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Impact of Selected Personality Traits on Accountants' Attitudes Toward Accounts Manipulation: Evidence From Slovenia

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Abstract

In the study, three selected personality traits were tested for their impact on Slovenian accountants' attitudes toward accounts manipulation behavior. The main objective was to investigate if personality plays a role in how Slovenian accountants think and feel about this ethically problematic business practice. Responses from 310 chief accounting officers of Slovenian medium- and large-size companies were gathered via electronic survey, and correlational and regression analyses were performed to investigate relationships between selected personality traits and participants responses to the scenario, thus depicting accounts manipulation behavior in violation of generally accepted accounting principles. Only two of the observed personality traits (Machiavellianism and agreeableness) were found to be statistically significantly related to accountants' attitudes, while the third one (locus of control) shows no such relationship. For both, Machiavellianism and agreeableness, the direction of the relationship with accountants' attitudes is the same. The higher the levels of accountants' Machiavellianism and agreeableness, the more positive their attitude toward observed accounts manipulation behavior.

Keywords: accounts manipulation, earnings management, personality

Introduction

Evidence shows that, when accounting information is manipulated in order to mislead users as to an organization's real financial position and performance, cosequences can be negative for a great many stakeholders. Enron, WorldCom, Tyko, Tesco, Kmart, Xerox, Merck, Parmalat, Refco, Satyam, Agrokor, etc., are among some of the most notorious cases in the last two decades or so in which billions were lost by shareholders, creditors, and employees due to the bad management hidden behind fraudulent financial reporting. And these are just the cases that became public. It is believed that there are many more cases of accounts manipulation that remain undiscovered.[1]

[1] In their study of CFOs, Dichev et al. (2016) found that it is a widespread belief among CFOs that companies frequently and intentionally distort their earnings and that the magnitude of misrepresentation is large (on average some 10% of reported earnings).

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The widespread nature of accounts manipulation, accompanied with its severe negative consequences for individuals, organizations, the economy, and society as a whole has led many to recognize it as inherently a dangerous, unethical, and economically and socially detrimental business practice, necessary of serious professional and regulatory attention and control (e.g., Levitt, 1998). One of the more, we dare to say, positive side effects of this widely recognized importance of accounts manipulation as being a (potentially) dangerous economic/business and social phenomenon is also the increased interest of the researchers, evident in recent years. Consequently, in the last 20 years or so, accounts manipulation has grown to become one of the most studied research subjects in accounting.

The literature review shows that researchers approach accounts manipulation from many different perspectives, one of them being also the so-called perceptual/attitudinal studies, focused primarily on learning how people think and feel about accounts manipulation, rather than on the behavior itself. Although such research is quite scarce in volume, compared with other more prevailing approaches, it has already produced many interesting findings. For example, it has been found that, on average, attitudes of managers and accountants toward accounts manipulation are quite lenient, suggesting that the practice is probably much more widespread than previously thought (e.g., Bruns & Merchant, 1990). Also it has been found that individuals' attitudes toward accounts manipulation are quite case and context sensitive. For example, on average, manipulations with operational means and manipulations for the benefit of an organization in regard to employment are judged as significantly more acceptable than manipulations with accounting means and manipulations for the personal benefit of engaged individuals (e.g., Merchant & Rockness, 1994; Fischer & Rosenzweig, 1995; Giacomino et al., 2006; Belski, 2008).

While all these findings are interesting and important, we believe much is still to be learned and many questions yet to be asked about peoples' attitudes toward accounts manipulation behavior. Particularly, we believe little has been done to date to adress the role of various personal determinants, such as personality traits, values, self-concept, stage of moral development, etc., in the formation of one's attitudes toward the behaviors in question. Because, without such a person-centered approach, it is impossible to fully explain between-person differences in accounts manipulation attitudes and behavior; thus, it is the aim of our study to close this research gap by investigating the impact of selected personality traits on accounts manipulation attitudes of accountants, employed as chief accounting officers in Slovenian big- and medium-size companies.

Literature Review

Researchers typically approach the subject of accounts manipulation from many different perspectives. Methods of detection, operational characteristics, organizational and environmental determinants, etc., are among the most popular lines of accounts manipulation research that can be found in the literature. Common to them is their predominantly methodological/operational, business/economic, and organizational focus on the subject (e.g., how it is done, how it can be detected, busines incentives, organizational and environmental constraints, etc.), while its characteristics as (also) a personal decision-making and behavior phenomenon remain mostly out of their interest. Consequently, such approaches can also be characterized a-personals, in a sense, in that no personal variables, either as determinants of accounts manipulation behavior, or as the subjects of interest on their own (e.g., accounts manipulation attitudes, beliefs, etc.) are addressed in these studies. Accounts manipulation is observed almost exclusively as a methodological and organizational (as opposed to personal) phenomenon.

The majority of the research we reviewed is of this a-personal nature. Nevertheless, exemptions can also be found, thus enabling insights into the subject from a more personal perspective. Perspectives such as, for example, accounts manipulation as an object of individuals thinking and feeling, or, for example, accounts manipulation as a personal behavior, contingent on one's various personal (cognitive and affective) and situational determinants. Although such, let's call them person(ologic)al, approaches to accounts manipulation research are not as frequently utilized by researchers as the aforementioned a-personal perspectives, many interesting findings to date have been reported. For example, it has been found that CEO and CFO narcissism is statistically significantly related to his/her accounts manipulation behavior. The greater the CEO narcissism, the higher the probability for organizational accounts being purposfully manipulated (e.g., Olsen et al., 2013; Ham et al., 2017; Majors, 2015). Similar "positive" relationships with accounts manipulation attitudes and behavior have also been found for some other psychological traits, such as Machiavelliansim (e.g., Murphy, 2012; Shafer & Wang, 2011; Majors, 2015), psychopathy (e.g., Majors, 2015), individuals ability for self-deception (e.g., Agarwalla et al., 2017), masculinity (e.g., Jia et al., 2014), overconfidence (e.g., Hsieh et al., 2014; Presley & Abbott, 2013; Schrand & Zechman, 2012), propensity to moraly disengage (e.g., Reckers & Samuelson, 2016), relativistic ethical orientation (e.g., Kung & Li Huang, 2013; Dayanandan et al., 2012; Elias, 2002), and external locus of control (Reckers & Samuelson, 2016; Chan & Leung, 2006).

Although at first glance, looking only at the amount of published studies and reported findings, it might seem that research on personal determinants of accounts manipulation is plentiful and extensive, a closer look reveals that, to date, only a small number of personal(ity) variables, potentially important for individuals' manipulative attitudes and behavior, have been investigated extensively enough to allow meaningful and reliable conclusions.[2] Consequently, one can safely conclude that research on the subject is rather scarce than plentiful and that, at the moment, we are quite far from any comprehensive account on the role of person(al) in individuals' accounts manipulation decision-making and behavior. For such an account to become at least a remote possibility, much more empirical work, focused on the impact of various personal(ity) variables on peoples' accounts manipulation related thinking, feeling, and behavior, is needed. This study is our attempt to contribute to such a collective and ongoing effort.

