

The Evolution Of Research On Academic Cheating Behavior Based On The Theory Of Planned Behavior (TPB): Perspectives For Future Research

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Abstract

This study aims to present a summary of various studies that explore academic cheating behavior with the support of a theory or conceptual framework so that it can be used as a valuable reference for monitoring the development of research on academic cheating behavior driven by the Theory of Planned Behavior (TPB). It is also hoped that this article can become a basis for inspiration for further research development in this domain in the future. The method applied in this study is a literature review using the connectedpapers.com platform. A search for relevant articles was conducted using the keywords "academic cheating behavior," "cheating behavior," and "academic misconduct." The study results show that the TPB can effectively predict academic cheating behavior. At the same time, variations in the use of variables include demographic, situational, and personality factors that are integrated with the TPB construct. The research methods used are also diverse, including a mixed-method approach.

Keywords: Theory of Planned Behavior, Academic Cheating Behavior, Academic Misconduct, Cheating Behavior, Cheating

INTRODUCTION

More than two decades of research into academic cheating has been conducted. Previous research on academic cheating consistently focuses on using demographic, situational, and personality variables to predict and explain behavior that violates academic integrity (AL-Dossary, 2017). Crown & Spiller (1998) revealed that research in the context of academic cheating often emphasizes individual factors, including gender, age, class, religion, values, and level of education. The results of this study provide in-depth insight into how demographic characteristics may be related to cheating behavior in the academic domain. Subsequent studies, such as the work of Kisamore et al. (2007), Smyth & Davis (2004), and a series of studies by McCabe et al., (1996, 1999, 2001, 2002), broadened the scope by investigating situational, demographic, and personality factors. Situational variables involve cultural aspects of integrity and honor code implementation, while demographics include gender, age, and ACT (American College Testing) scores. Personality factors such as prudence and adjustment were also examined to understand how specific personality characteristics may predict academic cheating behavior. These studies make significant contributions to completing our understanding of the complex factors involved in academic cheating.

Previous research indicates no coherent framework to guide research on academic integrity (Stone et al., 2009). A series of studies that have been conducted show that there needs to be a clear consensus in developing a model that can provide an in-depth and holistic understanding of academic integrity violation behavior. It reflects that most research still focuses on identifying and analyzing specific factors in terms of demographic, situational, and personality, without comprehensive efforts to build a framework that can summarize the complexity of this offending behavior. Thus, it can be concluded that the contribution of research in developing models to explain academic integrity violation behavior is still limited, and further efforts need to be made to fill this gap in the scientific literature.

This article aims to summarize various studies that explore academic cheating behavior with the support of a theory or conceptual framework. Stone et al. (2010) emphasized the importance of a theory-based approach in understanding the root causes of academic misconduct and determining the most effective strategies for dealing with this behavior. One theory proven to have high predictive

power regarding academic cheating behavior is the Theory of Planned Behavior (TPB) introduced by Ajzen in 1991. Hendy & Montargot (2019) added that TPB significantly contributes to predicting fraudulent behavior because it integrates aspects of perceived behavior control, which can predict the extent to which individuals have the opportunity and resources to carry out this behavior. Although TPB (Theory of Planned Behavior) is one of the most influential psychological theories in predicting various behaviors, its use in predicting academic cheating has received less attention (AL-Dossary, 2017; Hendy & Montargot, 2019). By summarizing various research results, this article can be used as a valuable reference for tracking the development of research on academic cheating behavior driven by the Theory of Planned Behavior (TPB). Apart from that, this article can also be a basis for inspiring further research development in this field in the future.

Therefore, the research question in this study is:

RQ: How has the research on academic cheating behavior evolved based on the Theory of Planned Behavior?

LITERATURE REVIEW

Theory of Planned Behavior

Many definitions have been presented by previous researchers regarding academic cheating behavior. *Academic cheating behavior* is a general term that covers a variety of unethical behavior in an academic environment that is carried out intentionally or consciously by claiming someone else's work as one's own without giving proper credit to the source, which can include claims for work that the individual did not do (Moeck, 2002). On the other hand, academic cheating refers to behavior categorized as unethical, such as looking at other people's answers in exams (Zhao et al., 2021). Academic cheating is also defined as inappropriate behavior during academic activities (Hendy & Montargot, 2019).

