




Research Article

# Factors influencing academic dishonesty among undergraduate students in higher education institutions (HEIs) in Malaysia

Md. Sozon<sup>1</sup>, Sia Bee Chuan<sup>2</sup>, Pok Wei Fong<sup>3</sup>, Omar Hamdan Mohammad Alkharabsheh<sup>4\*</sup>, Md. Ataur Rahman<sup>5</sup>

<sup>1</sup>Faculty of Accountancy and Management, Universiti Tunku Abdul Rahman, Kajang 43000, Selangor, Malaysia

<sup>2</sup>Faculty of Accountancy and Management, Department of Economics, Universiti Tunku Abdul Rahman, Kajang 43000, Selangor, Malaysia

<sup>3,4</sup>Faculty of Accountancy and Management, Department of International Business, Universiti Tunku Abdul Rahman, Kajang 43000, Selangor, Malaysia

<sup>5</sup>Department of English, Jahangirnagar University Savar, Dhaka 1342, Bangladesh

\*Corresponding Author email: [hamdan@utar.edu.my](mailto:hamdan@utar.edu.my)

## Keywords

*Academic Dishonesty;*  
*Higher Education;*  
*Students;*  
*Malaysia*

## ABSTRACT

Academic dishonesty is viewed as a major issue in higher education across the world. Therefore, this research aims to determine the factors influencing academic dishonesty among undergraduate students in higher education institutions (HEIs) in Malaysia. The data was gathered from the intended respondents using the questionnaire survey approach. A total of 590 questionnaires were gathered from undergraduate students at two Malaysian universities—one public and one private. Afterward, 438 of the completed questionnaires were deemed suitable for analysis. The findings revealed that there was a statistically significant relationship between academic dishonesty, social factors, and students' motivation (837\*\*, 204\*\*, respectively). However, academic dishonesty has a negative correlation with the academic environment  $-.235$ . Furthermore, social factors have a positive  $.297^{**}$  association with students' motivation and a negative relationship with the academic environment  $-.157^{**}$ . Also, student motivation has a positive correlation with the academic environment  $.332^{**}$ . The results of this investigation provide valuable insight into the frequency and contributing factors of academic dishonesty in HEIs in Malaysia. Combating academic dishonesty is essential to maintaining the reputation of Malaysian higher education and ensuring quality education for all students.

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## 1. INTRODUCTION

Academic dishonesty refers to any form of cheating in formal academic activities, such as plagiarism or falsification of data (Salamah, 2022). It encompasses unethical behaviors that occur in different academic settings, including classrooms, exams, and academic writing such as dissertations and assignments. Common forms of academic dishonesty include plagiarism, cheating, fabrication, unethical collaboration, and copying homework. It is a global issue that significantly impacts students' motivation to learn (Mohamed Saat et al.,

2012). In this study, academic dishonesty, academic integrity violation and academic misconduct will be interchangeably used.

The higher education system in Malaysia has experienced significant development over the years. Unfortunately, similar to the global higher education context, academic dishonesty among students is also prevalent in Malaysia. Recent studies indicate an increase in the number of incidents related to academic dishonesty in higher education institutions (Cheah, 2024; Singh et al., 2024; Chiang et al., 2022). In Malaysia, academic dishonesty has become a major concern. According to a study conducted in a Malaysian university, it was found that 82.1% of students have participated in academic dishonesty at least once (Abusafia et al., 2018). Plagiarism and other forms of dishonesty by students, which were already common before the COVID era, have become even more widespread in the virtual teaching and assessment system (Goff et al., 2020).

The misuse of information and communication technology has contributed to the rise in academic dishonesty in higher education (Peytcheva-Forsyth et al., 2018), which undermines the classroom environment and learning objectives. The internet has fostered a culture of "cut-paste," a form of plagiarism that hinders originality and undermines the purpose of disciplined academic learning.

Table 1 presents various instances of academic dishonesty reported in educational institutions worldwide.

**Table 1. Academic dishonesty incidents**

Author	Academic dishonesty incident
(Anitha & Sundaram, 2021)	Many students at HEIs are reported to disregard academic integrity on a regular basis; a case in point is 93% of students in Andhra Pradesh, India, have acknowledged doing so at least once while completing their assignments.
(Ledesma, 2011)	According to a Korean survey, 69% of participants acknowledged cheating and plagiarising in academic exams.
(Arshad et al., 2021)	There is no sense of transgression, and pupils see academic dishonesty in the examination as typical.
(MacLeod & Eaton, 2020)	A poll in Canada found that 53.1% of respondents acknowledged to academic dishonesty in online learning, indicating a detrimental impact on the education and learning system.
(Bilen & Matros, 2021)	32.7% of students admitted to cheating in order to earn excellent grades in an online course.

Similar to the global higher education context, research indicates that 57.4% of students in major public universities in Malaysia have admitted to participating in academic dishonesty at least once during their studies (Mustapha et al., 2017). In another study reveals that 52.5% of students in HEIs in Malaysia have committed at least one case of academic dishonesty (Tiong et al., 2018). Furthermore, research indicates that 65.3% of students have admitted to cheating in examinations, quizzes, and class assessments (Yussof & Ismail, 2018). Similarly, the results show that 64.1% of respondents from a public university in Malaysia completed their assignments by gathering resources from the internet without proper referencing or acknowledging the sources (Rusdi et al., 2019). Additionally, it is concerning that students are now frequently purchasing assignments, theses, and presentations without putting in any effort to learn (Azim, 2021). There is no doubt that students who

display deceitful and unethical behaviors in order to gain an unfair advantage in the grading system are more likely to engage in dishonest behavior in the workplace. Therefore, it is crucial to address students' academic dishonesty as they represent the future of the country on a global scale.

Academic dishonesty not only damages the reputation of Malaysian higher education but also fosters unhealthy practices among students to achieve grades in an unfair manner. Tackling students' academic dishonesty should be a priority for higher educational institutions to maintain the quality of higher education and the overall learning ecosystem in Malaysia. Additionally, a report by the Malaysian Qualifications Agency emphasizes the need for Malaysian higher education institutions to take measures to prevent academic dishonesty. The report recommends that institutions develop policies and procedures to address academic dishonesty, educate students and faculty about the consequences of academic dishonesty, and implement technology-based solutions to detect and prevent plagiarism (Mohamed et al., 2018).

In this regard, HEIs bear the responsibility of guiding students in developing their moral and ethical compass (Bleazby, 2020). HEIs should actively assist students in achieving their academic goals and objectives while instilling important values. In fact, 97% of American parents agree that moral qualities such as honesty and integrity should be integrated into the academic curriculum (Pavela, 1997; Kumar Shrivastava, 2017). In other words, HEIs should strive to maintain teaching excellence and promote academic integrity among the student community.

Overall, academic dishonesty is a serious problem that requires continuous efforts from educational institutions to address and prevent it. Students need to understand the importance of academic integrity and the consequences of academic dishonesty, while universities must implement effective policies and procedures to uphold academic standards and promote academic integrity. Failure to do so will disrupt the inclusive learning environment designed for ethical practices.

The significance of this research lies in providing empirical evidence of students' academic dishonesty in a Malaysian context, particularly the factors that influence academic dishonesty. Moreover, the research contributes to the existing body of literature by utilizing data from Malaysian public and private institutions.

## **2. LITERATURE REVIEW & FORMATION OF HYPOTHESES**

### **2.1. ACADEMIC DISHONESTY**

Mustapha et al. (2017), define academic dishonesty as any form of deceptive behavior in academic work, including the purchase of assignments or unauthorized copying and reproduction of others' work. Upon further analysis of the existing literature, in this study academic dishonesty has been classified into five main categories: cheating, plagiarism, electronic cheating, and collusion. Therefore, this study will solely focus on these five forms of academic dishonesty within Malaysian higher education institutions. To facilitate

understanding, Fig. 1 provides a visual representation of the five types of academic dishonesty that will be examined in this research.

