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# The Role of Personal Values in Forming the Al Ethics of Prospective Accountants



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Abstract: This study aims to discuss how to form AI (Artificial Intelligence) ethical behavior with insight into the personal and organizational values of prospective accountants. This was a quantitative survey method. The sampling technique with a saturated sample was used as the research sample. Partial Least Square (PLS) analysis was conducted on 421 data points using WarpPLS software. The study results show that organizational and personal values significantly positively affect the intention of prospective accountant students to engage in AI ethics. Organizational values have a positive effect on the personal values of prospective accounting students. Intentions had a significant effect on AI ethics. Personal values did not play a role in mediating the impact of organizational values on intentions toward AI ethics. Intention succeeds in mediating the influence of personal values on the intention to engage in AI ethics among prospective accountant students. The findings referred to are very applicable to be implemented in different cultural settings due to the personal and organizational values tend to be implemented in general situation and condition. The findings provide universal outlook that values within organizations have an essential role in enhancing future accountants to be ethical in respect to AI.

**Keywords:** Organizational values; personal values; moral intentions; AI; Artificial Intelligence; AI Ethics Behavior Funding Statement.

#### Introduction

Digital technology brings social, economic, and cultural changes in all areas, including ways of doing business<sup>1</sup>. The accounting profession has also undergone significant changes due to the emergence of new technologies such as AI, data analytics, blockchain and other new technologies (Qasim & Kharbat 2020). AI-based technologies have had a major impact on the overall structure and processes in accounting, massively changing professional work and tasks quickly. Software robots have taken over the routine tasks of professional accountants in stages and provide support in non-routine tasks that require decisions about complex situations leading to higher accounting efficiency (Leitner-Hanetseder et al. 2021).

Management accountants are increasingly harnessing the power of AI to enhance their analytical capabilities, with a particular emphasis on improving company performance. This includes performance measurement, the establishment of effective control systems, and the enhancement of managerial accounting quality (Zhang 2023). Existing scholarly literature underscores the pivotal role of AI in the accounting discipline, primarily through the development and utilization of expert systems. These systems play a critical role in accounting education and training, offering guidance to accountants facing various challenges (Odoh 2018). Furthermore, AI is leveraged for tasks such as auditing through checking and analysis, as well as the application of cognitive technologies (Issa 2016).

Contemporary advancements in technology have enabled the creation of human-like machines capable of serving and even acting as autonomous human counterparts (Nowak 2020). However, these developments are accompanied by significant concerns, including data bias, security, privacy and ethical dilemmas inherent in AI based technology, affecting users, developers, and society at large. One pressing issue resolves around addressing the ethical and moral challenges associated with AI technology (Siau & Wang 2020), with a particular focus on the ethical conduct of humans in the development, utilization and interaction with AI. The ethical dilemmas arising in AI cannot be divorced from the rose played by humans in its ecosystem. Hence, various stakeholders emphasize the importance of AI ethics education. Despite the increasing interest in this field, there remains a shortage of suitable tools to gauge students' attitudes toward AI ethics (Jang & Kim 2022).

In the context of AI development, China's AI governance committee has established regulations to safeguard human and societal rights. In the accounting field, professional associations and regulatory bodies have crafted ethical codes to guide the responsible use of technology within the profession. For instance, the objectivity, and responsibility. While ethical considerations in the implementation and use of AI are acknowledged

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by accounting professionals, the realm of AI ethics in academia remains relatively underexplored (Zhang 2023). Recently there has been a lot of misuse of AI-based voice technology for crime by disguising as the voice of someone demanding the transfer of some money (Livni 2019), apart from that the problem of fake news is separate. The existence of AI places individuals, companies and communities at increased risk to human rights such as privacy, freedom of association, freedom of speech, non-discrimination, the right to work and access to public services (Siau & Wang 2020). As a result of technological developments that make machines smarter, we must balance the concept that people must have a moral obligation to these intelligent machines. Machine ethics deals with the moral behavior of artificial moral agents (Siau & Wang 2020). AI ethics emerged because of concerns about the impact of AI. This is because there are many cases of losses that occur due to misuse of technology, such as (psychometric voter manipulation 1,2 facial recognition surveillance, and mass data collection without consent) as well as the result of technological design flaws (bias in cases of recidivism, loan rejection, and medical misdiagnosis). Digital ethics is part of the broader field of digital ethics, which addresses concerns raised by the development and spread of digital technologies such as AI, big data and blockchain technology. (Kazim & Koshiyama 2021)

The values instilled at a young age by parents and teachers help children practice good behavior. Virtue ethics is part of normative ethics, which studies what makes actions right or wrong. In the context of AI, AI ethics determine the moral obligations of AI and its creators. AI ethics is a subset of advanced technology ethics focusing on robots and other artificial intelligence. AI ethics is divided into two, namely robot ethics and machine ethics. Robot ethics deals with the behavior of humans when they design, build, use and interact with AI agents, and the impact that robots have on humanity and society. AI ethics addresses ethical issues related to AI, including ethical issues that arise when designing and developing AI, such as human bias in data, data privacy and transparency, and ethical issues caused by AI, such as unemployment and wealth distribution.

