



Student's access to scientific information resources using pirate open access sci-hub: A gender perspective

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Abstract

Access to scientific information resources needs to be used by many academicians, especially the students. Some of articles are paywall article so scholarly publications cannot all be freely accessed via the internet and there is an information gap. Because of this, many students access information sources through pirate open access called Sci-Hub. This study aims to determine the differences between male and female students in accessing scientific information sources through Sci-Hub open access pirates. This research provides a gender perspective based on the theory of planned behaviour. This research method uses a quantitative approach with a descriptive survey format. The population in this study were students of Padjadjaran University with sampling techniques using non-probability sampling techniques, namely purposive sampling and data processing using SPSS. The results found that the male mean was higher on the attitude towards behaviour and perceived behaviour control variables while the female mean was higher on the subjective norm variable but the mean difference was not significant. The conclusion is that overall there is no difference between male and female students in accessing scientific information sources through pirate open access Sci-Hub.

INTRODUCTION

Scientific articles are one of the needs of students in learning activities in university. The development of knowledge runs rapidly and quickly so that the need for articles from scientific journals is very important to get up-to-date and reliable information. Access to scientific information resources needs to be used by many academicians, especially in order to achieve the Tri Dharma of Higher Education. Basically, to fulfill these information needs, university libraries provide printed and non-printed collections. At this time with the advancement of technology and the use of the internet, it is easier for students to get information quickly. The existence of the library has also developed to provide online services, moving to digital-based libraries to non-print collections such as electronic books and electronic journals which show that the change in form from physical to electronic makes students in finding the information sources needed more effective and easier (Rohanda & Winoto, 2017). Students are an image of a new generation of users called the "digital natives" generation where they are accustomed to and grow up with computer access and get information from online sources or in short born in the digital era, causing them to prefer to use online sources rather than traditional or printed information materials (Joo & Choi, 2015).

The provision of journals in the traditional printed form requires libraries to purchase or subscribe from publishers. This subscription fee serves as revenue for the publisher to ensure the financial sustainability of the publisher, facilitate researchers to have good and strict quality control, and maintain the integrity of academic discourse (Costello, 2023). As the digital revolution began to develop, academic publishing also adapted to the internet and mimicked the revenue model of the traditional system by introducing paywall methods in their online content. This aims to keep the digital dissemination of academic content credible. As a result of this exclusivity, scholarly publications cannot all be freely accessed via the internet and there is an information gap.

Open Access was initiated by the Budapest Open Access Initiative. The term Open Access is research literature that is freely available and widely distributed on the internet, and has permission for users to read, copy, distribute, print, search or link to the full text of the article, and use it without financial, legal or technical



barriers as from the easy access to the internet itself (Torres-Salinas et al., 2019). IFLA in 2003 wrote a press release that supported the Open Access movement and emphasized that Open Access with comprehensive scientific research literature and documentation is essential for understanding and identifying solutions to global challenges, especially to reduce the information gap. IFLA supports providing access to information for the benefit of general knowledge in an inclusive environment regardless of age. Such access to information is literature that can be accessed via the internet.

In the development of Open Access, there are two paths to provide a middle ground for new business and sustainable provision of scientific literature, namely Green OA and Gold OA (Torres-Salinas et al., 2019). Green OA is basically an alternative approach to providing open access to scientific literature, where researchers are expected to upload their work to institutional repositories or public online repositories after an embargo period on the publisher of the article, so that the public can still access a copy through the repository. Gold OA, on the other hand, is an approach to providing open access to scientific literature where journals are the main providers of open access. In this model, journals allow open access to all published articles without requiring a subscription. This model encourages the abandonment of traditional subscription-based business models and replaces them with publishing fees paid by authors or research institutions (Björk, 2017; Torres-Salinas et al., 2019).

In reality, Open Access has not been able to meet the needs of public scientific information sources. The emergence of Black OA is proof that the public accesses scientific journals illegally. Most journal articles still require a subscription fee, causing people to turn to pirate sites to access them. Despite this action being a crime, people do it because it is basically the right of every individual to 'freely' liberally obtain knowledge. However, the fact that piracy is still being practiced today is proof that the existence of pirate sites is beneficial to its users.