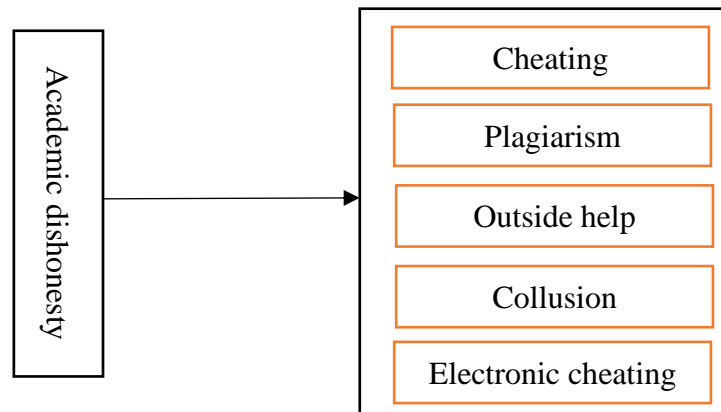


Fig. 1. Five types of academic dishonesty [categories for this study]

## 2.2. CHEATING

Cheating is a pervasive violation of academic integrity. It encompasses the improper utilization of information, materials, tools, or techniques to complete academic assignments, which includes actions such as sharing answers and engaging in sabotage. Within the academic realm, cheating is deemed a criminal offense, as it entails the unauthorized utilization of information, materials, tools, or practices in academic activities (Salamah, 2022). Moreover, cheating can be defined as the act of copying or submitting another individual's work without their explicit consent (Garavalia et al., 2007). This includes the use of prohibited materials, replicating another student's work, or engaging in fraudulent behavior (such as feigning illness or injury) to gain an unfair advantage during examinations. Cheating transpires when students employ unauthorized information, materials, devices, sources, or practices to complete academic tasks. Students may resort to cheating in an attempt to gain an unfair edge over their peers. Previous studies have indicated that cheating on examinations is reported at a higher rate compared to other forms of academic dishonesty (McCabe et al., 2006; Power, 2009). Various types of examination cheating include sending proxies to take the test, utilizing unsanctioned aids such as notes or books, and tampering with examination results (Chiam et al., 2021). Moreover, studies suggest that social factors, academic culture, and students' motivation within the academic environment of Malaysian Higher Education Institutions may contribute to instances of academic integrity violations. Therefore, HEIs must proactively implement measures to identify and prevent academic integrity violations among students, thereby enhancing institutional reputation and fostering a conducive learning environment.

## 2.3. PLAGIARISM

Plagiarism refers to the act of claiming credit for someone else's original work, whether it is published or unpublished. This encompasses copying or rephrasing another author's ideas without providing appropriate acknowledgment or citation. As Hodgkinson et al.

(2016) assert, when plagiarism occurs in written assignments, it means that existing material, information, ideas, or knowledge have been utilized without giving credit to the original author or source. This violation of academic integrity is the most prevalent form of misconduct in educational institutions. Plagiarism has emerged as a significant concern in the realms of education, industry, and the research community. It is regarded as a serious academic offense and a breach of ethical standards. The development of information and communication technology has provided students with greater opportunities to engage in plagiarism within educational settings. According to Rozar et al. (2020), internet has made it effortless for students to plagiarize by directly copying and pasting sentences, phrases, or words without proper citation and referencing. Moreover, students frequently turn to the internet to find relevant information for their assignments, thereby facilitating plagiarism (Jereb et al., 2018). Various factors contribute to students' inclination to plagiarize, including a lack of awareness, negative personal attitudes, inadequate skills, academic pressure, and institutional factors (Srirejeki et al., 2022). Plagiarism directly or indirectly harms students' academic and professional reputation and can even lead to suspension. Therefore, it is imperative to promote academic integrity and address issues of student plagiarism. Students must cultivate a strong sense of morality, ethical practices, honesty, dedication, and perseverance to ensure their career development by adhering to the rules regarding plagiarism.

#### **2.4. OUTSIDE HELP**

Academic integrity violations are considered crimes, regardless of how they occur. Students must adhere to academic integrity when completing academic tasks. According to Riley and Brown (1996), outside help means any unethical students' engagement in checking the exam paper before submitting to the invigilator, asking for the content of an exam, or sharing the exam contents with classmates. Moreover, according to Rawwas et al. (2004), outside help means visiting a professor and comparing work with classmates before submitting it for final assessment. Cheating incidents have increased with the shift to online teaching and learning systems. Students often resort to cheating to achieve good grades in the short term. They can easily ask questions via email or seek expert help, which is not possible during in-person examinations. Students are using calculators, second monitors, and taped notes to cheat. Educational institutions must clearly communicate the consequences of seeking outside help and impose severe punishments for any violation of academic integrity, regardless of the students' success (Chen, 2022).

#### **2.5. COLLUSION**

The educational institution utilizes various assessment methods to evaluate the performance and learning of students. One such method is individual projects or assignments. In individual assessments, students are expected to work independently and submit their assignments without any external assistance. When students contravene this principle by sharing assignments or seeking help from a ghostwriter, they are guilty of collusion. Collusion can be defined as the collaboration between two or more individuals in

a test, assignment, or group work situation, where such collaboration is explicitly prohibited or unauthorized (Hodgkinson et al., 2016).

In Malaysian higher education institutions, not only do students engage in collusion, but they also resort to purchasing significant assignments, theses, and presentation slides instead of studying and preparing themselves (Velliari, 2015; Azim, 2021). This behavior poses a threat to the reputation of the country's higher education institutions as students can complete their academic journey without truly learning and by submitting fraudulent assignments, theses, and presentations. The study recommends implementing punitive measures against students who partake in such cheating, even after they have completed their academic journey, in order to safeguard the reputation of Malaysia's HEIs (Valizadeh, 2022).

## 2.6. ELECTRONIC CHEATING

In the era of digitalization and the 4th industrial revolution, significant developments in information and Communication Technology (ICT) have occurred worldwide. The education industry has experienced both positive and negative effects from this technological advancement. According to Underwood and Szabo (2003), the development of ICT has made academic dishonesty easier. Students can easily share information during exams through the internet, engage in discussions with friends, and copy content, leading to an increase in unethical behavior on online educational platforms (Goff et al., 2020). Students often misuse electronic devices in educational institutions to commit fraudulent activities (Dyer et al., 2020). This misuse of technology has made it easier for students to cheat on exams by looking up, sending, and receiving answers from others. Technology is frequently exploited for plagiarism as it allows for easy copying and pasting of information from various sources (Jereb et al., 2018). In the context of online learning, there are even more opportunities for students to cheat due to a lack of supervision (Srirejeki et al., 2022). The most common tools used for electronic cheating include mobile phones, personal data assistants, magic calculators, Bluetooth pens, smartwatches, invisible watches, and spy Bluetooth earpieces (Baijnath & Singh, 2021). In the context of Malaysian higher education institutions, electronic cheating has also increased, especially during the Covid-19 pandemic.

The research indicates that students are receiving undue privileges due to the opportunity to engage in academic dishonesty in academia (Musa & Ismail, 2021). There are several consequences of academic dishonesty in higher education institutions. Academic dishonesty disrupts classroom decorum, poisons the classroom experience and learning, and affects students' ethics and professionalism (Offstein & Chory, 2017). It can also have negative impacts on institutions, teachers, and students, both locally and globally (Dyer et al., 2020; Kailis, 2019). Studies show that academic dishonesty seriously affects an institution's reputation and hinders students' intellectual growth. In summary, academic dishonesty ultimately harms the education system and culture of an institution. Therefore, the failure to detect and prevent academic dishonesty among students can impact the value of degrees, graduate employability, accreditation, and global recognition (Thomas, 2017). Moreover, students' academic dishonesty places an additional burden on teachers,

forcing them to spend extra hours dealing with cases of academic misconduct instead of focusing on important academic tasks such as developing lecture materials, improving the curriculum, and enhancing the teaching and learning system. This situation can be self-degrading for teachers as they may question their teaching methods and expectations, further harming the overall study system.

Academic dishonesty not only affects students in their personal lives but also in their professional careers. By deviating from the path of righteous education and lacking a solid foundation in their studies, students will face future consequences. Research shows that the outcomes of academic dishonesty can erode academic integrity and the learning culture (Comas-Forgas et al., 2021). Additionally, students who engage in academic dishonesty will fail to meet employers' expectations. Many students in Malaysia face challenges in proving the value of their degrees (Cuadrado et al., 2019). This not only has negative consequences for the students themselves, but also for the country as a whole. If not addressed, violations of academic integrity will continue to increase among motivated learners and in the corporate sector of Malaysia. As a result, the violation of students' academic integrity will undoubtedly harm the reputation and growth of higher education in Malaysia (Mustapha et al., 2017). Additionally, it will impact learning outcomes and undermine the hard work of individuals who adhere to ethical guidelines. The violation of students' academic integrity is an ongoing issue in Malaysian higher education institutions. Therefore, the researcher aims to identify the factors that affect students' academic integrity in this context.

