students are particularly noted. For example, while Avelino, Lima, Cunha e Colauto (2017) aimed to examine the relationship between the trait of non-pathological narcissism and the perception of dishonesty of accounting students, D'Souza e Lima (2019) aimed to understand the relationship between Accounting students' cultural values and the non-pathological personality traits that make up the Dark Triad (Machiavellianism, narcissism, and psychopathy). Thus, the field of behavioral accounting, more specifically focused on the personality of individuals, gained prominence, mainly because the interdisciplinarity between accounting and psychology is relatively recent.

Evidence of this is found in Thaler (2019). In his book *Misbehaving*, it is indicated that there was no postgraduate course in behavioral economics in 1992, at least to the best of his knowledge. So, the first course was created by the Behavioral Economics Roundtableⁱ, which Thaler (2019) was part of. Therefore, it is reasonable to assume that behavioral accounting does not exist either, particularly in Brazil. A recently created area of research has fertile ground for further exploration. Personality traits were inserted in this branch, which can be investigated to better understand accounting professionals' behavior (Wheeler, 2001; Wheeler, Jessup, & Martinez, 2002), as well as that of other professionals involved in the business area.

One of the personality traits still little explored and that can contribute to this research area is cynicism. First, it should be highlighted that there are differences between contemporary cynicism and ancient cynicism. In this research, contemporary cynicism is studied. For the sake of brevity and focus, ancient cynicism will not be addressed. Background literature has provided different definitions and types for the study of this personality trait, as its conception depends on the area of knowledge, context, and historical moment. Therefore, in this study, cynicism is defined as a general belief about human nature that individuals are unreliable (Chiaburu, Peng, Oh, Banks, & Lomeli, 2013; Costa, Zonderman, McCrae, & Williams, 1986). Consequently, individuals with a strong trait of cynicism are those who see other people as dishonest and distrust them (Bernardi & Adamaitis, 2006; Cook & Medley, 1954). Due to the way cynics perceive other people, the cynicism of managers, accountants, and business professionals, in general, entails implications for their behavior and decisions, particularly in what can be broadly considered as cheating conduct. There is evidence that business students report and are more likely to cheat than those in other areas of knowledge (McCabe, 2005; McCabe & Trevino, 1995). In addition, business students have stated that immoral behaviors are dominant in the business world and, in order to advance their professional careers, they will need to cheat somehow (Lawson, 2004). In this sense, it is relevant to understand how the strong sense of dishonesty and distrust, characteristic of cynicism, is related to cheating behaviorsⁱⁱ. Thus, the objective of this study is to analyze the relationship between cynicism and the expectation that cheating will be necessary in the academic and professional life of *lato sensu* graduate students in accounting.

The expectation that cheating will be necessary of individuals with more intense traits of cynicism can help to anticipate some of their unwanted behaviors and decisions, contributing to better human resource management within the companies. The identification of employees' cynical personality through academic or clinical instruments also helps to ascertain the human resources' level of cynicism. Thus, the company can take action and adopt policies and codes of conduct that diminish the feeling of distrust and dishonesty in relation to its image and among its employees. The construct of cynicism investigated in this study is non-pathological, although the instruments used for its measurement are part of the medical and psychological literature. Therefore, the clinical diagnosis of cynicism as a pathology goes beyond the scope of this study, which is its mere analysis for academic purposes.

This research contributes to the background literature by analyzing the possible relationship between cynicism and the expectation that cheating will be necessary in the academic and professional life of *lato sensu* graduate students in accounting at two higher education institutions in the South of Brazil. This audience was chosen because it is concurrently acting in the professional and academic areas. In addition, as will be discussed in Section 2, the study contributes by reporting results based on two proxies for cynicism. The need to use two measures for cynicism is also discussed in Section 2 and its implications are discussed in the final considerations section.

Besides this introductory section, the article is organized as follows: Section 2 presents the literature review and the development of hypotheses. Section 3 explains the methodological procedures used in the development of this study. Section 4 reports and discusses the results and Section 5 describes the conclusions, implications, limitations and recommendations for future research.

2. Literature review and hypotheses

2.1 Cynicism and cheating

Researchers have defined the trait of cynicism as a general belief regarding the human nature that other individuals are not reliable (Bernardi & LaCross, 2004; Chiaburu et al., 2013; Costa et al., 1986). Similarly, cynicism can also be considered as a moral dimension that involves stronger levels of distrust and hostility towards other people's motives and actions (Adorno, Frenkel-Crunswik, Levinson, & Sanford, 1950; Turner & Valentine, 2001).

The cynicism of managers, accountants, and other business professionals entails serious consequences for their productivity and form of behavior (Andersson & Bateman, 1997; James, Miles, & Mullins, 2011), as well as for their health, as there is evidence that cynicism is related to the Burnout syndrome (Viljoen & Claassen, 2017) and other health problems (Stavrova & Ehlebracht, 2018; Why & Johnston, 2008). For example, a head of the accounting department with a stronger cynical personality can often be suspicious that his or her team is not performing the designated jobs as qualitatively as wanted and, therefore, (s)he ends up doing his or her work plus that of his or her team, burdening and wearing him out. Likewise, cynical employees are inclined to believe that the company's management will take advantage of their hard work (Kanter & Mirvis, 1989) and that their contribution to the company will not be acknowledged (James et al., 2011). In addition, employees with a strong cynical personality can take positions contrary to the company's actions and publicly mock its initiatives (Serrano Archimi, Reynaud, Yasin, & Bhatti, 2018). Therefore, excessive cynicism – or exaggerated distrust of something or someone – can affect the organizational climate and cooperation between employees, making it essential to regain the employees' trust (Serrano Archimi et al., 2018). Studies also indicate that a negative relationship exists between cynicism and job satisfaction (Kökalan, 2019; Leung, Ip, & Leung, 2010). The greater the sense of dishonesty and mistrust, the lesser the satisfaction in the professional environment.

As they do not trust other individuals, cynics may exhibit individualistic behaviors. James et al. (2011) report that “individuals who are highly cynical are not naturally prone to engage in voluntary helping behaviors” (p.168). Thus, cynical professionals are more inclined to prioritize their personal interests over those of the company (Kökalan, 2019), or the public interest. Cynics are willing to benefit at the expense of others. For this reason, ethical competence has been considered relevant for business professionals, and more specifically for accountants (Lawson et al., 2015).

