

DISHONESTY IN ONLINE LEARNING: DISTANCE LEARNING PERSPECTIVES DURING PANDEMIC

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ABSTRACT

Academic dishonesty has become a serious concern, particularly during the Covid-19 pandemic era, where online learning is left as a single option in almost all academic activities. Lack of graduate ethics has an impact on attitudes in the workplace. Therefore, it is important to introduce academic integrity to students in higher education to foster an attitude of honesty in the world of work, especially ethics. Online lectures encourage students to violate academic integrity due to the lack of direct interaction and administration. This study aims to see the level of academic dishonesty that occurs during online lectures. The research was conducted by the Faculty of Economics and Business, public and private universities. The number of samples is 431 students of economics and business. We examine the effect of lecture administration, lecturer-student interaction, and learning satisfaction on the impact of academic dishonesty. The results showed that clear administration and good interaction between lecturers and students would increase student learning satisfaction and reduce academic dishonesty. But the satisfaction that students want to achieve does not have a significant effect on the level of academic dishonesty. Implications for practice are discussed and future research directions are offered.

Keywords: Academic dishonesty, administration, lecturer-student interaction, learning satisfaction, distance learning.

INTRODUCTION

The importance of behavioral education in higher education aims as a basis for inculcating an attitude of academic integrity in students. The academic scandal has become a public concern because it is related to ethics and academic norms. Research conducted Brown & Choong (2005) shows that ethics and behavior have an impact on academic integrity. Lack of academic integrity causes academic cheating which has an impact on cheating in the workplace (Iberahim et al., 2013). The problem of academic dishonesty is serious in the world of education and is a concern at the world level (Bashir & Bala, 2018; Grijalva et al., 2006; Iberahim et al., 2013; Krishnamurthi & Rhode, 2018). In 2018, cases of plagiarism were found in the academic environment, namely the copying of academic manuscripts in the form of dissertations and scientific articles

where academics did not include the source of writing. In some developed countries themselves, almost 70% of students commit academic violations (Benson et al., 2019; McCabe, 2005; Stephens et al., 2010). This attitude results in academic dishonesty to the detriment of others. The importance of academic integrity is to create a good image in universities and avoid cheating in the workplace.

The phenomenon of online learning has raised concern in all academic institutions significantly (Alvarez, 2020; Dhawan, 2020). Besides the pandemic, which has caused many countries to require their students to study online, the development of technology, especially learning facilities and infrastructure, is also a challenge for universities (Krishnamurthi & Rhode, 2018; Lim & Wang, 2017; Rodchua, 2017; Spaulding, 2009) prepare the right method so that online learning has the same benefits as face-to-face learning. There are advantages and disadvantages to online learning. The advantage is that online learning can reach more remote areas including rural areas and has a lower cost, while the disadvantage is that the lack of supervision and interaction between teachers and students as well as between students causes ethical violations in the form of academic dishonesty (Sileo & Sileo, 2008). This is the biggest challenge for universities in maintaining academic integrity to avoid academic dishonesty which ultimately affects attitudes and behavior in the world of work (Bashir & Bala, 2018; Ellahi et al., 2013; Iberahim et al., 2013; Krishnamurthi & Rhode, 2018; Nazir & Aslam, 2010; Poorian et al., 2013; Spaulding, 2009; Yankelovich & Furth, 2005).

There are still many universities or teachers who consider academic dishonesty as not a serious problem for students, but they are not aware that this attitude will have an impact on the work environment (Iberahim et al., 2013; Monahan et al., 2018) thus failing to provide ethical knowledge to participants. students (Coalter et al., 2007). There are reasons why students take acts of academic dishonesty such as lack of academic sanctions given, an excessive number of students, technological developments, unlimited learning resources and lack of supervision and interaction between teacher-students and students and students, peer pressure, lecture policies unclear learning outcomes, anxiety about learning outcomes, and lack of understanding of the material received (Burton et al., 2011; Grijalva et al., 2006; Krishnamurthi & Rhode, 2018; Sileo & Sileo, 2008). Therefore, this has set an important concern for all parties, both teachers, students, and universities, regarding to overcome the negative effect on the occurrence of academic dishonesty.

The research conducted by Grijalva et al. (2006) shows that the lack of interaction in online learning indicates greater cheating than in traditional classrooms. This is in line with research Krsak, (2007) which states that the lack of direct interaction provides opportunities for students to commit fraud.

In addition, institutions play an important role in preventing fraud where regulations provide limits for students not to commit academic dishonesty. Research conducted Krishnamurthi & Rhode, (2018), Krsak, (2007), Mahabeer & Pirtheepal, (2019) shows that institutions have an important role in preventing fraud and plagiarism by providing supervision and sanctions against ethical violators.

