

Do self-awareness and behavioral biases impact ethics compliance? The student's perspective

Blasius Erik Sibarani* and Ervilia Agustine Wiharsianti

Universitas Gadjah Mada, Indonesia

*Corresponding Author. E-mail: blasiuseriksibarani@mail.ugm.ac.id

ARTICLE INFO

ABSTRACT

Article History

Submitted:

20 January 2024

Revised:

30 May 2024

Accepted:

27 June 2024

Keywords

Behavioral biases; self-awareness; student's ethics compliance

This study aims to investigate the impact of self-awareness and behavioural biases on students' ethics compliance. In the context of rapid development, ethics is becoming an increasingly important issue both in and outside the academic sphere. Ethics is a moral value that guides individuals or groups in acting and behaving. A person's moral character is formed early through the influence of the family, culture, and religious environment. Good ethical knowledge can affect a person's moral understanding and awareness. The sample analyzed in this study amounted to 100 respondents consisting of high school students and college students. The data is analyzed with the help of SmartPLS. SmartPLS allows researchers to test relationships between variables in a model using PLS methods. Hypothesis testing is carried out with a path coefficient that looks at the p-value at a significance level of 5%. The results of this study show that self-awareness has a positive impact on students' ethics compliance, and behavioural biases have a negative impact on students' ethics compliance.

Scan Me:



This is an open access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



To cite this article (in APA style):

Sibarani, B. E & Wiharsianti, E. A. (2024). Do self-awareness and behavioral biases impact ethics compliance? The student's perspective. *Jurnal Penelitian dan Evaluasi Pendidikan*, 28(1), 107-121 doi: <https://doi.org/10.21831/jpep.v28i1.70870>

INTRODUCTION

Currently, ethics is discussed a lot both in academic circles and outside the academic field. This is because the rapid development of the times affects a person's personality, which leads to personal ethics. According to [Marenco \(2018\)](#), in the best ethical theory, it is said that the right action is always accompanied by the right thinking. Ethics can be interpreted as moral values that guide a person or a group in acting and behaving. Ethics cannot be taught just like that to someone because ethics in a person already exists from an early age and comes from his family environment. The reason morality cannot be taught is that moral character is formed early in life through family, cultural or religious influences, making it difficult for college morality classes to bring about attitude change ([Shenkir, 1990](#); [Kerr & Smith, 1995](#); [Oddo, 1997](#)). Some people think that ethics courses have nothing to do with professional behaviour ([Bishop, 1992](#); [McDonald & Donleavy, 1995](#); [Oddo, 1997](#)). Morality cannot be taught simply by imparting knowledge or forcing students to follow certain views ([Shenkir, 1990](#); [Bishop, 1992](#); [Poynter & Thomas, 1994](#); [Loeb, 1994](#)). It must be deeply instilled through positive influences from family, culture, or religion early on. Actively involving students in moral discussion and reflection will be more effective in shaping their moral consciousness. Knowledge of ethics best captures the essence of teaching professionalism because it allows teachers to understand the complexity of their moral subjects ([Campbell, 2014](#)). Ethics is closely related to the virtues of responsibility,

trust and credibility. It should always be fair, honest, transparent and respect the rights and privacy of others in society (Frank et al., 2011).

Building self-awareness theories (Duval & Wicklund, 1972; Wicklund, 1975), the authors argue that increasing students' self-awareness can provide a means by which students with low-trait empathy can be motivated to engage in higher levels of fairness. Self-awareness can trigger comparisons between a person's current behaviour and standards of behaviour that are considered normative (Duval & Wicklund, 1972). Self-awareness is a motivated state that occurs when one's attention is entirely focused on oneself as an object of evaluation (Whiteside & Barclay, 2016). Self-awareness can motivate individuals to suppress differences by avoiding behaviours that do not conform to their standards (Gibbons, 1990). Self-awareness can enhance an individual's equity behaviour, especially when individuals see themselves as responsible for the actions taken (Greenberg, 1980). People who have a high level of self-awareness have a good ability to monitor and adjust their behaviour in order to interact with others effectively and act as needed (Shivers-Blackwell, 2006). Self-awareness involves the ability to recognize and evaluate what is happening to ourselves and others. However, the most important component of self-awareness and empathy is how we respond and use information about our emotions to guide our lives and build relationships with high self-confidence and act (Cooper & Sawaf, 1997). From this, the author assumes that self-awareness has an important role in increasing students' ethical compliance.

Behavioural bias is behaviour that deviates from existing rules and leads to error or negative value. Behavioural biases can occur under one's consciousness and outside one's consciousness, in the sense that biased behaviour can occur with intentional or unintentional elements. Behavioural biases will cause someone to take actions that deviate from existing rules and against ethics that apply to the organization and its environment. From this, the author assumes that behavioural biases have a role in influencing students' ethical compliance.