Pirate Open Access is also often referred to as Black OA, Robin Hood OA, rogue OA, Guerilla OA and Shadow Library (Baich, 2017; Björk, 2017; Gardner et al., 2017). Basically, Pirate Open Access is access to a collection of various information sources that are not limited by paid barriers and the urgency for quick and easy access so that they can meet user needs, one of which is Sci-Hub. Sci-Hub with its collection of more than 80 million can provide various scientific journal articles from various publishers to be accessed freely and freely for anyone (Himmelstein et al., 2018). Sci-Hub is a web-based platform that accesses scientific literature with a simple use and process (Marple, 2018). A large tagline is displayed on the Sci-Hub page when first seen "to remove all barriers in the way of science" and the about section describes "the first pirate website in the world to provide mass and public access to tens of millions of research papers". Users only need to know the full title, URL, DOI or other unique identifier to access the scientific article they need. The convenience, speed and comprehensive collection have made it an option for many students to 'pirate' paywall scholarly journal articles (Kjellström, 2019; Lawson, 2017).

This kind of piracy of scholarly information resources is not unusual. Digital Piracy has grown with the development of technology and internet usage in society. Pirated products are digital intellectual products such as music, books, movies, software, and others (Wicaksono & Urumsah, 2018). The definition of digital piracy is illegally downloading, copying, using or uploading copyrighted products such as software, videos, music, books and others (Arlı & Tjiptono, 2016; Cronan & Al-rafee, 2008; Yoon, 2011). Several studies have shown that university students are the biggest perpetrators of piracy because they are the young generation and get the impact of using the internet or also called digital natives (Arlı & Tjiptono, 2016; Wicaksono & Urumsah, 2018). In its development, research on Digital Piracy uses various theories such as TAM (Technology Acceptance Model), Ethics Theory, Deterrence theory, and Religiosity Theory. In addition, Theory of Planned Behavior is also used in research on Digital Piracy ((Cronan & Al-rafee, 2008; Firtriasih & Hati, 2018; Phau et al., 2014; Yoon, 2011).

Theory of Planned Behavior is an extension of Theory of Reasoned Action which is used to predict and understand a person's behavior in various situations (Ajzen, 1985). The predictors used are 1) Attitude toward the behavior, 2) Subjective Norm, and additional predictors, namely 3) Perceived Behavioral Control (Ajzen,

1991). Attitude toward the behavior is a measure of where a person has an assessment of whether they like or dislike a behavior. Subjective Norm is a measure of where a person gets social pressure to do or not do a behavior. Meanwhile, Perceived Behavioral Control is a measure where a person shows the ease or difficulty of behavior and previous experience can be an anticipation for facing obstacles or obstacles. In addition, Theory of Planned Behavior also adds background factors to explain that a person in a certain social environment gets different information.

One of these background factors is gender. Gender is one of the toughest variables to investigate in business ethics (Tjiptono et al., 2016). Previous research found that in groups that have committed digital piracy, women tend to report higher incidence than men (Cronan & Al-rafee, 2008). Another finding showed that male respondents had a significantly more favorable attitude towards digital piracy compared to females (Tjiptono et al., 2016). Another study found that women tend to avoid the potential risk of punishment by buying music licenses legally than men who tend to be inconsistent regarding the risk factor by sharing music files illegally (Chiang & Assane, 2008). This is in line with the findings of other studies where students find it difficult to accept the price of the original digital product while female students are willing to pay it, but overall the results show no significant difference between the two (Wicaksono & Urumsah, 2018). Similarly, in a study of university students in Lagos, there was no significant difference between the views of university students and female students on file sharing and actions to reduce piracy (Amodu et al., 2020).

So, from the previous explanation, the researcher formulated the problem of whether there are differences between students and college students in accessing scientific publication information through pirate open access. The purpose of this study is to identify any differences between genders in accessing scientific publication information through pirate open access. This research refers to previous research with digital piracy studies in other forms, not only music, books, movies, software and others. In this study, the study of digital piracy in the form of access to scientific information sources using pirate open access which is also currently spreading to students.