The researcher argues that it is crucial to promptly identify the factors contributing to the rising cases of academic dishonesty and provide effective solutions to address this problem. This approach can help develop academic integrity policies and design appropriate educational programs to enhance students' academic integrity. Given the significance of higher education in Malaysia, the researcher seeks to examine the factors that influence students' academic integrity in both public and private universities in the country.

## **2.7. THE IMPACT OF SOCIAL FACTORS ON ACADEMIC DISHONESTY**

Social factors, as defined by modern social scientists, are events or situations that influence individuals' lives and well-being (Gottdiener et al., 2019). These factors can be further categorized as social categories that impact a person's life circumstances, experiences, and social standing. Examples of social factors include socioeconomic condition, educational level, surroundings, health and safety, cultural norms and practices, gender, and ethnicity, among others.

In this study, the first element related to students' academic dishonesty is social factors. Different socioeconomic backgrounds of students who enroll in educational institutions influence their academic dishonesty. Social factors that contribute to academic dishonesty will be examined under two main components: i) social norms and ii) social trust. Research suggests that social trust and standards can influence people's behavior (Al Shbail et al., 2021). Social issues are correlated with violations of academic integrity by students in higher education institutions (Buccioli et al., 2020).

### 2.7.1. Social norms:

Social norms are the accepted standards of conduct in society. The extent to which a person believes it is necessary to pass judgment on academic integrity violations depends on social norms. Social norms also determine the extent to which individuals believe they should engage in certain behaviors to complete tasks (Chang et al., 2006). These norms are often unspoken rules that define appropriate and acceptable behavior within a specific group or society, influencing how individuals behave.

### 2.7.2. Social trust:

Social trust refers to an individual's confidence in their ability to engage socially with others (Al Shbail et al., 2021). In the context of academic integrity violations, students may develop trust in their peers to share written answers during exams. However, when social trust is compromised, it often leads to an increase in dishonest behavior. This study aims to explore the relationship between social norms, social trust, and academic integrity violations among students. Various social factors, including the desire to outperform others, peer pressure, gender, socio-economic status, religious influences, and parental expectations, contribute to academic dishonesty. Furthermore, students may be more inclined to engage in dishonest practices if the consequences are not severe, such as failing a course or facing expulsion. Based on these premises, the research hypothesis is:

H1: There is a positive relationship between peer behaviors in the class and students' decision of academic dishonesty.

## 2.8. THE IMPACT OF STUDENT'S MOTIVATION ON ACADEMIC DISHONESTY

The Latin term "moveo," which means to arouse, annoy, or urge someone to act, is the root of the English word "motivation." It refers to the system responsible for initiating, stimulating, and sustaining specific behaviors. Motivation is a tool used to persuade someone to take action (Cardina & Kristiani, 2022). Academic motivation pertains to the driving force behind behaviors related to academic performance and functioning, such as students' effort, workload management, activity choices, and persistence (Usher, 2018). This study examines three aspects of student motivation: i) intrinsic motivation, and ii) extrinsic motivation.

### 2.8.1. Intrinsic motivation:

Intrinsic motivation stimulates students' learning and memory. Another study suggests that students' mindsets influence their motivation. Students who are more intrinsically motivated tend to invest more time in their education and professional growth. Self-motivated individuals who seek to learn for career advancement are less likely to engage in academic integrity violations (Kasayira et al., 2007). Studies support the need for student motivation to prevent academic dishonesty. It is also stated that enhancing students' self-awareness of their strengths and weaknesses through education can help reduce instances of academic dishonesty.

### 2.8.2. Extrinsic motivation:

Students who are extrinsically motivated are less likely to pay attention in class and receive grades that accurately reflect their abilities or performance. They may develop the belief and behavior that they are incapable of submitting assignments on time and according to institutional requirements. To justify their actions, they may seek assistance from others or compromise their moral principles (Cardina & Kristiani, 2022). Students whose primary objective is obtaining an academic degree are more prone to cheating (Anderman, 2007). Some students even perceive motivation and cheating as being positively correlated. Additionally, cheating may be seen as a strategic way to appear knowledgeable in a particular field. Considering these points, it is important for students to be properly motivated in order to avoid academic dishonesty. Previous research has also suggested that motivation can influence students' mindsets (Thomas, 2017), and mindset has a significant impact on motivation among university students. Jordan (2001), also found in a separate study that participants with stronger extrinsic motivation and lower intrinsic motivation engage in academic dishonesty within educational institutions. Therefore, the following hypothesis has been developed:

H2: Highly motivated students for learning are less likely to commit academic dishonesty.

## 2.9. THE IMPACT OF ACADEMIC ENVIRONMENT ON ACADEMIC DISHONESTY

### 2.9.1. Institutional factors:

These practices that undermine academic integrity in the classroom include seeking external assistance, engaging in plagiarism, collaborating inappropriately, and using technology for cheating purposes. Throughout this study, the terms "classroom environment," "learning environment," and "academic environment" are used interchangeably. The classroom environment refers to the psychological atmosphere of the classroom, which is believed to reflect the demeanor of the students. On the other hand, the academic environment is a specialized setting created to facilitate learning and nurture students' creativity (Thomas, 2020). Research has demonstrated that a positive classroom atmosphere enhances students' learning outcomes, including their achievements and overall satisfaction. The term "academic environment" encompasses the various physical settings, contexts, and cultures in which students acquire knowledge. It also underscores the impact of the learning environment on students' motivation to study, their interest in learning, and their personal well-being. Negative attitudes among students can emerge within the classroom, contributing to instances of academic integrity violations and other forms of academic dishonesty (Chiam et al., 2021).

This study focuses on three vital aspects of the academic setting that could potentially give rise to academic integrity violations: i) comprehension of academic policy, ii) awareness of the severity of consequences for academic dishonesty, and iii) the risk of detection. Understanding academic policy is paramount for managing students' unethical behavior in higher education institutions (Bertram Gallant & Rettinger, 2022). Schools should educate students about acceptable and unacceptable behaviors in the classroom, as many underestimate the importance of academic integrity. Academic integrity education

programs can assist students in developing their moral and ethical compass (Mustapha & Ali, 2017). It is suggested that emphasis be placed on academic integrity starting from the first year of enrollment to help students grasp its significance. New students should be informed about the university's policies on academic integrity (Oran et al., 2016). Understanding academic policies can enhance academic integrity among students in HEIs. In order to address breaches of academic integrity, it is important to have knowledge of the severity of punishment for academic dishonesty. Institutions should establish clear consequences and penalties for violations (Cardina & Kristiani, 2022). Creating a comprehensive action plan is essential for addressing academic integrity infractions (Cuadrado et al., 2019). In line with the seriousness of the offense, issuing appropriate sanctions and punishments may help deter violations (Balbuena & Lamela, 2015). Instructors play a crucial role in reducing academic integrity infringements by communicating motivational messages about the negative effects of academic dishonesty.

Higher education institutions must develop a system to detect academic dishonesty among students. If students are aware that institutions have the means to identify and discipline those who violate academic policy, they are more likely to refrain from doing so. According to a study by De Lambert et al. (2006), it was found that 50% of students believed that university staff would not report incidents of academic dishonesty. This perception potentially leads students to compromise their academic integrity.

A second study by Bertram Gallant and Rettinger (2022) and Harris et al. (2020), suggests that contextual factors such as peer cheating behavior, peer disapproval of cheating behavior, and perceptions of the seriousness of cheating penalties can influence individuals to engage in cheating. Consequently, even though students may be aware of their peers cheating, they hesitate to report it because they fear damaging their personal relationships.

Furthermore, academic staff members also exhibit reluctance in reporting cases of academic dishonesty due to the additional burden and hassle associated with initiating disciplinary measures. This observation indicates a direct link between the academic setting and the breach of academic integrity in higher education institutions. Therefore, following is the hypothesis that fall under this category:

H3: Academic environment has significant positive relationship on students' intention of academic dishonesty.

## 2.10. THEORETICAL FRAMEWORK

Theories provide a logical basis to analyze the situation and draw a legitimate conclusion (Wacker, 1998). A formal logical explanation of a particular collection of events that includes predictions or describes how multiple components relate to one another is known as a theory. The main objective of a theory is to help in understanding the relationships between various phenomena and to make predictions about the characteristics of one phenomenon based on information about another phenomenon. A theory is a concept that describes how and why a phenomenon happens (Corley & Gioia, 2011). This section will discuss the ideas that underlie the variables shown in the schematic diagram in Fig. 2.