Another factor that influences someone to commit academic fraud is the satisfaction to be achieved in the form of better learning outcomes or competition (Higbee & Thomas, 2002). However, research conducted Pino & Smith, (2003) shows that students who want to have high average grade satisfaction through learning satisfaction and generic satisfaction will have more academic ethical attitudes and tend not to cheat. This study aims to examine the role of lecture administration, interaction in the classroom, satisfaction in the learning process, and the generic impact on students' academic dishonesty. The results of this study are expected to provide input to all parties, both institutions, teachers, and students in maintaining academic integrity and avoiding academic dishonesty.

RESEARCH METHOD

Participant and Context

The main objective of this study is to analyze the relationship among academic dishonesty, interaction and learning satisfaction of accounting university students in Indonesia. As mentioned in the earlier section, the major learning-related activities are conducted online, promoting a lack of supervision and social interactions among most university students, lecturers, and academic staff. Subsequently, we developed a survey instrument elaborating the abovementioned concerns into a set of online questionnaires that were further distributed to the accounting undergraduate students of state and private universities in the North Sumatera Province, the third-largest province in Indonesia.

Instrumentation and Scale

A Likert scale is used consisting of 4 questions is set to direct respondents answering each question provided in the survey instrument (K. T. Jones & Chen, 2008; Marks et al., 2005). The respondents perceptions of generic ability and learning satisfaction were detailed into 9 individual questions modifying the instrument of Chen & Jones (2007) study. Academic dishonesty shows cheating committed by students in the learning process such as plagiarism. All question items use 4 Likert scale measurements where one is disagree, two disagree, three agree, and four strongly agree following Iberahim et al. (2013) study's setting.

Data Collection and Analysis Methods

The first stage of data collection is to set question items for each variable. The question items are then arranged in the form of a google form. Previously, the validity and reliability tests were carried out on 30 respondents outside the research sample. After passing the validity and reliability test, the google form was given to the respondents. The data collection method uses probability sampling. The number of respondents who answered the question was 431 people. This research was conducted on online-based learning, highlighting that academic fraud is more significant than the conventional face-to-face class. Hypothesis testing using Structural Equation Modeling (SEM). Specifically, SEM analyzes the relationship between administration and interactions during the learning process that affects academic dishonesty through perceptions of generic abilities and learning satisfaction. The tools used are SPSS and Smart-PLS.

FINDINGS

Academic dishonesty is a serious concern for all academicians in universities across the globe. This has something to do with fraud in the workplace (Iberahim et al., 2013). The importance of building academic integrity so that the graduates produced have ethics and loyalty (Coalter et al., 2007) and is a big challenge for universities and the social environment (Spaulding, 2009; Witherspoon et al., 2012). Therefore, it is important to build academic integrity to produce academic ethics in the world of education and work. Table 1 shows the Pearson Correlation matrix between variables. The results show that all variables are inversely proportional to academic dishonesty. Table 2 shows the feasibility test of the research model. Based on the examine shows that this research model is declared feasible. Table 3 shows hypothesis testing where all variables have a negative effect on academic dishonesty except for learning satisfaction. Finally, table 4 shows the strong or weak influence of each variable on academic dishonesty.

The number of samples in this study was 431 people. The research was conducted at private and public universities in the Province of North Sumatra. In this study, respondents consisted of 87 (20%) men and 344 women (20%). Respondents who participated in this study consisted of a minimum of 17 years, a maximum of 46 years, and the average age of respondents was 20 years. The origin of domiciles from outside the city is 250 people (58%) and within the city, 181 people (42%) so more students come from outside the city. Besides that, most of the respondents who took part in this study were from undergraduate level, namely as many as 405 people, then 22 people for masters and 4 people from doctoral programs. The 42 respondents came from private universities and 389 people came from state universities. The GPA of the respondents in this study consisted of 27 people from 2.5 to 3, a GPA of 3.01 to 3.5 consisted of 276 respondents, and above 3.5 consisted of 128 people. In this online learning, the lecturer still gives daily assignments so that students can repeat the material that has been delivered. The results of the questionnaire given showed that there was 1 person who did not repeat the task every day, 29 people repeated/worked on the task less than 1 hour per day, for 1 hour to 2 hours consisting of 141 people, 2 to 3 hours consisted of 131 people and the last over 3 hours 129 people. The E-Learning media used in online learning consists of 150 LMS students, 257 Google Classroom students, 16 WhatsApp members, 1 YouTube student, and 7 others, so it can be concluded that the majority of online learning uses e-Learning media. Google classroom. Based on interviews conducted, the use of Google Classroom is because it is easier to use than other e-learning. The following are the results of categories on research variables.

