

The Mediating Effect of Religiosity on Customer Loyalty After Skimming Cases

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ABSTRACT

The density of queues in making cash withdrawals at banks makes the use of ATMs increasingly necessary. However, there are some individuals who use the use of ATMs as an act of fraud through skimming. This study aims to examine the effect of customer religiosity on loyalty after a skimming case. The method used was quantitative, researchers used as many as 96 respondents who were selected based on their experience experiencing skimming events. Researchers used the partial least square (PLS-SEM) structural equation model. The findings showed that moderation of the religiosity variable did not increase the influence on the variables of risk of loss, security risk and risk of trust on customer loyalty. Researchers reasoned that the religiosity of human relations with God, but related to the loyalty of ATM use, requires evidence of protection efforts from the Bank against customer data security.

Keywords: *Religiosity, Loyalty, Skimming Effect*

INTRODUCTION

Automated Teller Machine (ATM) is a tool or means of electronic channel-based banking used for transactions by customers (Adane, Wale, & Meried, 2021; Harelimana, 2018; Tadesse & Bakala, 2021). This ATM can be easily used by customers because it is found in various places or strategic locations other than banks such as mini markets, markets or other places (Hariyanto & Pujiyono, 2020; Utama, 2021). Customers do not need to come directly to the teller or other bank officers because customers only need to bring the ATM card to the ATM machine to make the desired transaction. However, in 2021 the number of ATM usage decreased by 9.31%, namely 94,585 ATM units only even though in December 2020 it had increased by 104,654 units and since December until the end of 2021 it has decreased every month (Rachman & Prabawani, 2016).

One of the factors decreasing the use of ATMs in banking is the presence of

financial crime cases (Adane et al., 2021; Ashby & Thorpe, 2017; Harelimana, 2018; Mahmood & Shaikh, 2013; Narteh, 2015). In 2017-2020 and there have been 16,845 reports of cyber crimes where these crimes include hacking or hacking, skimming or copying information, defacing or replacing website pages and so on. One form of financial crime that is a concern today is skimming (Aljuaid & Ansari, 2022; Van Anholt, Coelho, Laporte, & Vis, 2016; Y. Zhang & Kulkarni, 2018). Speaking of skimming, it is a criminal activity that takes data from ATM machines where criminals or individuals who act harmfully take data from chips on the back of ATM cards or magnetic tapes. In this case, the way things work in skimming crimes is copying ATM data from customers through ATM machines. When customers make transactions or other things using an ATM card at an ATM machine where previously the perpetrator would attach tools in the form of skimmers (the perpetrator made this tool resemble the mouth of a slot from an ATM machine)

and a very small camera which was affixed and also installed near the customer when entering the pin. So, in this case the activities carried out by the customer will be recorded to the perpetrator and automatically the data in the form of an account along with a pin or password from the customer is known by the perpetrator (Barker, D'Amato, & Sheridan, 2008; Butler, 2007; Soomro, Ahmed, Shah, & Khoumbati, 2019; Watters, McCombie, Layton, & Pieprzyk, 2012).

Recently, a viral case of skimming cases in 2022 has been excited on social media where there are customers who experience skimming crimes. The customer named Hebbie Agus Kurnia used a BCA account where the victim realized that the savings in his account were lost and broken into by irresponsible parties. The value taken was around 135 million at 1 a.m. on March 27, 2022. The victim is domiciled in Bandung while the illegal transaction occurred in Surabaya. The victim realized that she had experienced a skimming crime until finally the victim reported to BCA Customer Service, but the process of reporting the case was not easy and in the end the case was completed because it was replaced by BCA. Researchers also know that other skimming cases have occurred in the area around the Muria Kudus University campus which resulted in customers who are students experiencing many losses where they lost almost hundreds of thousands or even millions of rupiah in their accounts. This incident happened around November 2021.