Attitude is a consistent psychological disposition to support or not support a particular entity. On the other hand, preference refers to the comparative evaluation between entities. However, attitudes and preferences are used interchangeably in many studies with similar meanings. Past research has been conducted to ascertain user attitudes and preferences toward AI ethics. Al Burach et al. (2018) measured user preferences for data collection and recommendation algorithms regarding privacy. The results show that privacy concerns decrease with age, and individuals with higher computer self-efficacy have more prominent privacy concerns. In addition, Shin (2020) examines how people evaluate personalized AI systems. The results show that users perceive an algorithm as fairer, transparent, reliable, and useful. Meanwhile, Grgić-Hlača et al. (2020) analyzed people's attitudes toward justice using a data set and found significant associations between demographic features and attitudes toward justice. While these studies measure and analyze a person's ethical attitude toward an AI system, they have limitations because

they use tools developed for other purposes adaptable to AI ethical situations. (Jang et al. 2022)

Ethical behavior and education are essential for modern society, and the business world and accounting professions are no exception. The credibility of the accounting profession is threatened if there are irregularities in the ethical behavior of accountants (Kerr & Smith 1995). Professional accounting communities face daily scandals because of unethical behavior and illegal practices. The skills to behave ethically as future accountants are key for universities to educate and integrate character values into their students (Bairaktarova & Woodcock 2017). The information technology revolution has changed all aspects of life, including the accounting profession (Al-Htaybat et al. 2018). Information technology, on the one hand, provides undoubted benefits, but on the other hand, it creates risks and ethical issues. This problem is caused by misuse, which leads to financial losses (Leonard et al. 2004).

Concerns about the involvement of the accounting profession in various global scandals around the world have recently stimulated research aimed at improving the ethical behavior of professionals. Ethical behavior itself is defined as what is morally accepted as "good" and "right" as opposed to "bad" or "wrong" in acting (Sukserm & Takahashi 2012). The essence of the debate about unethical behavior is whether global scandals and the resulting losses can be avoided if accountants engage in ethical behavior (Onumah et al. 2022). Various violations of the ethics of the accounting profession, such as inflating the financial statements of *PT Tiga Pilar Sejahtera Food Tbk (AISA)*, *Indosat Oredoo*, Baker Hughes, and *PT Garuda Indonesia*, illustrate a series of unethical behaviors in Indonesia.

Ethics is a professional requirement because it involves public trust in the quality of and professional services. Prospective accountants should be able to maintain their attitudes and actions starting from university, so they are molded into individuals with virtuous characters or good accountant personality ethics. The emergence of negative behavior in students can be caused by 1) lack of supervision from parents, 2) promiscuity on campus, and 3) lack of ethical education received.

Rapid technological development has affected the accounting profession. The emergence of big data, artificial intelligence, and cloud computing is a tool that makes the work of accountants easier. The urgency of this study is in line with the use of information technology in the accounting profession. Therefore, it is essential to pay attention to AI ethics in the accounting profession. It was also triggered by various ethical violations by the accounting profession; therefore, the need for AI ethics is a topic that needs attention. Based on (Tweedie et al. 2013) this finding, teaching ethics should accommodate the ethical traditions and practices that vary by culture. Educational programs should also be able to adapt to local culture and individual character values. Integrating organizational values into the ethical development of prospective accountants is essential. Thus, the formation of AI ethics should be based on organizational values. The problems of the

study are as follows: "How is the formation of AI ethics related to organizational values and personal values with an insight in prospective accountants?."

The specific objectives of this study are as follows:

- *RQ1.* Mapping out the factors influencing the ethical behavior of prospective accountants;
- *RQ2.* Analyzing the effect of organizational values on personal values
- *RQ3.* Analyzing the effect of digital literacy on ethical intentions and behavior related to AI prospective accountants;
- *RQ4.* Analyzing the role of personal values in mediating the effect of organizational values on prospective accountants' ethics applied to AI;
- *RQ5.* Analyzing the intention's role in mediating personal values' influence on prospective accountants' ethics.

This study has specific specifications related to integrating organizational values at *higher education student*, values with an insight in developing AI ethical behavior for prospective accountants.

#### II. Literature Review

#### II.1. The Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB) posits that an individual's intention to act serves as a pivotal predictor of their future behavior (Azjen 1991). In this study, we employ TPB as a framework to elucidate the influence of intentions on ethical AI behavior. Behavioral intentions are shaped by a combination of internal and external factors (Marmat 2021). Within this research, personal value represents the internal factors influencing behavioral intention, while organizational values encapsulate the external factors. TPB has gained extensive traction as a theoretical foundation in numerous ethical studies, particularly within the realm of ethical conduct among accountants. In our investigation, we adopt the TPB framework to examine the ethical behavioral intentions of aspiring accountants. Azjen (1991) contends that intention encapsulates the factors driving behavior, with a stronger intention to engage in a behavior correlating with a greater likelihood of performance.