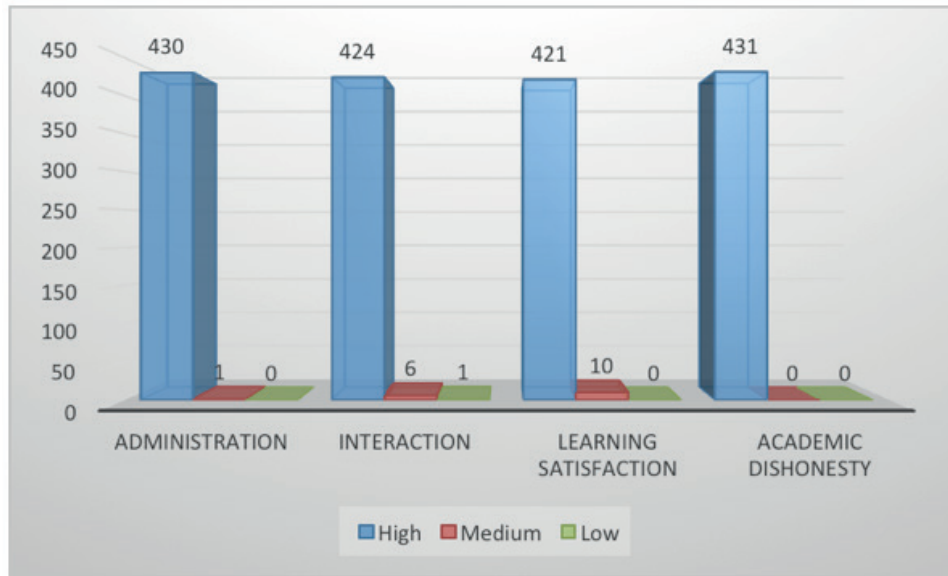


Figure 1. The Distribution of Responses of Research Variables

Figure 1 shows the administrative variable as many as 430 respondents answered agree so that it is included in the high category. Likewise, interaction variables are included in the high category where as many as 424 respondents answered agree, indicating that there is high interaction between students and lecturers during online learning. Learning satisfaction shows that there is high satisfaction felt by students during online learning where the learning process and the use of good methods provide a good understanding to produce learning satisfaction. But the academic dishonesty variable shows high dishonesty where all respondents give high respondents to questions related to academic dishonesty. These results indicate that despite high administration, high interaction, and high learning satisfaction, the academic dishonesty of students is also high.

Respondents were given questions related to academic integrity projected against academic dishonesty where the exogenous variables in this study were the administration of lectures given by lecturers at the beginning and during lectures, interactions during lectures between lecturers-students and students, and perceptions related to learning satisfaction where this study seen in the perception of online learning during this pandemic. The following are the results of testing the Pearson correlation coefficient.

Table 1. Correlation Coefficient of Research Variables

		Administration	Interaction	Learning Satisfaction	Academic Dishonesty
Administration	Pearson Correlation	1	.574 **	.587 **	-.185 **
Interaction	Pearson Correlation	.574 **	1	.505 **	-.218 **
Learning Satisfaction	Pearson Correlation	.587 **	.505 **	1	-.208 **
Academic Dishonesty	Pearson Correlation	-.185 **	-.218 **	-.208 **	1

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

Based on the table above, the results show that all variables have a strong relationship because they have a significant value less than 5% or a value greater than the r product moment value of 0.098. Based on these tests all variables show a strong relationship. But the correlation can be in the form of a positive correlation and a negative correlation where a positive correlation indicates a stronger relationship between a variable, while a negative correlation between one variable will strengthen and weaken the other variables.

The next examine is to test whether the research model is said to be feasible or not. The test is by looking at the values of Cronbach's Alpha, ρ_A , Composite Reliability, Average Variance Extracted (AVE). The following are the results of the model's feasibility test.