In this study, the author sees that there is still no research on ethics compliance, especially in students. Every school or college/university has ethics that must be followed. Thus, this study will investigate factors affecting a student's ethical compliance. The author believes that there is an impact provided by aspects of an individual's awareness and deviant behaviour. According to self-awareness theory, students with high self-awareness have the ability to monitor and evaluate their thoughts and actions. Students with a high level of self-awareness are better able to recognize when they deviate from ethical standards and can take corrective action (Maryati et al., 2020; Poh et al., 2016). Self-awareness allows students to monitor their actions and ensure their behaviour conforms to ethical values and norms. Self-aware students tend to be more reflective and consider the ethical impact of their actions, thereby increasing compliance with ethics (Harrison & Vallin, 2018; Yawisah et al., 2019). In addition, students with high awareness can use appropriate thinking strategies to make ethical decisions. Self-awareness helps identify situations that require the application of ethical norms and encourages students to act following those standards (Sibarani, 2024). Despite these insights, there is a gap in the comprehensive understanding of how self-awareness directly impacts ethical compliance among students. Existing studies primarily focus on the general benefits of self-awareness but do not delve deeply into its specific impact on ethics compliance in educational settings. Additionally, there is a lack of empirical research examining the interplay between self-awareness and behavioural biases in this context. This study aims to address these gaps by exploring the factors affecting students' ethics compliance, with a particular focus on individual awareness and deviant behaviour, thereby providing a more detailed understanding of these dynamics.

According to self-awareness theory, students with high self-awareness have the ability to recognize their own thoughts and actions. They are better able to recognize when they begin to deviate from ethical norms. Behavioural biases, such as prejudice, group conformity, or rationalization of unethical actions, can interfere with college student's ability to evaluate their

actions objectively (Kallio et al., 2018). These biases can make students less aware of their ethical lapses. Behavioural biases reduce the effectiveness of self-awareness. Students affected by this bias may not realize that their actions are unethical, or they may rationalize their actions as acceptable (Kallio et al., 2018; Rivas et al., 2022). The impact on ethical compliance is that students cannot effectively monitor and correct their actions. Students with low self-awareness tend to have high behavioural biases. This leads to lower ethical compliance because they do not recognize or are unwilling to admit that their actions violate ethical standards.

In line with what was conveyed by the author related to behavioral biases above, the author also believes self-awareness and self-integrity can have impact on ethical compliance. However, it is necessary to prove whether there is an influence exerted on ethical compliance or not, it is not enough just to be a logical conjecture and there must be evidence to support the validity of the logical conjecture. That's why the author wants to do research here to see the proof's results. The authors assert that another motivation in this study is related to including behavioural constructs and the personality of a person. This is because the author believes that the greatest ethical compliance comes from within a person and also from the behaviour of that person.

This study aims to investigate 1) the impact of self-awareness on students' ethics compliance and 2) the impact of behavioural biases on students' ethics compliance. This research made several contributions. First, this study will provide new theories related to self-personality and biased behaviour that impact students' adherence to ethics. Second, this research will prove the validity of the theory used. Third, this research will add to the literature related to self-awareness and behavioural biases in relation to ethical compliance. The next part of the study, part 2, presents research methods. In part 3, the author presents statistical results and discussion. The final section discusses conclusions, limitations, suggestions, and practical implications.

RESEARCH METHOD

Sample

The population in this study was undergraduate students in Yogyakarta, and the sampling technique used was snowball sampling. The researcher gave questionnaires to respondents and asked them to distribute them to their friends. This was to make it easier for the researcher to obtain respondents. The total number of respondents who filled out the research questionnaire was 119, but 19 participants were excluded from this study because they did not fill in the data completely and clearly. Thus, the final sample consisted of 100 respondents, 69 females and 31 males..

Data Analysis

The data is analyzed with the help of SmartPLS. SmartPLS allows researchers to test relationships between variables in models using the PLS method (Hair et al., 2019). Users can see the strength and direction of relationships between variables as well as test the statistical significance of those relationships. The first test carried out is outer loading with a value that must be above 0.50 (Templeton et al., 2002). The measurement model assessment is tested with composite reliability (CR) and average variance extracted (AVE). This is followed by the composite reliability and convergent validity test indicators, and their values should be above 0.5 (AVE > 0.5), Cronbach's alpha > 0.5 (CR > 0.5) (Hair et al., 2022). Hypothesis testing is performed by running bootstrapping with a sample of 5000. The final criterion involves assessing the size and significance of path coefficients. Bootstrapping procedures are run to obtain significance (Hair et al., 2019). The alpha level for statistical significance is set at 0.05 (5%).

Table 1. Outer Loading

	Behavioral Biases	Self-Awareness	Student's Ethics Compliance
BB1	0.812		
BB2	0.844		
BB3	0.795		
BB4	0.893		
BB5	0.858		
BB6	0.874		
BB7	0.858		
BB8	0.876		
SEC1			0.827
SEC2			0.873
SEC3			0.827
SEC4			0.885
SEC5			0.801
SEC6			0.810
SEC7			0.780
SA1		0.764	
SA2		0.886	
SA3		0.848	
SA4		0.724	
SA5		0.829	
SA6		0.778	
SA7		0.874	
SA8		0.782	
SA9		0.749	

Note: BB: Behavioral Biases, SA: Self-Awareness, SEC: Student's Ethics Compliance

Variables and measurements

The dependent variable of this study is student's ethics compliance. According to [Suditu and Safta \(2021\)](#), student ethical compliance is the level of knowledge and compliance with the rules of ethical and academic behaviour by students in educational institutions. The variable was measured using an adaptation from [Sims \(2006\)](#). This variable employed 8 items that were adjusted to fit the research context.