## 2.11. THE SOCIAL LEARNING THEORY (SLT)

A learning process is complex. Different psychological theories explain why and how people learn. In 1977, the famous psychologist Albert Bandura proposed the Social Learning Theory (SLT). The SLT suggests that people learn social behavior by closely observing, imitating, and modeling the behavior of others (Mcleod, 2011). This theory is considered a bridge between behaviorist and cognitive learning theories. The SLT incorporates a person's attention, memory, and motivational processes to understand learning. It is an important theory for understanding how people learn through observing others (Muro & Jeffery, 2008). The SLT has three core principles. First, it assumes that people can learn behavior from others through observation. In this stage, a child observes the behavior of others and attempts to imitate it. They then model that behavior by imitating it. Successful imitation occurs when the observed behavior is reproduced in one's own behavior (Bandura & Walters, 1977). Researchers have applied the social learning theory in different contexts. For example, the SLT has been used to examine the role of peer behavior in students' academic dishonesty. This study further indicates that a person must go through four stages (attention, retention, reproduction, and motivation) to successfully imitate behavior. The study also reports a potential link between peer behavior and students' academic dishonesty.

Social factors such as social norms and social trust play a vital role in educational institutions. Students come from diverse social and economic backgrounds, each with their own mindset, values, and belief systems that may be associated with academic dishonesty. The current study employs the social learning theory to determine how social variables affect academic integrity breaches among students at Malaysian higher education institutions. The SLT suggests that students may observe the behavior of their peers and other individuals in society. They may imitate these behaviors and model them in their own actions, leading to violations of academic integrity. Therefore, the aim of this theory is to understand how social factors influence academic integrity violations in Malaysian higher education institutions.

## 2.12. THE SELF-DEVELOPMENT THEORY (SDT)

Motivation is the process of initiating, guiding, and maintaining goal-oriented human behavior. It is related to persistence, activation, and intention. "To be motivated means to be moved to do something" (Ryan & Deci, 2000). There are several prominent theories related to motivation and human behavior, one of which is the self-determination theory (Thomas, 2017). The self-determination theory was introduced by psychologists and authors Richard M. Ryan and Edward L. Deci in 2000 (Duda & Appleton, 2016). It originates from five different micro-theories, each explaining a different set of driving elements of human behavior (Kanat-Maymon et al., 2015). The self-determination theory (SDT) is a useful tool for analyzing motivation in various situations, including education (Khalid et al., 2020). It helps predict human performance and psychological health outcomes and focuses on intrinsic and extrinsic motivation as the two most common and important forms of motivation.

The term "intrinsic motivation" refers to performing a certain behavior for the sake of the activity itself. Intrinsically motivated individuals are self-driven to engage in certain behaviors to achieve their life goals. They seek novelty and challenge themselves to develop their capacities. Their motivation comes from gaining social recognition and self-actualization through learning and personal enjoyment throughout their lives (Ryan & Deci, 2000). On the other hand, extrinsic motivation is about engaging in certain behaviors to obtain rewards or recognition, status, approval, and academic success. Externally motivated individuals are driven by external factors (Thomas, 2017). They are not interested in learning or developing their abilities.

Khalid et al. (2020) use SDT to investigate students' motivation for academic dishonesty. The study reveals that students in educational institutions can be either intrinsically or extrinsically motivated. Some students engage in certain actions to obtain rewards. Another study suggests that intrinsic and extrinsic motivation have an impact on students' performance in Asian cultures, similar to the Western context. The study highlights that extrinsically motivated students have a higher tendency to cheat in educational institutions. Another research on the SDT argues that people develop intrinsic drive to fulfill their core psychological needs, such as autonomy, competence, and relatedness (Roth et al., 2019). However, people may engage in certain behaviors to achieve certain outcomes even if they are not intrinsically motivated to do so. In this study, the theory is applied to investigate the role of intrinsic and extrinsic motivation, as well as the reasons for academic dishonesty in Malaysian higher education institutions

### **2.13. THE ACTIVITY THEORY**

The academic environment is the physical, mental, social, and emotional learning environment where a student learns (Thomas, 2017; Ambrose et al., 2010). It has seven essential characteristics, such as task direction, engagement, teacher support, social cohesiveness, equality, and cooperation (Fisher et al., 2001). In the modern education context, the academic environment is designed to prepare students to enhance their knowledge, skills, and attitude along with ethical values, professionalism, and teamwork. Several studies show that the academic environment influences students' learning. On the contrary, the academic environment may lead to a violation of academic integrity. The activity theory (AT) is a very useful framework to analyze the academic environment under different parameters. A. N. Leont'ev developed this theory from principles originally presented by Lev Vygotsky in *Thought and Language* in 1986. According to the activity theory of Vygotsky and Cole (1978), the essence of activity is a connection between the subject (human doer) and the object (thing being done). While the subject, a person or group engaging in the activity, incorporates the subject's varied reasons, the object of the action comprises the activity's emphasis and goal. Based on the application of the instruments, AT is a theoretical framework for analyzing and comprehending human interaction. It offers a holistic and contextual method of discovering students' behavior and perception through different angles. AT is more appropriate and helpful when there is a significant historical and cultural backdrop and the students, their aims, and their instruments are fast and constantly changing (Hardman, 2008; Hashim & Jones, 2007). The

theory is related to an academic environment. According to Waycott et al. (2005), activity theory offers a comprehensive understanding of how individuals interact, i.e., do meaningful group activities, with the aid of high-tech instruments in the dynamic, complex contexts of modern companies. Hasan (1998) claims that activity theory offers a comprehensive understanding of circumstances and issues in complex cultural contexts. Due to a lack of comprehension of academic regulations and a lack of awareness of the consequences of violating academic integrity, there is a significant likelihood that students will break academic policies in their academic careers.

From the above theories, the relationships between the variables can be shown in the schematic diagram (Fig. 2).

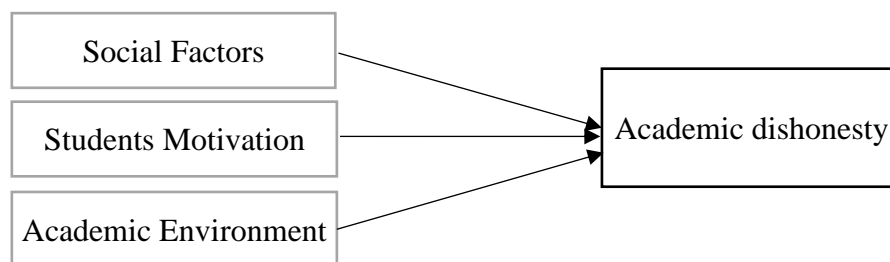


Fig. 2. Schematic diagram of the study variables

### 3. MATERIALS AND METHOD

This study is descriptive in nature. The researcher in this study looked at each respondent's characteristics and data concerning the population being investigated. Moreover, it examines the relationship between academic dishonesty (DV) with social factors, students' motivation, and the academic environment (IV) affecting students' decisions to commit fraudulent behavior in academia.

#### 3.1. POPULATION AND SAMPLING

This is a quantitative study where cross-sectional data had been collected from the targeted respondents by applying a purposive sampling technique. In this data collection process, the researcher has limited the sample to those who can provide the necessary information, either because they meet the criteria set by the researcher or because respondents are the ones who are suitable for this study (Sekaran & Bougie, 2016).

Malaysian undergraduate students are the study's intended population. The respondents belong to one public university and one private university in Malaysia. The sample was formed using the minimum number of students that were considered to be acceptable for this study (Krejcie & Morgan, 1970; Sekaran & Bougie, 2016).

#### 3.2. DATA COLLECTION PROCEDURES

The researcher used questionnaire survey method for data collection. The questionnaire was adopted from previous research (Al Shbail et al., 2021; Ryan & Connell, 1989; Farahat, 2022; Ellahi et al., 2013; McCabe & Trevino, 1993) and adapted from researcher to make questions fit with Malaysian students.

Academic dishonesty has been categorized as the dependent variable (DV) and social factors, students' motivation, and academic environment as the independent variables (IV).