The Planned Behavior (TPB) theory developed by Ajzen emerged as a significant decision-making theory in understanding when and why a student decides to cheat (Ababneh et al., 2022). Different from the previous version, namely the Theory of Reasoned Action (TRA), TPB enriches the analysis by including the construct of perceived behavioral control as a critical predictor of behavioral intentions and, ultimately, actual behavior. Ababneh et al. (2022) stated that in the view of Ajzen and colleagues, engagement in a particular behavior depends not only on the intention to do it but also on the perceived control over the behavior. Thus, the TPB provides a more holistic and detailed framework to explain the complexity of students' decisions in committing academic fraud.

According to this theory, the direct predictor of behavior is the intention to perform the behavior, which is determined by three main factors: attitude toward the behavior, subjective norms, and perceived behavioral control (Beck & Ajzen, 1991). Attitude towards behavior refers to an individual's evaluation of a particular behavior, either in the form of support or rejection. Subjective norms include individuals' impressions about whether individuals relevant to them believe that behavior should be followed. Meanwhile, perceived behavioral control reflects an individual's view of his or her capacity to carry out a behavior influenced by previous experiences and anticipated obstacles.

Beck & Ajzen (1991) present a modified version of the Theory of Planned Behavior (TPB) by including the element of "personal feelings and responsibility to carry out or reject a behavior based on their personal moral or ethical feelings," which is referred to as moral obligation. In their view, moral obligations become an essential catalyst when moral concerns become the primary motivator for behavior, enriching the TPB framework with ethical dimensions and moral values in behavioral decision-making (AL-Dossary, 2017). According to (Beck & Ajzen (1991), moral obligations are necessary when moral concerns are the primary motivator for behavior.

Although TPB is considered effective in predicting fraudulent behavior, much of the variation in this behavior remains unexplained (AL-Dossary, 2017). This fact indicates that the TPB may have yet to fully assess several vital constructs in the context of fraudulent behavior. Efforts to increase the explanatory power of the TPB model have been made by testing additional components to complete the model (Armitage & Conner, 1999). In (Ajzen, 1991) view, the TPB is open to integrating additional predictors if it can be demonstrated that they can accommodate most of the variability in intentions or behavior once the current variables of the theory have been considered. It shows TPB's open attitude towards development and improvement and developing knowledge and understanding of human behavior. Thus, continued efforts to enrich the TPB with additional constructs could be a significant step towards increasing the accuracy and precision of the model in explaining fraudulent behavior.

METHOD

This research applies a literature review method chosen with the consideration that this article is intended as a valuable reference for tracking the development of research on academic cheating behavior. Through the literature review method, it can be identified whether there are developments in specific research results. The technical literature review was carried out using a simplified approach, which was carried out in several steps.

The topic raised in this article is academic cheating behavior. After determining the topic, the next step involves source search and selection, where a search is carried out for relevant literature sources to the research focus. At this stage, relevant sources were found through the connectedpapers.com platform using search keywords such as "academic cheating behavior," "cheating behavior," and "academic misconduct." After collecting sufficient literature, the next step is conducting analysis and synthesis. It simplifies the literature analysis by summarizing the main findings, patterns, or trends that emerge from the existing literature. Each article was carefully analyzed, focusing on the title, variables, respondents, research procedures, and results. The final stage in this process is the presentation of information, where the findings are arranged systematically and structured in an article. Thus, this article not only reflects the framework of the chosen topic but also shows an attempt at an in-depth analysis of the relevant literature.

RESULT

From the search results for relevant sources via the connectedpapers.com platform, 14 articles were found that had been published from various leading sources, such as Emerald, ScienceDirect, Springer, and several others. The analysis that has been successfully carried out will be presented in Table 1 below.

