



# Does Religiousness Matter to Intention to Commit Digital Piracy?

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**Abstract.** The study aims to examine digital piracy using the Theory of Planned Behavior (TPB), religious theory, and deterrence theory by adding economic and hedonic benefits. This study used a non-probability sampling technique. The questionnaire was distributed through an online platform and obtained from 214 respondents. The data acquired from the respondents used SPSS 23 and AMOSS 21 to process the Structural Equation Model (SEM). This study shows that attitude toward digital piracy and perceived behavioral control positively influence consumer intention to commit digital piracy. The results also reveal that attitude toward digital piracy is positively influenced by hedonic benefit and negatively influenced by extrinsic religiousness. According to this study, the government and the film industry must change the way Indonesian consumers perceive digital piracy so that the number of digital piracies in Indonesia can decrease.

**Keywords:** Theory of Planned Behavior · Digital Piracy · Religiosity · Consumer Behavior

## 1 Introduction

One of the biggest problems facing the music, film, and software industries is digital piracy [1]. Digital piracy is an illegal act of copying, downloading, uploading, sharing, and distributing digital media (audio products, videos, books, and images) without the copyright holder's permission [2]. Digital piracy is most vulnerable in developing countries like China and Indonesia [3]. The factors that drive a high rate of digital piracy in developing countries are low average income, high unemployment rate, lack of strict law enforcement, and low moral obligation [3–5]. In fact, the impact of digital piracy is bigger and more complex in developing countries [6].

Interestingly, apart from the high rate of digital piracy (which is an unethical act), developing countries such as Bangladesh, Indonesia, Sri Lanka, and Nigeria also have a high level of community religiosity [7]. Previous research showed that the results are not uniform regarding the influence of a person's level of religiosity on attitudes and intentions to behave unethically [8–10]. Vitell et al. [8] stated that religiosity reduces a person's behavior unethically. Meanwhile, according to Barna [10] and Casidy et al. [9], a person's higher level of religiosity does not result in lower levels of digital piracy.

Due to the Covid-19 pandemic, the Indonesian film industry experienced a 97% decline in revenue [11]. This is due to large-scale social restriction regulations that require non-essential public facilities, including cinemas, to be closed to suppress Covid-19 cases. In fact, although many digital platforms and streaming services have emerged as a medium for watching movies, 90% of Indonesia's film industry revenue comes from cinema tickets. Moreover, illegal movie streaming services are still rampant and trigger film piracy. Piracy has hurt the film industry long before the emergence of the Covid-19 pandemic. The pandemic has further exacerbated the loss of the film industry. Indonesian Film Producers Association/*Asosiasi Produser Film Indonesia* (APROFI), reported that in 2020 the loss of the film industry due to film piracy was US\$ 350 million. The Indonesian government has tried to reduce the number of film piracy by blocking around 1,745 illegal sites from 2017 to 2020, but these efforts were not enough. This is because even though many illegal sites have been blocked, many new illegal sites have sprung up [12].

Many previous studies have investigated digital piracy. For example, research in the context of digital piracy in general [7, 9, 13–16] music piracy [1, 17], software piracy [6, 18–20], and pirated video games [21]. Furthermore, different theories have been used to study digital piracy, such as the theory of planned behavior (TPB) [6, 18, 21], religiosity theory [4, 7, 9], and deterrence theory [3, 20]. Of the many studies that have been carried out, there are still very few researchers interested in comparing these theories in one study. Therefore, this study wants to examine digital piracy using TPB, religiosity theory, and deterrence theory by adding economic and hedonic benefits. More specifically, this study will only examine one form of digital piracy, namely film piracy in Indonesia. This is interesting to study because the Indonesian film industry is affected by film piracy, while on the other hand, Indonesian society is a religious society.

## 2 Research Methods

This research used a quantitative approach. Based on the objectives, this research used casual research because it aims to test causal relationships between variables. The population of this study was Gen z, who knew and did digital film piracy. The characteristics of the population determined were Gen z, who did digital piracy, male or female, aged 16–26 years old, and at least possessed a high school education or equivalent.

The questionnaire was distributed through an online platform and obtained from 214 respondents. The data obtained from the respondents were processed using SPSS 23 and AMOSS 21 to process the Structural Equation Model (SEM).