#### **II.2 AI Ethics**

The use of blockchain technology, business data analytics, and artificial intelligence in accounting is growing rapidly. Adopting AI in business activities has also affected accounting and auditing activities. Audit offices are starting to test and implement audit process automation through technology, including the possible use of AI. In the current technological era, AI is used in repeated audit processes to test internal controls, such as

inventory counting (Qasim & Kharbat 2020). As the use of AI has grown, so has interest in the ethics of AI worldwide.

Al ethics raises essential issues such as fairness, data bias, discrimination, privacy, and others (Choi et al. 2022). Transparency refers to the ability of an AI system to explain its technical procedures. Suppose an AI system has a significant influence on a decision. In that case, an explanation of the AI decision-making process must be available, meaning that the system should be designed so that reasoning can be explained and humans can interpret the output. Often when collecting data with AI systems have undesirable historical biases, need to be completed, and have better governance mechanisms. Maintaining this kind of bias leads to prejudice and discrimination against certain groups. The system should be designed in such a way regardless of age, gender, ability, or particular characteristics. Another ethical issue is fairness and equity, i.e., developers of AI systems should check unfair bias, discrimination, and social stigma. Mechanisms must be in place to avoid, remedy, and reverse outcome discrimination caused by the use of AI.

## **III. Hypothesis Development**

According to Posner (2010), values can be seen from how these values are manifested in opinions, attitudes, preferences, desires, and fears. Values can be personal, professional, organizational, or social. Although they are interrelated, the influence of these values is different (Posner 2010). Organizational and personal values are organizational strengths in decision-making (Shafer et al. 2001). Organizational values affect personal values because organizational members play a role in shaping organizational values (Trevino 1986). Furthermore, organizational values also guide members in choosing between conflicting options and perspectives. In the context of accounting students, when do students have strong relationships with institutions (in this case, universities)? Students tend to follow the institution's standards and values, align them with university values (Jurše & Mulej 2011) and empirically prove that students with a solid ethical climate are more likely to be involved in unethical behavior. This shows that values, morals, and institutional identity, in this case, the values set by the university, are the determining factors for a person to behave ethically (Tomlin et al. 2021).

H1: *Organizational value influences AI ethics.* 

H2: Organizational value influences the intention to AI ethics.

Values are the most abstract part of social cognition and reflect the underlying characteristics of a person behaving and behaving (Homer & Kahle 1988; Rogers et al. 1992). Many experts argue that behavior is the result of values and attitudes. Williams (1968) stated that the function of personal values is a preference criterion or standard. The outcome of a person's chosen behavior stems from concrete motivations in a particular

situation that are partly determined by prior beliefs and personal values (Fritzsche & Oz 2007a).

H3: Personal value influences intention.

The theory of Planned Behavior states that a person's actions originate from their intention to act; therefore, the intention to behave is an essential measure and becomes a predictor of certain behaviors in the future (Ajzen 1991). Value is a type of social cognition that helps people adapt to their environment. Many experts state that behavior is the result of values and attitudes. According to Homer and Kahle (1988) and Fritzsche and Oz (2007), values provide a basis for the development of individual attitudes that lead to certain decisions in behavior. Someone will act based on personal values, which become standard preferences that conceptualize cognitive and affective aspects into assessment criteria, preferences, and choices (Fritzsche & Oz 2007).

H4: Intention to engage in AI ethics influences AI ethics.

Organizational values guide members of an organization in making choices among various alternative actions and points of view that may conflict with each other (Akaak & Lund 1994). Thus, organizational values have a significant impact on personal values (Badovick & Beatty 1987). Based on Allport (1964) opinions, value is a belief that makes a person act based on his choice. Based on his statement, values occur in a psychological area called beliefs. According to psychologists, beliefs are a higher psychological realm than desires, motives, attitudes, desires, or needs. Therefore, right or wrong, good, or bad decisions are in that area and result from a series of psychological processes that direct a person to actions and actions that follow the values he chooses (Wibowo 2017).

H5: Organizational values influence the intention to engage in AI ethics through personal values.

Values are socially and personally shared concepts of good, right, and desirable. Beliefs about personal and socially preferred behavior are a person's first step toward ethical behavior. Based on the theory of planned behavior, a person, before behaving, begins with a desire or intention to behave. Thus, personal values encourage someone to engage in AI ethics, which affects AI ethics.

H6: Personal values influence AI ethics through the intention to achieve AI ethics.

## IV. Methodology

The research reported in this article was quantitative in nature. The primary data used in the research were collected by distributing questionnaires compiled based on the

indicators of the variables. Questionnaires were distributed offline and online (*Google form*). The research respondents were accounting students. This is related to the focus of the accounting profession, so this study uses accounting students as prospective accountants. The study population included all accounting students from all batches. The sampling technique was a saturated sample, in which all populations were used as research respondents.