Empirical Model

Because every personality trait characterizes an individual from a different perspective, it is normal that those traits' impact on individual behaviors differs with respect to the type of behavior observed. It can be expected, for example, that personality traits of agreeableness will be especially important for one's behavior in social interactions, while for curiosity, for example, it can be expected to be important in contexts, related to one's oportunity to acquire new knowledge, information, experience, etc. It is quite normal, therefore, that, for the explanation of certain specific behaviors, as in our case is attitude of accountants toward accounts manipulation, all personality traits are not of equal importance.

Because the main purpose of accounting rules is to ensure true and fair financial reporting to the users of accounting information, any violation of these rules, no matter the purpose or method, is not just a violation of accountants' professional norms but is also a violation of multiple universal ethical/moral principles, such as not to lie, not to deceive, always to be honest and truthful, etc. Consequently, the dilemma (decision), whether to engage in accounts manipulation or not, is never just a business dilemma (decision) but always and necessarily also an ethical/moral one. Therefore, it can be expected that personality traits, related to individuals' ethical decision-making, might be of particular importance for one's attitudes toward accounts manipulation behavior.

We began our selection of personality traits with those from the five factor (or big five) model (Goldberg, 1990, 1992; Costa in McCrae, 1989 in 1992), which, at the moment and despite some critics (e.g., Block, 1995; Boyle, 2008), is the most widely accepted core traits model of human personality (e.g., John & Srivastava, 1999). Literature reviews on the subject of psychological origins of individuals' moral behavior reveals (especially) two personality traits from the big five, identified among researchers as potentially important for individuals' ethics and morality. The first is dispositional conscientiousness and the second is dispositional agreeableness (e.g., Walker, 1999; Walker & Frimer, 2007; Colquitt et al., 2006; de Raad et al., 1992; Hofstee et al., 1992; McFerran et al., 2010). Empirical evidence for both suggests strong negative relationships with personality traits from the so-called dark triad (Machiavellianism, narcissism, and psychopathy) used to describe individuals with pronounced manipulative, ruthless, unscrupulous, egoistic, and malevolent interpersonal styles (Furnham et al., 2013; Jakobwitz in Egan, 2006) and can therefore be qualified as a direct opposite of what is conventionally regarded as ethical/moral personality. Because requirements on diligence, dutifullness, orderliness, accuracy, reliability, punctuality, self-discipline, etc., which are all core ingredients of dispositional conscientiousness, are conventionally high in the accounting profession, it is difficult to expect differences between accountants on the conscientiousness trait to be substantial. Consequently, from the big five personality traits, only agreeableness was selected to be tested in our model. Our hypothesis on the relationship between agreeableness and accountants' attitudes toward accounts manipulation is as follows:

> H1: Accountants higher on agreeableness trait tend to have a more negative attitude toward accounts manipulation behavior, while accountants lower on the agreeableness trait tend to have more positive attitude toward such a behavior.

Critics of the big five model of personality traits stress that five factors of the model do not capture the whole spectrum of core personality traits of normal personality (e.g., Block, 1995; Boyle, 2008) and that the model does not properly address many additional traits important for individuals' behavior. Among them is also dispositional Machiavellianism, which is described as manipulative, cynical, egoistic, self-centered, etc., individuals (Christie in Geis, 1970), which all are prototicpical characteristics of what is traditionally regarded as immoral personality traits. Together, with narcissism and psychopathy, dispositional Machiavellianism composes a triad of personality traits in personality psychology known as the dark triad. Empirical research generally confirms the dark triad as an important determinant of individual ethical decision-making and behavior (e.g.,

[2] See Taggar and Parkinson (2007) for a review of research with personality used to address accounting issues.

Harrison et al., 2016; O'Boyle et al., 2012), and individuals high on Machiavellianism traits are frequently found to have more agreeable attitudes toward various unethical or ethically problematic behaviors such as deceiving, lying, cheating, etc. (Flynn et al., 1987; Fletcher, 1990; McLeod & Genereux, 2008; Schlenker, 2008). In Cohen et al. (2014)'s model of individual's moral character, dispositional Machiavellianism occupies one of the highest places among all the observed deteminants. Consequently, dispositional Machiavellianism was selected as the second personality trait to be tested in our model. Our hypothesis on the relationship between agreeableness and accountants' attitudes toward accounts manipulation is as follows:

> H2: Accountants higher in the Machiavellianism trait tend to have more positive attitude toward accounts manipulation behavior, while accountants lower in the Machiavellianism trait tend to have more negative attitude toward such a behavior.

Locus of control is the third and final personality trait selected to be tested in our model of accountants' attitudes toward accounts manipulation behavior. It was first introduced by Rotter (1966) as a personality trait, describing individuals' orientation with respect to the where belief resides in taking responsibility for what is happening to them in their life. Those who believe what is happening to them is the consequence of chance, luck, or powerful others, are described as having external locus of control orientation, while those who believe what is happening to them is the result of their own actions/decisions/behavior are described as having internal locus of control orientation. Locus of control therefore reflects individuals' belief about the relationship between his/her behavior on one side and its consequences on the other.

Trevino (1986) was the first to theoreticaly link locus of control with ethical decision-making (Detert et al., 2008). In her person–situation interactionist model, she hypothesized that because individuals with internal locus of control orientation see the conection between their behavior and its outcomes more strongly than those with external locus of control orientation, they should also be more likely to take personal responsibility for their behavior and its outcomes. Because assuming personal responsibility is hypothesized to activate one's moral norms (Schwartz, 1977), individuals with more internal locus of control should be less capable to morally disengage and consequently less likely to make unethical decisions.

Empirical evidence with respect to the hypothesized relationships between locus of control orientation and ethical decision-making is mixed. While quite a few studies can be found, empirically confirming statistically significant relationships in business/organizational contexts (e.g., Trevino & Youngblood, 1990; Reiss & Mitra, 1998; Maqsud, 1980; Hegarty & Sims, 1978), quite a few can also be found to report no significant relationships of that kind (e.g., Detert et al., 2008). Nevertheless, an important consistency can be observed among findings that do report significant relationships. Namely, they are virtually all in the same, theoretically hypothesized direction. It is this consistency, along with the three studies, empirically connecting locus of control specifically to the subject of accounts manipulation (Cote et al. 2013, Reckers & Samuelson, 2016; Chan & Leung, 2006), which was decisive for us to include as the third personality trait to be tested in our model. Our hypothesis on the relationship between locus of control and accountants attitudes toward accounts manipulation is as follows:

> H3: Accountants with more internal locus of control orientation tend to have a more negative attitude toward accounts manipulation behavior, while accountants with more external locus of control orientation tend to have a more positive attitude toward it.