The first independent variable in this study was self-awareness, which was measured by the Situational Self-Awareness Scale (SSAS), which included as many as nine items developed by [Govern & Marsch \(2001\)](#). Respondents' answers were then measured on a 4-point Likert Scale from strongly disagree (1) to strongly agree (4). The behavioural bias variable is measured with the Biased Attitudes Scale (BAS), which measures as many as eight items that have been adjusted to the context of the researcher's research. The Biased Attitudes Scale (BAS) was developed by [Watts et al., 2020](#). The entire questionnaire used for measurement in previous research was proven to be valid and reliable, with validity and reliability values each above 0.70 and 0.60, respectively, so the questionnaire could be used.

Hypothesis development

Self-awareness and student's ethics compliance

According to previous studies, self-awareness has a positive impact on student's ethics compliance ([Sibarani, 2024](#)). This happens because self-awareness can impact student assessment and decision-making objectively to encourage ethical compliance ([Sibarani, 2024](#)). Student perceptions of self-awareness include the ability to shift the focus of their attention

from their environment to themselves and vice versa (Duval & Wicklund, 1972). The self-awareness expressed in this self-focus has both public and private dimensions (Buss, 1980; Davis & Franzoi, 1999). Public self-focus is characterized by attention to those features of one's self that are presented to others. Personal self-focus involves paying attention to internal and personal aspects of oneself, such as memory and feelings of pleasure or physical pain (Buss, 1980).

The study of self-awareness stems from psychologists' claims that a whole self is essential for a person's growth (Eysenck, 1994). So, students need to develop self-awareness early in childhood to be more successful in school and later in life. Each person has different abilities and limitations that establish oneself, and by developing an awareness of these components and the environment in which one lives, one achieves self-fulfilment (Morin, 2004). Furthermore, this study argues that student ethical compliance tends to be positively influenced by self-awareness.

According to self-awareness theory, students with high self-awareness have the ability to monitor and evaluate their own thoughts and actions. Students who have a high level of self-awareness are better able to identify when they deviate from ethical standards and can take corrective action actions (Maryati et al., 2020; Poh et al., 2016). Self-awareness allows students to monitor their actions and ensure that their behaviour is in accordance with ethical values and norms. Self-aware students tend to be more reflective and consider the ethical impact of their actions, leading to higher ethical compliance. In addition, students with high self-awareness can use appropriate thinking strategies to make ethical decisions. Self-awareness helps in identifying situations where ethical norms need to be applied and encourages students to act in accordance with those standards (Harrison & Vallin, 2018; Yawisah et al., 2019). Therefore, this study developed the first alternative hypothesis below.

H1: Self-awareness positively impact on student's ethics compliance

Behavioral biases and student's ethics compliance

Some studies show that behavioural biases can negatively affect students' ethical compliance. This occurs as a result of the fact that behavioural biases have the potential to interfere with ethical compliance by influencing student judgment and decision-making in a non-objective way. Supporting the perception of future business activity is the perception of biased behaviour of students. There are many elements that influence a person's ethical orientation, but only age and religious orientation have a significant influence on the way students perceive behavioural bias (Allmon et al., 2000). Research by Tomlin et al. (2017) explains that if students think they are immune to ethical errors or are unaware of their vulnerability to bias, this can result in unethical behaviour. Furthermore, this study argues that student ethical compliance tends to be negatively influenced by behavioural biases.

Behavioural biases, such as prejudice, group conformity, or rationalization of unethical actions, can interfere with college student's students' ability to evaluate their actions objectively (Kallio et al., 2018). These biases can make students less aware of their ethical lapses. Behavioural biases reduce the effectiveness of self-awareness. Students affected by this bias may not realize that their actions are unethical, or they may rationalize their actions as acceptable (Kallio et al., 2018; Rivas et al., 2022). Students with high behavioural biases will stimulate themselves to act unethically and will rationalize their actions even if they are unethical. This leads to lower ethical compliance because they do not recognize or are unwilling to admit that their actions violate ethical standards. Therefore, this study developed the second alternative hypothesis below.

H2: Behavioral biases negatively impact on student's ethics compliance.

FINDINGS AND DISCUSSION

Findings

Table 1 presents the outer loading of all items used in variable measurements. Outer loading is the correlation coefficient between the indicator and its latent construct. With outer loading, researchers can ensure that the latent construct is measured well by the indicators or items used. Therefore, good outer loading is a crucial prerequisite for accurate and valid hypothesis testing. It can be seen that the overall outer loading value of each item is above 0.70, so it can be interpreted that instrument items can be used (Hair et al., 2019), and no items are issued and then can proceed to hypothesis processing.