METHODS

The approach in this research uses a quantitative approach with a descriptive survey format. According to Bungin (2005), quantitative research with a descriptive format is intended to explain, summarize various conditions, various situations, or various variables that exist in the community which is the object of research based on what happens. This study uses a statistical measurement scale, namely an ordinal scale to measure research data. The ordinal scale used is a Likert scale with the answers Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree. Data collection was carried out by distributing questionnaires online via Google Form. The questionnaire consists of 14 closed questions and is adapted based on the Theory of Planned Behavior. Data processing was carried out using SPSS 25.

The research was conducted at one of the universities in West Java, Padjadjaran University. The population used in this study were active undergraduate students of Padjadjaran University class of 2018-2022 totaling 29,789. The sampling technique used in this study is non-probability sampling, namely purposive sampling which is deliberately selected for certain considerations to achieve research objectives. So that the criteria for respondents who can participate in this study are: 1) Active undergraduate students class of 2018-2022, 2) Have used Sci-Hub and created academic assignments using Sci-Hub. The minimum number of samples is determined using the slovin formula with a margin of error of 10% with the following formula:

$$n = \frac{N}{1 + Ne^2} = \frac{29.789}{1 + 29.789(0,1)(0,1)} = 99,66 \sim 100$$

Based on calculations through the Slovin formula, the minimum number of respondent samples used was 100 people.

RESULTS AND DISCUSSION

Result

From distributing questionnaires, 101 respondents answered. This research is comparative so it uses an independent sample t-test.

Table 1. Respondent's class and gender

		Gender		Total
		Male	Female	
Class	2018	0	1	1 (1%)
	2019	6	5	11 (10,9%)
	2020	21	51	72 (71,3%)
	2021	3	6	9 (8,9%)
	2022	2	6	8 (7,9%)
Total		32 (31,7%)	69 (68,3%)	101 (100%)

Based on table 1, it shows that the majority of respondents came from the class of 2020 as much as 71.3%. This is because during the data collection process, the class of 2020 was doing their final project / thesis so they needed a lot of references to be used in writing scientific papers. In addition, 68.3% of respondents were female and 31.7% were male. This is because the population at Padjadjaran University is dominated by women around 60% (Maulana, 2023).

Table 2. Group Statistics attitude toward behavior

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Attitude towards piracy behavior of scientific information sources	Men	32	12.47	2.342	.414
	Women	69	12.38	2.358	.284

Tabel 3. Independent Table Test attitude toward behavior

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Attitude toward behavior	Equal variances assumed	.073	.788	.183	99	.855
	Equal variances not assumed			.183	60.885	.855

Table 3 shows the output encountered in the Sig value. Levene's Test for Equality of Variances of .788 > .05 so that it means that men and women are homogeneous. So that in the Equal variances assumed section, known value of Sig. (2-tailed) equal to .855 > .05, it is concluded that there is no significant difference in attitudes towards the behavior of accessing scientific information sources between men and women. While the mean difference between men and women is .092 which indicates that the mean of men is higher than women. This is shown in table 2 which found that men do not significantly have an attitude towards the behavior of accessing illegal information sources through Sci-Hub (mean = 12.47) than women (mean = 12.38).

Table 4. Group Statistics Subjective Norm

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Subjective Norm	Men	32	6.47	2.199	.389
	Women	69	6.48	1.899	.229

Table 5 shows the output encountered in the Sig value. Levene's Test for Equality of Variances of .361 > 0.05 so that it means that the male and female groups are homogeneous. So that in the Equal variances assumed section, known value of Sig. (2-tailed) equal to .982 > .05, it is concluded that there is no significant difference related to subjective norms in accessing scientific information sources between men and women.

While the mean difference between men and women is $-.010$ which indicates that the mean of women is higher than men. This is also shown in table 4 which found that women do not significantly have subjective norms accessing illegal information sources through Sci-Hub (mean = 6.48) than men (mean = 6.47).