From a comprehensive perspective, studies suggest that cynicism is the source of reduced economic growth and individuals’ civic engagement, being equally responsible for granting the opportunity to commit crimes (Andersson & Bateman, 1997; Stavrova & Ehlebracht, 2018). Based on this reasoning, the more pronounced the cynicism of business professionals, the greater the propensity to cheat. Particularly in Accounting, research has pointed out that cynicism is positively correlated with cheating. In this sense, if the cynicism of business professionals is more pronounced, they are more likely to cheat in the work environment.

Particularly in the Accounting area, research shows that there is a positive relationship between cynicism and cheating behavior (Ameen, Guffey, & McMillan, 1996a; Bernardi & Adamaitis, 2006; Bernardi & LaCross, 2004; Salter, Guffey, & McMillan, 2001), although those studies have been developed with students and were focused on cheating in the academic environment. Adding to this literature, this study seeks to focus on the relationship between cynicism and cheating in the research participants’ professional life.

It is relevant to emphasize that cynicism at *reasonable levels* is important for individuals, so that they can act cynically according to the context in which distrust arises. For example, Figure 1 represents an advertisement taken from a website in which it is indicated that the user is the 999,999th visitor of a particular website and that he has been selected as a possible winner of a prize. In general, this type of advertising on websites has a link that contains viruses or redirects the user to other pages that are not related to the promised prize. Therefore, if the user is excessively innocent and/or has little knowledge of internet fraud, (s)he may be attracted by this type of misleading advertising and end up suffering undesirable consequences. Therefore, as Tsay, Shu and Bazerman (2011) argue, the opposite of cynicism is innocence.



Figure 1. Image of an advertisement on an internet page.

Source: <https://www.tecmundo.com.br/phishing/1680-dicas-para-identificar-janelas-fraudulentas-nas-paginas-da-web.htm>

Cynicism at reasonable levels tends to be healthy and provide protection to individuals. Eventually, people who repeatedly experience cheating situations tend to become (more) cynical. For example, a person who is betrayed in a love relationship becomes more cynical about the motives of the partner's actions. Thus, cynicism prevents the person from continuing to make the mistake of trusting the partner. In the business context, the same occurs with companies and colleagues. For example, companies that present financial fraud or compete unfairly with their competitors are more likely to be watched with distrust by society, and may lose essential economic transactions with customers, suppliers and other related parties. Therefore, cynicism can be interpreted as a psychological defense mechanism (Horney, 1992) by the victims of cheating.

Based on this debate, it is observed that excessive cynicism can provoke a lack of cooperation and commitment and prioritization of private over public interests, even if cheating is needed. This overlapping of private and public interests (company or society) is a motive for many crimes committed in the financial and non-financial world. On the other hand, cynicism, at reasonable levels, can represent a mechanism for preventing and protecting potential targets of cheating. Despite this, the concept adopted in this study is of high levels of cynicism, in which individuals generally believe that the human nature of third parties is unreliable (Bernardi & LaCross, 2004; Chiaburu et al., 2013; Costa et al., 1986). In addition, it is emphasized that there is evidence that cynicism is positively related to cheating (Ameen et al., 1996a; Bernardi & LaCross, 2004).

2.2 Related research

Little empirical exploration has been done thus far concerning the point at which accounting, cynicism and cheating meet. In the Brazilian accounting literature consultedⁱⁱⁱ, studies were found that only slightly approach cynicism, as being, for example, one of the aspects of Machiavellianism (D'Souza & Lima, 2019). Similarly, relevant international accounting journals^{iv} have been consulted, in which there are studies that subtly cite cynicism, whether as a subconstruct or just as a word, and not as a research focus (ex: Bowen, Rajgopal, & Venkatachalam, 2014; Klein & Speckbacher, 2019; Majors, 2016). This study differs by focusing particularly on the construct of cynicism, using specific academic instruments for its measurement.

In addition to earlier research that investigated cynicism in a peripheral way, in the international accounting literature, empirical studies could be detected that actually discuss cynicism as one of its main topics. These studies are described next and, at the end, it is argued how this study contributes to the literature on accounting and cynicism.

Ameen et al. (1996a) studied the academic dishonesty of accounting students, as well as the influence of environmental factors and the propensity to cheat. One of these factors was cynicism, which was measured by the three questions of Sierles et al. (1980). Specifically concerning the results of the relationship between cynicism and the propensity to cheat, a lower level of cynicism was found in non-cheating students. The findings of the binary logistic regression also supported a positive correlation between cynicism and cheating. The results concerning the construct of cynicism should be observed with caution though, as the Cronbach's alpha found for this construct was 0.554, suggesting that there is fragile internal consistency.

Ameen, Guffey and McMillan (1996b) investigated the relationship between gender and the willingness to tolerate immoral behavior in a sample of 285 accounting students from four major public institutions in the United States. The results indicated that male students tend to be more tolerant of cheating than female students. With regard to cynicism, measured by the three questions of Sierles et al. (1980), the test of means showed that male students have higher levels of cynicism than female students.

Salter et al. (2001) investigated the determinants of cheating based on a sample of 370 students enrolled in upper-level accounting courses at public universities in the United States and the United Kingdom. The authors also used the questions of Sierles et al. (1980) to measure cynicism. After the statistical analyses, a positive relationship between cynicism and cheating was found for students from the United Kingdom, but this relationship was not established when students from the United States were analyzed. One potential explanation for this result is that there were more men in the UK student sample, who tend to be more tolerant of cheating. This finding also suggests that cynicism may vary according to the country culture.

Bernardi and LaCross (2004) evaluated the effects of the social desirability response bias (SDRB) in the model built by Salter et al. (2001), as the authors believed that the SDRB contaminated the variables, including cynicism, which were used in previous research that modeled cheating. Thus, data were collected from 174 students in the business area and particularly cynicism was measured through the questions of Sierles et al. (1980). Regarding the results for the cynicism variable, a negative relationship was observed between cynicism and SDRB. This result was as expected, as students' cynical responses are not seen as socially desired.

Bernardi and Adamaitis (2006), in a similar study, examined the effects of SDRB on cheating behavior, controlling for a series of variables, including cynicism (also measured based on the three questions of Sierles et al. (1980)). Data were collected from 290 Australian, Chinese, Irish, and Japanese students, in addition to the 174 students of the research by (Bernardi & LaCross, 2004). The results indicated that students with strong traits of cynicism are more likely to report cheating than students with a subtler cynical personality. In addition, a negative relationship was found for cynicism and VRDS, similar to (Bernardi & LaCross, 2004).