Methodology

Instruments

The personality trait of Machiavellianism was measured with the abbreviated 13 items version of original the Christie and Geis (1970) MACH IV instrument. Responses for all items were measured on a 5-point Likert scale. Individual accountant's overall Machiavellianism score was computed as the average of his/her reponses on all 13 items of the instrument. Reverse-keyed items were appropriately recoded. Cronbach's alfa of the instrument was 0.68, which is just a bit below the value of 0.70, recomended by Nunnally (1978) as the acceptable minimum for measuring psychological constructs. Because the Machiavellianism construct (as measured with MACH IV) is known for its internal reliability problems, and because Cronbach's alfas below 0.70 are frequenty reported,[3] we find the internal reliability of our instrument satisfactory.

Locus of control was measured with Valecha and Ostrom's (1974) abbreviated 11-items version of the original Rotter I-E instrument (1966). The instrument is of the forced-choice format, in which every item consists of two response options, one indicating more internal locus of control orientation and

[3] For example, Barbuto and Moss (2006) examined 13 studies utilizing MACH IV instrument. Average reported Cronbach's alfa in these studies was 0.67.

the other more external. All "external choices" in the survey were coded as 0, while all "internal choices" as 1. Individual accountant's overall locus of control score was computed as the sum of his/her responses on all 11 items of the instrument. Crombach's alfa of the instrument was satisfactory at 0.70.

Agreeableness was measured with nine items from the big five inventory instrument of Benet-Martinez and John (1998). Responses for all items were measured on a 5-point Likert scale. Individual accountant's overall agreeableness score was computed as the average of his/her reponses on all nine items of the instrument. Reverse-keyed items were appropriately recoded. Cronbach's alfa of the instrument was satisfactory at 0.73.

The scenario (vignettes) method was choosen as the most appropriate method to measure accountants' attitudes. According to Alexander and Becker (1978:103), the main advantage of the scenario method over alternative methods for studying human behavior and thinking is that: "*The use of vignettes helps to standardize the social stimulus across respondents and at the same time makes the decision-making situation more real*." Although the multiple scenario method is generally preferred over the single scenario method,[4] only one scenario was used in our study. Decisive for such a decision was the concern that if multiple scenarios were utilized, we will not be able to secure a response rate high enough for our findings to be reliable.[5] The concern was not so much with the length of the survey as it was with the possibility that, due to the high professional sensitivity of the subject, extensive asking on it might cause discomfort among potencial participants, which is strong enough for many of them to reject their participation. Furthermore, with the rise of such discomfort, reliability of the answers acquired might also be affected. Consequently, the decision was made only to utilize one scenario in our study.

Main elements of the scenario were adapted from Vinciguerra and O'Reilly–Allen (2004), depicting a situation in which accounts were manipulated for the company to retain bank financing. Because many companies in our sample were not production companies, manipulation of the amount of warranty reserves was replaced with manipulation of the amount of bad debt reserves. Scenarios with accounts being manipulated in order to facilitate bank loan approval or to meet bank loan covenants can frequently be found in accounting ethics research (e.g., Odar et al., 2017; O'Leary, 2012), and researchers frequently list bank loans approval and bank loans covenants as one of the most common reasons/incentives for accounts manipulation.

Since at the time of the survey, the worst memories of the latest global financial and economic crisis remained alive and strong, the whole story was put into the context of such a crisis in order to add to its actuality and so to evoke stronger emotional activation of survey participants. The scenario was pretested on a small group of accounting practitioners, who all agreed that it is realistic, easy to understand, and contains violations of accounting rules. Complete text of the scenario is presented in the appendix.

A univariate measure of semantic differential format with response options ranging from -2 ("*very unethical and immoral behavior*") at one extreem to +2 ("*in given circumstance ethically and morally justified and acceptable behavior*") at the other was utilized to measure participants' attitudes toward accounts manipulation behavior. Measure anchors were adapted from previous business ethics research. It is common in business ethics research for attitudes toward ethicaly sensitive/problematic behaviors to be measured this way. According to Hyman and Steiner (1996), the anchors of ethical/unethical, acceptable/unacceptable, appropriate/inappropriate, etc. are the most frequently used anchors for ethical attitudes/perceptions to be measured in business ethics research.

Sampling and Data Collection

Accountants employed as chief accounting officers were chosen as the population of interest in the study. Participants were selected from the Bisnode[6] Gvin list of all Slovenian businesses with at least 40 employees. Businesses using external business accounting services were excluded from the survey as it was assessed that, because of the dual role of such external business accounting services providers (accountants and entrepreneurs at the same time), results would not be comparable with those of the internally employed accountants. A threshold of 40 employees or more was selected for practical reasons because, below that threshold, the number of businesses employing external accountants rather than internal raises sharply. It should therefore be

[4] The main disadvantage of using single instead of multiple scenarios is that the researcher is only able to observe responses in a single decision-making context. Consequently, findings cannot be generalized across different contexts, and the impact of context on the phenomenon under investigation cannot be analyzed.

[5] Babbie (1986) suggested that, for social research, a response rate of at least 50% is acceptable, 60% is good, and 70% is very good. High response rates are especially important in ethics research because the risk of attitudes of those who refused to participate being significantly different from attitudes of those who did participate is due to the sensitivity of the subject, in this line of research above-average high (Randall & Gibson, 1990).

[6] Leading commercial provider of financial and related information about business entities in Slovenia.

noted, as a limitation of this study, that accountants of small and micro businesses and providers of external business accounting services were not included.

Sampling method was such that every third company from the list was selected into the initial sample, starting with the first on the list.[7] In total, 467 companies were selected for the initial sample. When the initial sample was formed, chief accounting officers of all the companies in the sample were contacted by phone. In total, 467 chief accounting officers were contacted.[8] The purpose of the study was explained and permission asked to send a link to an anonymous electronic survey. Because seven refused to participate, the survey was sent only to the remaining 460 accountants; 310 completed surveys were returned, which represents a satisfactory and much above-average 67.4% response rate; 276 respondents were women (89%) and 34 men (11%). Additional descriptive statistics of the sample are presented in Table 1. With the exception of seven participants who requested a paper form questionnaire, all data for the study were collected via electronic survey, utilizing LimeSurvey software.