Tabel 5. Independent Table Test Subjective Norm

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Subjective Norm	Equal variances assumed	.841	.361	-.022	99	.982
	Equal variances not assumed			-.021	53.238	.983

Tabel 6. Group Statistics Perceived Control Behavior

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Perceived Control Behavior	Men	32	38.19	5.750	1.016
	Women	69	38.06	5.308	.639

Tabel 7. Independent Table Test Perceived Control Behavior

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Perceived Control Behavior	Equal variances assumed	.659	.419	.111	99	.912
	Equal variances not assumed			.108	56.334	.914

Table 7 shows the output encountered in the Sig value. Levene's Test for Equality of Variances of $.419 > .05$ so that it means that the male and female groups are homogeneous. So that in the Equal variances assumed section, known value of Sig. (2-tailed) equal to $.912 > .05$, it is concluded that there is no significant difference related to perceived control behavior in accessing scientific information sources between men and women. While the mean difference between men and women is $.130$ which indicates that the mean of men is higher than that of women. This is shown in table 6 which finds that men do not significantly have perceived control behavior in accessing illegal information sources through Sci-Hub (mean = 38.19) than women (mean = 38.06).

Discussion

The results of the study on the attitude toward piracy behavior factor show that men do not significantly have an attitude toward the behavior of accessing illegal information sources through pirate open access Sci-Hub because the mean of men was found to be slightly greater than that of women. As for the explanation of why the male mean can be greater in this section, it is also found in previous research, which shows that men have a more positive attitude towards piracy behavior than women with a slightly higher mean score than women (Tjiptono et al., 2016). This is related to differences in Gender socialization theory where there are differences in socialization that are emphasized in men and women where men are emphasized on justice and equality.

Meanwhile, the subjective norm factor shows the opposite. The results showed that the mean for women was slightly higher than that of men, but the difference was not too large, so it can be concluded that women do not significantly have subjective norms to access illegal information sources through Sci-Hub. This can be explained by previous research conducted by Venkatesh & Morris (2000) on research related to technology acceptance, finding that men are less influenced by subjective norms than women. Women are more responsive to accepting the opinions of others so that they take into account the opinions of others to make decisions regarding adopting a technology than men (Venkatesh & Morris, 2000). However, it is further explained that overall this is not a significant difference, thus supporting the findings in this study.

Perceived Behavioral Control (PBC) is how confident a person feels that they can perform a certain behavior, based on their beliefs about how easy or difficult it is to do so, and whether they have the resources and opportunities needed to do so (Ajzen, 1991). In simpler terms, PBC is about how confident a person is in their ability to perform an action. Previous research included several indicators in the development of PBC, namely self-efficacy, facilitating conditions, and habitual conduct (Firtiasih & Hati, 2018; Phau et al., 2014). Perceived behavior control in this study shows that the male mean is slightly higher than the female mean. So it can be concluded that men do not significantly have perceived behavioral control in accessing illegal information sources through Sci-Hub.

Investigating the higher mean of males than females can be explained in terms of self-efficacy by previous research finding that males are more skilled and proficient in using computers have higher tendencies than females (Wicaksono & Urumsah, 2018). However, the study found that although students with proficiency were positively associated with the intention of piracy, it appeared to be not significant because students tend to use file-sharing more while women are more willing to pay for 'real' digital products. As for the facilitating condition where one of the conditions that meet to enter this indicator is the ease of piracy (Firtiasih & Hati, 2018). It was also found that men tend to explore the convenience offered (Wicaksono & Urumsah, 2018). Furthermore, it was explained that there is a behavior that justifies piracy in normal behavior, there is no difference between men and women so that they are accustomed to piracy in an academic environment. This habit is related to habitual conduct where a person's past experience will have an effect on their ethical behavior.

Overall, this study shows that there is no significant difference in accessing scientific resources for male and female students. This is also in line with previous research which found that there is no difference between college students and female students in accepting social and environmental pressures to commit piracy and willing to curb piracy behavior itself (Amodu et al., 2020; Wicaksono & Urumsah, 2018).

This piracy behavior by students has its own reasons why they do it. The use of Sci-Hub does not cause guilt by students because they think that the idea of profit will only go to the publisher's profits, not to researchers (Paskalis & Putrawidjoyo, 2022). This is in line with the low moral obligation found in digital piracy which causes many people to feel that piracy behavior is not something wrong (Cronan & Al-rafee, 2008). Piracy is becoming justified as normal behavior because the lack of copyright awareness, legal uncertainty and weaknesses in law enforcement may give students the impression that purchasing pirated products will not be seriously punished, which encourages piracy practices among students in Indonesia (Arli & Tjiptono, 2016; Wicaksono & Urumsah, 2018).