Based on this literature review, there is evidence of a positive relationship between cynicism and cheating in the students' academic life. Furthermore, the studies observed in this literature review exclusively used the three questions of Sierles et al. (1980) to measure cynicism. Ameen et al. (1996a) found fragile evidence that this form of measurement is appropriate. Therefore, the use of a second proxy is justified to evaluate cynicism. This second proxy was selected based on the study by Greenglass and Julkunen (1989), as will be explained in Section 3. According to the theoretical discussion and empirical findings, the following hypotheses are formulated:

- **Hypothesis 1: Cynicism is positively related to the expectation that they will need to cheat in academic life.**
- **Hypothesis 2: Cynicism is positively related to the expectation that they will need to cheat in professional life.**

3. Method

3.1 Context of the study

The research was conducted in two higher education institutions (HEIs) – one private and one public - located in the South of Brazil. Based on the objective of the study, questionnaires were applied to collect data on the respondent's profile, cynicism and cheating. At the private institution, the questionnaires were applied via the internet (Google Forms) in October 2019 and, at the public institution, they were applied on site in November and December 2019. All participants agreed to participate in the research under the conditions of the free and informed consent form, which provided a general description of the purpose and method, the secrecy in the use and reporting of the data, the form of participation, the risks and benefits and the researchers' contact data. The study included 92 students from four *lato sensu* graduate courses in the business area, being three specific accounting courses and one course in financial management, accounting and controllership. It is highlighted that not all students from the four courses participated in the research, as some were absent on the day of the class when the data was collected. The *lato sensu* graduate students were chosen because they are working and continue studying. Thus, it is more likely that they remember and potentially cheat in their academic and professional lives.

3.2 Variables and models

Table 1 shows the details of the research variables. Following the order of the questionnaire, the respondents were first asked to complete their personal data, such as gender (SEX), age (IDD), type of work (TRB) and undergraduate academic education (FAC). Subsequently, the questions about cynicism were answered. Questions C1, C2, and C3 were translated freely from Sierles et al.(1980)^v and used to constitute the first proxy (CIN1) by calculating the arithmetic mean of the answers to these questions, as stated in the column "measurement" of Table 1, following the original formulation by Sierles et al. (1980). The higher the coefficient of CIN1, the more cynical an individual is.

Questions C4, C5 and C6 refer to the three-item version of Cook-Medley's Cynical Mistrust Scale, obtained from Greenglass and Julkunen (1989)^{vi}. The items were also freely translated and were used to form the second proxy of cynicism (CIN2), which represents the factor scores extracted from the main components factor analysis (FA) (regression method). To comply with the premises, Bartlett's sphericity test was performed, which indicated that the generated factor is appropriate ($\chi^2 = 74.376$; $p = 0.000$) (Fávero & Belfiore, 2017). Cronbach's alpha also showed that the level of internal consistency of the items is acceptable ($\alpha = 0.7507$)(Hair Jr., Black, Babin, & Anderson, 2009). Therefore, evidence was found that the FA is appropriate. Just like the first proxy of cynicism, higher values for CIN2 represent higher levels of individual cynicism. Finally, the questions on cheating were answered. The variables TRVA and TRVP indicate, respectively, whether the respondent has ever cheated in any way in his/her academic and professional life (yes or no). This form of measurement was used in the background literature (Ameen et al., 1996a; Bernardi & LaCross, 2004). And the variables EXVA and EXVP indicate, respectively, the student's expectation that it will be necessary to cheat, in some way, in academic and professional life in the future, with yes and no as the possible answers. These questions have also been used in earlier studies (Ameen et al., 1996a; Bernardi & Adamaitis, 2006; Salter et al., 2001).

Table 1
Study variables

Acronym	Description	Measurement
SEX	Gender	1 = male; 0 = female.
IDD	Age	Years.
TRB	Work	1 = accounting area; 0 = not in the accounting area.
FAC	Academic education (undergraduate)	1 = accounting; 0 = not accounting.
C1	People who say they never cheated are hypocrites	1 to 5 points.
C2	Everyone steals, cheats or lies at least once in a lifetime	1 to 5 points.
C3	People need to cheat in this heavily competitive world	1 to 5 points.
CIN1	"Cynicism 1"	(C1 + C2 + C3) / 3.
C4	Most people internally do not like to make themselves available to help other people	1 to 5 points.
C5	Most people will use somewhat unfair means to make a profit or gain an advantage rather than losing them	1 to 5 points.
C6	I think most people would lie in order to gain an advantage	1 to 5 points.
CIN2	"Cynicism 2"	Factor score generated by Factor Analysis. ^(A)
TRVA	Have you cheated, in any way, in academic life?	1 = Yes; 0 = No.
TRVP	Have you cheated, in any way, in professional life?	1 = Yes; 0 = No.
EXVA	Do you expect that you will need to cheat, in any way, in academic life?	1 = Yes; 0 = No.
EXVP	Do you expect that you will need to cheat, in any way, in professional life?	1 = Yes; 0 = No.

First, the data were observed based on descriptive statistics on the respondents' profile, questions about cynicism and questions about cheating. Subsequently, Welch's t-tests were performed to check for potential differences in the level of cynicism between groups of distinct gender, work, and academic background. When the assumptions of normality and homogeneity of variance are violated in the t-test, the correction of Welch (1947) can still be used, which adjusts its formula to make the test feasible by compensating for the violation of the assumptions. In this analysis, the two proxies of cynicism (CIN1 and CIN2) were analyzed. For age, the correlation tests were performed.

Next, the relationship between cynicism and expectation that cheating will be necessary was analyzed through binomial logistic regression models, which are appropriate when the response variable is binary qualitative (Chatterjee & Simonoff, 2012; Fávero & Belfiore, 2017; Menard, 2002). The event in question is the positive expectation that cheating will be necessary, in some way, in academic (EXVA) or professional (EXVP) life in the future. Thus, the following models were developed:

- **Model 1A:** $EXVA_i = 1/1 + e^{-(a + b_1.CIN1 + b_2.TRVA + b_3.TRVP + b_4.SEX + b_5.IDD + b_6.TRB + b_7.FAC)}$
- **Model 1B:** $EXVA_i = 1/1 + e^{-(a + b_1.CIN2 + b_2.TRVA + b_3.TRVP + b_4.SEX + b_5.IDD + b_6.TRB + b_7.FAC)}$
- **Model 2A:** $EXVP_i = 1/1 + e^{-(a + b_1.CIN1 + b_2.TRVA + b_3.TRVP + b_4.SEX + b_5.IDD + b_6.TRB + b_7.FAC)}$
- **Model 2B:** $EXVP_i = 1/1 + e^{-(a + b_1.CIN1 + b_2.TRVA + b_3.TRVP + b_4.SEX + b_5.IDD + b_6.TRB + b_7.FAC)}$

The response variables are the expectations that cheating will be necessary in academic life (models 1A and 1B) and professional life (models 2A and 2B). The difference between the models is the proxy for cynicism. CIN1 and CIN2 are the proxies for cynicism. The questions for CIN1 were taken from Sierles et al. (1980) and those for CIN2 from Greenglass e Julkunen (1989). While CIN1 has already been used in previous studies in the accounting area (Ameen et al., 1996b, 1996a; Bernardi & LaCross, 2004; Salter et al., 2001), no accounting studies using CIN2 were found in the literature consulted. For further details about the variables, review Table 1.