The study had four variables: organizational value, personal values, AI ethical behavior, and intentions. AI ethics are moral standards regarding the right actions in digitalization conditions: AI ethics behavior measurement by adopting research (Jang et al. 2022). The dependent variables in this study were organizational and personal values. Personal values, in this case, refer to conservation values defined as guidelines for behavior that include character, artistic, and cultural values, and values of natural resources and the environment. Organizational values consist of compiling instruments based on indicators of inspirational, humanist, caring, innovative, sportsmanship, creative, honesty, and fairness values. The study intends to carry out certain activities in this context in order to carry out AI ethics. The instruments used to measure this variable were adopted from previous research (Jang et al. 2022).

The data analysis technique used in this study uses a structural equation model with *Warp-PLS* software. The consideration of using A structural analysis model was used to explain the relationship and interdependence of the research variables. This model was developed as an alternative for situations in which the theoretical basis for model design could be more robust or yet to be found. Some indicators do not meet the reflective measurement model; therefore, they are formative measurement models. *Warp-PLS* is a powerful analytical method used to analyze hypotheses.

#### V. Results

The respondents were accounting students at *Universitas Negeri Semarang*, as presented in Table 1.

| Category | Total | Percentage |  |
|----------|-------|------------|--|
| Gender:  |       |            |  |
| Male     | 100   | 23.75%     |  |
| Female   | 320   | 76.01%     |  |
| Unknown  | 1     | 0.24%      |  |
| Ages:    |       |            |  |
| 18       | 8     | 1.90%      |  |
| 19       | 54    | 12.83%     |  |
| 20       | 226   | 53.68%     |  |
| 21       | 78    | 18.53%     |  |
| 22       | 48    | 11.40%     |  |

| 23         | 4   | 0.95%  |
|------------|-----|--------|
| 26         | 1   | 0.24%  |
| Unknown    | 2   | 0.48%  |
|            |     |        |
| Class      |     |        |
| G 2        | 288 | 68,4%  |
| Semester 3 | 133 | 31,6%  |
| Semester 5 |     | 31,070 |

*Table 1: Descriptions of the respondents. Source: processed data (2022).* 

Table 1 illustrates that the proportion of female students was higher than that of male students (76.01%). The students were divided into seven age groups: 18, 19, 20, 21, 22, 23, and 26 years. The results of the descriptive data processing showed that the most common age was 20 years (53.68%).

|                         |           | Mini-     | Maxi-     |           |                |
|-------------------------|-----------|-----------|-----------|-----------|----------------|
|                         | N         | mum       | mum       | Mean      | Std. Deviation |
|                         | Statistic | Statistic | Statistic | Statistic | Statistic      |
| Organizational<br>Value | 421       | 7         | 20        | 15.85     | 2.775          |
| Personal Value          | 421       | 65        | 120       | 99.88     | 10.985         |
| Intention               | 421       | 5         | 25        | 16.02     | 4.447          |
| Behavior                | 421       | 5         | 25        | 16.05     | 4.423          |
| Valid N (listwise)      | 421       |           |           |           |                |

Table 2: Descriptive statistics of the variables. Source: processed data (2022).

The results of the processing of descriptive statistics show that based on the tabulation results, the intention variable has an average of 16.02, which is included in the medium category. The behavior variable had an average of 16.05, which is included in the medium category. The results of the personal value descriptive statistics have an average of 99.88 in the high category, and organizational values have an average of 15.85 in the medium category.

| No. | Codes  | <b>Loading Factors</b> |
|-----|--------|------------------------|
| 1.  | OV1    | 0.864                  |
| 2.  | OV2    | 0.877                  |
| 3.  | OV3    | 0.858                  |
| 4.  | OV4    | 0.864                  |
| 10. | 0.940  | 0.940                  |
| 11. | 0.910  | 0.910                  |
| 12. | 0.941  | 0.941                  |
| 13. | 0.943  | 0.943                  |
| 14. | 0.984  | 0.984                  |
| 15. | 0.983  | 0.983                  |
| 16. | 0.972  | 0.972                  |
| 17. | 0.953  | 0.953                  |
| 18. | 0.954  | 0.954                  |
| 19. | 0.865  | 0.865                  |
| 20. | 0.946  | 0.946                  |
| 21. | 0.911  | 0.911                  |
| 22. | 0.970  | 0.970                  |
| 23. | 0.970  | 0.970                  |
| 24. | 0.968  | 0.968                  |
| 25. | 0.935  | 0.935                  |
| 26. | 0.936  | 0.936                  |
| 27. | 0.931  | 0.931                  |
| 28. | 0. 923 | 0. 923                 |
| 29. | 0.878  | 0.878                  |
| 30. | 0.762  | 0.762                  |
| 31. | 0.961  | 0.961                  |
| 32. | 0.969  | 0.969                  |
| 33. | 0.905  | 0.905                  |
| 34. | 0.750  | 0.750                  |
| 35. | 0.728  | 0.728                  |
| 36. | 0.745  | 0.745                  |
| 37. | 0.741  | 0.741                  |
| 38. | 0.739  | 0.739                  |

Table 3: Factor loading.

## VI. Hypothesis Test

The data processing technique used in this study uses a structural equation model with the help of Warp PLS software, because it can explain the relationship and interdependence of the research variables. Before testing the hypothesis, a series of measurements of the estimation model was carried out, including convergent and discriminant validity. Convergent validity test using *Cronbach's Alpha* and Composite reliability scores.