Sci-Hub is one of the places where students pirate paywall articles. Students use Sci-Hub because of financial barriers (Pastor-Ramon et al., 2023). Several studies have also found that students and their libraries or institutions are financially strapped as journal subscription costs have risen in the last decade (Bodo, 2017; Himmelstein et al., 2018; Marple, 2018; Valladares-Garrido et al., 2023). Sci-Hub is a testament to the great movement in science because its creator, Alexandra Elbakyan, also started from experiencing these financial barriers to accessing scientific articles. In digital piracy, price is a significant factor. Previous studies have found that students, the majority of whom are not ready to pay high prices, are more likely to commit digital piracy (Arli & Tjiptono, 2016; Carmen et al., 2014).

CONCLUSION

This study aims to determine the differences between male and female students in accessing scientific information sources through pirate open access. Overall, no differences were found between male and female students in accessing scientific information sources through pirate open access Sci-Hub. Based on the Theory of Planned Behavior used in this study, the male mean of the attitude variable and perceived behavioral control is higher, while the female mean is higher on the subjective norm variable. This study brings novelty in another form of digital piracy, which is the media to access scientific information sources by pirating articles that cannot

be accessed due to paywalls. However, this research is limited to only analyzing in terms of gender based on theory planned behavior variables. So it is expected that in the next research there will be a more detailed analysis by testing the relationship between the variables in this study and the intention to use open access pirates according to the theory of planned behavior.

REFERENCES

- Ajzen, I. (1985). From Intentions to actions: A theory of planned behavior. In *Action Control* (pp. 11–39).
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Amodu, L., Isiguzoro, C., Omojola, O., Adeyeye, B., & Ajakaiye, L. (2020). Assessing audience's willingness to curb digital piracy: A gender perspective. *Cogent Social Sciences*, 6(1), 1–14. <https://doi.org/10.1080/23311886.2020.1823602>
- Arli, D., & Tjiptono, F. (2016). Consumer digital piracy behaviour among youths: insights from Indonesia. *Asia Pacific Journal of Marketing and Logistics*, 28(5), 898–922. <https://doi.org/10.1108/APJML-11-2015-0163>
- Baich, T. (2017). Diminishing the perceived need for black open access. *Ilds 2017*, 1–12. <https://scholarworks.iupui.edu/handle/1805/14178>
- Björk, B. C. (2017). Gold, green, and black open access. *Learned Publishing*, 30(2), 173–175. <https://doi.org/10.1002/leap.1096>
- Bodo, B. (2017). Pirates in the Library An Inquiry into the Guerilla Open Access Movement. *SSRN Electronic Journal*, 1–19. <https://doi.org/10.2139/ssrn.2816925>
- Bungin, B. (2005). *Metodologi Penelitian Kuantitatif: Komunikasi, Ekonomi, dan Kebijakan Publik serta Ilmu-Ilmu Sosial Lainnya* (Kedua). KENCANA.
- Carmen, C., Carmen, A., Javier, R., Camarero, C., Antón, C., & Rodríguez, J. (2014). Technological and ethical antecedents of e-book piracy and price acceptance: Evidence from the Spanish case. *The Electronic Library*, 32(4), 542–566. <https://doi.org/10.1108/EL-11-2012-0149>
- Chiang, E. P., & Assane, D. (2008). Music piracy among students on the university campus: Do males and females react differently? *The Journal of Socio-Economics*, 37(4), 1371–1380. <https://doi.org/10.1016/j.socrec.2007.08.011>
- Costello, D. (2023). *Open Access vs. Paywalls: New Paradigms in Academic Publishing*. Servicescape. <https://www.servicescape.com/blog/open-access-vs-paywalls-new-paradigms-in-academic-publishing>
- Cronan, T. P., & Al-rafee, S. (2008). Factors that Influence the Intention to Pirate Software and Media. *Journal of Business Ethics*, 78, 527–545. <https://doi.org/10.1007/s10551-007-9366-8>
- Firtriasih, R., & Hati, S. R. H. (2018). Book and E-Book Piracy Behavior Based on Model Theory of Planned Behavior. *Disruptive Innovation in Modern Business Era*.
- Gardner, G. J., McLaughlin, S. R., & Asher, A. D. (2017). Shadow Libraries and You: Sci-Hub Usage and the Future of ILL. *Acrl*, 568–587.
- Himmelstein, D. S., Romero, A. R., Levernier, J. G., Munro, T. A., McLaughlin, S. R., Greshake Tzovaras, B., & Greene, C. S. (2018). Sci-Hub provides access to nearly all scholarly literature. *ELife*, 7, 1–22. <https://doi.org/10.7554/eLife.32822>
- Joo, S., & Choi, N. (2015). Factors affecting undergraduates' selection of online library resources in academic tasks usefulness, ease-of-use, resource quality, and individual differences. *Library Hi Tech*, 33(2), 272–291. <https://doi.org/10.1108/LHT-01-2015-0008>
- Kjellström, Z. (2019). *Black Open Access in Sweden - A study on the perceptions on and usage of illicit repositories of academic documents*.
- Lawson, S. (2017). Access, ethics and piracy. *Insights: The UKSG Journal*, 30(1), 25–30.