4. Results

Table 2 shows the respondents' profile. The study sample includes mostly women (63.04%), people who work in accounting (52.17%) and graduates in Accountancy (79.35%). As the *lato sensu* graduate courses are in Accounting, a preponderance of the accounting area would be expected in terms of the participants' academic background as well as their area of work. Most students are female, which is consistent with the increasing female participation in the undergraduate accounting degree that has been occurring in recent years. In addition, the participants' mean age is 28.76 years, with a standard deviation (SD) of 6.15 years.

Table 2

Participants' profile

Variable	Absolute Frequency	Relative Frequency
SEX - Male	34	36.96
SEX - Female	58	63.04
TRB - Accounting area	48	52.17
TRB - Not in the accounting area	44	47.83
FAC - Accounting	73	79.35
FAC - Not accounting	19	20.65

Next, Table 3 shows the descriptive statistics of the cynicism and cheating variables. Regarding cynicism, while the mean values of items C1 and C2 are 3.3043 and 3.6196 points, respectively, item C3 has an average value of 1.4565, below the intermediate level of the scale (3.0 points). This indicates that participants tended to agree more with C1 and C2 than with C3. The first proxy (CIN1) of cynicism had an average of 2.7935, also below 3.0, suggesting that, in general, the participants in the sample have a cynical personality that can be considered moderate. It is important to highlight that Cronbach's alpha was calculated for C1, C2 and C3, which resulted in 0.5719. This suggests that there is little internal consistency. This result is similar to that reported by Ameen et al. (1996a), who found an alpha of 0.544. Therefore, caution is needed in the analysis performed with the use of this proxy, as there is no strong evidence of one-dimensionality in the measurement of the construct.

With regard to items C4, C5 and C6, it is observed that C4 has an average of 2.9674 points, pointing out that the participants tended to agree less with this statement. On the other hand, the mean values for items C5 and C6 were 3.0326 and 3.1196 points, respectively, indicating greater agreement. The mean for CIN2 is 0.0000, indicating that, according to this proxy, participants have a moderate cynical personality, as the mean remains far from the minimum value (-1.9590) and the maximum value (2.3684). For CIN2, Cronbach's alpha is 0.7507. This indicates an acceptable level of internal consistency of the items that measure the same construct (Hair Jr. et al., 2009). Therefore, the analyses using this second proxy for cynicism (CIN2) are more reliable.

In relation to cheating, cross-tabulation analyses and chi2 tests were performed, as they are categorical variables. As for the variables EXVA and TRVA, 12 cases were verified in students who have already cheated and intend to cheat again in academic life. On the other hand, 59 students stated that they had not cheated in their earlier academic life and do not intend to cheat in the future. One potential explanation for these results is that participants tend to respond according to what society expects them to respond (SDRB), in which participants tend not to admit they will need to cheat. In addition, 11 students declared that they had not cheated in the past, but believe that they will need to cheat in the future. Ten other students indicated that they have already cheated, but do not believe that they will have to cheat in the future. The chi2 test for this cross-tabulation analysis indicated significance ($p = 0.000$). This evidences that TRVA and EXVA are not randomly associated.

Concerning the variables TRVP and EXVP, their contingency table shows that 14 students admit having cheated in the past and that they feel the need to do so in the future in their professional lives. In contrast, there are 30 students who stated that they have not cheated in their professional lives in the past and will not need to do so in the future. Again, it is emphasized that the respondents are subject to SDRB. Also, only one student replied that he did not cheat in professional life, but believes that he will have to do so in the future. And finally, 46 students responded that they have cheated before, but do not expect to reproduce this behavior in the future. The chi2 test for this cross-tabulation was significant ($p = 0.0014$). Thus, TRVP and EXVP are not randomly associated. A relevant association exists between their categories.

Table 3

Descriptive statistics - Variables of cynicism and cheating

Cynicism (N = 92)	Mean	Standard deviation	Minimum	Maximum
C1	3.3043	1.3965	1.0000	5.0000
C2	3.6196	1.3736	1.0000	5.0000
C3	1.4565	0.9307	1.0000	5.0000
CIN1	2.7935	0.9190	1.0000	5.0000
C4	2.9674	1.1526	1.0000	5.0000
C5	3.0326	1.1716	1.0000	5.0000
C6	3.1196	1.2996	1.0000	5.0000
CIN2	0.0000	1.0000	-1.9590	2.3684

Expectation that cheating and cheating in academic life will be necessary (N = 91)	TRVA		Chi2	P-value
	Yes	No		
EXVA	14	1	6,00	0,014
	46	30		

Expectation that cheating and cheating in professional life will be necessary (N = 92)	TRVP		Chi2	P-value
	Yes	No		
EXVP	12	10	13,46	0,000
	11	59		

Subsequently, Table 4 shows the mean values of CIN1 and CIN2 according to the research participants' gender (SEX), work (TRB), and academic background (FAC). Men have a stronger cynical personality than women, both for CIN1 and CIN2, when the descriptive analysis is considered. Nevertheless, Welch's t-test pointed out that this difference is not statistically significant, suggesting that the level of cynicism is similar between men and women in the study sample. This result differs from Ameen et al. (1996b), which found significantly higher levels of cynicism for male than for female students. One potential explanation is that, in general, the sample has moderate levels of the cynicism trait, as reported in the previous table.

When considering the area of work, the descriptive analysis showed that participants working in accounting have a stronger cynical personality than their colleagues in other areas, considering CIN1 as well as CIN2. Welch's t-test indicated that there is no statistically significant difference between the levels of cynicism of workers in accounting and other areas though. Therefore, there is no evidence that accounting professionals are more cynical than workers from other areas.

Regarding the academic background, CIN1 indicates that students who did not graduate in Accountancy (2.81) have slightly more intense cynical personality than those who graduated in Accountancy (2.79). Welch's t-tests indicated that there is no statistically significant difference. The same is true for CIN2, whose descriptive results suggest that students who graduated in Accounting (0.05) have higher levels of cynicism than those who graduated in other courses (-0.21), but this difference is not significant either. Overall, the two proxies of cynicism have shown to be reasonably consistent to date, as both indicated that the groups have statistically similar levels of cynicism.