Table 1. Literature Review

Title	Authors	Variables	Results	Suggestion
Using the theory of planned behavior and cheating justifications to predict academic misconduct	Stone et al., 2009	Attitude, Subjective Norm, Perceive Behavior Control, Justification, Intention, Cheating Behavior	The PBT model is a predictor of cheating behavior	(1) Conduct longitudinal research (2) Examine the extent to which cheating at school is related to cheating at work and other counterproductive work behavior
Predicting	Stone et	Attitude, Subjective	(1) The PBT model is a	Future research should

Title	Authors	Variables	Results	Suggestion
Academic Misconduct Intentions and Behavior Using the Theory of Planned Behavior and Personality	al., 2010	Norm, Perceive Behavior Control, Prudence, Adjustment, Intention	<p>predictor of cheating behavior,</p> <p>(2) PBT mediates adjustment and prudence,</p> <p>(3) Adjustment does not affect PBT,</p> <p>(4) Prudence is significantly related to all TPB components except intention.</p>	examine whether prudence, as a measure of personality, interacts with abilities, such as academic ability, to predict academic misconduct.
Intensi Mencontek Ditinjau Dari Theory of Planned Behavior	Riyanti (2015)	Attitude, Subjective Norm, Perceive Behavior Control, Intention, Cheating Behavior	<p>(1) There is a positive and significant influence between TPB and cheating intentions</p> <p>(2) TPB can be used to predict cheating intentions</p>	<p>(1) Conducting research using experimental methods that are more systematic, logical and thorough in controlling the conditions or manipulation of a stimulant, treatment or experimental conditions</p> <p>(2) Observing the effects caused by the treatment or manipulation that has been carried out.</p>
Application of the theory of planned behavior in academic cheating research—cross-cultural comparison	Chudzicka-Czupala et al. (2016)	Students' attitudes towards academic cheating, Subjective social norms, Perceived behavioral control, Moral obligation, Intentions to cheat	<p>(1) Attitude, perceived behavioral control, and moral obligation predict students' intentions to engage in academic dishonesty in the form of cheating.</p> <p>(2) A detailed modified version of the theory of planned behavior emerged as the best explanatory model in predicting intention to cheat.</p>	Conducting longitudinal research
Model Theory of Planned Behavior (TPB) Untuk Memprediksi Niat Mahasiswa Melakukan Kecurangan Akademik	(Wijayanti & Putri, 2016)	Students' attitudes towards academic cheating, Subjective social norms, Perceived behavioral control, Moral obligation, Intentions to cheat	(1) Attitude does not have a significant influence on the intention to commit academic fraud among students at the Faculty of Economics and Business in Solo Raya.	<p>(1) Carrying out tests by taking different research subjects or expanding the scope of research so that the generalization of the modelled concept can be increased,</p> <p>(2) Adding a moderating variable to clarify the influence of attitudes on</p>

Title	Authors	Variables	Results	Suggestion
			(2) Subjective norms, perceived behavioral control, and moral obligations are proven to influence the intention to commit academic fraud.	the intention to commit academic fraud.
Intentions to Cheat: Ajzen's Planned Behavior and Goal-Related Personality Facets	Lonsdale, 2017	Intention to cheat, attitudes of friends and parents towards academic dishonesty, and perceived ease of cheating	Subjective norms, such as students' perceptions of their friends' and parents' attitudes toward cheating, as well as the perceived ease of committing cheating, were all positively related to intentions to cheat.	<ol style="list-style-type: none"> (1) Using a more diverse sample. (2) Combining self-report and triangulation data collection methods. (3) Conduct research with a longitudinal design. (4) Conduct research in various cultural and institutional contexts. (5) Testing other psychological and social theories to understand more about academic cheating behavior. (6) Explore how emotions influence the intention to commit fraud and how these emotions interact with personality and social factors.
Does Islamic Religiosity Influence the Cheating Intention among Malaysian Muslim Students? A modified Theory of Planned Behavior	Mustapha et al. (2016)	Attitude, Subjective norm, Perceive behavior control, Islamic Religiosity, Intention	<ol style="list-style-type: none"> (1) Attitude and Subjective Norm are significant towards intention to cheat (2) Perceived behavioral control and religiosity are not significant on intention to cheat 	<ol style="list-style-type: none"> (1) Collect broader data that includes private universities where more comparisons and generalizations can be made. (2) Most respondents are Muslim students, and research can be expanded to involve other religions and cultures. (3) Organized interviews with more participants can be conducted to obtain deeper insights and more detailed results.
Why Do College Students Cheat? A Structural Equation	AL-Dossary, (2017)	Past behavior, Moral obligation, Attitude, Subjective norm, Perceived	(1) Attitudes, subjective norms, perceived behavioral control, and moral	(1) Testing a more comprehensive TPB model by including additional variables that