There are sections on the questionnaire. Demographic data is included in Section A, academic dishonesty is covered in Section B, and social factors, student motivation, and the academic environment are covered in Sections C to D. Prior to distribution, questionnaire underwent consistency testing. For the variables, Cronbach's Alpha ranged from 0.77 to 0.99, resulting in reliability (0.8 and above is regarded as good, Field, 2009).

### 3.3. VARIABLES MEASUREMENT

Primary data were gathered for this study through a questionnaire survey. The measurements for the variables follow Table 1 except for demographics. For instance, Section A includes demographic data such as gender, CGPA, religion, the year of study, and university name. Based on the provided questionnaire, Sections C, D, and E use a 5-point Likert scale with the following ratings: 1-Strongly disagree, 2-Disagree, 3-Neutral, 4-Agree, and 5-Strongly agree.

**Table 2.** Summary of measurement of the variable

Variable	Measurement
Academic Dishonesty	5-point Likert Scale:
Social Factors	1=Strongly disagree
Student's motivation	2=Disagree
Academic Environment	3=Neutral
	4=Agree
	5=Strongly agree

## 4. RESULTS AND DISCUSSION

### 4.1. DEMOGRAPHIC PROFILE

The researcher created a Microsoft form which was distributed through WhatsApp and E-mail to the targeted population: Universiti Tunku Abdul Rahman (UTAR) and Universiti Teknologi MARA (UiTM) of the study. Finally, after data cleaning and removing of duplicates responses, 438 responses were eligible for analysis. It was found that approximately 59.4 percent of the respondents were female whereas 40.6 percent were male. Similarly, in comparison of religion, the majority of the respondent's 74.4 percent were Buddhism and 18.7 percent were Muslims. Furthermore, almost half of the respondent's cumulative grade point average (CGPA) (representing 45.7 %) were in the range of 3.00 - 3.49 and 29.7 % were in the range of 2.50 - 2.99. In terms of the year of study, 81.5 percent respondents were belonging to the 2nd year undergraduate and whereas only 11.6 were representing 3<sup>rd</sup> year undergraduate students (refer Table 3).

**Table 3.** Demographic Analysis (N=438)

	Frequency		Valid %
Gender	Male	178	40.6
	Female	260	59.4
Year of Study	1st Year	18	4.1

	Frequency	Valid %	
Respondent University	2nd Year	357	81.5
	3rd Year	51	11.6
	4th Year	12	2.7
	UTAR	358	81.7
UiTM		80	18.3
	Cumulative Grade Point Average (CGPA)		
	Excellent (3.50 - 4.00)	61	13.9
	Good (3.00 - 3.49)	200	45.7
	Satisfactory (2.50 - 2.99)	130	29.7
	Pass (2.00 - 2.49)	41	9.4
	Below Average (0-1.99)	6	1.4
Religion	Muslim	82	18.7
	Hinduism	7	1.6
	Buddhism	326	74.4
	Christianity	18	4.1
	Others	5	1.1

## 4.2. NORMALITY TESTS

The normality of the data was examined using histogram. As can be seen in Fig. 3 (a) & 3 (b) the outcome reveals that the majority of the data falls within a bell-shaped curve. Furthermore, we applied the probability plot to verify the normality of the data and found that every single item is in close proximity to the probability line. Therefore, through analyzing the graph it is evident that the data are all distributed normally and appropriately.

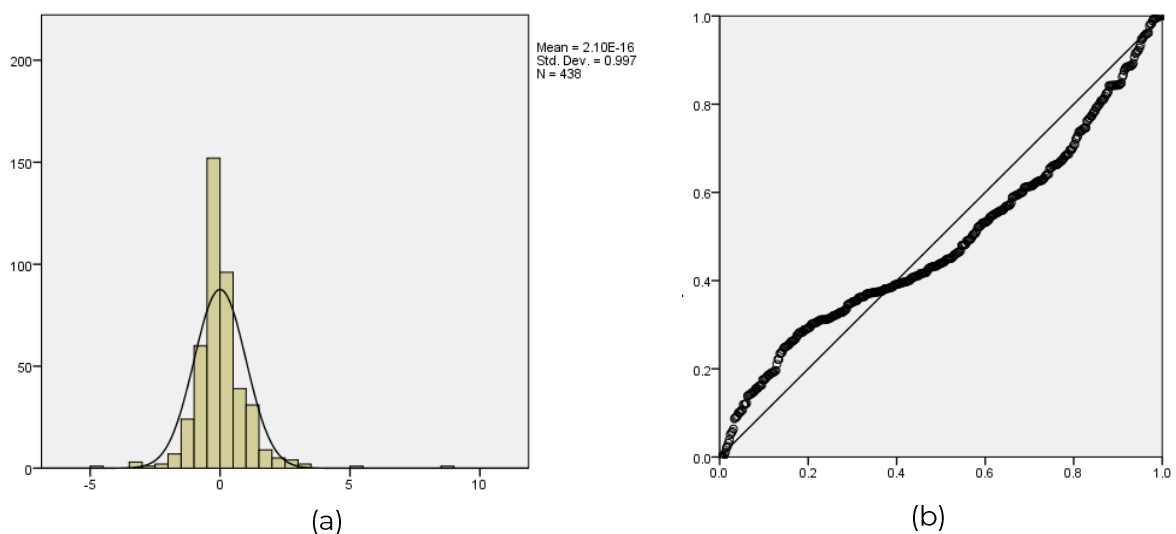


Fig. 3. Demonstrate the data normality

## 4.3. RELIABILITY TESTS

We used the SPSS 22 software to compute the Skewness and Kurtosis in order to assess the data's reliability. Table 4 illustrates that all of the item's Skewness values fall between  $\pm 3$ , while the values of Kurtosis fall between  $\pm 10$ . The values of Kurtosis and Skewness, according to Hier et al. (2011), satisfy the threshold level.

**Table 4.** Reliability of the data through Skewness and Kurtosis

Skewness and Kurtosis					
Items	Skewness	Kurtosis	Items	Skewness	Kurtosis
EI-1	1.7088	2.18128	SM-4	-0.2068	-0.1038
EI-2	1.76762	2.59282	SM-5	-0.8773	0.53712
EI-3	1.46392	1.06958	SM-6	-0.4592	-0.3612
EI-4	1.55713	1.37934	SM-7	-0.784	0.36519
EI-5	1.51545	1.41047	SM-8	-0.153	0.25871
EI-6	1.54826	1.50295	SM-9	-0.9683	1.03596
EI-7	1.4898	1.29699	SM-10	-0.6069	0.28544
EI-8	1.68565	2.12464	SM-11	0.07552	-0.6691
EI-9	1.51233	1.4101	SM-12	0.13501	-0.4023
EI-10	0.26674	-1.3133	SM-13	0.1176	-0.2949
EI-11	0.84937	-0.1083	SM-14	0.33677	-0.3013
EI-12	1.30056	1.06285	SM-15	0.20504	-0.3361
EI-13	2.15178	4.04764	SM-16	0.79893	-1.368
EI-14	2.01652	3.75845	SM-17	1.59515	1.92269
EI-15	2.18458	5.07142	EE-1	-0.2667	-0.231
SF-1	1.71018	2.42046	EE-2	-0.4569	-0.203
SF-2	1.60858	1.84757	EE-3	-0.2153	-0.459
SF-3	1.49266	1.44672	EE-4	-0.5614	0.24693
SF-4	1.74348	2.3177	EE-5	-0.7328	0.61325
SF-5	1.7455	2.36587	EE-6	-0.4695	0.23662
SF-6	1.26129	0.68895	EE-7	-0.4232	0.46176
SF-7	1.19185	0.5171	EE-8	-0.3614	0.56198
SF-8	1.09546	0.2206	EE-9	-0.3152	0.32861
SM-1	-0.0309	-0.7315	EE-10	0.15158	-0.5464
SM-2	-0.8904	0.50933	EE-11	-0.2894	-0.2709
SM-3	-0.7015	0.05932	EE-12	0.40414	-0.7541

#### 4.4. ACADEMIC DISHONESTY

Table 5 depicts descriptive statistics for academic dishonesty, the dependent variable. For example, the respondents generally agreed to copy in the examination from others (M=1.52) as well as help others to cheat (M=1.62). Similarly, student's respondent to receive help from others in completing the assignment (M=2.32) as well as agreed to copy the information without referencing (M=2.01). Moreover, respondents reported to pay money to ghost-writer to complete the assignment (M=1.40) and used the cell phone to cop and cheat during the examination (M=1.42).