Table 4

Level of cynicism (CIN1 and CIN2) according to SEX, TRB and FAC

Filter	Groups		Result
	Male	Female	
SEX			P-value (two-tailed)
CIN1	2.82	2.78	0.8141
CIN2	0.14	-0.08	0.3493
TRB	Accounting area	Not in the accounting area	P-value (two-tailed)
CIN1	2.82	2.77	0.7805
CIN2	0.15	-0.17	0.1245
FAC	Accounting	Not accounting	P-value (two-tailed)
CIN1	2.79	2.81	0.9448
CIN2	0.05	-0.21	0.2751

As for age, Pearson's and Spearman's correlation tests were applied, respectively. For the relationship between IDD and CIN1, coefficients of -0.0426 ($p > 0.10$) and 0.0040 ($p > 0.10$) were found. These results suggest that the first proxy of cynicism is not significantly correlated with age. For the relationship between IDD and CIN2, coefficients of -0.2851 ($p < 0.01$) and -0.1951 ($p < 0.10$) were found. These findings indicate that age is negatively associated with the second proxy of cynicism. Therefore, the lower the student's age, the higher the level of cynicism. This is the first result that distinguishes the proxies for cynicism (CIN1 and CIN2). In addition, for the Pearson's and Spearman's correlation between CIN1 and CIN2, coefficients of 0.4235 ($p < 0.01$) and 0.4195 ($p < 0.01$) were found, indicating that they are significantly related, although these coefficients cannot be considered high.

Next, the relationship between cynicism and expectation that cheating will be necessary was analyzed using binomial logistic regression models, as specified in Section 3. The results for the expectation that cheating will be necessary in academic life (Model 1) are reported in Table 5. The prob chi2 inferior to 0.05 points out that at least one of the explanatory variables is significant to explain the probability that the student expects that cheating will be necessary in academic life (EXVA). McFaden's pseudo R² can be used as a criterion to choose the best fit model when the models are compared (Fávero & Belfiore, 2017). The higher the pseudo R², the better the fit of the model. In this case, model 1A has a pseudo R² of 0.2530, against 0.2877 for model 1B. The same interpretation can apply to the function of likelihood (log-likelihood). The higher, the better fit the model will be. In this case, it is verified that model 1B has a higher log-likelihood (LL = -27.71) and, therefore, is more suitable compared to model 1A (LL = -29.05).

In Model 1A, it is observed that cynicism is not a relevant factor to influence the expectation that cheating will be necessary in academic life ($p > 0.10$). This result suggests that the cynical personality of the sample participants does not significantly affect their expectations that cheating will be necessary. This finding differs from the background literature (Ameen et al., 1996a; Bernardi & Adamaitis, 2006; Bernardi & LaCross, 2004; Salter et al., 2001), which found a positive correlation. The only significant factors were TRVP (coef. = 1.16; $p < 0.10$) and FAC (coef. = -1.80; $p < 0.05$). These results point out that students who have already cheated in professional life are more likely to cheat in academic life in the future and that accounting graduates are less inclined to expect that cheating will be necessary in their academic lives. The TRVA result of model 1A suggests that students who have already cheated do not necessarily feel the need to cheat in the future. This finding is counterintuitive, as those who practiced cheating in the past are more likely to commit cheating in the future.

Model 1B shows different results. Cynicism (CIN2) is positively correlated with the expectation that they will need to cheat in academic life (EXVA). This result is an indication that students with a more prominent cynical personality expect to have to cheat in their academic life in the future. This finding is consistent with previous studies (Ameen et al., 1996a; Bernardi & Adamaitis, 2006; Bernardi & LaCross, 2004; Salter et al., 2001) and supports hypothesis 1. In addition, students who have already cheated in their academic (coef. = 2.53; $p < 0.10$) and professional lives (coef. = 1.39; $p < 0.10$) are also positively related to the expectation that they will need to cheat. This indicates, for example, that professionals who have already cheated in the job market are more inclined to cheat in their academic life if they come to take a second degree course, graduate courses or other kinds of courses involving the teaching-learning process. Still in Model 1B, it is observed that, the higher the IDD (coef. = 0.12; $p < 0.10$), the higher the expectation that they will need to cheat. Additionally, accounting students are less inclined to think they will need to cheat in their academic lives compared to students graduated in other areas of knowledge. This is a promising finding for accounting professionals and regulators. Finally, the models were also applied using the probit estimation method, with results similar to the logit model.

Table 5

Results of the logistic regression models: EXVA

EXVA	Model 1A		Model 1B	
	Coefficient	Standard error	Coefficient	Standard error
CIN1	0.44	0.46		
CIN2			0.76*	0.42
TRVA	2.19	1.40	2.53*	1.41
TRVP	1.16*	0.69	1.39*	0.71
SEX	0.51	0.68	0.13	0.73
IDD	0.09	0.07	0.12*	0.07
TRB	0.95	0.83	0.97	0.84
FAC	-1.80**	0.86	-2.31**	0.92
CONSTANT	-7.19	3.04	-6.84	3.02
N		90		90
prob chi2		0.0063		0.0022
Pseudo R ²		0.2530		0.2877
Log likelihood (LL)		-29.05		-27.71

***, ** and * represent the level of significance at 1%, 5% and 10%, respectively.

The results on the expectation of the need to cheat in professional life (EXVP) are shown in Table 6. As observed, the prob chi2 are inferior to 0.05, indicating that at least one of the explanatory variables is significant. Model 2A has the highest R² and log likelihood, which suggests that the model fits the data better.

Based on the analysis of model 2A, the positive influence of CIN1 (coef. = 1.18; $p < 0.05$) on EXVP was observed, supporting hypothesis 2. This finding points out that the stronger an individual's cynical personality, the more likely (s)he is to expect to have to cheat in professional life. This finding is also troubling, as accountants with high traces of cynicism may be cheating more intensely in the work environment. Previous studies also found a positive relationship between cynicism and expectation that they will need to cheat (Ameen et al., 1996a; Bernardi & Adamaitis, 2006; Salter et al., 2001). The variable TRVP was also relevant (coef. = 2.47; $p < 0.01$) in relation to EXVP. This means that individuals who have already cheated expect to cheat again in their professional lives. Thus, the teachers need to alert the students to moral behavior when practicing the accounting profession. This point can and should be reinforced, especially in the disciplines of accounting ethics, an opportunity in which cases and situations of moral conflict which accountants are subject to should be discussed and what should be the most appropriate conduct. Also, the variable SEX (coef. = 1.42; $p < 0.05$) obtained a positive relationship with EXVP. This result suggests that male students are more inclined to think they will need to cheat in their professional lives in the future. In a profession in which the majority are men (CFC, 2019), it becomes worrisome for the accounting profession to know that male individuals expect to cheat more than female ones.