Title	Authors	Variables	Results	Suggestion
Modeling Validation of the Theory of Planned Behavior		Behavioral Control, Intention	<p>obligations can predict intentions to cheat.</p> <p>(2) The variable cheating in high school increases the predictive ability of the TPB, with students who cheat more often in high school tending to cheat more often in college.</p> <p>(3) There are gender differences in cheating behavior, with men more likely to cheat than women.</p>	<p>might influence cheating behavior, such as psychological, environmental, and technological factors.</p> <p>(2) Exploring other types of cheating, such as plagiarism, unethical collaboration, or use of prohibited materials.</p> <p>(3) Considering the existence of gender differences in cheating behavior, future research can explore more deeply the factors that cause these differences.</p>
Investigating antecedents of plagiarism using extended theory of planned behavior	Uzun et al. (2020)	Attitude, Computer literacy, Information Literacy, Intention, Subjective Norms, Moral Obligation, Past Behavior.	<p>(1) Attitude, information literacy, moral obligation, and past behavior are significant predictors of intention to commit plagiarism</p> <p>(2) Subjective norms do not have a significant effect on the intention to commit plagiarism</p> <p>(3) Internet and computer literacy were not found to be significant predictors</p>	<p>(1) Develop an expanded TPB model by including other variables that might influence the intention to commit plagiarism, such as the influence of the social environment or other psychological factors.</p> <p>(2) Explore the effectiveness of different educational interventions in improving academic integrity and reducing plagiarism</p> <p>(3) Future research can investigate more deeply why subjective norms were not found to be a predictor and how social norms and peer pressure influence plagiarism behavior.</p> <p>(4) Future research can investigate the relationship between information literacy and plagiarism in more depth, including the development of more effective measuring tools for assessing information</p>

Title	Authors	Variables	Results	Suggestion
				literacy.
Cheating Intention of Students Based on Theory of Planned Behavior	Dewanti et al. (2020)	Attitude, Subjective Norm, Perceive Behavioral Control, Moral Obligation, Intention	Subjective norms have the greatest influence on students' intention to cheat, followed by moral obligation and perceived behavioral control	<ol style="list-style-type: none"> (1) Future research could expand the conceptual model by including other factors that might influence the intention to cheat, such as peer pressure, academic stress, or other psychological factors. (2) Future research may use different or additional methodologies, such as experiments or secondary data analysis, to validate the findings. (3) Conduct longitudinal research.
Predictors of cheating in online exams among business students during the Covid pandemic: Testing the theory of planned behavior	Ababneh et al. (2022)	Attitudes towards cheating, intention to commit fraud, subjective norms, perceived behavioral control, moral obligations, fraudulent behavior, individual predictors, and contextual predictors	<ol style="list-style-type: none"> (1) Students' attitudes towards cheating, social norms that support cheating, and perceived control over cheating are the main predictors of intention to cheat in online exams. (2) Perceived control and intention to cheat directly predict actual fraud behavior. (3) Individual and contextual factors do not have a significant impact on fraudulent intentions or behavior. (4) The addition of moral imperatives, demographics, and contextual factors weakens and complicates the theoretical predictions offered by the TPB. 	<ol style="list-style-type: none"> (1) This research finds that the addition of demographic and contextual factors weakens the theoretical predictions offered by the Theory of Planned Behavior (TPB). Therefore, future research could explore more deeply how these factors influence academic cheating behavior. (2) Although the TPB has been shown to be effective in predicting fraud intentions and behavior, future research could test alternative models or expand the TPB with additional variables to gain a better understanding of fraud behavior.
Investigating the students' behavior	Hamdani et al. (2022)	Intention to commit fraud, fraudulent behavior, Islamic	(1) Islamic religiosity does not moderate the Theory of	(1) Future research could explore other factors that might influence cheating