Table 1. Descriptive Statistics of the Sample

Age	
less than 30 years	9 (2.9%)
from 31 to 40 years	88 (28.4%)
from 41 to 50 years	110 (35.5%)
from 51 to 60 years	98 (31.6%)
over 60 years	5 (1.6%)
Education	
High school	39 (12.6%)
Professional higher education degree	74 (23.9%)
University degree	171 (55.1%)
Master's degree and PhD	26 (8.4%)
Company auditing status	
Mandatory audit	236 (76.1%)
Audit not mandatory	74 (23.8%)
Company size	
less than 100 employees	137 (44.2%)
from 101 to 250 employees	105 (33.9%)
from 251 to 500 employees	35 (11.3%)
over 500 employees	33 (10.6%)

Source: Author

Method(s) of Analysis

Data were analyzed in two steps. First, correlational analysis was utilized to test each of the hypothesized relationships separately. Because the dependent variable is of an ordinal-type, Spearman rank correlation, which is a nonparametric test, was applied. Second, ordered probit regression was utilized to test, whether previously found individual relationships are independent of one another (i.e., remain the same when all variables of interest are tested jointly in the same model). Strong empirical evidence exists for the existance of statistically significant relationships between some of the personality traits in the study. For example, it is well documented that those high in Machiavellianism traits tend to have more external locus of control orientation, while those low in Machiavellianism traits are more internal (e.g., Mudrack, 1990). Also, locus of control has been found to be connected to one's personality trait of neuroticism (i.e., emotional stability), with those high on neuroticism tending to have more external locus of control orientation and those low on neuroticism more internal (e.g., Morrison, 1997; Judge et al., 1998). A statistically significant negative relationship between Machiavellianism and agreeableness is also regularly reported (e.g., Stead & Fekken, 2014; Jakobwitz & Egan, 2006; Paulhus & Williams, 2002; Lee & Ashton, 2005) as well as statistically significant intercorrelations between some of the "big five" factors of personality (e.g., Van der Linden et al., 2010).

Although the majority of this relationships qualifies as small to modest (correlation coefficients in range from 0.1 to 0.3), they are nevertheless an indicator, that statistically significant overlaps exist between some of the observed personality constructs. Consequently it is possible that some of the effects, found with univariate analysis, are not completely independent of one another, which means that, for some of the observed personality variables, they are partially or completely attributable to their overlap/relationship with other observed variables. If this is the case, such effects will lose their statistical significance (or part of it) when overlapping variables are modeled together. Also, the cumulative effect of observed independent variables can only be observed when modeled together.

[7] Businesses were listed in alphabetic order.

[8] One for each company.

Results

Descriptive Statistics of Dependent and Explanatory Variables

Table 2. Freqency Distribution of Accountant's Attitudes Toward Accounts Manipulation

Response options (semantic differential)	-2	-1	0	1	2
Frequency of answers (*n* = 310)	26 (8.4%)	55 (17.7%)	135 (43.5%)	65 (21.0%)	29 (9.4%)

Source: Author

Table 3. Means and Standard Deviations of Explanatory Variables

	Mean	Standard deviation	Min.	Max.
Dispositional Machiavellianism (range 1 to 5)	2.56	0.43	1.23	3.85
Dispositional agreeableness (range 1 to 5)	3.97	0.44	2.44	5.00
Locus of control (range 0 to 11)*	7.52	2.37	0	11

* Higher score depicts more internal locus of control orientation.

Source: Author

Correlational Analysis

As we can see, only two of three selected personality traits show a statistically significant relationship with accountants' attitudes toward accounts manipulation. While the relationship of dispositional Machiavellianism with accountants' attitudes is positive as hypothesized, the relationship of dispositional agreeableness is also positive, which is contrary to what was hypothesized. A moderate negative relationship of dispositional Machiavelism with dispositional agreeableness and locus of control can also be observed. Such a relationship is regularly reported in personality studies and can therefore be regarded as normal. None of the respondents' demographic variables nor company size and auditing status show a statistically significant relationship with the dependent variable.

Multiple Regression Analysis

Tables 5 to 7 report on the results of multiple regression analysis. An ordered probit model was selected as the most appropriate because the dependent variable is of an ordinal type.

Table 4. Spearman's RHO Correlation Matrix

		1	2	3	4	5	6	7	8	9
1	Attitude toward accounts manipulation	1.000								
2	Machiavellianism	**0.124***	1.000							
3	Agreeableness	**0.137***	-0.284**	1.000						
4	Locus of control	-0.043	-0.336**	0.096	1.000					
5	Sex • women = 0 • men = 1	-0.038	0.016	-0.070	0.113*	1.000				
6	Age	0.086	-0.008	-0.030	-0.049	-0.077	1.000			
7	Education	-0.090	-0.052	0.000	0.105	0.207**	-0.306**	1.000		
8	Company size	-0.053	-0.020	0.019	0.118*	0.062	-0.008	0.199**	1.000	
9	Company auditing status • nonmandatory = 0 • mandatory = 1	0.018	-0.082	0.068	0.061	0.051	-0.024	0.201**	0.431**	1.000

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Source: Author

Table 5. Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	df	Significance
Intercept Only	882.663			
Final	863.060	19.603	8	0.012

Source: Author

Table 6. Parameter Estimates

	Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Dispositional Machiavellianism	0.034	0.012	8.182	1	**0.004**	0.011	0.058
Dispositional agreeableness	0.053	0.016	11.118	1	**0.001**	0.022	0.084
Locus of control	0.010	0.027	0.143	1	0.705	-0.043	0.064
Sex	-0.073	0.197	0.138	1	0.710	-0.458	0.312
Age	0.083	0.071	1.365	1	0.243	-0.056	0.222
Education	-0.063	0.081	0.602	1	0.438	-0.222	0.096
Company size	-0.068	0.067	1.022	1	0.312	-0.200	0.064
Company auditing status	0.141	0.155	0.827	1	0.363	-0.163	0.445

Source: Author

Table 7. Test of Parallel Lines

Model	**-2 Log Likelihood**	**Chi-Square**	**df**	**Significance**
Null Hypothesis	863.060			
General	828.454	34.606	24	0.073

Source: Author

As we can see, results of the ordered probit regression are basically the same as the results of correlational analysis. The only two personality traits, statistically significantly related to our dependent variable, are again dispositional Machiavellianism and dispositional agreeableness. Directions of the relationship for both are positive, too. The model as a whole is statistically significant at 0.012 (Nagelkerke pseudo R-square 0.065). The test of parallel lines is statistically insignificant ($p > 0.05$), therefore confirming that assumption of proportional odds is not violated.