There were 9 variables used in this study: Hedonic Benefit (HDN), Economic Benefit (ECB), Intrinsic Religiousness (INR), Extrinsic Religiousness (EXR), Perceived Likelihood of Punishment (PLP), Subjective Norms (SBN), Attitude towards Digital Piracy (ADP), and Intention to Commit Digital Piracy (ICD). Initially, there were 47 measurement items proposed, but after the validity and reliability tests were carried out on SPSS, only 34 items were declared valid and reliable (HDN 5 items, ECB 3 items, INR 2 items, EXR 2 items, PLP 5 items, PBC 5 items, ADP 8 items, and ICD 3 items). Figure 1 shows the model of this research.

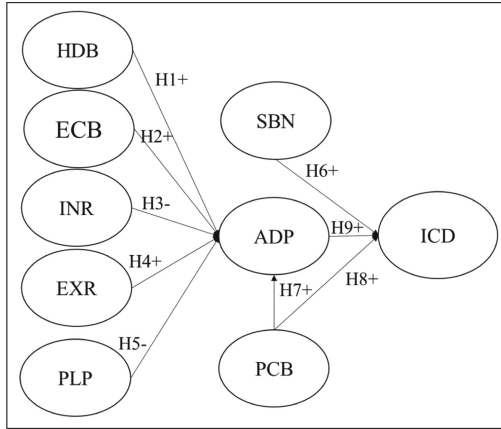


Fig. 1. Research Model

### 3 Results and Discussion

#### 3.1 Respondent’s Profile

There was a total of 214 respondents who completed the questionnaire in this study, which were dominated by males (54,67%), Muslims (36,92%), having a high school education (84,58%), and earning less than Rp. 500,000 (53,74%). All respondents were Gen z aged between 16–26 years, where Gen z is one of the groups (besides millennials) with the highest level of technology use (Table 1).

#### 3.2 Validity and Reliability Test Results

After calculating the Pearson Correlation and Cronbach’s Alpha on SPSS, all variables and indicators were declared valid (Pearson Correlation < 0.05) and reliable (Cronbach’s Alpha > 0.6).

#### 3.3 Measurement Models

The CFA model fit test results exhibited in Table 2 show that one index was classified as a good fit and four were classified as marginal fit.

Table 3 shows the Average Variance Extracted (AVE) and Construct Reliability (CR) values. However, before calculating the AVE and CR, it is necessary to evaluate the standard loading value, where the standard loading value must have a value >0,50. The AVE value must be >0.50 and CR value must be >0,70. After processing the data, it is known that all constructs have standard loading > 0.50; AVE > 50; and CR > 0.70. Thus, it can be stated that all research constructs can be declared valid and reliable.

**Table 1.** Respondent's Profile

Criteria	Demographics	n	%
Gender	Male	117	54.67
	Female	97	45.33
Religion	Muslim	79	36.92
	Christian	71	33.18
	Catholic	45	21.03
	Hindu	4	1.87
	Buddha	14	6.54
	Others	1	0.47
Last	Undergraduate	33	15.42
Education	Senior High School	181	84.58
Income (Rupiah)	<500,000	115	53.74
	> 10,000,000	6	2.80
	5,000,001–10,000,000	5	2.34
	500,001–1,000,000	55	25.70
	1,000,001–5,000,000	33	15.42

**Table 2.** CFA Model Fit Test

No.	Match Testing	Criteria	Results	Description
1	CMIN/DF	$\leq 2.00$	2.135	Marginal fit
2	GFI	$\geq 0.90$	0.775	Marginal fit
3	RMSEA	$\leq 0.08$	0.073	Good fit
4	TLI/NNFI	$\geq 0.90$	0.869	Marginal fit
5	CFI	$\geq 0.90$	0.885	Marginal fit

### 3.4 Structural Models

The structural analysis model is used to determine the effect between research variables or the results of hypothesis testing. The constructs that can be used to analyze structural models are constructs that have a significant estimation value of the variable to be measured. Variables that have significance to other variables can be determined from the  $p$ -value  $< 0.050$ . As shown in Table 2, the measurement model match test of structural model results shows that one index was classified as a good fit and four as a marginal fit (Table 4).

**Table 3.** AVE and CR of the Construct

Variable	AVE	CR
Hedonic Benefit	0.509	0.837
Economic Benefit	0.557	0.789
Intrinsic Religiousness	0.575	0.726
Extrinsic Religiousness	0.516	0.681
Perceived Likelihood of Punishment	0.538	0.822
Perceived behavioral control	0.610	0.886
Subjective norms	0.551	0.709
Attitude towards digital piracy	0.681	0.944
Intention to commit digital piracy	0.845	0.942