Model 2B presented similar results to model 2A. The same variables were significant in relation to EXVP. Cynicism (coef. = 0.90; $p < 0.05$), for example, obtained a positive relationship with the expectation that cheating will be necessary in professional life. Thus, individuals with higher levels of cynicism tend more strongly to expect that they will need to cheat in professional life compared to those with lower levels of cynicism. This finding supports hypothesis 2. Male students who have already cheated in professional life also presented positive coefficients. This evidence suggests that male students are more inclined to think they will need to cheat in their professional lives in the future. The results alert to potential cheating behaviors in the accounting work environment, as cynical male students who have already cheated think more intensely about cheating again than less cynical male students, female students and students who have not cheated. The latter may suffer the consequences of the former's cheating. Finally, it is emphasized that the models 2A and 2B were also estimated via probit and yielded results similar to the logit results.

Table 6

Results of the logistic regression models: EXVP

EXVP	Model 2A		Model 2B	
	Coefficient	Standard error	Coefficient	Standard error
CIN1	1.18**	0.49		
CIN2			0.90**	0.37
TRVA	-1.10	0.92	-0.64	0.86
TRVP	2.47***	0.76	2.61***	0.78
SEX	1.42**	0.67	1.17*	0.65
IDD	0.05	0.05	0.08	0.06
TRB	1.18	0.82	0.92	0.79
FAC	-0.72	0.85	-0.96	0.86
CONSTANT	-7.19	2.53	-4.62	2.11
N	90		90	
prob chi2	0.0001		0.0002	
Pseudo R ²	0.3049		0.2956	
Log likelihood (LL)	-33.14		-33.58	

***, ** and * represent the level of significance at 1%, 5% and 10%, respectively.

Overall, the results of models 2A and 2B were similar. As verified, the expectation that they will need to cheat in professional life (EXVP) does not depend on the participants' age (IDD), work area (TRB), and academic background. No relevant difference was found between students who graduated in accounting or in other areas in terms of their expectations of cheating in the professional context. The same interpretation applies to the age and work area of the students in the sample when analyzed together with other variables in the models.

5. Final considerations

The objective of this study was to analyze the relationship between cynicism and the expectation that cheating will be necessary in the academic and professional life of *lato sensu* graduate students in accounting. In this sense, data were collected from 92 students from four graduate courses through a questionnaire applied electronically and on-site. For the data analysis, descriptive statistics, Welch's t-tests, and binary logistic regression models were conducted.

Descriptive statistics indicated that most students admitted to cheating in their academic life. The same was not found for working life though, in which the majority did not admit having cheated. This finding is intriguing, as the background literature suggests a positive relationship between cheating behavior in academic and professional life. One potential explanation for this result is that the students in the sample are relatively young (mean = 28.76 years) and, therefore, may have little professional experience since the end of the undergraduate course or have been exposed to few moral conflicts in the work environment. This finding still needs further investigation.

Regarding Welch's t-tests, no statistically significant difference was observed in the students' level of cynicism -considering the two proxies - when separated by gender, work area and academic background. In the binomial logistic regression, evidence was found that cynicism is positively related to the expectation that cheating will be necessary in academic and professional life. This evidence suggests that, the higher the individuals' trait of cynicism, the greater their expectation that cheating will be necessary in the future. Thus, hypotheses 1 and 2 find restricted support as, in Model 1A, cynicism was not significant to explain EXVA. Additionally, students who have cheated previously are more inclined to think that they will need to cheat again. This finding is consistent with Smyth e Davis (2003) and suggests that the habit of cheating can turn into a vicious circle in which its practitioners need to be detected and the punishments in the norms and codes of conduct need to be applied for the cheating cycle to be interrupted.

The results obtained entail reflections and implications for accounting education and, more broadly, for business students' education. First, teachers may want to identify students with a more obvious cynical personality, in order to adopt educational policies that restrict their cheating behavior. Secondly, no difference was observed in the level of cynicism of students when separated by gender, work, and academic background. Therefore, the students showed to have similar traits of cynicism. If the teacher gets to know the level of cynicism of the students in his/her class, (s)he can take measures according to elements of the student behavior that are related to this personality. Thirdly, evidence was obtained that students who have already cheated in their professional lives more strongly expect that they will need to cheat in the future. In other words, cheating generates cheating. Course coordinators and teachers need to be aware of this fact, in order to develop policies and rules that limit the students' cheating behavior. Fourth, the results can also assist in the selection of future professionals in the business area. Considering the positive relationship between cynicism and cheating, human resources managers may want to measure the level of cynical personality in order to reduce the likelihood of cheating behavior of their employees.

As a limitation of the research, it is highlighted that there are few studies on cynicism in the accounting area, especially in the Brazilian context. Therefore, the discussion of the results was restricted to the international literature. A second aspect is the proxy CIN1, for which strong evidence of internal consistency of its items was not obtained, as Cronbach's alpha did not reach an acceptable level. The result of Cronbach's alpha obtained by this investigation is similar to Ameen et al. (1996a). Therefore, cynicism may not be measured properly when considering the questions of Sierles et al. (1980). Therefore, caution is recommended in the interpretation of the results involving the proxy CIN1, especially those in which they differ from the proxy CIN2. In addition, evidence of fragility in the form of cynicism measurement through the questions of Sierles et al. (1980) can raise deeper questions on the results of previous research that used them.