In research conducted by Dian Eka Kusuma Wardani, Maskun, Wahyu Firmadani, M. Malik, Komang Aldi Saskara, Ni Luh Gede Yogi Arthani, and Dian Ekawati said that skimming crime is indeed a form of crime where the main factor is indeed the development of information technology today which results in negative aspects and indeed causes new crimes in the form of skimming (Enrick, 2019; Firmadani &

Malik, 2019; Hazrina, Yulfasni, & Delfianti, 2019; Lestari, Muhaimin, & Mulada, 2022; Pamuji, 2018; Sarma & Prashad, 2016; Shintadewi, Budiarta, & Widyantera, 2021). In addition, there are also impacts caused by skimming such as risks both from the bank side and the customer side. In the study, there is also an explanation of the efforts made by banks if customers experience skimming and also an explanation of the legal protection that regulates the skimming crime (C.A., 2014; Chavan, Manjaly, & Ali, 2021; Van Anholt et al., 2016; Y. Zhang & Kulkarni, 2018).

LITERATURE REVIEW

In this study using the grand theory TAM (Technology Acceptance Model) which is one type of theory specifically used to study the behavior of a person, especially regarding information technology (Berakon, Wibowo, Nurdany, & Aji, 2023; Park & Park, 2020; Surendran, 2012; Vuković, Pivac, & Kundid, 2019; Zaineldeen, Hongbo, Koffi, & Hassan, 2020). This grand theory was first discovered and popularized by Davis in 1986 where this theory is a development of TRA (theory of reasoned action) theory of reasoned action where a person behaves usually depending on intentions and interests so that later it will affect the attitude or action to be carried out (Koul & Eydgahi, 2018; Marangunić & Granić, 2015).

Risk of Loss

According to Sciffman and Kanuk, risk is defined as uncertainty felt by customers so that customers have the potential to provide negative results for every thing they do. In this case, anything that can be influenced by external or other factors can also have a negative effect because of the perception made by the customer because the risk must have a negative effect and losses obtained. Irham Fahmi interprets risk as a form of uncertainty about a person's situation that will occur in the

future with various decisions taken now as consideration. This underlies someone in doing something to think about the impact of all decisions taken because of course there are risks that can be obtained (Peters, 2022).

From the above understanding, it can be concluded that the risk of loss or risk of loss is an impact and effect felt by customers in the form of negative results by getting losses or something unlucky so that this will affect the customer's decision to do something. Customers who experience the risk of loss may come from internal factors, namely the negligence of the bank or external factors from other parties who try to commit crimes, resulting in the risk of loss to customers. The risk of loss is experienced by many customers when customers experience banking crimes such as skimming where customers experience financial or financial losses and other losses (Damalas, 2021; Peters, 2022).

Security Risk

Pavlou defines security risks in the form of encryption, protection, verification, and authentication where encryption is a method or way of changing information so that it is not easy to read and use. Then protection is a way in which institutions maintain and protect the security of personal information from customers so that customers feel safe and protected from various kinds of banking crimes. While verification is a method of identifying personal information through evidence included so that there is an element of authenticity. And the last is authentication, which is the process or way of proving something like information authentically or reliably (Affia, Matulevičius, & Nolte, 2020; Pandey, Singh, Gunasekaran, & Kaushik, 2020).

Trust Risk

According to Gefen, trust is a feeling that describes openness to the actions of someone who thinks that what is done is

real and believes in what is done. Trust becomes an important factor in a person's behavior because the greater the trust, the more interest in something (Bélanger & Carter, 2008; Bohnet & Zeckhauser, 2004).

Building trust is also very difficult and must go through several processes in between. If someone like a customer uses products in banking, it is certain to trust the bank to use other products or services. Usually, customers trust the bank because of many factors such as bank services that make customers trust, the system used and the professionalism provided by the bank, thus making customers trust. According to Morgan and Hunt, trust is a condition in which one party is involved in every process that exchanges ideas and beliefs with the integrity of the other party (Damghanian, Zarei, & Siahsharani Kojuri, 2016; Kumar, Singh, Kumar, Khan, & Corvello, 2023; Van et al., 2020).

Trust also makes the image or image of the bank increase because if more and more customers trust the bank, the market will definitely increase as well. Like Islamic banking which is now in great demand by the public because of the principles in everything that is done using sharia principles. This makes Islamic banking must be careful to maintain the trust of customers because if the trust of customers has been lost, it will affect the bank itself (Ong & Lin, 2015; Tiwari & Tiwari, 2020; Yousafzai, Pallister, & Foxall, 2003).