Discussion

Based on the results of the study, only one of the three stated hypotheses on the relationship between personality traits and accountants' attitudes toward accounts manipulation can be confirmed, i.e., hypothesis H2, addressing the impact of dispositional Machiavellianism. This finding adds to the growing number of studies, confirming dispositional Machiavellianism's status as one of the personality traits most frequently found to have an impact on individuals' ethical decision-making. Nevertheless, it is difficult to overlook that, although statistically significant, effect size of the found relationship is rather small, thus indicating that dispositional Machiavellianism might not be a particularly important determinant of individuals' ethical decision-making.[9] It is important to note, however, that, although this might be perfectly true, results of the study do not warrant such a conclusion. Only one scenario was tested in our study, and, consequently, generalizing its results beyond the accounts manipulation context and method utilized in the scenario would be wrong, notably because it has been previously found that individuals' attitudes toward accounts manipulation behavior are quite context and method sensitive. It is though possible that results of the study could be quite different, if a different scenario, utilizing different accounts manipulation method contex, was used.[10]

Particularly, pro-organizational context of accounts manipulation utilized in our scenario is something that could have an important impact on the strength of accounts manipulation attitudes' relationship with dispositional Machiavellianism. Because Machiavellian individuals are frequently described as egoistic and self-centered, it can be expected or at least convincingly speculated that, in more pro-self contexts of accounts manipulation, Machiavellianism traits could prove to have a stronger impact on individuals' attitudes toward accounts manipulation than in pro-organizational contexts

[9] We were able to find only one other study, investigating the impact of Machiavellianism on accountant's attitudes toward accounts manipulation. Findings of the Shafer and Wang's (2011) study are similar to ours, confirming that higher Machiavellianism is related to a more positive attitude toward accounts manipulation, but that this relationship is rather weak.

[10] For example, it has been found in previous studies that accountants' attitudes toward accounts manipulation for the predominantly personal benefit of key actors (i.e., pro-self accounts manipulation) are much more negative than the same attitudes toward accounts manipulation, when it is done for the benefit of the organization of employment (i.e., pro-organizational accounts manipulation). Also, it has been found that individuals' attitudes are much more negative, when accounts manipulation is done by violation of accounting rules than when it is done by operational means. It is possible that such case sensitivity of individuals' attitudes toward accounts manipulation could also have an impact on the strength and direction of its relationship to observed personality traits.

such as the one in our scenario. Consequently, findings of our study cannot be generalized beyond the specific context and method utilized in our scenario; accordingly, the hypotheses can only be confirmed or rejected limited to the same specific scenario accounts manipulation context and method.

Although results for dispositional agreeableness do not confirm our hypothesis that higher agreeableness is related to more negative attitudes toward accounts manipulation and vice versa, they are nevertheless interesting. Results show that a statistically significant relationship between agreeableness and accountants' attitudes toward account manipulation does exist but is in the opposite direction than hypothesized. Higher levels of dispositional agreeableness are related to more positive attitudes toward accounts manipulation behavior and vice versa. Consequently, hypothesis H1 cannot be confirmed and is therefore rejected.

We are not aware of any previous studies investigating the relationship between dispositional agreeableness and accounts manipulation, but, with respect to ethical decision-making in general, agreeableness has frequently been found to be related to more ethical rather than ethically problematic or dubious choices. Consequently, there must be something special in our case because accountants with more agreeable personalities also hold more lenient attitudes toward accounts manipulation, and this connection is even stronger than the connection to Machiavellianism.

Again, we believe that a convincing explanation for such a behavior can be found in the pro-organizational nature of an accounts manipulation scenario utilized in our study, and also in the broader context of the widespread financial crisis the whole story was placed into. Because agreable individuals are frequently described as those high on care, empathy, cooperation, etc., it can be speculated that pro-organizational context of accounts manipulation as well as the fact that a company is under preassure and in distress promotes an empatic response, leading one to become more agreeable toward the behavior that in different circumstance he or she would reject strongly.

It has been found previously that an individual's agreeableness is connected to one's willingness to break rules in order to help someone. This behavior has been labeled as so-called prosocial rule-breaking. It is possible that pro-social rule-breaking is also the explanation, at least in part, for more lenient accounts manipulation attitudes of agreeable accountants, observed in our study. If this is true, it can be expected that, if a more "pro-self" accounts manipulation scenario was utilized, results could be quite different and maybe even in line with what was hypothesized.

Locus of control is third and final personality trait tested in our study for its impact on accountants' attitudes toward account manipulation. No statistically significant relationship between accountants' locus of control orientation and their attitude toward accounts manipulation has been found. Consequently, hypothesis H3, hypothesizing more negative attitudes for accountants with more internal locus of control orientation and positive attitudes for accountants with more external locus of control orientation cannot be confirmed and is rejected. Again, it is important to note that such a rejection is limited only to the context and method of accounts manipulation, observed in our study. With different contexts and methods of accounts manipulation, results could also be different, as previously explained for Machiavellianism and agreeablenes.

Finally, the results of our study are not only interesting from a tested hypotheses perspective but also on their own. They show a somewhat worrysome picture of, on average, quite lenient attitudes of Slovenian accountants toward this professionally clearly unethical practice. It is evident from frequency distribution of accountants' attitudes that only 26.1% of participating accountants exibits more negative that positive attitude toward such a behavior (semantic differential response options -2 and -1), while all the others exibit either neutral or more positive attitude (semantic defferential response options 0, +1, and +2). Ideally, from a profession's point of view, the satisfactory level of acceptability should be 0. Consequently, professionally, such results cannot be evaluated differently but poorly because they show quite a low level of professional moral/ethical awareness and motivation of Slovenian business accountants. For their defense, results are not that different from the results of similar studies in other countries (e.g., Merchant, 1990; Merchant & Rockness, 1994). Still, this is something regulators and institutions of professions should observe more closely.

Limitations of the Study and Recommendations for Future Research

The biggest limitation of our study is that only one scenario was utilized to test the impact of selected personality traits on accountants' attitudes toward accounts manipulation. As previously explained, the multiple scenario method is generally preferred over the single scenario, but it was the concern with the response rate that was decisive for our decision to utilize only one scenario. Consequently, findings of the study cannot be generalized beyond the accounts manipulation context and method, utilized in the scenario, because they could be significantly different if other scenarios were used. It is our recomendation for future research to test the same

hypotheses as our own with a variety of additional scenarios, utilizing different context and methods of accounts manipulation. This way, gradually a more complete account on the impact of Machiavellianism, agreeableness, and locus of control on accountants' attitudes will emerge, including the role/influence of different accounts manipulation contexts and methods.

Another important limitation of our study is that only three personality traits were tested for their impact on accounts manipulation attitudes. Many other personality traits besides the ones tested exist, which could have an mpact on observed accountants' attitudes. For example, honesty/humility from the HEXACO big six personality traits model, or propensity to the feelings of guilt and shame, etc., are examples of traits that have a potential for being important determinants of individuals' attitudes toward accounts manipulation. Therefore, it is our recomendation for future research to identify additional personality traits that are potentially important for individuals' ethical decision-making and test them for their relationship with accounts manipulation attitudes. Again, this way it can be expected that, gradually, a more comprehensive pricture about the role of personality traits in accounts manipulation attitudes will emerge, assisting future researchers in devising more complex models of individuals' accounts manipulation attitudes and behavior, including models combining the effects of personological as well as situational explanatory variables.