References

- Adorno, T. W., Frenkel-Crunswik, E., Levinson, D. J., & Sanford, R. N. (1950). *The authoritarian personality*. The American Jewish Committee. Retrieved from <http://www.ajcarchives.org/main.php?GroupingId=6490>
- Ameen, E. C., Guffey, D. M., & McMillan, J. J. (1996a). Accounting students' perceptions of questionable academic practices and factors affecting their propensity to cheat. *Accounting Education*, 5(3), pp. 191–205. Doi: <https://doi.org/10.1080/09639289600000020>
- Ameen, E. C., Guffey, D. M., & McMillan, J. J. (1996b). Gender differences in determining the ethical sensitivity of future accounting professionals. *Journal of Business Ethics*, 15(5), pp. 591–597. Doi: <https://doi.org/10.1007/BF00381934>
- Andersson, L. M., & Bateman, T. S. (1997). Cynicism in the workplace: some causes and effects. *Journal of Organizational Behavior*, 18(5), pp. 449–469. Doi: [https://doi.org/10.1002/\(SICI\)1099-1379\(199709\)18:5<449::AID-JOB808>3.0.CO;2-O](https://doi.org/10.1002/(SICI)1099-1379(199709)18:5<449::AID-JOB808>3.0.CO;2-O)
- Avelino, B. C., Lima, G. A. S. F. de, Cunha, J. V. A. da, & Colauto, R. D. (2017). The Influence of narcissism in the Professional environment: Aspects related to dishonesty. *Advances in Scientific and Applied Accounting*, 10(3), pp. 334–356. Retrieved from <http://asaa.anpcont.org.br/index.php/asaa/article/view/351/195>
- Bernardi, R. A., & Adamaitis, K. L. (2006). Data contamination by social desirability response bias: an international study of students' cheating behavior. In *Research on Professional Responsibility and Ethics in Accounting* (Vol. 11, pp. 149–175). Doi: [https://doi.org/10.1016/S1574-0765\(06\)11008-0](https://doi.org/10.1016/S1574-0765(06)11008-0)
- Bernardi, R. A., & LaCross, C. C. (2004). Data Contamination By Social Desirability Response Bias In Research On Students' Cheating Behavior. *Journal of College Teaching & Learning*, 1(8), pp. 13–26. Recuperado de <https://clutejournals.com/index.php/TLC/article/view/1973>
- Bowen, R. M., Rajgopal, S., & Venkatachalam, M. (2014). Is Warren Buffett's commentary on accounting, governance, and investing practices reflected in the investment decisions and subsequent influence of Berkshire Hathaway? *Accounting Review*, 89(5), pp. 1609–1644. Doi: <https://doi.org/10.2308/accr-50797>
- CFC. (2019). Profissionais Ativos nos Conselhos Regionais de Contabilidade agrupados por Gênero. Retrieved from <https://cfc.org.br/registro/quantos-somos-2/>
- Chatterjee, S., & Simonoff, J. S. (2012). *Handbook of Regression Analysis*. Doi: <https://doi.org/10.1002/9781118532843>
- Chiaburu, D. S., Peng, A. C., Oh, I.-S., Banks, G. C., & Lomeli, L. C. (2013). Antecedents and consequences of employee organizational cynicism: A meta-analysis. *Journal of Vocational Behavior*, 83(2), pp. 181–197. Doi: <https://doi.org/10.1016/j.jvb.2013.03.007>
- Cook, W. W., & Medley, D. M. (1954). Proposed hostility and Pharisic-virtue scales for the MMPI. *Journal of Applied Psychology*, 38(6), pp. 414–418. Doi: <https://doi.org/10.1037/h0060667>
- Costa, P. T., Zonderman, A. B., McCrae, R. R., & Williams, R. B. (1986). Cynicism and paranoid alienation in the Cook and Medley HO Scale. *Psychosomatic Medicine*, 48(3), pp. 283–285. Doi: <https://doi.org/10.1097/00006842-198603000-00014>
- D'Souza, M. F., & Lima, G. A. S. F. (2019). Um olhar sobre os traços do dark triad e os valores culturais de estudantes de contabilidade. *Advances in Scientific and Applied Accounting*, 12(1), pp. 161–183. Doi: <https://doi.org/10.14392/ASAA.2019120109>

- Fávero, L. P., & Belfiore, P. (2017). *Manual de análise de dados: Estatística e modelagem multivariada com Excel, SPSS e Stata*. Rio de Janeiro: Elsevier. Retrieved from <https://repositorio.usp.br/item/002858123> (book, not available online)
- Greenglass, E. R., & Julkunen, J. (1989). Construct validity and sex differences in Cook-Medley hostility. *Personality and Individual Differences*, 10(2), pp. 209–218. Doi: [https://doi.org/10.1016/0191-8869\(89\)90206-7](https://doi.org/10.1016/0191-8869(89)90206-7)
- Hair Jr., J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate data analysis* (7th ed.). Pearson Prentice Hall. Livro
- Horney, K. (1992). *Our inner conflicts*. New York: W W Norton & Company Inc. Recuperado de <https://wwnorton.com/books/9780393309409> (Livro, link para a compra do livro)
- James, M. S. L., Miles, A. K., & Mullins, T. (2011). The interactive effects of spirituality and trait cynicism on citizenship and counterproductive work behaviors. *Journal of Management, Spirituality & Religion*, 8(2), pp. 165–182. Doi: <https://doi.org/10.1080/14766086.2011.581814>
- Kanter, D. L., & Mirvis, P. H. (1989). *The cynical Americans: living and working in an era of discontent and disillusion*. San Francisco: Jossey-Bass. Retrieved from <https://www.wiley.com/en-us/The+Cynical+Americans%3A+Living+and+Working+in+an+Age+of+Discontent+and+Disillusion-p-9781555421502> (Livro, link para a compra do livro)
- Klein, A., & Speckbacher, G. (2019). Does Using Accounting Data in Performance Evaluations Spoil Team Creativity? The Role of Leadership Behavior. *The Accounting Review*, accr-52602. Doi: <https://doi.org/10.2308/accr-52602>
- Kökalan, Ö. (2019). The effect of organizational cynicism on job satisfaction. *Management Research Review*, 42(5), pp. 625–640. Doi: <https://doi.org/10.1108/MRR-02-2018-0090>
- Lawson, R. A. (2004). Business students' willingness to engage in academic dishonesty and whistleblowing. In *Research on Professional Responsibility and Ethics in Accounting* (Vol. 9, pp. 1–19). Doi: [https://doi.org/10.1016/S1574-0765\(04\)09001-6](https://doi.org/10.1016/S1574-0765(04)09001-6)
- Lawson, R. A., Blocher, E. J., Brewer, P. C., Morris, J. T., Stocks, K. D., Sorensen, J. E., Wouters, M. J. F. (2015). Thoughts on competency integration in accounting education. *Issues in Accounting Education*, 30(3), pp. 149–171. Doi: <https://doi.org/10.2308/iace-51021>
- Leung, K., Ip, O. K. M., & Leung, K.-K. (2010). Social Cynicism and Job Satisfaction: A Longitudinal Analysis. *Applied Psychology*, 59(2), pp. 318–338. Doi: <https://doi.org/10.1111/j.1464-0597.2009.00392.x>
- Majors, T. M. (2016). The Interaction of Communicating Measurement Uncertainty and the Dark Triad on Managers' Reporting Decisions. *The Accounting Review*, 91(3), pp. 973–992. Doi: <https://doi.org/10.2308/accr-51276>
- McCabe, D. L. (2005). Cheating among college and university students: A North American perspective. *International Journal of Educational Integrity*, 1(1), pp. 1–11. Doi: <https://doi.org/10.21913/IJEI.v1i1.14>
- McCabe, D. L., & Trevino, L. K. (1995). Cheating Among Business Students: a Challenge for Business Leaders and Educators. *Journal of Management Education*, 19(2), pp. 205–218. Doi: <https://doi.org/10.1177/105256299501900205>
- Menard, S. (2002). *Applied logistic regression analysis* (2nd ed.). Thousand Oaks: SAGE Publications, Inc. Retrieved from <https://us.sagepub.com/en-us/nam/applied-logistic-regression-analysis/book11277> (Livro)