**Table 5.** Academic dishonesty Scale

SL	Items	N	Min	Max	Mean	SD
1	I have used lecture sheets and class notes during the exam which is not allowed.	438	1	5	1.490	0.847
2	I have copied answer from my classmates during on the exam.	438	1	5	1.520	0.879
3	I have helped my classmates to cheat on a exam	438	1	5	1.620	0.991
4	I have passed the correct answer to my classmates during an exam.	438	1	5	1.600	0.993
5	My classmates have checked my scripts and answers before final submission to the exam invigilator.	438	1	5	1.610	0.955

SL	Items	N	Min	Max	Mean	SD
6	I have asked my classmates to share the exam questions who has already given before me.	438	1	5	1.570	0.912
7	I have shared the exam information to classmates who has not yet taken it.	438	1	5	1.620	0.963
8	I have visited the office of my course teacher to influence the grade.	438	1	5	1.570	0.934
9	Taken credit for full participation in a group project without doing a fair share of the work.	438	1	5	1.640	0.998
10	I have received the helped from my classmates to prepare the assignment	438	1	5	2.320	1.23
11	I have copied a few sentences of material from a published source without proper referencing.	438	1	5	2.010	1.089
12	Fabricated or falsified bibliography.	438	1	5	1.690	0.949
13	I have paid money to other persons to write my assignment.	438	1	5	1.400	0.822
14	I have used cellphone to take help during an exam.	438	1	5	1.420	0.784
15	I have used cellphone or another device to photograph an exam.	438	1	5	1.370	0.71

#### 4.5. CORRELATION ANALYSIS

We tested the hypothesis using the regression analysis at 95% confidence interval (refer table 6) to test the relationship between independent variables (Social Factors, Students Motivation and Academic Environment) and dependent variables (Academic dishonesty). The result shows that there was a statistically significant relationship between academic dishonesty and social factors and students' motivation (.837\*\*, .204\*\* respectively). However, academic dishonesty has negative correlation with academic environment -.235.

**Table 6.** Result of Correlation analysis

Variables	Mean	SD	1	2	3	4
1. Academic Dishonesty	1.63	0.74	1			
2. Social Factors	1.66	0.87	.837**	1		
3. Student Motivation	3.07	0.56	.204**	.297**	1	
4. Academic Environment	3.18	0.59	-.235**	-.157**	.332**	1

Furthermore, social factors have positive .297\*\* association students' motivation and an negative relationship with academic environment -.157\*\*. Also, Student motivation has positive correlation with academic environment .332\*\*

#### 4.6. TESTING THE HYPOTHESIS:

We tested the hypothesis using the regression analysis at 95% confidence interval. Table 7 shows the result of the hypothesis.

**Table 7.** Hypothesis result

Variables	Coefficients	t	Sig.	Decision
SF -->AD	.700	29.194	.000	Supported
SM -->AD	-.008	-.217	.828	Not supported
AE -->AD	-.130	-3.616	.000	Supported

The result shows that social factors have significant correlation with academic dishonesty and supported the hypothesis 1. Moreover, academic environment also has significant correlation with academic dishonesty. However, student motivation has not linked with academic dishonesty and therefore rejected the hypothesis 2.

## 5. CONCLUSION

Academic dishonesty is a common problem in Malaysian HEIs, according to the study. A sizable percentage of students acknowledged participating in dishonest activities including plagiarism, collusion, and cheating. The cause of academic dishonesty varies according to the individual. The major reasons peer pressure, attitudes towards cheating, and poor knowledge of academic integrity guidelines are a few of them. The study stresses the necessity for a multimodal strategy that addresses institutional and individual components of academic dishonesty.

The results highlight the part that universities play in the fight against academic dishonesty by establishing a culture of academic integrity, raising knowledge of academic integrity guidelines, and offering instruction in ethical behavior. These initiatives have the potential to lessen academic dishonesty and promote a more moral learning environment.

Finally, the policymakers, teachers, and HEIs can work together for the creation of a more morally trustworthy learning environment, which would eventually help to improve the Malaysian higher education system as well as the development of students.

### Author Contributions:

Conceptualization: Md. Sozon, Pok Wei Fong, Omar Hamdan Mohammad Alkharabsheh.

Methodology: Md. Sozon, Sia Bee Chuan, Pok Wei Fong, Omar Hamdan Mohammad Alkharabsheh.

Software: Md. Sozon, Pok Wei Fong, Omar Hamdan Mohammad Alkharabsheh.

Validation: Sia Bee Chuan, Pok Wei Fong, Omar Hamdan Mohammad Alkharabsheh.

Formal analysis: Md. Sozon, Omar Hamdan Mohammad Alkharabsheh.

Investigation: Md. Sozon, Pok Wei Fong, Omar Hamdan Mohammad Alkharabsheh, Md. Ataur Rahman.

Data curation: Md. Sozon, Pok Wei Fong, Omar Hamdan Mohammad Alkharabsheh, Md. Ataur Rahman.

Writing—original draft preparation: Md. Sozon, Pok Wei Fong, Omar Hamdan Mohammad Alkharabsheh.

Visualization: Md. Sozon, Sia Bee Chuan, Pok Wei Fong, Omar Hamdan Mohammad Alkharabsheh.

Supervision: Sia Bee Chuan, Pok Wei Fong, Omar Hamdan Mohammad Alkharabsheh.

Project administration: Pok Wei Fong, Omar Hamdan Mohammad Alkharabsheh.

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We obtained ethical clearance (U/SERC/51/2023) from the ethical committee at Universiti Tunku Abdul Rahman in Malaysia for conducting this study.

### Informed Consent Statement:

This study was voluntary in nature, and we obtained consent from participants to publish this paper.

### Data Availability Statement:

The data sets generated during and/or analyzed during the current study are available from the corresponding author on reasonable request.

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The authors state that they have no known competing financial or personal interests that could have seemed to affect the work reported in this study.

### References:

- Abusafia, A. H., Roslan, N. S., Yusoff, D. M., & Nor, M. Z. M. (2018). Snapshot of academic dishonesty among Malaysian nursing students: A single university experience. *Journal of Taibah University medical sciences*, 13(4), 370-376. doi:10.1016/j.jtumed.2018.04.003. PMID: 31435349; PMCID: PMC6695030.
- Al Shbail, M. O., Esra'a, B., Alshurafat, H., Ananzeh, H., & Al Kurdi, B. H. (2021). Factors affecting online cheating by accounting students: the relevance of social factors and the fraud triangle model factors. *Academy of Strategic Management Journal*, 20(6), 1-16.
- Ambrose, S. A., Bridges, M. W., DiPietro, M., Lovett, M. C., & Norman, M. K. (2010). *How learning works: Seven research-based principles for smart teaching*. John Wiley & Sons.
- Anderman, E. M. (2007). The effects of personal, classroom, and school goal structures on academic cheating. In *Psychology of academic cheating* (pp. 87-106). Academic Press. <https://doi.org/10.1016/B978-012372541-7/50008-5>.
- Anitha, P., & Sundaram, S. (2021). Prevalence, types and reasons for academic dishonesty among college students. *Journal of Studies in Social Sciences and Humanities*, 7(1), 1-14.
- Arshad, I., Zahid, H., Umer, S., Khan, S. Y., Sarki, I. H., & Yaseen, M. N. (2021). Academic dishonesty among higher education students in Pakistan. *Elementary Education Online*, 20(5), 5334-5345. doi: 10.17051/ilkonline.2021.05.597
- Azim, I. (2021). *A worryingly booming essay-for-hire industry*. Available at: <https://www.thevibes.com/articles/education/28556/msias-essay-for-hire-industry-booming-to-a-worrying-degree>
- Bajjnath, N., & Singh, D. (2019). Examination cheating: Risks to the quality and integrity of higher education. *South African Journal of Science*, 115(11-12), 1-6. <http://dx.doi.org/10.17159/sajs.2019/6281>.
- Balbuena, S. E., & Lamela, R. A. (2015). Prevalence, Motives, and Views of Academic Dishonesty in Higher Education. *Online Submission*, 3(2), 69-75.
- Bandura, A., & Walters, R. H. (1977). *Social learning theory* (Vol. 1). Prentice Hall: Englewood cliffs.