From a methodological perspective, the use of a univariate measure to measure accountants' attitudes is also an important limitation of our study that has to be noted. A multivariate measure would no doubt add to the reliability of results, while different aspects of one's attitude could also be observed, providing deeper insights into individuals' thinking and feelings with relation to accounts manipulation. Use of multivariate multidimensional measures of attitudes such as, for example, the multidimensional ethics scale (MES) of Reidenbach and Robin (1990) is, therefore, another of our recomendations for future research because it could add significantly to the reliability as well as relevancy of it's findings.

References

Agarwalla, S. K., Desai, N., & Tripathy, A. (2017). The impact of self-deception and professional skepticism on perceptions of ethicality. *Advances in Accounting*, *37*, 85-93. https://doi.org/10.1016/j.adiac.2017.04.002

Alexander, C. S., & Becker, H. J. (1978). The use of vignettes in survey research. *Public Opinion Quarterly*, *42*(1), 93-104. https://doi.org/10.1086/268432

Babbie, E. (1986). *The practice of social research* (4th ed.). Belmont, CA: Wadsworth Publishing.

Barbuto Jr, J. E., & Moss, J. A. (2006). Dispositional effects in intra-organizational influence tactics: A meta-analytic review. *Journal of Leadership & Organizational Studies*, *12*(3), 30-48. https://doi.org/10.1177/107179190601200303

Belski, W. H., Beams, J. D., & Brozovsky, J. A. (2008). Ethical judgments in accounting: an examination on the ethics of managed earnings. *Journal of Global Business Issues,* 2 (2), 59 – 68

Benet-Martinez, V., & John, O. P. (1998). Los Cinco Grandes across cultures and ethnic groups: Multitrait-multimethod analyses of the big five in Spanish and English. *Journal of personality and social psychology*, *75*(3), 729. https://doi.org/10.1037/0022-3514.75.3.729

Block, J. (1995). A contrarian view of the five-factor approach to personality description. *Psychological bulletin*, *117*(2), 187. https://doi.org/10.1037/0033-2909.117.2.187

Boyle, G. J. (2008). Critique of the five-factor model of personality. *The SAGE handbook of personality theory and assessment*, *1*, 295-312. https://doi.org/10.4135/9781849200462.n14

Bruns Jr, W. J., & Merchant, K. A. (1990). The dangerous morality of managing earnings. *Strategic Finance*, *72*(2), 22.

Chan, S. Y., & Leung, P. (2006). The effects of accounting students' ethical reasoning and personal factors on their ethical sensitivity. *Managerial Auditing Journal*, *21*(4), 436-457. https://doi.org/10.1108/02686900610661432

Christie, R., & Geis, F. L. (1970). *Studies in Machiavellianism*. New York: Academic Press. https://doi.org/10.1016/C2013-0-10497-7

Cohen, T. R., Panter, A. T., Turan, N., Morse, L., & Kim, Y. (2014). Moral character in the workplace. *Journal of Personality and Social Psychology*, *107*(5), 943. https://doi.org/10.1037/a0037245

Colquitt, J. A., Scott, B. A., Judge, T. A., & Shaw, J. C. (2006). Justice and personality: Using integrative theories to derive moderators of justice effects. *Organizational Behavior and Human Decision Processes*, *100*(1), 110-127. https://doi.org/10.1016/j.obhdp.2005.09.001

Corral, S., & Calvete, E. (2000). Machiavellianism: Dimensionality of the Mach IV and its relation to self-monitoring in a Spanish sample. *The Spanish Journal of Psychology*, *3*, 3-13. https://doi.org/10.1017/S1138741600005497

Costa, P. T., & McCrae, R. R. (1992). *NEO PI-R professional manual*. Odessa, FL: Psychological Assessment Resources.

Cote, J., Latham, C. K., & Sanders, D. (2013). Ethical financial reporting choice: The influence of individual characteristics. In *Advances in Accounting Behavioral Research* (pp.115-148). Emerald Group Publishing Limited. https://doi.org/10.1108/S1475-1488(2013)0000016010

Dayanandan, A., Donker, H., & Lin, K. Y. (2012). Ethical perceptions on earnings management. *International Journal of Behavioural Accounting and Finance*, *3*(3-4), 163-187. https://doi.org/10.1504/IJBAF.2012.052173

De Raad, B., Hendriks, A. A., & Hofstee, W. K. (1992). Towards a refined structure of personality traits. *European Journal of Personality*, *6*(4), 301-319. https://doi.org/10.1002/per.2410060405

Detert, J. R., Treviño, L. K., & Sweitzer, V. L. (2008). Moral disengagement in ethical decision making: A study of antecedents and outcomes. *Journal of Applied Psychology, 93*(2), 374–391. https://doi.org/10.1037/0021-9010.93.2.374

Dichev, I., Graham, J., Harvey, C. R., & Rajgopal, S. (2016). The misrepresentation of earnings. *Financial Analysts Journal*, *72*(1), 22-35. https://doi.org/10.2469/faj.v72.n1.4

Elias, R. Z. (2002). Determinants of earnings management ethics among accountants. *Journal of Business Ethics*, *40*(1), 33-45. https://doi.org/10.1023/A:1019956821253

Fischer, M., & Rosenzweig, K. (1995). Attitudes of students and accounting practitioners concerning the ethical acceptability of earnings management. *Journal of business ethics*, *14*(6), 433-444. https://doi.org/10.1007/BF00872085

Fletcher, C. (1990). The relationships between candidate personality, self-presentation strategies, and interviewer assessments in selection interviews: An empirical study. *Human Relations*, *43*(8), 739-749. https://doi.org/10.1177/001872679004300803

Flynn, S., Reichard, M., & Slane, S. (1987). Cheating as a function of task outcome and Machiavellianism. *The Journal of Psychology*, *121*(5), 423-427. https://doi.org/10.1080/00223980.1987.9915496

Furnham, A., Richards, S. C., & Paulhus, D. L. (2013). The dark triad of personality: A 10 year review. *Social and Personality Psychology Compass*, *7*(3), 199-216. https://doi.org/10.1111/spc3.12018

Giacomino, D. E., Bellovary, J. L., & Akers, M. D. (2006). The ethics of managing short-term earnings: business managers and business students rate earnings management practices– implications for academia. *Journal of College Teaching & Learning (TLC),* 3 (7), 57 – 70.