Table 2. Model Feasibility Test

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Academic Dishonesty	0.740	0.805	0.831	0.554
Administration	0.720	0.728	0.819	0.532
Interaction	0.716	0.739	0.826	0.547
Learning Satisfaction	0.733	0.746	0.849	0.653

According to Thorndike, (1995), Vinzi et al., (2010) it is said that a model is good if the Cronbach's Alpha value is greater than 0.7. Based on these tests, it can be seen that the value of Cronbach's Alpha is greater than 0.7. In addition, when viewed from the value of rho_A which according to Vinzi et al., (2010) must have a value greater than 0.7, it also shows a result greater than 0.7. The next examining is to see the feasibility of the model by examining composite reliability. According to Bagozzi & Yi, (1988), Chin & Dibbern, (2010) that a model is feasible if the composite reliability value is greater than 0.6. The conclusion of the test shows a result greater than 0.6. The next model feasibility test is examining average variance extracted according to Bagozzi & Yi, (1988), Chin & Dibbern, (2010), Fornell & Larcker, (1981) that the model is feasible if the AVE value is greater than 0.5. In Table 2 above, the AVE value for all variables is greater than 0.5.

Hypothesis Test

We examine using the Structure Equation Model (SEM) to see academic integrity during online learning. As for examine academic integrity by looking at how academic dishonesty is committed by students during distance learning such as cheating, plagiarism, cheating, and others. As for this study, examine was conducted on academic dishonesty through lecture administration, interaction, and learning satisfaction. The following are the examine results using the SEM model.

Table 3. Hypothesis Testing

Variable		Direct Influence	Indirect Influence	Total Influence
Administration -> Academic Dishonesty	Path Coefficient	-0.134	-0.016	-0.149
	t statistic	2.164	0.472	2,538
	p value	0.031	0.637	0.011
Administration -> Learning Satisfaction	Path Coefficient	0.490		0.490
	t statistic	11.191		11.191
	p value	0.000		0.000
Interaction -> Academic Dishonesty	Path Coefficient	-0.136	-0.009	-0.145
	t statistic	2.157	0.476	2.475
	p value	0.031	0.635	0.014
Interaction -> Learning Satisfaction	Path Coefficient	0.271	-	0.271
	t statistic	5.524	-	5.524
	p value	0.000	-	0.000
Learning Satisfaction -> Academic Dishonesty	Path Coefficient	-0.032	-	-0.032
	t statistic	0.478	-	0.478
	p value	0.633	-	0.633

Based on table 3 above, shows that the administrative variable directly affects academic dishonesty (p-value = 0.031) while indirectly having an insignificant effect on academic dishonesty (p-value = 0.637) so that in total it shows that administration has a significant negative effect on academic dishonesty. The next examine administration has a direct effect on learning satisfaction. The results show that the administration

directly has a significant positive effect on the level of student learning satisfaction (with the results of each p-value = 0.000). Examining the interaction directly on academic dishonesty showed a significant negative effect (p-value = 0.031) while indirectly through learning satisfaction showed a negative insignificant. But overall showed a significant negative effect (p-value = 0.014). The interaction has a significant positive effect on learning satisfaction (p-value = 0.000). Meanwhile, satisfaction shows an insignificant negative towards academic dishonesty (p-value 0.633). Table 4 shows how much influence exogenous variables have on endogenous variables. The following are the results of the R square test.

Table 4. Value of R Square

	R Square	Conclusion
Academic Dishonesty	0.062	Weak
Learning Satisfaction	0.423	Currently

Based on table 4 above, shows that the variables of administration, interaction, and learning satisfaction have a weak influence on academic dishonesty, which is 6.2% and the rest is influenced by other variables outside the study. While the variable of student learning satisfaction shows that administration and interaction affect learning satisfaction by 0.423 or 42.3 % including moderate effect and the rest is influenced by other variables outside the study.