Table 2. Cross-Loading

Item	Behavioral Biases	Self-Awareness	Student's Ethics Compliance
BB1	0.812	0.798	0.728
BB2	0.844	0.688	0.668
BB3	0.795	0.679	0.659
BB4	0.893	0.726	0.747
BB5	0.858	0.713	0.687
BB6	0.874	0.671	0.665
BB7	0.858	0.843	0.845
BB8	0.876	0.859	0.865
SEC1	0.674	0.622	0.827
SEC2	0.706	0.761	0.873
SEC3	0.849	0.904	0.827
SEC4	0.798	0.820	0.885
SEC5	0.740	0.780	0.801
SEC6	0.712	0.743	0.810
SEC7	0.690	0.730	0.780
SA1	0.717	0.764	0.722
SA2	0.821	0.886	0.805
SA3	0.740	0.848	0.697
SA4	0.681	0.724	0.714
SA5	0.764	0.829	0.711
SA6	0.601	0.778	0.719
SA7	0.805	0.874	0.756
SA8	0.738	0.782	0.664
SA9	0.630	0.749	0.706

Note: BB: Behavioral Biases, SA: Self-Awareness, SEC: Student's Ethics Compliance

Table 2 presents the cross-loading value of each item. Without good discriminant validity, the results of hypothesis testing in SEM research can be biased or invalid. Therefore, evaluating and adjusting for cross-loading is crucial in ensuring that research hypotheses are tested accurately and validly. We can see that the construct value of each item to its construct is greater than the value of cross-loading. For example, BB1 (behavioural biases item 1), with a score of 0.812, is more significant than its cross-loading to other constructs, namely 0.798 for self-awareness and 0.728 for student ethics compliance. Likewise with all other items where the value of loading into the construct > cross loading to another construct.

Table 3 shows the validity and reliability. Without good reliability and validity, the results of hypothesis testing can be inaccurate or biased. Therefore, evaluating and adjusting for construct reliability and validity is a critical step in research to ensure hypotheses are tested validly and reliably. We can see that the Average Variance Extracted (AVE) score on the self-awareness variable shows a score of 0.725, which means it is > 0.6 , so it is valid. In contrast, the Composite Reliability score shows a score of 0.955, which means it is > 0.7 , so it is reliable.

The Average Variance Extracted (AVE) score on the behavioural biases variable (see Table 3) shows a score of 0.649, which means it is > 0.6 , so it is valid, while the Composite Reliability score shows a score of 0.943, which means it is > 0.7 , so it is reliable. The Average Variance Extracted (AVE) score on the student's ethics compliance variable shows a score of 0.765, which means it is > 0.6 , so it is valid, while the Composite Reliability score shows a score of 0.824, which means it is > 0.7 , so it is reliable.

Table 3. Construct Reliability and Validity

Variable	Cronbach's Alpha	Composite Reliability	Average Variance Extracted
Self-awareness	0.946	0.955	0.725
Behavioral biases	0.932	0.943	0.649
Student's ethics compliance	0.700	0.824	0.765

Table 4 and Figure 1 show the P-values of both variables; namely, the self-awareness variable shows a score of 0.000, which means $P\text{-value} < 0.05$, $t\text{-value} = 6.420$, and original sample = 0.594, so it can be concluded that self-awareness variable positively impacts student's ethics compliance. Then, behavioural biases show a score of 0.000, which means $P\text{-value} < 0.05$, $t\text{-value} = 3.728$, and original sample = -0.344, so it can be concluded that behavioural biases have a negative impact on student's ethics compliance. From the results of this path test, it proves that hypotheses 1 and 2 were supported.

Table 4. Path Coefficients

	Original Sample	Std. Deviation	T	P Values
BB \rightarrow SEC	-0.344	0.092	3.728	0.000
SA \rightarrow SEC	0.594	0.093	6.420	0.000

Note: BB: Behavioral Biases, SA: Self-Awareness, SEC: Student's Ethics Compliance

Table 5 shows an R-Square. R-square plays a crucial role in testing research hypotheses because it shows how well the model explains the variability of the dependent variable. A high R-square value provides strong support for the research hypothesis, indicating that the chosen independent variables have a significant impact. We can see the R-square score of 0.832, which means that this shows how the two independent variables, namely self-awareness and behavioural biases, simultaneously affect $0.832 \times 100\%$, which is 83.2% on the dependent variable, namely student's ethics compliance. While the remaining 16.8% is impacted by other variables outside of this research, which can impact ethics compliance.