Religiosity

Religiosity comes from the word religion which means belief in god or other terms namely religion. In this religiosity, it prioritizes faith and also faith in the one and only god. According to Delener, religiosity is a very important factor in a person related to faith in Allah SWT which can affect an attitude or behavior from within a person so that he will make decisions that have been made by that person based on their faith (Aldás-Manzano, Lassala-Navarré,

Ruiz-Mafé, & Sanz-Blas, 2009; Kesharwani & Singh Bisht, 2012; Thusi & Maduku, 2020).

Loyalty

The word loyalty has two different meanings depending on how a person sees from his point of view where according to Lawfer explains that loyalty means a trait in a person that is not eternal or permanent because it can be loyal or unfaithful and in this case Lawfer considers loyalty only a feedback or response given by someone to the actions taken by the institution or company (Jayanti, 2021; Sierra & McQuitty, 2005; Subagiyo, Mutafarida, Nur Asiyah, Bachtiar, & Fauzan, 2022).

While in simple terms loyalty comes from the word loyal which means loyal or obedient. More clearly, according to Auh, loyalty is the willingness of a person to show a commitment to something and be willing to accept the risk of everything he decides. So in this case it can be concluded that customer loyalty is an attitude or decision taken by someone in his willingness to provide a positive sense of commitment and responsibility to banking institutions. According to Hurriyati, customer loyalty is a commitment to the company or institution from someone who consistently gives a positive and good response to the company or institution by buying products, using services or other things (Ali; Noraei & Kavosh, 2021; Nouman Saeed & Dr. Naimat Ullah Khan, 2021; Tabrani, Amin, & Nizam, 2018; Van Deventer & Redda, 2021; L. Zhang, Yi, & Zhou, 2022).

METHODOLOGY

The research method used in this study is Quantitative Method with post positivism paradigm. The use of this method is based on doubts about the influence of religiosity in influencing customer loyalty after skimming cases. The sampling technique uses the purposive sampling method by selecting respondents who have

experienced skimming events. The population in this study is customers in Kudus district. The population was selected based on the criteria that there have been many skimming cases in Kudus. Based on the calculation results through the lemeshow formula, it can be known the number of samples needed as many as 96 people. The measurement scale used is the Likert scale with values of 1-5 for scores strongly disagree to strongly agree. The questionnaire item of each variable consists of 5 items based on the dimensions on each variable. Researchers used validity and reliability tests in questionnaire testing. The data results were then analyzed by researchers using the SPSS 23 application. Variable testing uses two models, a direct influence test between independent and dependent variables and an interaction test or Moderated Regression Analysis (MRA) (Haryono, 2014; Muhajirin & Panorama, 2017; Sugiyono, 2014, 2016).

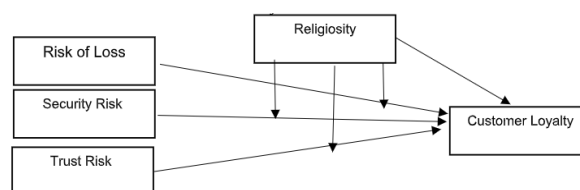
Direct variable testing using the formula:

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + e$$

Testing moderation variables using the formula:

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_1X_4 + b_5 X_2X_4 + b_6 X_3X_4 + e$$

The multiplication variable between X_1 and X_2 is a moderating variable because it describes the moderating effect of the variable X_2 on the relationship between X_1 and Y (Ghozali, 2009; Imam Ghozali, 2013). While the variables X_1 and X_2 are direct variables of variables X_1 and X_2 to Y . Here is the model of this study:



The hypothesis of this study is as follows:

- H1: Risk of Loss berpengaruh terhadap Customer Loyalty
- H2: Security Risk affects Customer Loyalty
- H3: Trust Risk affects Customer Loyalty
- H4: Religiosity affects Customer Loyalty
- H5: Religiosity memoderasi pengaruh Risk of Loss terhadap Customer Loyalty
- H6: Religiosity moderates the effect of Security Risk on Customer Loyalty
- H7: Religiosity moderates the effect of Trust Risk on Customer Loyalty