Title	Authors	Variables	Results	Suggestion
towards the temptation to do academic misconduct in higher education: The moderation of religiosity		religiosity, attitudes towards cheating, perceived behavioral control, and subjective norms	<p>Planned Behavior (TPB) in reducing students' desire to commit academic violations.</p> <p>(2) Islamic religiosity has a negative effect on the intention to cheat, which means students with a high level of religiosity tend to commit academic fraud less.</p> <p>(3) Attitudes toward cheating, perceived behavioral control, and religiosity all have significant effects on intention to commit fraud.</p> <p>(4) Perceived behavioral control has a positive effect on fraud intentions, while social norms have no effect.</p>	<p>intentions and behavior, such as academic pressure, perceived fairness, and other psychological factors.</p> <p>(2) Conduct longitudinal research.</p> <p>(3) Exploring how religiosity influences actual cheating behavior.</p> <p>(4) Develop and test interventions designed to improve academic integrity, such as ethics education programs or self-control training.</p>
Academic cheating as planned behavior: the effects of perceived behavioral control and individualism-collectivism orientations	Zhang (2023)	Attitude, Subjective Norm, Perceive Behavior Control, Academic Cheating, Horizontal-vertical-individualism-collectivism	<p>(1) Perceived Behavioral Control (PBC) and individualism-collectivism orientation have an important role in predicting academic cheating behavior among college students in China.</p> <p>(2) PBC has a significant negative effect on subjective norms and a positive but not significant effect on attitudes towards cheating.</p> <p>(3) Individualism-collectivism orientation interacts significantly with the combined effect of PBC with subjective norms</p>	<p>(1) Future research could further explore how other cultural orientations, besides individualism and collectivism, influence academic cheating behavior, such as power distance, uncertainty avoidance, and masculinity/femininity.</p> <p>(2) Develop and test interventions tailored to specific cultural orientations to see whether they are more effective in reducing academic cheating compared with more general approaches.</p> <p>(3) Conduct longitudinal research.</p>

Title	Authors	Variables	Results	Suggestion
			<p>and attitudes towards cheating.</p> <p>(4) PBC, attitude (ATT), and subjective norm (SN) together accounted for 8.0% of the variance in academic cheating behavior.</p> <p>(5) A negative interaction between PBC and SN was reported, indicating that PBC moderates the relationship between subjective norms and cheating.</p> <p>(6) Horizontal individualism and collectivism significantly interact with the combined effect of PBC with SN and ATT.</p>	
Understanding Contract Cheating Behavior Among Indonesian University Students: An Application of the Theory of Planned Behavior	Heriyati et al. (2023)	Attitude, Subjective Norm, Perceive Behavioral Control, Intention to do contract cheating	<p>The opportunity for students to commit contract fraud will be higher if:</p> <p>a) They believe that contract cheating provides various benefits (positive attitude towards contract cheating),</p> <p>b) Many of their friends do the same thing and expect them to do it too (subjective norm)</p> <p>c) They can control their contract cheating behavior to avoid being caught (perceived behavioral control).</p>	<p>(1) Research using a mixed method approach.</p> <p>(2) Research focuses on students who do not cheat to see the reasons why they avoid this action.</p> <p>(3) Specify the type of fraud in research: university entrance exams, assignments, final semester exams, etc.</p> <p>(4) Longitudinal research</p>

DISCUSSION

Research on Academic Cheating Behavior Based on the Theory of Planned Behavior (TPB) over time.

In recent years, research on academic cheating behavior has become a significant focus, emphasizing developing models based on the theory of planned behavior (TPB). Most of this research adopts a modified Theory of Planned Behavior (TPB), with the addition of variables that are considered relevant. The popularity of academic cheating behavior research based on the TPB increased, especially after Stone and colleagues conducted research entitled "Using the Theory of Planned Behavior and Cheating Justifications to Predict Academic Misconduct." In this research, Stone et al. (2009) wanted to test the theory of planned behavior, which had been modified to predict academic cheating behavior. In his article, Stone claims that this research is different from previous research on academic cheating because it is a theory-based study that aims to test the effectiveness of modifications to Ajzen's Theory of Planned Behavior in predicting academic cheating behavior.