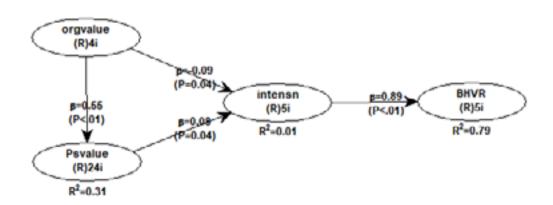


Figure 1: Path analysis of the test results. Notes: organizational value; Psvalue = Personal value; intensn = intention; BHVR = behavior.

| No. | Criteria                                     | <b>Test Results</b>    | Role of the Conclusion thumb                              |
|-----|--|------------------------|---|
| 1   | Average path coefficient (APC)               | 0.403; <i>P</i> <0.001 | P<0.05  |
| 2   | Average R-squared (ARS)                      | 0.368; <i>P</i> <0.001 | <i>P</i> <0.05  |
| 3   | Average adjusted R-squared (AARS)            | 0.366, <i>P</i> <0.001 | <i>P</i> <0.05  |
| 4   | Average block VIF (AVIF)                     | 1.170                  | acceptable if <= acceptable 5, ideally <= 3.3             |
| 5   | Average full collinearity <i>VIF</i> (AFVIF) | 3.069                  | acceptable if <= acceptable 5, ideally <= 3.3             |
| 6   | Tenenhaus GoF (GoF)                          | 0.449                  | small >= 0.1, me- large<br>dium >= 0.25,<br>large >= 0.36 |
| 7   | R-squared contribution ratio (RSCR)          | 1.000                  | acceptable if >= ideal<br>0.9, ideally = 1                |

Table 4: Model Fit and Quality Indices.

| Variables | $R^2$ | CR (Composite reliability coefficients) | Cronbach's<br>Alpha | AVE (Average<br>variances ex-<br>tracted) | Full collin-<br>earity VIFs |
|-----------|-------|---|---------------------|---|-----------------------------|
| Orgvalu   |       | 0.900                                   | 0.851               | 0.692                                     | 1.372                       |
| Psvalue   | 0.305 | 0.939                                   | 0.931               | 0.392                                     | 1.367                       |
| Intensn   | 0.009 | 0.862                                   | 0.800               | 0.556                                     | 4.773                       |
| BHVR      | 0.791 | 0.858                                   | 0.793               | 0.547                                     | 4.765                       |

Table 5: Latent Coefficients of the variables. Notes: orgvalue = Organizational Value; Psvalue = Personal Value; intensn = intention; BHVR = behavior.

| Hypotheses              |         | $\beta$ and $p$ value       | Results           |  |
|-------------------------|---------|-----------------------------|-------------------|--|
| H1: orgvalue            | Psvalue | β: 0.552, p<0.001           | H1: supported     |  |
| H2: orgvalue            | intensn | $\beta$ : 0.087, p: 0.035   | H2: supported     |  |
| H3: Psvalue             | intensn | <i>β</i> : 0.082, p :0.045  | H3: supported     |  |
| H4: intensn             | BHVR    | <i>β</i> : 0.889, p: <0.001 | H4: supported     |  |
| H5: orgvalue<br>intensn | Psvalue | <i>β</i> : 0.045, p: 0.093  | H5: not supported |  |
| H6: Psvalue<br>BHVR     | intensn | β: 0.073, p 0.016           | H6: supported     |  |

Table 6: Hypotheses Test Results.

#### VII. Direct Effects

The results of the direct effects tests are listed in Table 6. The H1, H2, H3, and H4 tests showed that the path coefficient values (direct effect) were supported. As shown in Table 5, the impact of orgvalue $\rightarrow$ Psvalue (H1), orgvalue $\rightarrow$ intensity (H2), Psvalue $\rightarrow$ intensive (H3), and intensity $\rightarrow$ BHVR (H4) is significant, with beta ( $\beta$ ) values of 0.552, 0.087, 0.082, 0.889, and significance at p<0.001, p=0.035, p=0.045, and p<0.001, respectively.

## **VIII. Indirect Effects**

In this study, the indirect effect examined the role of personal values in mediating the influence of organizational values on the intention of AI ethics. The study also analyzed the indirect effect of Psvalue on behavior through intention in H6. The test results in Table 5 show that the indirect effect of orgvalue $\rightarrow$  Psvalue $\rightarrow$  intense (H5) is not supported by  $\beta$ =0.045, p =0.093. The indirect effect of Psvalue $\rightarrow$ intense $\rightarrow$ BHVR (H6) was significant, with a value of  $\beta$ =0.073, p 0.016. Thus, H5 is not supported and H6 is supported. Personal value was not successful in mediating the effect of organizational value on intention to

engage in AI ethics. Intention succeeds in mediating the influence of personal values on AI ethics.