Discussion

This study found that self-awareness positively impacts student's ethics compliance with a score of $\text{sig.} < 0.05$, $t\text{-value} = 6.420$, and original sample = 0.594, so H1 was supported. This

happens because of behavioural ethics. Finding people's self-awareness can increase the ability to exercise ethical knowledge and prevent ignoring, belittling, or justifying their own mistakes. This can result in ethical behaviour among college students if they recognize themselves. According to respondents' answers regarding the self-awareness measurement item (untabulated), the statement "Currently, I am so aware of everything around me that I adhere to the ethical rules of my university" has the highest average score compared to other items, with a value of 3.127. This indicates that an individual aware of their surroundings, such as the ethical rules at their campus/environment, will be stimulated to act ethically and not violate ethical rules, thereby promoting ethics compliance. The results of this study are in line with research conducted by (Flavian, 2016; Morin, 2004). The results of this study are consistent with previous research that proved that self-awareness in an individual can lead them to act and behave according to ethics (Sibarani, 2024).

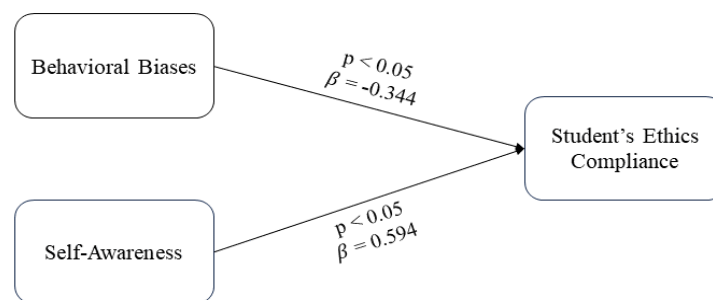


Figure 1. Result of model

With a high level of self-awareness, individuals can better recognize their personal values and principles, making them more likely to act according to those ethical standards. Self-awareness also enables individuals to critically evaluate their actions, correct unethical behaviour, and control their emotions and impulses (Sibarani, 2024). Additionally, through self-awareness, an individual can understand and empathize with what others are experiencing, which helps in considering the impact of their actions on others and promotes more ethical behaviour. Self-awareness individuals are also more likely to take responsibility for their actions, accept accountability for their mistakes, and act with integrity (Carden et al., 2022). Self-awareness supports moral development by helping individuals understand and apply moral principles in daily life and more effectively navigate ethical dilemmas. Overall, self-awareness aids individuals in making more ethical decisions and acting with integrity in various situations.

Table 5. R-Square

	R Square	R Square Adjusted
Student's ethics compliance	0.832	0.829

Furthermore, based on theories about self-awareness derived from psychologists' claims that a whole self is essential for a person's growth (Eysenck, 1994), we conclude that self-awareness can improve the assessment of ethical situations and rational or impulsive decision-making. Self-awareness theory states that self-awareness triggers an individual's behaviour to conform to behavioural standards based on norms and ethics (Duval & Wicklund, 1972). Self-awareness can also be influenced by self-focus and the external environment. If students are in an environment where ethical norms are high, they may be encouraged to follow those norms

(Lu & Wan, 2018; Roeser & Peck, 2009). Self-awareness often arises as a form of self-awareness of the internal conditions of the self and the external environment (Silvia & Duval, 2001). The presence of self-awareness behaviour factors in an individual's thoughts and decision-making can enable them to evaluate their actions ethically and consider the moral implications critically. This indicates that ethical compliance can occur when there is an increase in self-awareness among individuals (DeMink-Carthew et al., 2020; Showry & Manasa, 2014; Zaborowski & Slaski, 2003).

Moreover, this research is substantiated by cognitive dissonance theory, which posits that individuals undergo unease when there is a discrepancy between their beliefs and actions. Self-awareness can strengthen this discomfort, prompting individuals to overcome dissonance by adhering to their ethical values and principles, thereby promoting ethical compliance (Festinger, 1957; Festinger & Carlsmith, 1959).

Next, this study found that behavioural biases negatively impact student's ethics compliance with a score of $\text{sig.} < 0.05$, $t\text{-value} = 3.728$, and original sample = -0.344 , so H2 was supported. This is due to the fact that behavioral ethics has found that cognitive biases and limitations can prohibit people from making sincere judgments of their own ethical behavior or compliance, causing them to belittle, ignore, or rationalize their own mistakes. If they are unable to identify and eliminate their biases, this can lead to students acting unethically. Based on respondents' answers regarding the behavioural biases measurement item (untabulated), the statement "If certain unethical acts occur only rarely, then they are not a big deal" has the highest average score compared to other items, with a value of 3.091. This indicates that an individual who has cognitive biases and rationalizes their behaviour is stimulated to act unethically and violate ethical rules, resulting in low ethical compliance. This is following research by Feldman & Kaplan (2019). When an individual has a biased mindset and rationalize their behavior, they tend to act or behave in ways that are unethical, resulting in non-compliance with existing ethical standards.

Behavioural biases can cloud an individual's judgment and make them more susceptible to unethical behaviour. These behavioural biases can hinder their ability to assess situations objectively, consider the impact of their actions on others, and make decisions that comply with ethical standards. Thus, individual behaviour deviates from ethics and results in non-compliance with existing ethics in general. Based on theories about behavioural biases (Watts et al., 2020), we draw the conclusion that behavioural biases can influence how ethical circumstances are assessed and affect how decisions are made rationally or impulsively. Social influences and group standards can also influence behavioural biases. Students may feel pressured to comply and violate ethical norms if they are in an atmosphere where such norms are weak or where they are normal. This can prevent individuals from following ethical standards and leave them open to harmful influences.