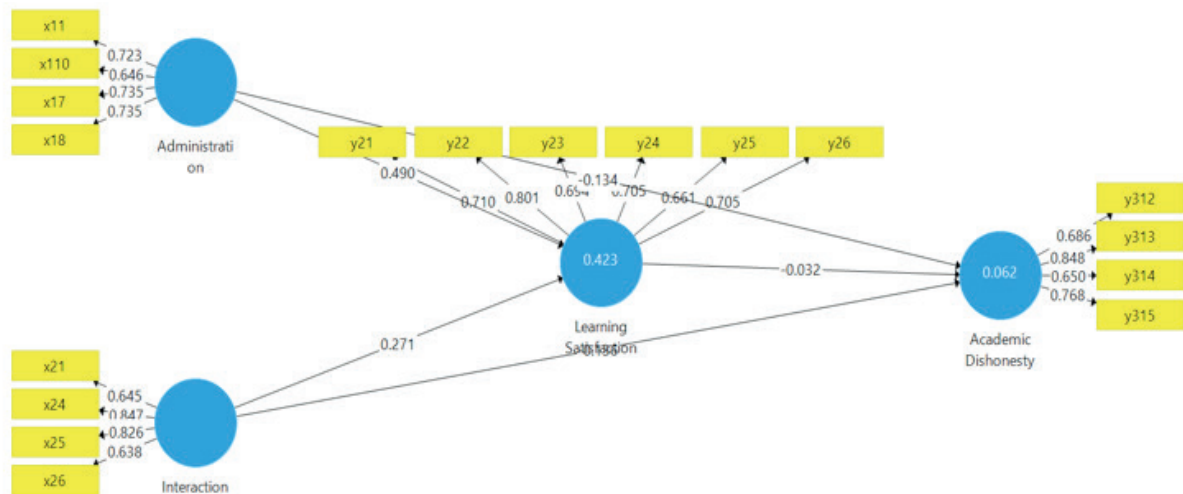


Figure 2. Analysis of Partial Least Square

DISCUSSIONS AND CONCLUSION

This study was conducted to examine the effect of lecture administration, interaction, and learning satisfaction on academic dishonesty. The existence of a clear administrative provides student satisfaction in achieving the learning outcomes to be achieved and through clear regulations will avoid academic dishonesty. The role of lecturers in online learning will encourage critical thinking to increase critical thinking (Huynh, 2005). Therefore, lecturers must be clear in delivering administration and instructions at the beginning of the lecture and be consistent in their implementation in online learning. In the future, it is important to develop a curriculum that emphasizes education management, curriculum, and the role of teachers to avoid academic cheating (Ibrahim & Nat, 2019).

The interaction in this study shows a reciprocal relationship during the lecture process, both among students and with lecturers. Online learning that is currently taking place causes a lack of direct interaction making it difficult to measure the level of satisfaction obtained as well as acts of academic cheating. With the traditional method, interaction is easy to do where teachers and students can directly interact starting

from giving statements or answers. However, online learning causes teachers and students to not be able to interact directly, causing students not to gain knowledge and satisfaction as well as using the face-to-face method. The importance of lecturer's role in developing the right method in interacting remotely will have an impact on academic satisfaction and dishonesty. Lecturers who can create effective ways to increase learning interactions while using online methods and foster student satisfaction will increase knowledge. In the end, students will be more motivated in increasing their knowledge and being honest during online learning to avoid academic cheating. The results of this study indicate that good interactions during online learning will increase learning satisfaction and reduce academic dishonesty. These results are consistent with Alqurashi, (2019), Baber, (2020), Gray & DiLoreto, (2016), S. Jones, (2006), Maloshonok & Shmeleva, (2019) where interactions during online learning have a significant effect on satisfaction (Ku et al., 2013). The flexibility of learning through learning interactions will have an impact on the satisfaction obtained through learning outcomes (Muthuprasad et al., 2020). In addition, the creativity generated during online learning will encourage increased satisfaction during online learning (Fortin et al., 2019).

The variable of learning satisfaction shows the experience gained by students during online learning. This satisfaction shows that students are more motivated in participating in learning using online methods. These results are consistent with previous studies Herrador-Alcaide et al., (2019). But the satisfaction obtained by students does not indicate that the learning process is carried out honestly. Satisfaction in obtaining good results will encourage students to commit academic fraud. The results of this study indicate that the satisfaction obtained by students in participating in online learning does not affect reducing academic cheating, thus indicating that the satisfaction obtained by students has other goals. In addition, during online learning, student satisfaction is very low (Page & Kulick, 2016; Vamosi et al., 2004). Based on the above discussion, it can be seen the importance of clear administration, good interaction so that it will have an impact on satisfaction and reduce academic dishonesty. This statement is by research conducted Bickle et al., (2019) that good interaction, attractive administration will increase student satisfaction.

Conclusion and Implication

The current pandemic period forces the learning process to be conducted remotely (online). This study aims to examine the effect of administration of learning provided by lecturers, the interactions between students and lecturers and fellow students on learning satisfaction, and subsequently affecting academic dishonesty. The result of this study confirms that there is a direct influence of both administration of e-learning activities and interaction among students and lecturers on learning satisfaction and academic dishonesty. In contrast, satisfaction in e-learning shows zero effect in mediating the influence of administration of e-learning activities and interaction among students and lecturers on the academic dishonesty of accounting undergraduate students in Indonesia. These findings support the study of Iberahim et al. (2013) and Grijalva et al. (2006) to the extent that the strength level of e-learning administration and interactions of students with lecturers and students to their peers affects their satisfaction in the e-learning activities and academic dishonesty practice individually. Accordingly, greater satisfaction in e-learning indicates a decrease in the academic dishonesty level among accounting university students. The results of this study indicate that administration is not directly inversely proportional to academic dishonesty, which shows that clarity in administration delivered by lecturers at the beginning of the lecture will reduce academic cheating. Structured learning will provide students with better understanding and satisfaction during online learning (Gray & DiLoreto, 2016; Richardson & Swan, 2003). Interactions made by students with lecturers or fellow students also increase satisfaction during the distance learning process. Although learning is not done face-to-face, frequent interactions in learning will increase satisfaction, increase academic integrity, and reduce academic dishonesty (Alqurashi, 2019; Ku et al., 2013). Learning satisfaction obtained by students during academic learning will not significantly affect academic dishonesty. Students only pursue satisfaction to get good grades without paying attention to academic dishonesty. In the end, using technology will improve student learning and knowledge (Ebrecht & Ku, 2014).