#### **IIX. Discussion**

Based on the results of statistical testing, there is empirical evidence that organizational values affect personal values. According to the social cognitive theory developed by (Bandura 2005), the research makes an essential contribution by emphasizing individual moral concepts rooted in organizational values and how individual perspectives are developed in organizations or other social contexts. Social cognitive theory states that behavior is a function of the individual, stimuli received, and interactions between individuals and organizations (Al Halbusi 2022). Organizational values are indeed different from, but related to, individual, cultural, and societal values (Bourne et al. 2019). Thus, the values adopted in the organization play an important role in representing its intention to operate, especially in encouraging certain behaviors of its organizational members. In contrast to the results of Akaak & Lund (1994) the study, which stated that they could not provide empirical evidence of the relationship between organizational and personal value, the study provided empirical evidence of the effect of the organization on personal value.

The empirical results show that organizational and personal values influence the intention to engage in AI ethics. Organizational value comes from the vision and mission statement of the organization, incorporated into rules, policies, and practices to uphold the integrity of organizational members (Suar & Khuntia 2010). According to the existing literature, organizational and personal values influence ethical decision making. Organizational values guide members of an organization to make ethical choices (Akaak & Lund 1994). This research is in line with Mubako et al. (2021), which proves that someone with lower personal values tends to act unethically.

The results show that personal values cannot mediate the effect of organizational values on intention to engage in AI ethics. This shows that the values built by the institution (conservation values) affected the values of individual students. The meaning of organizational values applied at *Universitas Negeri Semarang* are conservation values that refer to perspectives and behavioral attitudes oriented towards the preservation, maintenance, care, preservation, and development of natural resources and socio-cultural values. *Universitas Negeri Semarang*, in implementing the threefold missions of higher education (*Tridarma Perguruan Negeri*) adheres to organizational values (conservation values). The university's commitment to implementing these organizational values will foster conservation values in students, which include inspirational, humanist, caring, innovative, creative, sportsmanship, honest, and fair values. It follows the Cognitive Social Theory, which states that a person's attitude and behavior are influenced by the person within and the environment. Organizational values, in this case university values, influence

the development of students' values or are in the position of AI ethics. Conservation values embedded in students can influence their responses in dealing with social and environmental issues to generate motives related to ethical behavior. Conservation values may focus more on developing natural conservation areas in campus life that have not been touched on digitization. This results in a lack of value and wisdom in the use of digital technology.

#### Conclusion

This study empirically proves the effect of conservation values on the AI ethical behavior of prospective accountants. Organizational values can effectively manage AI ethics behavior to encourage and generate ethics for accountants. Rapid technological development has affected the accounting profession. This research incorporates the university's conservation values into the variable of organizational values. The conservation value addressed in this study encompass inspirational, humanist, caring, innovative, sportsmanship, creative, honesty and justice values. These pillars align with universally recognized organizational cultural values, consistent with Kolberg's (1971) assertion that moral reasoning is in accord with ethical principles across diverse culture context (Snarey 1985).

Society holds accountants to high standards, as their profession demands both strong intellectual capabilities and unwavering moral integrity. Accountants working in the business sector often grapple with significant ethical challenges, especially in an environment where management frequently seeks new strategies for competitive advantage and sustainability. Implications of this research on practitioners, accountants are encouraged to be aware of improvements in AI ethical behavior. Unfortunately, current accounting education tends to prioritize intellectual skill development over fostering moral competence in its graduated (e.g., Lind 2021; Kodvani & Schillinger 2009). Hence, it is essential for Universities graduating future accountants to instill moral values in their students, ensuring that, when they enter the workforce, they conduct themselves with a strong commitment to ethical behavior. One limitation of this study pertains to its focus on human behavior in the context of AI. Future research is anticipated to delve deeper into the realm of AI ethics within the domain of machine behavior.

## **Appendix**

### Questions

*University* has clear organizational values (such as conservation values).

The learning climate at *University* is aligned with organizational values (conservation values).

The learning culture at *University* reflects organizational values (conservation values)

*University* has visionary leaders who follow organizational values (conservation values).

I think positively about something.

I give motivation to others.

I continually improve myself.

I prioritize harmony in life.

I respect the rights of others.

I can control myself (not easily conflict with others).

I help others in need.

I empathize with other people.

I am willing to sacrifice for the benefit of the people

I have the will to generate new findings and then implement them.

I always want to contribute by sharing knowledge (knowledge sharing).

I do activities in a new (optimistic) way.

I would not say I like cheating.

I always believe that what is done will be rewarded

I want to admit mistakes and defeats

I outline new ideas by thinking from all directions

I am always encouraged to find solutions to problems in a unique way.

I pay attention to the flexible process of dealing with problems

I tell the truth as it is

I believe that what is thought, said, and done is seen by God Almighty

I report the mistakes of others who commit negative actions and break the rules.

I treat friends fairly (not discriminatory)

I prioritize the balance between rights and obligations

I am consistent in deciding something that has been considered

## Justice:

A programmer creates a program by siding with one party. The AI he created made it possible to make decisions in favor of one of the parties because of his great contribution to the creation of the program.

*If I become a programmer, I would intend to do the things he did.* 

Transparancy

Someone orders AI for a project to be able to make decisions. However, in making this AI, it needs to be explained how the decision is made/hidden.