Behavioural biases often arise as a result of limited self-awareness. Students may not be fully aware of the biases that exist in their thinking and decision-making. This can lead to them being unable to evaluate their actions ethically and consider their moral implications critically. This suggests that overcoming bias and raising ethical awareness through education can help improve ethical compliance among college students.

Lastly, the impact of self-awareness and behavioural biases simultaneously on students' ethics compliance is 83.2% (see Table 5), which means there is a strong impact. When an individual has high self-awareness and high behavioural biases, the individual's ethics compliance will be significantly affected. The strong impact of self-awareness and behavioural biases suggests that interventions targeting these areas could potentially enhance students' ethical behaviour. Strategies aimed at promoting self-awareness, such as reflective practices and mindfulness exercises, may help students better recognize their values, motivations, and the consequences of their actions, thereby facilitating more ethical decision-making. However, it is

crucial to acknowledge that approximately 16.8% (see [Table 5](#)) of the variance in ethics compliance remains unexplained by self-awareness and behavioural biases in our model. This implies the presence of other factors not addressed in this study that may also play a role in influencing students' ethical behaviour. Possible additional variables could include organizational culture, peer influences, or situational factors.

The presence of unexplained variance underscores the complexity of ethical decision-making processes and suggests avenues for future research. Further investigations could explore additional predictors of ethical behaviour among students and examine how various factors interact and influence each other in shaping ethical conduct.

CONCLUSION

Based on the results of the hypothesis test and discussion of the research results, it was concluded that self-awareness impacts students' ethics compliance, and behavioural biases impact students' ethics compliance. This proves that cognitive psychology impacts ethics compliance, as cognitive processes involve introspection, self-reflection, and awareness of one's own thoughts and feelings. Additionally, it involves thought patterns and the way individuals process information, which can lead to deviations from rational judgment. This research certainly has limitations. First is data collection through questionnaires, which certainly has its own shortcomings. Second, this study did not use control variables that might have an impact on the results of the study. Third, the number of respondents in the research is still relatively small, so it cannot be used as a reference for all students. Lastly, this study used a relatively small sample, which may weaken the generalization of the research findings.

Based on the results of the study and the limitations of the research above, the author put forward several suggestions, namely for students to increase their self-awareness and minimize deviant behaviour. In addition, for further researchers, it is expected that by providing a wider range of new developments, such as adding research variables (such as variable moderation, mediation, or control – e.g. gender, age, education, self-efficacy, self-integrity, etc.), can also add data analysis used, replace data collection by using experiments and increase the number of samples. Furthermore, future research can use other theories (e.g. Cognitive Dissonance Theory or Moral Rationalization Theory) to see perspectives from other theories, which will strengthen research findings. The results of this research are expected to be developed and useful in the future. Caution is advised when interpreting the research results due to the study's limitations.

The practical implication of this research is that students' ethics compliance is impacted by self-awareness and deviant behaviour. Therefore, it is important to ensure that students have a good self-awareness, the level of deviant behavior that will help to improve student ethical compliance. In addition, teachers and lecturers, students and students, and parents need to ensure the continuity of this situation.

IMPLICATION

This research has several key implications. First, it highlights the importance of increasing students' self-awareness to improve ethical compliance, suggesting schools should implement reflection programs. Second, it underscores the need to identify and manage behavioral biases, recommending education and training for students to overcome these biases. Third, it stresses the importance of strengthening ethics programs within schools through curriculum integration and activities like discussions and simulations. Finally, collaboration with parents is crucial in promoting ethical behavior, emphasizing open communication between schools and families to support students' moral development. These insights inform interventions and policies aimed at enhancing ethical behavior in education.

Conflict of interests

There are no known conflicts of interest associated with this publication.