The decrease in academic integrity is also relevant where technology is used in the contemporary e-learning era. Technology impacts the learning process and shifts the learning paradigm (Kumar et al., 2019; Phutela & Dwivedi, 2019). It also provides a more significant gap of the lack of supervision during e-learning that further leads to violations of academics such as academic dishonesty, cheating in the administration of exams, and other academic violations. In addition, preparing the curriculum and management of higher education plays a vital role in reducing academic cheating (Ibrahim & Nat, 2019).

Implication

The main insight of this study points the social interaction between students-lecturers must be kept maintaining during the commencement of e-learning. Although this learning is challenging to monitor, the existence of these factors will reduce academic cheating. The importance of using technology in education will increase the broad insight of students (Alismail & McGuire, 2015; Shafieiosgouei et al., 2019) so that, in the end, it will encourage the development of higher-order thinking skills (Kurt, 2010). Future research is expected to examine the impact of academic dishonesty on human resource development and loyalty to the company. This is related to the responsibilities of higher education institutions that shape character as long as students carry out the learning process on campus (Coalter et al., 2007). In addition, appropriate learning strategies in online learning to avoid academic cheating.

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REFERENCES

- Alqurashi, E. (2019). Predicting student satisfaction and perceived learning within online learning environments. *Distance Education*, 40(1), 133–148. <https://doi.org/10.1080/01587919.2018.1553562>
- Alvarez, A. (2020). The phenomenon of learning at a distance through emergency remote teaching amidst the pandemic crisis. *Asian Journal of Distance Education*, 15(1), 144–153. <https://doi.org/10.5281/zenodo.3881529>
- Baber, H. (2020). Determinants of students' perceived learning outcome and satisfaction in online learning during the pandemic of COVID19. *Journal of Education and E-Learning Research*, 7(3), 285–292. <https://doi.org/10.20448/JOURNAL.509.2020.73.285.292>
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 074–094.
- Bashir, H., & Bala, R. (2018). Development and Validation of Academic Dishonesty Scale (ADS): Presenting a Multidimensional Scale. *International Journal of Instruction*, 11(2), 57–74. <https://doi.org/10.12973/iji.2018.1125a>
- Benson, L., Rodier, K., Enstrom, R., & Bocatto, E. (2019). Developing a university-wide academic integrity e-learning tutorial: A Canadian case. *International Journal for Educational Integrity*, 15(1), 1–23. <https://doi.org/10.1007/s40979-019-0045-1>
- Bickle, M., Rucker, R., & Burnsed, K. A. (2019). Online Learning: Examination of Attributes That Promote Student Satisfaction. *Online Journal of Distance Learning Administration*, 22(1), 1–7.
- Brown, B. S., & Choong, P. (2005). A Investigation of Academic Dishonesty among Business Students at Public and Private United Sates Universities. *International Journal of Management*, 22(2), 201–214.
- Burton, J. H., Talpade, S., & Haynes, J. (2011). Religiosity and test-taking ethics among Business School Students. *Journal of Academic and Business Ethics*, 4, 1–8. <http://search.proquest.com/docview/876279468?accountid=14549%5Cnhttp://hl5yy6xn2p.search.serialssolutions.com/?genre=article&sid=ProQ:&atitle=Religiosity+and+test-taking+ethics+among+Business+School+students&title=Journal+of+Academic+and+Business+Ethics&i>
- Chen, C. C., & Jones, K. T. (2007). BLENDED-LEARNING VS. TRADITIONAL CLASSROOM SETTINGS: ANALYZING STUDENTS' SATISFACTION WITH INPUTS AND LEARNING PROCESSES IN AN MBA ACCOUNTING COURSE. *Advances in Accounting Education Teaching and Curriculum Innovations*, 8, 25–37. <https://doi.org/10.1108/s1085-462220160000018011>