RESULTS AND ANALYSIS

Results

The object of this research is a banking customer in Kudus. In this case, the customers in question are all types of customers who use the services of all banks, both conventional banks and Islamic banks in Kudus Regency such as customers of Bank Syariah Indonesia, Bank Rakyat Indonesia, Bank Nasional Indonesia, Bank Jateng Syariah, Bank Mandiri and other banks. The descriptive data is as follows:

a. Characteristics of respondents

Information	Criterion	Number of Respondents	Percentage
Gender	Man	42	43,8%
	Perempuan	54	56,2%
Age	<20 years	10	10,4%
	20-30 years	76	79,2%
	30-40 years	7	7,3%
	>40 years	3	3,1%
ATMs used	BSI	19	19,8%
	BRI	57	59,4%
	BNI	5	5,2%
	BCA	3	3,1%
	Bank Mandiri	10	10,4%
	Bank Jateng Syariah	2	2,1%
Transaction intensity	>5 times a month	43	44,8%
	5-10 times a month	39	40,6%
	10-15 times a month	11	11,5%
	15-20 times a month	1	1,0%
	>20 times a month	2	2,1%
Years of skimming	2017	2	2,1%
	2018	7	7,3%
	2019	9	9,4%
	2020	15	15,6%

Information	Criterion	Number of Respondents	Percentage
	2021	42	43,7%

b. Research Instrument Test

Indicator	Correlation coefficient (r)	R table (α 5%)	Keterang an	Average
Risk Off Loss				
I get a risk or adverse impact after experiencing a skimming incident	0,660	0,1689	Valid	4,34
I felt threatened and worried after the skimming incident	0,675	0,1689	Valid	4,18
I got a loss after skimming	0,731	0,1689	Valid	4,24
I feel that skimming crime is a form of crime that harms many parties, especially customers and banks	0,729	0,1689	Valid	3,94
I was traumatized to make transactions using ATMs after the skimming incident	0,684	0,1689	Valid	3,95
Security Risk				
Banking provides handling of ATM damage	0,627	0,1689	Valid	4,31
Banking provides guarantees or compensation to customers	0,738	0,1689	Valid	4,11
I intend to check the condition of the ATM before use	0,680	0,1689	Valid	4,15
I feel that using ATMs is no longer safe after the skimming incident	0,730	0,1689	Valid	4,02
Banks increase security at ATM locations after skimming	0,693	0,1689	Valid	4,22
Trust Risk				
I intend to keep using the ATM after the skimming incident	0,766	0,1689	Valid	4,23
I still use ATM outlets that have experienced skimming incidents	0,608	0,1689	Valid	3,74
I have the intention and interest to use another bank's ATM after the skimming incident	0,737	0,1689	Valid	4,23
I am satisfied with the handling provided by the	0,729	0,1689	Valid	4,20

Indicator	Correlation coefficient (r)	R table (α 5%)	Keterang an	Average
bank on skimming cases				
Banking provides assistance quickly	0,594	0,1689	Valid	4,17
Religiosity				
I believe in the existence of a god	0,676	0,1689	Valid	4,78
I believe every action must be accountable	0,757	0,1689	Valid	4,82
I'm a Muslim	0,743	0,1689	Valid	4,23
I use ATM transactions by prioritizing sharia principles	0,703	0,1689	Valid	4,80
The crime of skimming includes acts prohibited by religion because of harm	0,764	0,1689	Valid	4,36
I will reprimand or report skimming criminals to the authorities and banks	0,676	0,1689	Valid	4,78
Customer Loyalty				
I will continue to do financial transactions and ATM services using the same bank	0,777	0,1689	Valid	4,23
I recommend to relatives, friends or relatives that I have to use ATMs carefully	0,476	0,1689	Valid	4,78
I prohibit the use of ATM outlets that have been skimmed to relatives, friends or relatives that I have	0,836	0,1689	Valid	4,27
I am not interested in using products and services or using ATMs at other banks after the skimming case	0,693	0,1689	Valid	4,31
I can tolerate negligence by the banking authorities in case of skimming	0,591	0,1689	Valid	4,17

Based on the data of the variable frequency description table above, it can be concluded that the highest average answers of respondents or banking customers in Kudus on each variable are as follows:

1) Risk of loss, respondents experienced losses after experiencing skimming crimes with the highest average of 4.34

on the indicator of experiencing losses while for the lowest average answer of 3.94 in the fourth statement with a statement that respondents felt threatened and worried after experiencing skimming crimes on indicators of certain risks experienced by customers.