- Bertram Gallant, T., & Rettinger, D. (2022). An introduction to 30 years of research on academic integrity. *Journal of College and Character*, 23(1), 1-5. <https://doi.org/10.1080/2194587X.2021.2017975>
- Bilen, E., & Matros, A. (2021). Online cheating amid COVID-19. *Journal of Economic Behavior & Organization*, 182, 196-211. <https://doi.org/10.1016/j.jebo.2020.12.004>
- Bleazby, J. (2020). Fostering moral understanding, moral inquiry & moral habits through philosophy in schools: a Deweyian analysis of Australia's Ethical Understanding curriculum. *Journal of curriculum studies*, 52(1), 84-100. <https://doi.org/10.1080/00220272.2019.1650116>
- Buccioli, A., Cicognani, S., & Montinari, N. (2020). Cheating in university exams: the relevance of social factors. *International Review of Economics*, 67, 319-338. <https://doi.org/10.1007/s12232-019-00343-8>
- Cardina, Y., & Kristiani, K. B. S. (2022). Qualitative Survey of Academic Dishonesty on Higher Education: Identify the Factors and Solutions. *Journal of Positive School Psychology*, 6(3), 8705-8719.
- Chang, F. C., Lee, C. M., Lai, H. R., Chiang, J. T., Lee, P. H., & Chen, W. J. (2006). Social influences and self-efficacy as predictors of youth smoking initiation and cessation: a 3-year longitudinal study of vocational high school students in Taiwan. *Addiction*, 101(11), 1645-1655. <https://doi.org/10.1111/j.1360-0443.2006.01607.x>
- Cheah, J. K. S. (2024). Academic Plagiarism in Malaysia: Perspectives. In *Second Handbook of Academic Integrity* (pp. 31-39). Cham: Springer Nature Switzerland. [https://doi.org/10.1007/978-3-031-54144-5\\_5](https://doi.org/10.1007/978-3-031-54144-5_5)
- Chen, L. (2022). The Concepts of Academic Dishonesty of Undergraduate Students in China in the Situation of Online Education. *Journal of Higher Education Theory and Practice*, 22(6).
- Chiam, C. C., Lim, Y. W., & Kue, W. L. (2021). Academic cheating behaviour among students in higher education institutions in Malaysia. *Journal of Social Sciences and Humanities*, 7(2), 108-113.
- Chiang, F. K., Zhu, D., & Yu, W. (2022). A systematic review of academic dishonesty in online learning environments. *Journal of Computer Assisted Learning*, 38(4), 907-928. <https://doi.org/10.1111/jcal.12656>
- Comas-Forgas, R., Lancaster, T., Calvo-Sastre, A., & Sureda-Negre, J. (2021). Exam cheating and academic integrity breaches during the covid-19 pandemic: An analysis of internet search activity in Spain. *Heliyon*, 7(10). <https://doi.org/10.1016/j.heliyon.2021.e08233>
- Corley, K. G., & Gioia, D. A. (2011). Building theory about theory building: what constitutes a theoretical contribution?. *Academy of management review*, 36(1), 12-32. <https://doi.org/10.5465/amr.2009.0486>
- Cuadrado, D., Salgado, J. F., & Moscoso, S. (2019). Prevalence and correlates of academic dishonesty: Towards a sustainable university. *Sustainability*, 11(21), 6062. <https://doi.org/10.3390/su11216062>
- De Lambert, K., Ellen, N., & Taylor, L. (2006). Chalkface challenges: a study of academic dishonesty amongst students in New Zealand tertiary institutions. *Assessment & Evaluation in Higher Education*, 31(5), 485-503. <https://doi.org/10.1080/02602930600679415>
- Duda, J. L., & Appleton, P. R. (2016). Empowering and disempowering coaching climates: Conceptualization, measurement considerations, and intervention implications. In *Sport and exercise psychology research* (pp. 373-388). Academic Press. <https://doi.org/10.1016/B978-0-12-803634-1.00017-0>
- Dyer, J. M., Pettyjohn, H. C., & Saladin, S. (2020). Academic dishonesty and testing: How student beliefs and test settings impact decisions to cheat. *Journal of the National College Testing Association*, 4(1).
- Ellahi, A., Mushtaq, R., & Khan, M. B. (2013). Multi campus investigation of academic dishonesty in higher education of Pakistan. *International Journal of Educational Management*, 27(6), 647-666. <https://doi.org/10.1108/IJEM-03-2012-0039>

- Farahat, A. (2022). Elements of academic integrity in a cross-cultural middle eastern educational system: Saudi Arabia, Egypt, and Jordan case study. *International Journal for Educational Integrity*, 18(1), 9. <https://doi.org/10.1007/s40979-021-00095-5>
- Field, A. (2009). *Discovering statistics using SPSS*. 3rd edn SAGE Publications Limited: London.
- Fisher, D., Aldridge, J., Fraser, B., & Wood, D. (2001). Development, validation and use of a questionnaire to assess students' perceptions of outcomes-focused, technology-rich learning environments. In *annual conference of the Australian Association for Research in Education, December, Perth, Western Australia*. <http://www.aare.edu.au/01pap/fis01028.htm>.
- Garavalia, L., Olson, E., Russell, E., & Christensen, L. (2007). How do students cheat?. In *Psychology of academic cheating* (pp. 33-55). Academic Press. <https://doi.org/10.1016/B978-012372541-7/50004-8>
- Coff, D., Johnston, J., & Bouboulis, B. S. (2020). Maintaining Academic Standards and Integrity in Online Business Courses. *International Journal of Higher Education*, 9(2), 248-257.
- Cottdiener, M., Hohle, R., & King, C. (2019). *The new urban sociology*. Routledge. <https://doi.org/10.4324/9780429244452>
- Hardman, J. (2008). Researching pedagogy: An activity theory approach. *Journal of education*, 45(1), 65-95.
- Harris, L., Harrison, D., McNally, D., & Ford, C. (2020). Academic integrity in an online culture: do McCabe's findings hold true for online, adult learners?. *Journal of Academic Ethics*, 18(4), 419-434. <https://doi.org/10.1007/s10805-019-09335-3>
- Hasan, H. (1998). Activity theory: A basis for the contextual study of information systems in organisations. *Information systems and activity theory: Tools in context*, 19-38.
- Hashim, N. H., & Jones, M. L. (2007). Activity theory: A framework for qualitative analysis.
- Hodgkinson, T., Curtis, H., MacAlister, D., & Farrell, G. (2016). Student academic dishonesty: The potential for situational prevention. *Journal of Criminal Justice Education*, 27(1), 1-18. <https://doi.org/10.1080/10511253.2015.1064982>
- Jereb, E., Perc, M., Lämmlein, B., Jerebic, J., Urh, M., Podbregar, I., & Šprajc, P. (2018). Factors influencing plagiarism in higher education: A comparison of German and Slovene students. *PloS one*, 13(8), e0202252. <https://doi.org/10.1371/journal.pone.0202252>
- Jordan, A. E. (2001). College student cheating: The role of motivation, perceived norms, attitudes, and knowledge of institutional policy. *Ethics & Behavior*, 11(3), 233-247. [https://doi.org/10.1207/S15327019EB1103\\_3](https://doi.org/10.1207/S15327019EB1103_3)
- Kailis, H. (2019). *The cost of a flawed approach to academic integrity*. Cadmus. <https://www.cadmus.io/blog/the-cost-of-a-flawed-approach-to-academic-integrity>.
- Kanat-Maymon, Y., Benjamin, M., Stavsky, A., Shoshani, A., & Roth, G. (2015). The role of basic need fulfillment in academic dishonesty: A self-determination theory perspective. *Contemporary educational psychology*, 43, 1-9. <https://doi.org/10.1016/j.cedpsych.2015.08.002>
- Kasayira, J. M., Musingarabwi, S., Nyanhongo, S., Chipandambira, K. S., & Sodi, T. (2007). A survey of the views of college students on academic dishonesty. *Journal of psychology in Africa*, 17(1-2), 123-127. <https://doi.org/10.1080/14330237.2007.10820156>
- Khalid, F. M., Rauf, F. H. A., Othman, N. H., & Zain, W. N. W. M. (2020). Factors influencing academic dishonesty among accounting students. *Global Business and Management Research*, 12(4), 701-711.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, 30(3), 607-610. <https://doi.org/10.1177/001316447003000308>
- Ledesma, R. G. (2011). Academic dishonesty among undergraduate students in a Korean university. *Research in World Economy*, 2(2), 25-35.