Stone and his colleagues did not stop at previous research; instead, they continued their exploration of academic cheating behavior using a modified theory of planned behavior. In the study of Stone et al. (2010), the integrated variable involves the intention to perform the behavior, which is influenced by factors from the original theory (attitude towards the behavior, subjective norms, and perceived behavioral control) as well as personality characteristics (adjustment and prudence). With the development of academic cheating behavior research based on the Theory of Planned Behavior, more and more research is adopting this theory to predict academic cheating behavior. A Study by Riyanti (2015) titled "Cheating intentions as viewed from the TPB" uses the TPB construct to predict academic cheating behavior. Meanwhile, Chudzicka-Czupala et al. (2016) applied a modified TPB construct, including attitudes toward behavior, subjective norms, perceived behavioral control, moral responsibility, and intention to commit academic cheating behavior.

Wijayanti & Putri (2016) presented research on students' intentions to commit academic fraud by proposing a model based on the Theory of Planned Behavior (TPB), which has been modified into four constructs, namely attitudes toward behavior, subjective norms, perceived behavioral control, and moral responsibility. On the other hand, Lonsdale (2017) conducted research entitled "Intentions to Cheat: Ajzen's Planned Behavior and Goal-Related Personality Facets," which involved variables such as intention to carry out the behavior, friends' and parents' attitudes towards academic dishonesty, as well as perceptions ease of cheating. In the same year, Mustapha et al. (2016) also took a similar approach by examining intentions to commit academic fraud. They used modified TPB construct variables, including attitudes toward behavior, subjective norms, and perceived behavioral control. Uniquely, one of the researchers added the variable Islamic religiosity as an additional factor that might influence the intention to commit academic fraud.

Research on academic cheating behavior using a Theory of Planned Behavior (TPB) based approach to understand and predict the phenomenon of academic cheating behavior continues to be developed. For example, AL-Dossary (2017) has modified the TPB construct by adding past behavior variables and forming five variables to predict academic cheating behavior. In a similar study, Hendy & Montargot (2019) used three TPB constructs and included the conscientiousness variable, considering its similarity to prudence, to strengthen predictions of academic cheating behavior. The following year, Uzun & Kilis (2020) and Dewanti et al. (2020) conducted further research by testing a modified model based on the theory of planned behavior. They involve six adapted TPB constructs, including attitudes toward behavior, subjective norms, perceived behavioral control, moral responsibility, intention to behave, and considering past behavioral variables. Uzun et al. used information literacy and technology as proxy variables for perceived behavioral control. These studies together create a solid foundation for an in-depth understanding of the factors influencing

academic cheating behavior, as well as demonstrating the evolution and increasing complexity of the models used in this analysis.

In recent research, Ababneh et al. (2022) focused on identifying the main predictors of academic dishonesty among undergraduate business students during the COVID-19 pandemic in the United Arab Emirates (UAE), using the Theory of Planned Behavior (TPB) approach. Ababneh applied the TPB construct and modified it by adding moral obligation and integrating two new variables: individual and contextual predictors. In line with this, research by Zhang (2023) entitled "Academic cheating as planned behavior: the effects of perceived behavior control and individualism-collectivism orientations" also adopted the TPB framework. They explored the role of perceived behavior control as a moderator variable that moderates the relationship between attitudes and subjective norms regarding academic dishonesty behavior. Apart from that, the moderating role of perceived behavior control is also moderated by the cultural element of individualism-collectivism. Similarly, Heriyati et al. (2023) conducted research focusing on the intention to commit contractual academic fraud involving third parties. Although still using the TPB approach, this research further develops this theory to understand academic dishonesty behavior in a more specific context. It is relevant to the dynamics of contracts between individuals.

Research Methods Employed in Academic Cheating Studies

In research on academic cheating behavior, various data analysis techniques have been applied to explore the complexity of relationships between variables. In a study conducted by Stone et al. (2009), a mixed-method approach was applied to gain a more comprehensive understanding of the phenomenon of academic behavior. Quantitative methods are used to measure the influence of each variable. In contrast, qualitative methods are used to explore in more depth whether students have plans to cheat, consider this action because they feel panic, or engage in cheating behavior solely because there is an easy opportunity to do so. The quantitative data collection process was carried out by distributing questionnaires to respondents. In contrast, qualitative data was obtained using open-ended questions, which allowed researchers to explore a more prosperous and deeper understanding of the reasons behind cheating behavior.