- 2) Security risk, the highest average is that the bank provides handling of ATM damage with an average of 4.31 on the security guarantee indicator while for the lowest average answer is 4.02 on the fourth statement with a statement that the bank increases security for ATMs after skimming crimes on the data confidentiality indicator.
- 3) Trust risk, the highest average is that respondents will continue to use ATMs after experiencing skimming crimes, but customers also have the intention to move to other bank ATMs with an average of 4.23% on indicators of constancy and honesty while for the lowest average answer of 3.74% in the second statement with a statement that banks provide guarantees to customers.
- 4) Religiosity, the highest average is that respondents believe that every action taken will definitely be held accountable with an average of 4.82% on the belief indicator while for the lowest average answer of 4.23% in the third statement with a statement that respondents prioritize sharia principles in every transaction on the indicator of religious practice.
- 5) Customer loyalty, the highest average is that respondents recommend to relatives, friends or relatives to use ATMs carefully with an average of 4.78% on the indicator of recommending and persuading others to make purchases at the same banking institution while for the lowest average answer of 4.17% in the fifth statement with a statement that respondents can tolerate negligence by the bank if it occurs Skimming on indicators has an attitude that can tolerate the occurrence

of accidental irregularities in the company or institution occasionally without turning towards other companies and institutions.

Results of the analysis of the hypothesis of direct effects

In the table T distribution known $t_{(a/2; n-k-1)}$ where a means a confidence level of 0.025 and k is the number of independent variables and n is a sample so it can be inferred $t_{tabel} = 96-3-1 = 92$. So that on t_{tabel} Through a confidence level of 0.025 it can be known as 1.989. The following is a partial test T can be seen in table 4.24, namely:

Table 2. Model I Partial Test T Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.220	.589		5.469	.000
Risk Of Loss (X1)	.258	.052	.287	4.934	.000
Security Risk (X2)	.238	.066	.252	3.597	.001
Trust Risk (X3)	.402	.058	.468	6.902	.000

a. Dependent Variable: Customer Loyalty
Sumber: Data Primer 2022

Based on table 4.24 above, it can be concluded that the results of the t-test are stated as follows:

1) The effect of risk of loss (X1) on customer loyalty in using ATMs after *skimming cases*.

Judging from the t test table above, it is known through the t column that the significance value of risk of loss on customer loyalty is $0.000 < 0.05$, while for $t_{calculate}$ it is $4.934 > t_{table}$ is 1.989. Thus, H0 is rejected and H1 is accepted which means that there is a positive and significant influence on the risk of loss variable on customer loyalty in using ATMs after the *skimming* incident.

2) The effect of security risk (X2) on customer loyalty in using ATMs after *skimming cases*

Judging from the t test table above, it is known through the t column that the

significance value of security risk to customer loyalty is $0.001 < 0.05$, while for $t_{calculate}$ it is $3.597 > t_{table}$ is 1.989. Thus, H0 is rejected and H1 is accepted which means that there is a positive and significant influence on security risk variables on customer loyalty in using ATMs after *skimming events*.

3) The effect of trust risk (X3) on customer loyalty in using ATMs after *skimming cases*

Judging from the t test table above, it is known through the t column that the significance value of trust risk to customer loyalty is $0.000 < 0.05$, while for $t_{calculate}$ it is $6.902 > t_{table}$ is 1.989. Thus, H0 is rejected and H1 is accepted which means that there is a positive and significant influence on the trust risk variable on customer loyalty in using ATMs after the *skimming* incident.