REFERENCES

- Allmon, D. E., Page, D., & Rpberts, R. (2000). Determinants of perceptions of cheating: Ethical orientation, personality and demographics. *Journal of Business Ethics*, 23, 411-422. <https://doi.org/10.1023/A:1006087104087>
- Bishop, T. R. (1992). Integrating business ethics into an undergraduate curriculum. *Journal of Business Ethics*, 11, 291-299. <https://doi.org/10.1007/bf00872171>
- Buss, A. (1980). *Self-consciousness and social anxiety*. San Francisco: Freeman
- Campbell, E. (2014). Teaching ethically as a moral condition of professionalism. In *Handbook of moral and character education* (pp. 117-134). Routledge.
- Carden, J., Jones, R. J., & Passmore, J. (2022). Defining self-awareness in the context of adult development: A systematic literature review. *Journal of Management Education*, 46(1): 140-177. <https://doi.org/10.1177/1052562921990065>
- Cooper, R. K., & Sawaf, A. C. (1997). *Executive EQ: Emotional Intelligence in Leadership and Organizations* (The Berkley Publishing Group, New York).
- Davis, M. H., & Franzoi, S. L. (1999). Self-awareness and self-consciousness. In V. Derlega, B. Winstead, & W. Jones (Eds.), *Personality: Contemporary theory and research* (pp. 307–338). Chicago: Nelson-Hall.
- DeMink-Carthew, J., Netcoh, S., & Farber, K. (2020). Exploring the Potential for Students to Develop Self-Awareness through Personalized Learning. *Journal of Educational Research*, 113(3), 165–176. <https://doi.org/10.1080/00220671.2020.1764467>
- Duval, T. S., & Wicklund, R. A. (1972). *A theory of objective self-awareness*. New York: Academic.
- Eysenck, M. W. (1994). *Individual Differences: Normal and Abnormal*. New York: Lawrence Erlbaum Associates.
- Feldman, Y., & Kaplan, Y. (2019). Behavioral ethics as compliance. Forthcoming, *Cambridge Handbook of Compliance* (Van Rooij & Sokol Eds.), Bar Ilan University Faculty of Law Research Paper, (19-18). <http://dx.doi.org/10.2139/ssrn.3458582>
- Festinger, L. (1957). *A theory of cognitive dissonance*. Evanston, IL: Row, Peterson.
- Festinger, L., & Carlsmith, J. M. (1959). Cognitive consequences of forced compliance. *The Journal of Abnormal and Social Psychology*, 58(2): 203-210. <https://doi.org/10.1037/h0041593>
- Flavian, H. (2016). Towards teaching and beyond: Strengthening education by understanding students' self-awareness development. *Power and Education*, 8(1), 88-100. <https://doi.org/10.1177/1757743815624118>

- Frank, H., Campanella, L., Dondi, F., Mehlich, J., Leitner, E., Rossi, G., Ioset, K. N., & Bringmann, G. (2011). Ethics, chemistry, and education for sustainability. *Angewandte Chemie International Edition*, 50(37), 8482-8490. <https://doi.org/10.1002/anie.201007599>
- Gibbons, F. X. (1990). Self-attention and behavior: A review and theoretical update. *Advances in experimental social psychology*, 23, 249-303. [https://doi.org/10.1016/S0065-2601\(08\)60321-4](https://doi.org/10.1016/S0065-2601(08)60321-4)
- Govern, J. M., & Marsch, L. A. (2001). Development and validation of the situational self-awareness scale. *Consciousness and Cognition*, 10(3), 366-378. <https://doi.org/10.1006/ccog.2001.0506>
- Greenberg, J. (1980). Attentional focus and locus of performance causality as determinants of equity behavior. *Journal of Personality and Social Psychology*, 38(4), 579-585. <https://doi.org/10.1037/0022-3514.38.4.579>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate Data Analysis*, Eighth Edition. United Kingdom: Cengage Learning EMEA.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Thousand Oaks, California: Sage publications.
- Harrison, G. M., & Vallin, L. M. (2018). Evaluating the metacognitive awareness inventory using empirical factor-structure evidence. *Metacognition and Learning*, 13(1), 15-38. <https://doi.org/10.1007/s11409-017-9176-z>
- Kallio, H., Virta, K., & Kallio, M. (2018). Modelling The Components of Metacognitive Awareness. *International Journal of Educational Psychology*, 7(2), 94-122. <https://doi.org/10.17583/ijep.2018.2789>
- Kerr, D. S., & Smith, L. M. (1995). Importance of and approaches to incorporating ethics into the accounting classroom. *Journal of Business Ethics*, 14, 987-995. <https://doi.org/10.1007/BF00872114>
- Loeb, S. E. (1994). Ethics and accounting doctoral education. *Journal of Business Ethics*, 13, 817-828. <https://doi.org/10.1007/BF00876262>
- Lu, C., & Wan, C. (2018). Cultural Self-Awareness as Awareness of Culture's Influence on the Self: Implications for Cultural Identification and Well-Being. *Personality and Social Psychology Bulletin*, 44(6), 823-837. <https://doi.org/10.1177/0146167217752117>
- Marenco, M. (2018). Ethics education in the professions: an unorthodox approach. *International Journal of Ethics Education*, 3(2), 193-206. <https://doi.org/10.1007/s40889-018-0057-3>
- Maryati, T., Khasanah, S. U., & MaPUla, V. Y. (2020). Contribution of teacher's teaching skills and students' intrapersonal intelligence toward metacognitive awareness of students in state vocational school in Blitar. *Journal of Physics: Conference Series*, 1470(1). <https://doi.org/10.1088/1742-6596/1470/1/012045>