<https://doi.org/10.1629/uksg.333>

- Marple, H. (2018). Parasite, Pirate, and Robin Hood: Sci-Hub is Disrupting the World of Academic Publishing. *The IJournal*, 3(2), 1–8.
- Maulana, A. (2023). *Hari Perempuan Internasional, Fakta Tingginya Pernikahan Dini, dan Dorongan untuk Terus Berkarya*. Universitas Padjadjaran. <https://www.unpad.ac.id/2023/03/hari-perempuan-internasional-fakta-tingginya-pernikahan-dini-dan-dorongan-untuk-terus-berkarya/>
- Paskalis, S. A., & Putrawidjoyo, A. (2022). Undergraduate students' use of shadow libraries as counter-enclosure of knowledge. *Berkala Ilmu Perpustakaan Dan Informasi*, 18(2), 189–203. <https://doi.org/10.22146/bip.v18i2.4546>
- Pastor-Ramon, E., Aguirre, O., García-Puente, M., María Morán, J., & Herrera-Peco, I. (2023). Sci-Hub use among Spanish researchers: Enemy or a learning opportunity for libraries? In *Journal of Information Science*. <https://doi.org/10.1177/01655515221142432>
- Phau, I., Lim, A., Liang, J., & Lwin, M. (2014). Engaging in digital piracy of movies: A theory of planned behaviour approach. *Internet Research*, 24(2), 246–266. <https://doi.org/10.1108/IntR-11-2012-0243>
- Rohanda, & Winoto, Y. (2017). Pemanfaatan Sumber Informasi Jurnal Dan Buku Elektronik Di Perpustakaan Universitas Padjadjaran. *Edulib*, 7(2), 74–81. <https://doi.org/10.17509/edulib.v7i2.9390>
- Tjiptono, F., Arli, D., & Vivie. (2016). Gender and digital piracy: Examining determinants of attitude toward digital piracy among youths in an emerging market. *International Journal of Consumer Studies*, 40(2), 168–178.
- Torres-Salinas, D., Robinson-García, N., & Moed, H. F. (2019). Disentangling gold open access. *Springer Handbooks*, 129–144. https://doi.org/10.1007/978-3-030-02511-3_5
- Valladares-Garrido, M. J., Serrano, F. T., Rios-González, C. M., Pedersini, P., Villafañe, J. H., Franchi, T., Tovani-Palone, M. R., & Mejia, C. R. (2023). Association between the use of Sci-Hub and consultation of scientific journals by medical students from six Latin American countries: A secondary analysis. *Heliyon*, 9(8). <https://doi.org/10.1016/j.heliyon.2023.e17868>
- Venkatesh, V., & Morris, M. G. (2000). Why don't men ever stop to ask for directions? Gender, social influence, and their role in technology acceptance and usage behavior. *MIS Quarterly*, 24(1), 115–139.
- Wicaksono, A. P., & Urumsah, D. (2018). Analisis Gender Dalam Pembajakan Produk Digital. *JRAMB*, 4(2), 85–99.
- Yoon, C. (2011). Theory of Planned Behavior and Ethics Theory in Digital Piracy: An Integrated Model. *Journal of Business Ethics*, 100(3), 405–417. <https://doi.org/10.1007/s10551-010-0687-7>