Results of the analysis of the moderation effect hypothesis

Table 2. MRA Test Equation and Partial T Test Results Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-9.687	7.488		-1.294	.199
Risk Of Loss	1.189	.513	1.325	2.320	.023
Security Risk	.431	.706	.457	.611	.542
Trust Risk	-.045	.530	-.053	-.086	.932
Religiosity	.554	.321	.505	1.726	.088
Risk Of Loss*Religiosity	-.041	.022	-1.451	-1.865	.066
Security Risk*Religiosity	-.008	.030	-.275	-.256	.798
Trust Risk*Religiosity	.020	.023	.748	.884	.379

a. Dependent Variable: Customer Loyalty
Sumber: Data Primer 2022

Based on the table data above, it can be explained in the MRA equation model as follows:

$$Z = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4Y + b_5X_1Y + b_6X_2Y + b_7X_3Y + e$$

$$Z = -9,687 + 1,189X_1 + 0,431X_2 - 0,045X_3 + 0,554Y - 0,041X_1Y - 0,008X_2Y + 0,020X_3Y + e$$

Keterangan:

Z : Customer Loyalty (Dependent Variable)

Y : Religiosity (Moderating Variable)

X_1 : Risk Of Loss (Variabel Independen)

X_2 : Security Risk (Variabel Independen)

X_3 : Trust Risk (Variabel Independen)

X_1Y : The interaction between *risk of loss* and religiosity

X_2Y : The interaction between *security risk* and religiosity

X_3Y : The interaction between *trust risk* and religiosity

b_1 sampai b_7 : Regression Coefficient

e : Standar Error

Based on table 4.19 above, it can be concluded that the results of the partial t-test of moderation variables are expressed as follows:

- 1) The influence of religiosity on customer loyalty (H4)

From the t-test table, it can be seen that religiosity has no effect on customer loyalty based on a significance value of $0.088 > 0.05$. Then the hypothesis is rejected.

- 2) The influence of religiosity on the relationship between *risk of loss* and customer loyalty in using ATMs after *skimming cases* (H5)

Judging from the t test table above, it is known through the t column that the significance value of *risk of loss* on customer loyalty is $0.023 > 0.05$, while for $t_{\text{calculate}}$ it is $2.320 > t_{\text{table}}$ is 1.989. In the interaction between *risk of loss* and religiosity variables as moderation variables, the $t_{\text{calculated}}$ value is $-1.865 < t_{\text{table}}$ is 1.989 with a significance value of $0.066 > 0.05$. Thus, H0 is accepted and H1 is rejected which means that religiosity

does not moderate the relationship between *risk of loss* and customer loyalty in using ATMs after *skimming events*.

- 3) The influence of religiosity on the relationship between *security risk* and customer loyalty in using ATMs after *skimming cases* (H6)

Seen in the t test table above, it is known through column t that the significance value of *security risk* to customer loyalty is $0.542 > 0.05$, while for $t_{\text{calculate}}$ $0.611 > t_{\text{table}}$ is 1.989. In the interaction between the variables of *security risk* and religiosity as moderation variables, the $t_{\text{calculated}}$ value is $-0.256 < t_{\text{table}}$ is 1.989 with a significance value of $0.789 > 0.05$. Thus, H0 is accepted and H1 is rejected which means that religiosity does not moderate the relationship between *security risk* and customer loyalty in using ATMs after *skimming incidents*.

- 4) *The influence* of religiosity on the relationship between *trust risk* and customer loyalty in using ATMs after *skimming cases*. (H7)

Judging from the t test table above, it is known through column t that the significance value of *trust risk* to customer loyalty is $0.932 > 0.05$, while for $t_{\text{calculate}}$ it is $-0.086 > t_{\text{table}}$ is 1.989. In the interaction between the variables of *trust risk* and religiosity as moderation variables, the $t_{\text{calculated}}$ value is $0.884 < t_{\text{table}}$ is 1.989 with a significance value of $0.379 > 0.05$. Thus, H0 is accepted and H1 is rejected which means that religiosity does not moderate the relationship between *trust risk* and customer loyalty in using ATMs after *skimming events*.

In addition, the MRA test conducted by researchers also uses the MRA test according to Imam Ghozali where in the method used there are three kinds of moderation variables, namely *pure moderator*, *quasi moderator* and

predictor moderator. Where it is explained that *pure moderator* is a designation for the results of the moderation variable test if the value of the second equation test is significant and the third equation test is not significant. As *for quasi-moderator*, it is a designation for the results of the moderation variable test if the resulting values of the second and third equation tests are not significant. And *for the moderator predictor* if the value produced in the second equation test is not significant but for the third equation test is significant.