- Salter, S. B., Guffey, D. M., & McMillan, J. J. (2001). Truth, consequences and culture: A comparative examination of cheating and attitudes about cheating among U.S. and U.K. Students. *Journal of Business Ethics*, 31(1), pp. 37–50. Doi: <https://doi.org/10.1023/A:1010785106667>
- Serrano Archimi, C., Reynaud, E., Yasin, H. M., & Bhatti, Z. A. (2018). How Perceived Corporate Social Responsibility Affects Employee Cynicism: The Mediating Role of Organizational Trust. *Journal of Business Ethics*, 151(4), pp. 907–921. Doi: <https://doi.org/10.1007/s10551-018-3882-6>
- Sierles, F., Hendrickx, I., & Circle, S. (1980). Cheating in medical school. *Journal of Medical Education*, 55(2), pp. 124–125. Doi: https://journals.lww.com/academicmedicine/Abstract/1980/02000/Cheating_in_medical_school.6.aspx
- Smyth, M. L., & Davis, J. R. (2003). An Examination of Student Cheating in the Two-Year College. *Community College Review*, 31(1), pp. 17–32. Doi: <https://doi.org/10.1177/009155210303100102>
- Stavrova, O., & Ehlebracht, D. (2018). Education as an Antidote to Cynicism. *Social Psychological and Personality Science*, 9(1), pp. 59–69. Doi: <https://doi.org/10.1177/1948550617699255>
- Thaler, R. H. (2019). *Misbehaving*. Rio de Janeiro: Intrínseca. Retrieved from <https://www.intrinseca.com.br/resultado-de-busca/?livro=Misbehaving> (livro)
- Tsay, C.-J., Shu, L. L., & Bazerman, M. H. (2011). Naïveté and Cynicism in Negotiations and Other Competitive Contexts. *The Academy of Management Annals*, 5(1), pp. 495–518. Doi: <https://doi.org/10.1080/19416520.2011.587283>
- Turner, J. H., & Valentine, S. R. (2001). Cynicism as a Fundamental Dimension of Moral Decision-Making: A Scale Development. *Journal of Business Ethics*, 34(2), pp. 123–136. Recuperado de <http://www.jstor.org/stable/25074627>
- Viljoen, M., & Claassen, N. (2017). Cynicism as subscale of burnout. *Work*, 56(4), pp. 499–503. Doi: <https://doi.org/10.3233/WOR-172518>
- Welch, B. L. (1947). The generalization of students' problem when several different population variances are involved. *Biometrika*, 34(1/2), pp. 28–35. Recuperado de <http://www.jstor.org/stable/2332510>
- Wheeler, P. (2001). The Myers-Briggs Type Indicator and Applications to Accounting Education and Research. *Issues in Accounting Education*, 16(1), pp. 125–150. Doi: <https://doi.org/10.2308/iace.2001.16.1.125>
- Wheeler, P., Jessup, C., & Martinez, M. (2002). The Keirsey Temperament Sorter: Investigating the impact of personality traits in accounting. In *Advances in Accounting Behavioral Research*, pp. 247–277. Doi: [https://doi.org/10.1016/S1474-7979\(02\)05044-5](https://doi.org/10.1016/S1474-7979(02)05044-5)
- Why, Y. P., & Johnston, D. W. (2008). Cynicism, anger and cardiovascular reactivity during anger recall and human–computer interaction. *International Journal of Psychophysiology*, 68(3), pp. 219–227. Doi: <https://doi.org/10.1016/j.ijpsycho.2008.02.001>

End Notes

- ⁱ The graduate program in behavioral economics known as the *Behavioral Economics Roundtable* was originally called “*Russell Sage Foundation Summer Institutes in Behavioral Economics*”, informally known as the “Russell Sage holiday colony”. For further details, see Chapter 19 by Thaler (2019).
- ⁱⁱ The meaning of the term cheating is treated comprehensively in this study. That is, cheating can be any act in which injustice is perceptible as a function of treatments and applications of different rules or behaviors to achieve a certain end, with consequences in the criminal sphere or not.
- ⁱⁱⁱ The Brazilian accounting journals consulted are available at: <http://anpcont.org.br/periodicos-de-contabilidade/> (Accessed on 03/19/2020). The keywords entered in the journal search engines were as follows: “cinismo”, “cínico” and “cínica”. Furthermore, the following words were inserted in English: “*cynicism*”, “*cynic*” and “*cynical*”. Specifically in the journal *Custos e @gronegóciosOnline*, there is no search engine. Therefore, the issues of this journal were consulted manually. The *Revista Contabilidade & Controladoria (RC&C)* at UFPR was unavailable on the day of the search. Therefore, a new attempt took place on 03/28/2020, when RC&C was available and the search revealed no studies on cynicism.
- ^{iv} The following international accounting journals were consulted: *The Accounting Review*, *Contemporary Accounting Research*, *Journal of Accounting Research*, *Journal of Accounting and Economics*, *European Accounting Review*, *Accounting Horizons*, *Journal of Accounting Education*, *Accounting Education*, *Issues in Accounting Education*, *Behavioral Accounting Research*, *Journal of Forensic Accounting Research*, *Journal of Information Systems*, *Journal of International Accounting Research*, *Journal of Management Accounting*, *Accounting in Europe*, *The Journal of the American Taxation Association*. The keywords entered in the journal search engines were: “cynicism”, “cynic” and “cynical”.
- ^v In English: “*People who say they have never cheated are hypocrites*” (C1); “*Everybody steals, cheats or lies at least once in his lifetime*” (C2); and “*People have to cheat in this ‘dog eat dog’ world*” (C3). (Sierles et al., 1980).
- ^{vi} In English: “*Most people inwardly dislike putting themselves out to help other people*” (C4); “*Most people will use somewhat unfair means to gain profit or an advantage rather than lose it*” (C5); and “*I think most people would lie in order to get ahead*” (C6). (Greenglass & Julkunen, 1989).