Furthermore, in the research of Stone et al. 2010, the Confirmatory Factor Analysis (CFA) method was used to test and confirm the previously developed theoretical model. Meanwhile, Structural Equation Modeling (SEM) tests and grows more complex theoretical models. With this approach, Stone and his colleagues can make significant contributions to the understanding of the factors underlying cheating behavior through the integration of quantitative and qualitative methods, as well as the application of sophisticated analytical techniques.

In Riyanti's (2015) research, analysis using multiple linear regression correlation was directed at understanding the relationship between the Theory of Planned Behavior (TPB) and the intention to cheat. In contrast, Chudzicka-Czupała et al. (2016) and Zhang (2023) adopted hierarchical multiple regression. Wijayanti & Putri (2016) also chose multiple regression analysis as a data analysis technique in their research, providing more detailed insight into the factors that influence academic behavior. On the other hand, Lonsdale (2017) applied hierarchical regression analysis to test hypotheses and predict academic cheating intentions. In this approach, control variables such as age and gender are entered in Step 1, followed by Theory of Planned Behavior (TPB) variables in Step 2, and goal-related personality dimensions in Step 3.

As the methodology developed, Mustapha et al. (2016) and Uzun et al. (2020) chose Partial Least Squares Structural Equation Modeling (PLS-SEM) as a data analysis technique, providing a more holistic framework for understanding the conceptual structure and relationships between variables. On the other hand, AL-Dossary (2017) and Ababneh et al. (2022) also utilized the Structural

Equation Modeling (SEM) method to explore the relationship between variables in the context of academic cheating behavior.

In research conducted by Hendy & Montarget (2019), path analysis with 1000 bootstraps in MPlus version 7 was used to test the three proposed hypotheses. This analysis method provides high statistical accuracy and robustness to the relationships between variables, showing dedication to the accuracy of research results. Meanwhile, Dewanti et al. (2020) and (Heriyati et al., 2023) took a sequential mixed approach in their research on cheating intentions among accounting students. In Dewanti et al.'s research, they conducted a regression analysis of quantitative data to understand the relationship between the Theory of Planned Behavior (TPB) variables and cheating intentions in the first phase. The next step involved a qualitative approach by interviewing ten respondents and exploring attitudes based on factors such as gender, duration of research, and type of university. By combining quantitative and qualitative analysis, these studies provide a more comprehensive understanding of the complex dynamics that influence cheating intentions among college students. The various analytical techniques that have been carried out provide a valuable contribution to forming a deeper understanding of the complexity of academic behavior and the factors that influence it.

CONCLUSION

Although research on theory-based academic cheating behavior still needs to improve in terms of numbers compared to research that tends to use demographic, situational, and personality variables, the variability in using these variables is quite diverse. Several studies can be found that have succeeded in integrating personality, psychological, cultural, and environmental factors with the Theory of Planned Behavior (TPB) construct. These studies are diverse in terms of the variables used, the methodological approaches applied, and the use of mixed methods combining quantitative and qualitative approaches. The purpose of using mixed methods is to gain a deeper understanding of the complexity of academic behavior and the factors that influence it.

Through the literature review method in this study, TPB has a significant role as a strong predictor of academic cheating intentions and behavior. In addition, integrating other factors with the TPB construct showed mixed effects. Therefore, further research that examines the TPB and other factors that may influence academic cheating behavior must be carried out.

From the literature review results, it can also be identified that all research collected is cross-sectional, providing a picture at one point in time. Therefore, a longitudinal study is needed to provide deeper insight into how fraud intentions and their influencing factors change over time. This initiative is expected to contribute more substantially to understanding the dynamics of academic cheating behavior.

As with most studies, there are limitations to this study. The literature review method used in this study was carried out manually using the connectedpapers.com platform. Therefore, the number of articles that can be accessed is limited, so the articles that can be included in the analysis may not be optimal, and the analysis carried out may need to be more in-depth. It is recommended that further studies be carried out using a systematic literature review approach using special software. This approach can allow more comprehensive access to related articles so that analysis can be carried out more in-depth and holistically. A systematic literature review can also make it easier to identify research gaps for future research focused on TPB-based academic cheating behavior. In this way, it is hoped that it can make a more substantial contribution to the understanding and development knowledge in this field.

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