Analysis

1) **The influence of religiosity as a moderation variable in the relationship between risk of loss and loyalty of banking customers in Kudus in using ATMs after the skimming case**

In the variable of religiosity as a moderation variable in the relationship between *risk of loss* and loyalty of banking customers in Kudus in using ATMs, the test conducted by the researcher obtained the results of a calculated t value of $-1.865 < t_{\text{table of}} 1.989$ with a significance value of $0.066 > 0.05$. From these results, it can be concluded that H_0 is accepted and H_1 is rejected, which means that the variable of religiosity does not moderate the relationship between *risk of loss* and loyalty of banking customers in Kudus in using ATMs after the *skimming incident*.

In this case, *risk of loss* is one of the impact factors obtained by banking customers who experience *skimming crimes*, namely the impact of losses where in the questionnaire distributed by researchers to banking customers in Kudus almost all of them answered that they had the impact of losses such as losing money in accounts and worry and anxiety when making transactions

using ATMs at ATM outlets that they usually do use. In this case, it certainly raises attitudes and desires whether to continue using ATMs or change to other means of transaction, especially if customers have a high religious attitude which will later cause customer loyalty in using ATMs after the *skimming incident* they experienced.

This is also in accordance with the theory explained by Bessis *where the risk of loss is an uncertainty that can result in various losses that can harm from the possibility or loss. where the information that researchers get through interviews from victims who have experienced skimming they get various risks of loss such as losing some money in the account, experiencing trauma and also fear.*

Based on TAM or *technology acceptance model* about the concept of technology in ATMs that customers have confidence in using ATMs so that it greatly facilitates every transaction activity carried out by customers because instead of taking money through banks and queuing, people prefer transfers using ATMs because it facilitates daily activities. This can also be a factor in customers who often use ATMs without paying attention to the surrounding environment in the ATM machine, so that unknowingly there are irresponsible parties who have placed skammer devices to make it difficult for customer money to get out, resulting in customers experiencing the impact of losses, one of which is the *risk of loss* when experiencing *skimming crimes*.

In this case, being a customer must be able to understand and learn a little to know what *skimming crimes* are so that when customers will use ATMs they can be careful and more aware of the surrounding environment. In addition, TAM also has a positive impact because in the structure model

in TAM, namely the usefulness, perception and confidence in using technology, customers have applied TAM in their daily lives by using ATMs in today's era. Moreover, the development of technology makes it easier for customers to access every transaction they want to do. However, in that case, customers must also be careful when using ATMs so that unwanted things do not happen because the use of technology certainly also has a negative impact.

In the *risk of loss variable*, there are several indicators where in these indicators according to the questionnaire that has been distributed by researchers, the results that the average respondent, namely banking customers in Kudus, answered 4.34% on the indicator of experiencing losses with customers choosing the first statement, namely that respondents suffered losses after experiencing *skimming* crimes. This is the highest respondent's answer and is a causal factor that has a strong influence on respondents.

In research through the distribution of questionnaires conducted by researchers, there were several respondents, namely banking customers in Kudus gave a score of 4, one of which was Alfiyatur Rohmaniyah and Nadia Fauzia Mawarda who had previously *experienced skimming crimes and they mentioned that when they experienced skimming crimes*. The factor or impact they feel is that they get the risk of loss such as losing money, worry and also trauma to return to making transactions using ATMs. In addition, the variable risk of loss in the lowest answer given by respondents on average answered in the fourth statement with a statement that respondents felt threatened and worried after experiencing *skimming* crimes on indicators of certain risks

experienced by customers with an answer of 3.94%.

In this study, the variable of religiosity as a moderation variable did not have any effect on customer loyalty in using ATMs. This means that the risk of loss obtained by customers does have an impact on customers, but in the variable of religiosity, it is explained where every adverse action should be abandoned, but in this case customers still want to use ATMs as financial transactions even though they have experienced *skimming* previously. Because looking at the answers of respondents through questionnaires that have been distributed on the consequence indicator on the variable of religiosity where the indicator explains that every action taken by humans must have a responsibility.

In addition, the indicator of religiosity as a moderation variable where in the questionnaire distributed, the lowest average answer is on the indicator of religious practice where in the selected statement, the customer or respondent uses sharia principles when making transactions using ATMs with an average value of 4.23%. In this case, it is indeed the lowest answer because in addition to bank users and Islamic ATMs, customers in Kudus also use ATMs from conventional banks. Although the comparison of users of Islamic ATMs and conventional ATMs is mostly exposed to *skimming* from conventional ATMs.