**Table 4.** Model Fit Test of Structural Model

No.	Match Testing	Criteria	Results	Description
1	CMIN/DF	$\leq 2.00$	2.120	Marginal fit
2	GFI	$\geq 0.90$	0.774	Marginal fit
3	RMSEA	$\leq 0.08$	0.720	Good fit
4	TLI/NNFI	$\geq 0.90$	0.871	Marginal fit
5	CFI	$\geq 0.90$	0.885	Marginal fit

**Table 5.** Summary of Hypothesis Test Results

Relationship between constructs	Estimate Value	P	Significance	Supported Hypothesis
HDB → ADP	0.415	0.006	Yes	Yes
ECB → ADP	0.173	0.173	No	Yes
INR → ADP	0.116	0.341	No	No
EXRADP	0.575	***	Yes	Yes
PLP → ADP	-0.053	0.666	No	Yes
SBN → ADP	-0.046	0.802	No	No
PCB → ADP	0.044	0.604	No	Yes
PCB → ICD	0.438	0.001	Yes	Yes
ADP → ICD	0.867	***	Yes	Yes

### 3.5 Hypothesis Testing

Table 5 summarizes the hypothesis testing results of the proposed model. The results demonstrate that not all hypotheses are supported and significant. A hypothesis is supported and has a significant value if the p-value is less than 0.05. There are four supported hypotheses, i.e., H1, H4, H8, and H9.

## 4 Discussion

This study indicates that the higher the hedonic benefit, the greater the consumer's attitude toward digital piracy. This is in line with previous studies [1, 22]. The final consumer sees the purchase and consumption of counterfeit products as a pleasurable act that provides pleasure and emotional satisfaction. The excitement of committing illegal acts offline and online drives digital piracy behavior. Therefore, the hedonic benefits offered by pirated products result in a positive attitude towards piracy attitudes.

This study shows that extrinsic religiousness has a negative influence on attitudes toward digital piracy. This is in line with previous studies [4, 8, 23]. Research conducted by Vitell et al. [8] showed that extrinsic religiousness has no effect on consumer ethics. Individuals with high extrinsic religiousness may be ethically insensitive than individuals who have high intrinsic religiousness and are more likely to accept digital piracy and tend to be less afraid of legal consequences [4].

This study indicated that the higher the consumer's perceived behavioral control, the greater the consumer's intention to commit digital piracy. This is in line with previous studies [4, 24, 25]. Perceived control describes an individual's beliefs about behavior and the difficulty of doing something. When consumers perceive themselves to have more control in unethical situations (e.g., digital piracy), they are more likely to commit digital piracy [25]. In the context of film piracy in Indonesia, many illegal websites provide free viewing of pirated films. This makes it very easy for Indonesian people to commit film piracy. The government is not without action in eradicating illegal websites that provide pirated films. The Indonesian government has eradicated many illegal websites providing pirated films. However, there are more and more illegal websites providing pirated films.

This study indicates that the higher the consumer's attitude toward digital piracy, the more significant consumer's intention to commit digital piracy. This is in line with previous studies [1, 4, 18, 25, 26]. Attitude is the best predictor of intention, which can also be used to predict behavior. Therefore, a good attitude towards action must be consistent with the behavior, while a negative attitude makes a person refrain from performing a behavior [1, 27]. Based on the SEM test, it is known that attitude toward digital piracy has the greatest positive influence on intention to commit digital piracy (0.867). Therefore, the government and related parties to the film business in Indonesia need to change consumer attitudes towards digital piracy. Consumers in developing countries such as Indonesia are still optimistic about piracy. This has hampered efforts to reduce film piracy.

## 5 Conclusion

This study examined the attitudes and intentions toward digital film piracy in Indonesia and developed factors affecting the attitudes and intentions of Gen Z by considering

multiple theories, i.e., TPB, religiosity theory, and deterrence theory, by adding economic and hedonic benefits factors. This study's results show that attitude toward digital piracy and perceived behavioral control positively influence consumer intention to commit digital piracy. The results also reveal that attitude toward digital piracy is positively influenced by hedonic benefit and negatively influenced by extrinsic religiousness.

Based on the study results, the factors that influence the rise of digital piracy in developing countries, especially in Indonesia, are hedonic benefits, perceived behavioral control, and attitude toward digital piracy. The high number of cases of film piracy in Indonesia is due to a large number of illegal websites and the absence of solid law enforcement from the Indonesian government. This makes it easier for Indonesian consumers to film piracy.

Good cooperation is needed between the Indonesian government and parties related to the film industry to eradicate film piracy. Based on the results of this study, one thing that can be done is to change the way Indonesian consumers perceive digital piracy. Indonesian consumers should be educated that digital piracy is unethical and can harm many parties.

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