- McDonald, G. M., & Donleavy, G. D. (1995). Objections to the teaching of business ethics. *Journal of Business Ethics*, 14, 839-853. <https://doi.org/10.1007/BF00872350>
- Morin, A. (2004). A neurocognitive and socioecological model of self-awareness. *Genetic, social, and general psychology monographs*, 130(3), 197-224. <https://doi.org/10.3200/mono.130.3.197-224>
- Oddo, A. R. (1997). A framework for teaching business ethics. *Journal of business ethics*, 16, 293-297. <https://doi.org/10.1023/A:1017951729585>
- Poh, B. L. G., Muthoosamy, K., Lai, C. C., & Gee, O. C. (2016). Assessing the Metacognitive Awareness among the Foundation in Engineering Students. *IAFOR Journal of Education*, 4(2), 48–61. <https://doi.org/10.22492/ije.4.2.03>
- Poynter, H., & Thomas, C. (1994/01//). Review: Can ethics be taught? *Management Accounting*, 75(7), 72. Retrieved from <https://www.proquest.com/scholarly-journals/review-can-ethics-be-taught/docview/229767132/se-2>
- Rest, J. R. (1979). *Development in Judging Moral Issues*. MN: University of Minnesota Press.
- Rivas, S. F., Saiz, C., & Ossa, C. (2022). Metacognitive Strategies and Development of Critical Thinking in Higher Education. *Frontiers in Psychology*, 13(June). <https://doi.org/10.3389/fpsyg.2022.913219>
- Roeser, R. W., & Peck, S. C. (2009). An education in awareness: Self, motivation, and self-regulated learning in contemplative perspective. *Educational Psychologist*, 44(2), 119–136. <https://doi.org/10.1080/00461520902832376>
- Shenkir, W. G. (1990). A perspective from education: Business ethics. *Management Accounting*, 71(12), 30. Retrieved from <https://www.proquest.com/scholarly-journals/perspective-education-business-ethics/docview/229746628/se-2>
- Shivers-Blackwell, S. (2006). The influence of perceptions of organizational structure & culture on leadership role requirements: The moderating impact of locus of control & self-monitoring. *Journal of Leadership & Organizational Studies*, 12(4), 27-49. <https://doi.org/10.1177/107179190601200403>
- Showry, M., & Manasa, K. V. L. (2014). Self-Awareness-Key to Effective Leadership. *IUP Journal of Soft Skills*, 8(1). 15-26. Retrieved from <https://www.proquest.com/scholarly-journals/self-awareness-key-effective-leadership/docview/1540082133/se-2>
- Sibarani, B. E. (2024). Exploring the role of self-awareness, self-integrity, self-regulation, and ethics education in the student's ethics compliance: evidence from Indonesia. *International Journal of Ethics Education*, (Forthcoming). <https://doi.org/10.1007/s40889-024-00188-y>
- Silvia, P. J., & Duval, T. S. (2001). Objective self-awareness theory: Recent progress and enduring problems. *Personality and Social Psychology Review*, 5(3), 230–241. https://doi.org/10.1207/S15327957PSPR0503_4
- Sims, R. L. 2006. Comparing ethical attitudes across cultures. *Cross Cultural Management: An International Journal*, 13(2), 101–113. <https://doi.org/10.1108/13527600610662294>

- Suditu, M., & Safta, C. (2021). Student's Perceptions of Ethics and Academic Integrity. *Journal of Educational Sciences & Psychology*, 11(73)(2), 3–8. <https://doi.org/10.51865/jesp.2021.2.02>
- Templeton, G. F., Lewis, B. R., & Snyder, C. A. (2002). Development of a measure for the organizational learning construct. *Journal of management information systems*, 19(2), 175-218. <https://doi.org/10.1080/07421222.2002.11045727>
- Tomlin, K. A., Metzger, M. L., Bradley-Geist, J., & Gonzalez-Padron, T. (2017). Are Students Blind to Their Ethical Blind Spots? An Exploration of Why Ethics Education Should Focus on Self-Perception Biases. *Journal of Management Education*, 41(4), 539–574. <https://doi.org/10.1177/1052562917701500>
- Watts, L. L., Medeiros, K. E., McIntosh, T. J., & Mulhearn, T. J. (2020). Decision biases in the context of ethics: Initial scale development and validation. *Personality and Individual Differences*, 153, 109609. <https://doi.org/10.1016/j.paid.2019.109609>
- Whiteside, D. B., & Barclay, L. J. (2016). The face of fairness: Self-awareness as a means to promote fairness among managers with low empathy. *Journal of Business Ethics*, 137, 721-730. <https://doi.org/10.1007/s10551-014-2357-7>
- Wicklund, R. A. (1975). Objective self-awareness. *Advances in experimental social psychology* (Vol. 9, pp. 233-275). New York: Academic Press. [https://doi.org/10.1016/S0065-2601\(08\)60252-X](https://doi.org/10.1016/S0065-2601(08)60252-X)
- Yawisah, U., Umam, A. K., Asas, M., & Wahyundin. (2019). Importance of Metacognitive Awareness in Learning and Instruction for Engineering Students' Education. *Journal of Social Studies Education Research*, 10(3), 364–386. Retrieved from <https://jsser.org/index.php/jsser/article/view/3043>
- Zaborowski, Z., & Slaski, S. (2003). Contents and Forms Theory of Self-Awareness. *Imagination, Cognition and Personality*, 23(2), 99–119. <https://doi.org/10.2190/tcx3-e1u1-5g7m-u2v1>