*If I were that employee, I would intend to do the things he did.* 

The AI technology I created can be used to carry out voice phishing scams that can make me much money.

*If I were the programmer, I would intend to do the things he did.* 

**Privacy** 

Companies use AI by collecting users' personal data for their benefit. I am only in charge of creating AI to collect data, and I do not know anything about the leakage of personal data from the data collected.

If I were that employee, I would intend to do the things he did.

Responsibility

I created AI technology that can make it easier for accountants to process data and draw conclusions. At one point, the AI technology I created caused a problem. I'm not responsible for the problem because I just made it.

If I were that employee, I would intend to do the things he did.

#### References

- Ajzen I. 1991. "The Theory of Planned Behavior," *Organizational Behavior and Human Decision Processes* 50(2):179–211. https://doi.org/10.1016/0749-5978(91)90020-T
- Akaak I. P. & Lund D. 1994. "The Influence of Personal and Organizational Values on Marketing Professionals' Ethical Behavior," *Journal of Business Ethics* 13:417–430. https://doi.org/10.1007/BF00881450
- Al Halbusi H. 2022. "Who Pays Attention to the Moral Aspects? Role of Organizational Justice and Moral Attentiveness in Leveraging Ethical Behavior," *International Journal of Ethics and Systems* 38(3):357–379. https://doi.org/10.1108/IJOES-09-2021-0180

- Al-Htaybat K., von Alberti-Alhtaybat L., & Alhatabat Z. 2018. "Educating Digital Natives for the Future: Accounting Educators' Evaluation of the Accounting Curriculum," Accounting Education 27(4):333–357. https://doi.org/10.1080/09639284.2018.1 437758
- Badovick G. J. & Beatty S. E. 1987. "Shared Organizational Values: Measurement and Impact upon Strategic Marketing Implementation," *Journal of the Academy of Marketing Science Spring* 15(1):19–26.
- Bairaktarova D. & Woodcock A. 2017. "Engineering Student's Ethical Awareness and Behavior: A New Motivational Model," *Science and Engineering Ethics* 23(4):1129–1157. https://doi.org/10.1007/s11948-016-9814-x
- Bandura A. 2005. "The Evolution of Social Cognitive Theory," in K. G. Smith & M. A. Hitt (Eds.), *Great Minds in Management* (pp. 9–35). Oxford: Oxford University Press.
- Bourne H., Jenkins M., & Parry E. 2019. "Mapping Espoused Organizational Values," Journal of Business Ethics 159(1):133–148. https://doi.org/10.1007/s10551-017-3734-9
- Choi C., Kim H., Kang J. H., Song M. K., Yeon H., Chang C. S., ... & Kim J. 2022.

  "Reconfigurable Heterogeneous Integration Using Stackable Chips with Embedded Artificial Intelligence," *Nature Electronics* 5(6):386–393. https://doi.org/10.1038/s41928-022-00778-y
- Conner M. & Abraham C. 2001. « Conscientiousness and the Theory of Planned Behavior: Toward a More Complete Model of the Antecedents of Intentions and Behavior," *Personality and Social Psychology Bulletin*" 27(11):1547–1561. https://doi.org/10.1177/0146167201271
- Fritzsche D. J. & Oz E. 2007a. Personal Values' Influence on the Ethical Dimension of Decision Making," *Journal of Business Ethics* 75(4):335–343. https://doi.org/10.1007/s10551-006-9256-5
- Haines R. & Leonard L. N. K. 2007. "Individual Characteristics and Ethical Decision-making in an IT Context," *Industrial Management & Data Systems* 107(1):5–20. https://doi.org/10.1108/02635570710719025
- Homer P. M. & Kahle L. R. 1988. "Structural Equation Test of the Value-Attitude-Behavior Hierarchy," *Journal of Personality and social Psychology* 54(4):638. https://doi.org/10.1037/0022-3514.54.4.638
- Jang Y., Choi S., & Kim H. 2022. "Development and Validation of an Instrument to Measure Undergraduate Students' Attitudes Toward the Ethics of Artificial Intelligence (AT-EAI) and Analysis of Its Difference by Gender and Experience of AI Education," *Education and Information Technologies* 27(8):11635–11667. https://doi.org/10.1007/s10639-022-11086-5
- Jurše M. & Mulej M. 2011. "The Complexities of Business School Alignment with the Emerging Globalisation of Business Education," *Kybernetes* 40(9):1440–1458. https://doi.org/10.1108/03684921111169477