- Chin, W. W., & Dibbern, J. (2010). An Introduction to a Permutation Based Procedure for Multi-Group PLS Analysis: Results of Tests of Differences on Simulated Data and a Cross Cultural Analysis of the Sourcing of Information System Services Between Germany and the USA. In *Handbook of Partial Least Squares*. Springer. https://doi.org/10.1007/978-3-540-32827-8_8
- Coalter, T., Lim, C. Lo, & Wanorie, T. (2007). Factors that Influence Faculty Actions: A Study on Faculty Responses to Academic Dishonesty. *International Journal for the Scholarship of Teaching and Learning*, 1(1). <https://doi.org/10.20429/ijstol.2007.010112>
- Dhawan, S. (2020). Online Learning: A Panacea in the Time of COVID-19 Crisis. *Journal of Educational Technology Systems*, 49(1), 5–22. <https://doi.org/10.1177/0047239520934018>
- 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>
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error Author(s): *Journal of Marketing Research*, 18(1), 39–50. <http://www.jstor.org/stable/3151312>
- Fortin, A., Viger, C., Deslandes, M., Callimaci, A., & Desforges, P. (2019). Accounting students' choice of blended learning format and its impact on performance and satisfaction. *Accounting Education*, 28(4), 353–383. <https://doi.org/10.1080/09639284.2019.1586553>
- Gray, J. A., & DiLoreto, M. (2016). The Effects of Student Engagement, Student Satisfaction, and Perceived Learning in Online Learning Environments This. *NCPEA International Journal of Educational Leadership Preparation*, 11(1), 98–119.
- Grijalva, T. C., Kerkvliet, J., & Nowell, C. (2006). Academic Honesty and Online Courses. *College Student Journal*, 40(1), 180–185.
- Herrador-Alcaide, T. C., Hernandez-Solis, M., & Sanguino Galvan, R. (2019). Feelings of satisfaction in mature students of financial accounting in a virtual learning environment: an experience of measurement in higher education. *International Journal of Educational Technology in Higher Education*, 16(1), 1–19. <https://doi.org/10.1186/s41239-019-0148-z>
- Higbee, J. L., & Thomas, P. V. (2002). Student and Faculty Perceptions of Behaviors that Constitute Cheating. *NASPA Journal*, 40(1), 39–52. <https://doi.org/10.2202/1949-6605.1187>
- Huynh, M. Q. (2005). Viewing E-Learning Productivity from the Perspective of Habermas' Cognitive Interests Theory. *Journal of Electronic Commerce in Organizations*, 3(2), 33–45.
- Iberahim, H., Hussein, N., Samat, N., Noordin, F., & Daud, N. (2013). Academic Dishonesty: Why Business Students Participate in these Practices? *Procedia - Social and Behavioral Sciences*, 90(InCULT 2012), 152–156. <https://doi.org/10.1016/j.sbspro.2013.07.076>
- Ibrahim, M. M., & Nat, M. (2019). Blended learning motivation model for instructors in higher education institutions. *International Journal of Educational Technology in Higher Education*, 16(1). <https://doi.org/10.1186/s41239-019-0145-2>
- Jones, S. (2006). Evaluation of Instructor Knowledge on Structuring and Facilitating Effective Online Discourses. *The Journal of Educators Online*, 3(2), 1–14. <https://doi.org/10.9743/jeo.2006.2.1>
- Krishnamurthi, M., & Rhode, J. (2018). Addressing Academic Integrity in Education and Innovation. *International Journal of Information and Education Technology*, 8(11), 786–791. <https://doi.org/10.18178/ijiet.2018.8.11.1140>
- Krsak, A. M. (2007). Curbing Academic Dishonesty in Online Courses. *TCC 2007 Proceedings*, 159–170. <http://www.ncta-testing.org/cctc/>
- Ku, H. Y., Tseng, H. W., & Akarasriworn, C. (2013). Collaboration factors, teamwork satisfaction, and student attitudes toward online collaborative learning. *Computers in Human Behavior*, 29(3), 922–929. <https://doi.org/10.1016/j.chb.2012.12.019>