Goldberg, L. R. (1990). An alternative description of personality: The big-five factor structure. *Journal of Personality and Social Psychology*, *59*(6), 1216. https://doi.org/10.1037/0022-3514.59.6.1216

Goldberg, L. R. (1992). The development of markers for the big-five factor structure. *Psychological Assessment*, *4*(1), 26. https://doi.org/10.1037/1040-3590.4.1.26

Ham, C., Lang, M., Seybert, N., & Wang, S. (2017). CFO narcissism and financial reporting quality. *Journal of Accounting Research*, *55*(5), 1089-1135. https://doi.org/10.1111/1475-679X.12176

Harrison, A., Summers, J., & Mennecke, B. (2016). The effects of the dark triad on unethical behavior. *Journal of Business Ethics*, 1-25. https://doi.org/10.1007/s10551-016-3368-3

Hegarty, W. H., & Sims, H. P. (1978). Some determinants of unethical decision behavior: An experiment. *Journal of Applied Psychology, 63*, 451– 457. https://doi.org/10.1037/0021-9010.63.4.451

Hofstee, W. K., De Raad, B., & Goldberg, L. R. (1992). Integration of the big five and circumplex approaches to trait structure. *Journal of Personality and Social Psychology*, *63*(1), 146. https://doi.org/10.1037/0022-3514.63.1.146

Hsieh, T. S., Bedard, J. C., & Johnstone, K. M. (2014). CEO overconfidence and earnings management during shifting regulatory regimes. *Journal of Business Finance & Accounting*, *41*(9-10), 1243-1268. https://doi.org/10.1111/jbfa.12089

Hyman, M. R., & Steiner, S. D. (1996). The vignette method in business ethics research: Current uses, limitations, and recommendations. *Studies*, *20*(100.0), 74-100.

Jakobwitz, S., & Egan, V. (2006). The dark triad and normal personality traits. *Personality and Individual Differences*, *40*(2), 331-339. https://doi.org/10.1016/j.paid.2005.07.006

Jia, Y., Lent, L. V., & Zeng, Y. (2014). Masculinity, testosterone, and financial misreporting. *Journal of Accounting Research*, *52*(5), 1195-1246. https://doi.org/10.1111/1475-679X.12065

John, O. P., & Srivastava, S. (1999). The big five trait taxonomy: History, measurement, and theoretical perspectives. *Handbook of Personality: Theory and Research*, *2*(1999), 102-138.

Judge, T. A., Locke, E. A., Durham, C. C., & Kluger, A. N. (1998). Dispositional effects on job and life satisfaction: The role of core evaluations. *Journal of Applied Psychology, 83*, 17-34 https://doi.org/10.1037/0021-9010.83.1.17

Kung, F. H., & Li Huang, C. (2013). Auditors' moral philosophies and ethical beliefs. *Management Decision*, *51*(3), 479-500. https://doi.org/10.1108/00251741311309616

Lee, K., & Ashton, M. C. (2005). Psychopathy, Machiavellianism, and narcissism in the five-factor model and the HEXACO model of personality structure. *Personality and Individual differences*, *38*(7), 1571-1582. https://doi.org/10.1016/j.paid.2004.09.016

Levitt Jr, A. (1998). The numbers game. *The CPA Journal*, *68*(12), 14.

Majors, T. M. (2015). The interaction of communicating measurement uncertainty and the dark triad on managers' reporting decisions. *The Accounting Review*, *91*(3), 973-992. https://doi.org/10.2308/accr-51276

Maqsud, M. (1980). Locus of control and stages of moral reasoning. *Psychological Reports, 46*, 1243–1248. https://doi.org/10.2466/pr0.1980.46.3c.1243

McCrae, R. R., & Costa, P. T. (1989). The NEO-PI/NEO-FFI manual supplement. *Odessa, FL: Psychological Assessment Resources. Google Scholar*.

McFerran, B., Aquino, K., & Duffy, M. (2010). How personality and moral identity relate to individuals' ethical ideology. *Business Ethics Quarterly*, *20*(1), 35-56. https://doi.org/10.5840/beq20102014

McLeod, B. A., & Genereux, R. L. (2008). Predicting the acceptability and likelihood of lying: The interaction of personality with type of lie. *Personality and Individual Differences*, *45*(7), 591-596. https://doi.org/10.1016/j.paid.2008.06.015

Merchant, K. A., & Rockness, J. (1994). The ethics of managing earnings: An empirical investigation. *Journal of Accounting and Public Policy*, *13*(1), 79-94. https://doi.org/10.1016/0278-4254(94)90013-2

Morrison, K. A. (1997). Personality correlates of the five-factor model for a sample of business owners/managers: Associations with scores on self-monitoring, Type A behavior, locus of control, and subjective well-being. *Psychological reports*, *80*(1), 255-272. https://doi.org/10.2466/pr0.1997.80.1.255

Mudrack, P. E. (1990). Machiavellianism and locus of control: A meta-analytic review. *The Journal of Social Psychology*, *130*(1), 125-126. https://doi.org/10.1080/00224545.1990.9922944

Murphy, P. R. (2012). Attitude, Machiavellianism and the rationalization of misreporting. *Accounting, Organizations and Society*, *37*(4), 242-259. https://doi.org/10.1016/j.aos.2012.04.002

Nunnally, J. C. (1978). *Psychometric theory* (2rd. Ed.). New York: McGraw-Hill

O'Boyle Jr., E. H., Forsyth, D. R., Banks, G., & McDaniel, M. A. (2012). A meta-analysis of the Dark Triad and work outcomes: A social exchange perspective. *Journal of Applied Psychology, 97*, 557-579. doi: 10.1037/a0025679 https://doi.org/10.1037/a0025679

Odar, M., Jerman, M., Jamnik, A., & Kavčič, S. (2017). Accountants' ethical perceptions from several perspectives: evidence from Slovenia. *Economic Research-Ekonomska Istraživanja*, *30*(1), 1785-1803. https://doi.org/10.1080/1331677X.2017.1392885

O'Leary, C. (2012). Semester-specific ethical instruction for auditing students. *Managerial Auditing Journal*, *27*(6), 598-619. https://doi.org/10.1108/02686901211236418

Olsen, K. J., Dworkis, K. K., & Young, S. M. (2013). CEO narcissism and accounting: A picture of profits. *Journal of Management Accounting Research*, *26*(2), 243-267. https://doi.org/10.2308/jmar-50638

Paulhus, D. L., & Williams, K. M. (2002). The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality*, *36*(6), 556-563. https://doi.org/10.1016/S0092-6566(02)00505-6

Presley, T. J., & Abbott, L. J. (2013). AIA submission: CEO overconfidence and the incidence of financial restatement. *Advances in Accounting*, *29*(1), 74-84. https://doi.org/10.1016/j.adiac.2013.03.007