- Kerr D. S. & Smith L. M. 1995. "Importance of and Approaches to Incorporating Ethics into the Accounting Classroom," *Journal of Business Ethics* 14(12):987–995. https://doi.org/10.1007/BF00872114
- Kodvani D. & Schillinger M. 2009. "Ethics to Accountants: Challenges of a Global Qualification," a presentation on the MOSAIC Conference at University of Konstanz, 27-31 July 2009. URL: https://www.slideserve.com/mayda/mosaic-conference-university-of-konstanz-27-31-july-2009 (accessed October 2, 2023).
- Kohlberg L. 1971. From Is to Ought: How to Commit the Naturalistic Fallacy and Get Away with It in the Study of Moral Development. New York: Academic Press.
- Leonard L. N. K., Cronan T. P., & Kreie J. 2004. "What Influences IT Ethical Behavior Intentions Planned Behavior, Reasoned Action, Perceived Importance, or Individual Characteristics?" *Information and Management* 42(1):143–158. https://doi.org/10.1016/j.im.2003.12.008
- Lind G. 2021. "What It Means and How Accountant Education Could Foster It," in M. M. Pinheiro & A. J. Costa (Eds.), *Accounting Ethics Education: Teaching Virtues and Values* (pp. 155–174). New York London: Routledge.
- Mubako G., Bagchi K., Udo G., & Marinovic M. 2021. "Personal Values and Ethical Behavior in Accounting Students," *Journal of Business Ethics* 174(1):161–176. https://doi.org/10.1007/s10551-020-04606-1
- Nowak E. 2020. *Advancing the Human Self: Do Technologies Make Us "Posthuman"?*Berlin: Peter Lang International Academic Publishers.
- Onumah R. M., Simpson S. N. Y., & Kwarteng A. 2022. "The Effects of Personal and Organisational Attributes on Ethical Attitudes of Professional Accountants: Evidence from Ghana," *Journal of Global Responsibility* 13(3):245–267. https://doi.org/10.1108/JGR-04-2021-0041
- Pengembangan R. I. & Semarang U. N. 2016. Mewujudkan Universitas Negeri Semarang Berwawasan Konservasi dan Bereputasi Internasional.
- Posner B. Z. 2010. "Another Look at the Impact of Personal and Organizational Values Congruency," *Journal of Business Ethics* 97(4):535–541. https://doi.org/10.1007/s10551-010-0530-1
- Qasim A. & Kharbat F. F. 2020. "Blockchain Technology, Business Data Analytics, and Artificial Intelligence: Use in the Accounting Profession and Ideas for Inclusion into the Accounting Curriculum," *Journal of Emerging Technologies in Accounting* 17(1):107–117. https://doi.org/10.2308/jeta-52649
- Rogers J. C., Ross S. C., & Williams T. G. 1992. "Personal Values and Purchase Dissatisfaction Response," *The Journal of Consumer Satisfaction* 5:81–92.
- Shafer W. E., Morris R. E., & Ketchand A. A. 2001. "Effects of Personal Values on Auditors' Ethical Decisions," *Auditing & Accountability Journal* 14(3). MCB University Press. Available online at: http://www.emerald-library.com/ft (accessed October 1, 2023).

- Siau K. & Wang W. 2020. "Artificial Intelligence (AI) Ethics: Ethics of AI and Ethical AI," *Journal of Database Management (JDM)* 31(2):74–87. https://doi.org/10.4018/JDM.2020040105
- Snarey J. R. 1985. "Cross-cultural Universality of Social-Moral Development: A Critical Review of Kohlbergian Research," *Psychological Bulletin 97(2)*:202–232. https://doi.org/10.1037/0033-2909.97.2.202
- Suar D. & Khuntia R. 2010. "Influence of Personal Values and Value Congruence on Unethical Practices and Work Behavior," *Journal of Business Ethics* 97(3):443–460. https://doi.org/10.1007/s10551-010-0517-y
- Sukserm T. & Takahashi Y. 2012. "Self-efficacy as a Mediator of the Relationships between Learning and Ethical Behavior from Human Resource Development in Corporate Social Responsibility Activity," *Asia-Pacific Journal of Business Administration* 4(1):8–22. https://doi.org/10.1108/17574321211207944
- Tomlin K. A., Metzger M. L., & Bradley-Geist J. 2021. "Removing the Blinders: Increasing Students' Awareness of Self-Perception Biases and Real-World Ethical Challenges through an Educational Intervention," *Journal of Business Ethics* 169(4):731–746. https://doi.org/10.1007/s10551-019-04294-6
- 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
- Tweedie D., Dyball M. C., Hazelton J., & Wright S. 2013. "Teaching Global Ethical Standards: A Case and Strategy for Broadening the Accounting Ethics Curriculum," *Journal of Business Ethics* 115(1):1–15. https://doi.org/10.1007/s10551-012-1364-9
- Allport W. G. 1964. "Prejudice: Is It Societal or Personal?" *Religious Education* 59(1):2-029. https://doi.org/10.1080/0034408640590107
- Wibowo M. E. S. H. R. A. H. E. 2017. *Tiga Pilar Konservasi Penopang Rumah Ilmu Pengembang Peradaban Unggul* (1st Ed.). Unnes Press.
- Yanuardianto E. 2019. "Teori Kognitif Sosial Albert Bandura (Studi Kritis dalam Menjawab Problem Pembelajaran di Mi)," *Auladuna: Jurnal Prodi Pendidikan Guru Madrasah Ibtidaiyah* 1(2):94–111. https://doi.org/10.36835/au.v1i2.235\_