- Lim, C. P., & Wang, L. (2017). *Blended Learning for Quality HE: Selected Case Studies on Implementation from Asia-Pacific Learning*.
- Mahabeer, P., & Pirtheepal, T. (2019). Assessment, plagiarism and its effect on academic integrity: Experiences of academics at a university in South Africa. *South African Journal of Science*, 115(11–12), 1–8. <https://doi.org/10.17159/sajs.2019/6323>
- Maloshonok, N., & Shmeleva, E. (2019). Factors Influencing Academic Dishonesty among Undergraduate Students at Russian Universities. *Journal of Academic Ethics*, 17, 313–329.
- Marks, R. B., Sibley, S. D., & Arbaugh, J. B. (2005). A structural equation model of predictors for effective online learning. In *Journal of Management Education* (Vol. 29, Issue 4). <https://doi.org/10.1177/1052562904271199>
- McCabe, D. L. (2005). Cheating among college and university students: A North American perspective. *International Journal for Educational Integrity*, 1(1). <https://doi.org/10.21913/ijei.v1i1.14>
- Monahan, M., Shah, A., & Shah, R. (2018). A comparison of the prevalence of dishonest academic behaviors between USA and German students. *Journal of Ethical and Legal Issues*, 11, 1–18.
- Muthuprasad, T., Aiswarya, S., Aditya, K., & Jha, G. K. (2020). Students' perception and preference for online education in India during COVID-19 Pandemic. *Social Sciences & Humanities Open*, 3(1).
- Nazir, M. S., & Aslam, M. S. (2010). Academic dishonesty and perceptions of Pakistani students. *International Journal of Educational Management*, 24(7), 655–668. <https://doi.org/10.1108/09513541011080020>
- Page, E., & Kulick, M. (2016). Student Satisfaction as a Predictor of Retention in a Professional Online For-Profit Higher Education Institution. *Online Journal of Distance Learning Administration*, 19(4), 1–12.
- Pino, N., & Smith, W. (2003). College Students and Academic Dishonesty *. *College Student Journal*, 37(4), 490.
- Poorian, M., Nekooei, M. J., & Boon, Y. bin. (2013). Academic Cheating In Higher Education The Effect of A Student Development Approach A Study At Universiti Teknologi Malaysia. *IOSR Journal of Research & Method in Education (IOSRJRME)*, 1(6), 40–43. <https://doi.org/10.9790/7388-0164043>
- Roberts, C. J., & Hai-Jew, S. (2009). Issues of Academic Integrity: An Online Course for Students Addressing Academic Dishonesty. *Journal of Online Learning and Teaching*, 5(2), 182–196.
- Rodchua, S. (2017). Effective Tools and Strategies to Promote Academic Integrity in e-Learning. *International Journal of E-Education, e-Business, e-Management and e-Learning*, 7(3), 168–179. <https://doi.org/10.17706/ijeeee.2017.7.3.168-179>
- Saidin, N., & Isa, N. (2013). Investigating Academic Dishonesty among Language Teacher Trainees: The Why and How of Cheating. *Procedia - Social and Behavioral Sciences*, 90(InCULT 2012), 522–529. <https://doi.org/10.1016/j.sbspro.2013.07.122>
- Sileo, J. M., & Sileo, T. W. (2008). Academic Dishonesty and Online Classes: A Rural Education Perspective. *Rural Special Education Quarterly*, 27(1–2), 55–60. <https://doi.org/10.1177/8756870508027001-209>
- Spaulding, M. (2009). Perceptions of academic honesty in online vs. face-to-face classrooms. *Journal of Interactive Online Learning*, 8(3), 183–198.
- Stephens, J. M., Romakin, V., & Yukhymenko, M. (2010). Academic motivation and misconduct in two cultures: A comparative analysis of US and Ukrainian undergraduates. *International Journal for Educational Integrity*, 6(1). <https://doi.org/10.21913/ijei.v6i1.674>
- 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>

- Thorndike, R. M. (1995). Book review: psychometric theory by Jum Nunnally and Ira Bernstein New York: McGraw-hill, 1994, xxiv+ 752 pp. *Applied Psychological Measurement*, 19(3), 303–305.
- Vamosi, A. R., Pierce, B. G., & Slotkin, M. H. (2004). Distance Learning in an Accounting Principles Course—Student Satisfaction and Perceptions of Efficacy. *Journal of Education for Business*, 79(6), 360–366. <https://doi.org/10.3200/JOEB.79.6.360-366>
- Vinzi, V. E., Trinchera, L., & Amato, S. (2010). PLS path modeling: from foundations to recent developments and open issues for model assessment and improvement. In *Handbook of Partial Least Squares*. Springer. <https://doi.org/10.1007/978-3-540-32827-8>
- Witherspoon, M., Maldonado, N., & Lacey, C. (2012). Undergraduates and Academic Dishonesty. *International Journal of Business and Social Science*, 3(1), 76–86. http://www.ijbssnet.com/journals/Vol_3_No_1_January_2012/9.pdf
- Yankelovich, D., & Furth, I. (2005). The Role of Colleges in an Era of Mistrust. *The Chronicle of Higher Education*, 52(24), 1–8.