Randall, D. M., & Gibson, A. M. (1990). Methodology in business ethics research: A review and critical assessment. *Journal of Business Ethics*, *9*(6), 457-471. https://doi.org/10.1007/BF00382838

Reckers, P., & Samuelson, M. (2016). Toward resolving the debate surrounding slippery slope versus licensing behavior: The importance of individual differences in accounting ethical decision making. *Advances in Accounting*, *34*, 1-16. https://doi.org/10.1016/j.adiac.2016.07.003

Reiss, M. C., & Mitra, K. (1998). The effects of individual difference factors on the acceptability of ethical and unethical workplace behaviors. *Journal of Business Ethics, 17*, 1581 – 1593. https://doi.org/10.1023/A:1005742408725

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and applied*, *80*(1), 1. https://doi.org/10.1037/h0092976

Schlenker, B. R. (2008). Integrity and character: Implications of principled and expedient ethical ideologies. *Journal of Social and Clinical Psychology*, *27*(10), 1078-1125. https://doi.org/10.1521/jscp.2008.27.10.1078

Schrand, C. M., & Zechman, S. L. (2012). Executive overconfidence and the slippery slope to financial misreporting. *Journal of Accounting and Economics*, *53*(1-2), 311-329. https://doi.org/10.1016/j.jacceco.2011.09.001

Schwartz, S. H. (1977). Normative influences on altruism. *Advances in experimental social psychology,* 10, 221-279. https://doi.org/10.1016/S0065-2601(08)60358-5

Shafer, W. E., & Wang, Z. (2011). Effects of ethical context and Machiavellianism on attitudes toward earnings management in China. *Managerial Auditing Journal*, *26*(5), 372-392. https://doi.org/10.1108/02686901111129553

Shafer, W. E., Morris, R. E., & Ketchand, A. A. (2001). Effects of personal values on auditors' ethical decisions. *Accounting, Auditing & Accountability Journal*, *14*(3), 254-277. https://doi.org/10.1108/EUM0000000005517

Stead, R., & Fekken, G. C. (2014). Agreeableness at the core of the dark triad of personality. *Individual Differences Research*, *12*.

Taggar, S., & Parkinson, J. (2007). Personality tests in accounting research. *Journal of Human Resource Costing & Accounting*, *11*(2), 122-151. https://doi.org/10.1108/14013380710778776

Trevin˜o, L. K., & Youngblood, S. A. (1990). Bad apples in bad barrels: A causal analysis of ethical decision-making behavior. *Journal of Applied Psychology, 74*, 378 – 385. https://doi.org/10.1037/0021-9010.75.4.378

Trevino, L. K. (1986). Ethical decision making in organizations: A person-situation interactionist model. *Academy of Management Review*, *11*(3), 601-617. https://doi.org/10.5465/amr.1986.4306235

Valecha, G. K., & Ostrom, T. M. (1974). An abbreviated measure of internal-external locus of control. *Journal of Personality Assessment*, *38*(4), 369-376. https://doi.org/10.1080/00223891.1974.10119987

Van der Linden, D., te Nijenhuis, J., & Bakker, A. B. (2010). The general factor of personality: A meta-analysis of Big Five intercorrelations and a criterion-related validity study. *Journal of Research in Personality*, *44*(3), 315-327. https://doi.org/10.1016/j.jrp.2010.03.003

Vinciguerra, B., & O'Reilly-Allen, M. (2004). An examination of factors influencing managers' and auditors' assessments of the appropriateness of an accounting treatment and earnings management intentions. *American Business Review*, *22*(1), 78.

Walker, L. J. (1999). The perceived personality of moral exemplars. *Journal of Moral Education*, *28*(2), 145-162. https://doi.org/10.1080/030572499103188

Walker, L. J., & Frimer, J. A. (2007). Moral personality of brave and caring exemplars. *Journal of Personality and Social Psychology*, *93*(5), 845. https://doi.org/10.1037/0022-3514.93.5.845

Appendix (accounts manipulation scenario)

The following is a short description of a company in a crisis situation and decisions made by some of its key individuals. **Please read the story carefully and evaluate appropriateness or inappropriattenes of individual actions.**

THE STORY: A major production company has a loan arrangement with a bank, which it needs to finance its normal business operations. The current arrangement is slowly coming to an end, and it is the requirement of the bank that a certain minimum year-end profit threshold must be met before the existing contract can be renewed or a new contract negotiated. Because of a widespread crisis, the data show that the company will not be able to attain the required year-end profit, especially because many of its customers are in crisis, too, and are not settling their liabilities as they should. Consequently, at the end of the year, the company should significantly increase its reserves for bad debt, causing additional negative impact on its profit figures. ***Because the bank insists on its requirements, the CEO of the company decides that the only way to retain bank financing is not to recognize reserves for bad debt in full amount but partly to postpone their recognition until after the current year annual report.***

On the scale between both extremes (from -2 on the left to +2 on the right), mark the option closest to your oppinion about the decision of the CEO. Please be as realistic and sincere as possible (imagine how it would be if you were in the same position).

	-2	-1	0 (midpoint)	1	2	
Very unethical and immoral decision	○	○	○	○	○	In given circumstance ethically and morally justified and acceptable decision

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Vpliv izbranih osebnostnih lastnosti na odnos slovenskih računovodij do prikrojevanja računovodskih podatkov in informacij

Izvleček

V raziskavi smo preizkusili vpliv treh izbranih osebnostnih lastnosti na odnos slovenskih računovodij do prikrojevanja računovodskih podatkov in informacij. Glavni namen raziskave je bil ugotoviti, ali ima osebnost kakorkoli pomemben vpliv na to, kako slovenski računovodje zaznavajo to poklicno in tudi sicer etično problematično poslovno prakso. V raziskavi je sodelovalo 310 vodij računovodstva slovenskih srednje velikih in velikih podjetij, katerih odgovori so bili zbrani s pomočjo elektronske ankete. Obstoj morebitnih povezav med osebnostnimi lastnostmi in odnosom do prikrojevanja računovodskih podatkov in informacij smo preverili s korelacijsko in regresijsko analizo. Samo dve od opazovanih osebnostnih lastnosti (makiavelizem in sprejemljivost) sta pokazali statistično značilno povezanost s proučevanim odnosom, medtem ko pri tretji (mesto nadzora) takšne povezanosti nismo ugotovili. Tako za makiavelizem kot tudi sprejemljivost je smer povezave enaka. In sicer sta močnejši makiavelizem in sprejemljivost povezana z bolj pozitivnim (sprejemljivim) odnosom do tovrstnega početja, šibkejši makiavelizem in sprejemljivost pa z bolj negativnim (odklonilnim).

Ključne besede: prikrojevanje računovodskih podatkov in informacij, prirejanje poslovnega izida, osebnost