- MacLeod, P. D., & Eaton, S. E. (2020). The paradox of faculty attitudes toward student violations of academic integrity. *Journal of Academic Ethics*, 18(4), 347-362. <https://doi.org/10.1007/s10805-020-09363-4>
- McCabe, D. L., Butterfield, K. D., & Trevino, L. K. (2006). Academic dishonesty in graduate business programs: Prevalence, causes, and proposed action. *Academy of Management Learning & Education*, 5(3), 294-305. <https://doi.org/10.5465/amle.2006.22697018>
- McCabe, D. L., & Trevino, L. K. (1993). Academic dishonesty: Honor codes and other contextual influences. *The Journal of Higher Education*, 64(5), 522-538. <https://doi.org/10.1080/00221546.1993.11778446>
- McLeod, S. (2011). Albert Bandura's social learning theory. *Simply Psychology*. London.
- Mohamed, K., Abdul Samat, N. H., Abd Aziz, A. S., Mohd Noor, N. A., & Ismail, N. (2018). Academic plagiarism in Malaysia higher education institutions: legal perspective. *International Journal of Law, Government and Communication*, 3(13), 245-253.
- Mohamed Saat, M., Porter, S., & Woodbine, G. (2012). A longitudinal study of accounting students' ethical judgement making ability. *Accounting Education*, 21(3), 215-229. <https://doi.org/10.1080/09639284.2011.562012>
- Muro, M., & Jeffrey, P. (2008). A critical review of the theory and application of social learning in participatory natural resource management processes. *Journal of Environmental Planning and Management*, 51(3), 325-344. <https://doi.org/10.1080/09640560801977190>
- Musa, A., & Ismail, J. (2021). Academic Dishonesty: A Cause for Concern? *Journal of Administrative Science*, 18(1), 334-342. <https://ir.uitm.edu.my/id/eprint/48500>
- Mustapha, R., & Ali, N. A. N. (2017). An empirical survey of an academic dishonesty at a major public universities in recent years: The Malaysian evidence. *Asian Journal of Educational Research*, 5(3), 43-49.
- Mustapha, R., Hussin, Z., Siraj, S., & Darusalam, G. (2017). Academic dishonesty among higher education students: The Malaysian evidence (2014 To 2016). *KATHA-The Official Journal of the Centre for Civilisational Dialogue*, 13(1), 73-93. <https://doi.org/10.22452/KATHA.vol13no1.4>
- Offstein, E. H., & Chory, R. M. (2017). Breaking bad in business education: Impacts on student incivility and academic dishonesty. *Business and Professional Communication Quarterly*, 80(3), 269-295. <https://doi.org/10.1177/23294906166717>
- Oran, N. T., Can, H. Ö., Şenol, S., & Hadımlı, A. P. (2016). Academic dishonesty among health science school students. *Nursing Ethics*, 23(8), 919-931. <https://doi.org/10.1177/096973301558392>
- Pavela, G. (1997). Applying the power of association on campus: A model code of academic integrity. *JC & UL*, 24, 97.
- Peytcheva-Forsyth, R., Aleksieva, L., & Yovkova, B. (2018, December). The impact of technology on cheating and plagiarism in the assessment—The teachers' and students' perspectives. In *AIP conference proceedings* (Vol. 2048, No. 1). AIP Publishing. <https://doi.org/10.1063/1.5082055>
- Power, L. G. (2009). University students' perceptions of plagiarism. *The Journal of Higher Education*, 80(6), 643-662. <https://doi.org/10.1080/00221546.2009.11779038>
- Rawwas, M. Y., Al-Khatib, J. A., & Vitell, S. J. (2004). Academic dishonesty: A cross-cultural comparison of US and Chinese marketing students. *Journal of Marketing Education*, 26(1), 89-100. <https://doi.org/10.1177/0273475303262354>
- Riley, L. A., & Brown, S. C. (1996). Crafting a public image: An empirical study of the ethics of ghostwriting. *Journal of Business Ethics*, 15, 711-720. <https://doi.org/10.1007/BF00381736>
- Roth, G., Vansteenkiste, M., & Ryan, R. M. (2019). Integrative emotion regulation: Process and development from a self-determination theory perspective. *Development and Psychopathology*, 31(3), 945-956. doi:10.1017/S0954579419000403
- Rozar, N., Sidik, M. H., Razik, M. A., Sidik, N. A., & Zolkepl, M. F. (2020). Why do university students perpetrate internet plagiarism? A multiple linear regression analysis. *Systematic Reviews in Pharmacy*, 11(12).

- Rusdi, S. D., Hussein, N., Rahman, N. A. A., Noordin, F., Aziz, Z. Z. A., & Aziz, Z. Z. A. (2019). Academic dishonesty among tertiary students in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 9(3), 512-520. DOI: 10.6007/IJARBS/v9-i3/5710
- Ryan, R. M., & Connell, J. P. (1989). Perceived locus of causality and internalization: examining reasons for acting in two domains. *Journal of personality and social psychology*, 57(5), 749-761. <https://doi.org/10.1037/0022-3514.57.5.749>
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary educational psychology*, 25(1), 54-67. <https://doi.org/10.1006/ceps.1999.1020>
- Salamah, I. (2022). Factors influencing academic dishonesty among Sriwijaya State Polytechnic students. *International Journal of Science, Technology & Management*, 3(2), 357-362.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & sons.
- Shrivastava, S. K. (2017). Promotion of moral values through education. *International journal of research in social sciences*, 7(6), 103-108.
- Singh, M. K. M., & Jun, J. P. K. (2024). Examining Exemplar Elements of Selected Malaysian Higher Education Institutions'academic Integrity Policy: Document Analysis Based Evidence. *Journal of Nusantara Studies (JONUS)*, 9(1), 269-293. <https://doi.org/10.24200/jonus.vol9iss1pp269-293>
- Srirejeki, K., Faturokhman, A., Praptapa, A., & Irianto, B. S. (2022). Academic misconduct: Evidence from online class. *Int J Eval & Res Educ*, 11(4), 1893-1902. DOI: 10.11591/ijere.v11i4.23556
- Thomas, D. (2017). Factors that explain academic dishonesty among university students in Thailand. *Ethics and Behavior*, 27(2), 140-154. <https://doi.org/10.1080/10508422.2015.1131160>
- Thomas, D. (2020). Academic dishonesty, religious fundamentalism, among students at a religious university. *International Forum Journal*, 23(1), 126-138.
- Tiong, J. J. L., Kho, H. L., Mai, C. W., Lau, H. L., & Hasan, S. S. (2018). Academic dishonesty among academics in Malaysia: a comparison between healthcare and non-healthcare academics. *BMC medical education*, 18, 1-10. <https://doi.org/10.1186/s12909-018-1274-3>
- Underwood, J., & Szabo, A. (2003). Academic offences and e-learning: individual propensities in cheating. *British Journal of Educational Technology*, 34(4), 467-477. <https://doi.org/10.1111/1467-8535.00343>
- Usher, E. L. (2018). Acknowledging the whiteness of motivation research: Seeking cultural relevance. *Educational Psychologist*, 53(2), 131-144. <https://doi.org/10.1080/00461520.2018.1442220>
- Valizadeh, M. (2022). Cheating in Online Learning Programs: Learners' perceptions and Solutions. *Turkish Online Journal of Distance Education*, 23(1), 195-209. <https://doi.org/10.17718/tojde.1050394>
- Velliaris, D. M. (2015). A clearer pathway to institutionalising academic integrity: Distinguishing between collaboration and collusion. In *26th International Education Association (ISANA) Conference, Pullman on the Park, Melbourne, Australia*.
- Vygotsky, L. S., & Cole, M. (1978). *Mind in society: Development of higher psychological processes*. Harvard university press.
- Wacker, J. G. (1998). A definition of theory: research guidelines for different theory-building research methods in operations management. *Journal of operations management*, 16(4), 361-385. [https://doi.org/10.1016/S0272-6963\(98\)00019-9](https://doi.org/10.1016/S0272-6963(98)00019-9)
- Waycott, J., Jones, A., & Scanlon, E. (2005). PDAs as lifelong learning tools: an activity theory based analysis. *Learning, Media and Technology*, 30(2), 107-130. <https://doi.org/10.1080/17439880500093513>
- Yussof, S. H., & Ismail, S. (2018). Academic dishonesty among accounting students in Malaysia. *Management & Accounting Review (MAR)*, 17(1), 19-46. <https://ir.uitm.edu.my/id/eprint/30292>