Judging from respondents' answers to the consequence indicator which ranks highest with an average result of 4.82%. This further proves that customers do believe that if this *skimming* crime is carried out, the perpetrators will get consequences and accountability in the afterlife by Allah SWT. Therefore, the test results conducted by researchers prove that religiosity does not affect or weaken the risk of *loss* variable for the loyalty

of banking customers in Kudus in using ATMs after experiencing *skimming crimes*.

This is also in line with research conducted by Abi Huzaifah in his research on the influence of reference groups, financial literacy, and public perceptions of interest in saving at Islamic banks with variables of religiosity whether they can moderate the variables of reference groups, financial literacy and perception or not. In a study conducted using a sample of online motorcycle taxi drivers in Yogyakarta, researchers used primary data by distributing questionnaires totaling 97 respondents. Where with the results of the study, namely that religiosity as a moderation variable did not affect or did not moderate the independent variables consisting of reference groups as X1, financial literacy as X2 and public perception as X3 in the study. The reason why religiosity does not moderate is due to the lack of socialization from Islamic banks in Yogyakarta, causing online motorcycle taxi drivers to still lack awareness in saving in Islamic banking.

However, in another test carried out, namely the MRA test which was carried out jointly or simultaneously which obtained the results that religiosity as a moderation variable turned out to be able to moderate and also affect the independent variables in this study, one of which was the *risk of loss*. This is evidenced by the results of the significance value seen in R Square, the results of the first regression test of 0.922 and when compared with the results of the second regression test, it increased with the results of R Square of 0.927. This means that the variable of religiosity moderates the *risk of loss* to customer loyalty in using ATMs after experiencing *skimming crimes*.

Where in this case, in line with research conducted by Muslim Marpaung, et al. with research on the influence of education, experience and motivation on employee performance in the government in North Sumatra province with religiosity as a moderation variable where in this study it is explained that the independent variables are education as X1, experience as X2, and motivation as X3 and religiosity as moderation variables which can strengthen or weaken from the independent variable itself. And the result of the study, namely religiosity, turned out to strengthen the influence of educational, experience and motivation variables on employee performance.

Although from the tests carried out together, the variable of religiosity turned out to affect the independent variable against the dependent, but according to the formulation of the problem and the hypothesis in the research that the researcher conducted that indeed religiosity as a moderation variable in fact does not moderate the independent variable if tested according to the MRA method, both the second and third regression models. So in this case it can be concluded that the risk of loss or risk of loss cannot be moderated by religiosity because there are several factors or causes among which many of the respondents feel that they do not mind the risks they experience, especially the risk of loss because the bank has provided handling to customers so that even though customers have a high sense of religiosity it still does not affect the risks obtained one of them the risk of such losses.

2) The influence of religiosity as a moderation variable in the relationship between *security risk* and the loyalty of banking customers

in Kudus in using ATMs after the *skimming case*

In the variable of religiosity as a moderation variable in the relationship between *security risk* to the loyalty of banking customers in Kudus in using ATMs after experiencing *skimming crimes* in the test conducted by researchers obtained results, namely the calculated t value of $-0.256 < t_{\text{table}}$ of 1.989 with a significance value of $0.798 > 0.05$. Thus, H_0 is accepted and H_1 is rejected which means that the variable of religiosity does not moderate the relationship between *security risk* and loyalty of banking customers in Kudus in using ATMs after the *skimming* incident.

Security risk is one of the factors obtained by banking customers after experiencing *skimming crimes* where the risks obtained are about security. In this case, banking customers in Kudus almost all answered that they get security risks in the form of passwords or ATM pins that customers usually use are no longer secure, then customer personal data is also known by *skimming criminals*, and there are also customers who can get their money back, some cannot and lose money in their accounts. In this case, it certainly raises attitudes and desires whether to continue using ATMs or change to other means of transaction, especially if customers have a high religious attitude which will later cause customer loyalty in using ATMs after the *skimming incident* they experienced.

This is also in line with the theory described by Pavlou defining security risks in the form of encryption, protection, verification, and authentication. Where in this case, security risk or *security risk* is indeed very risky if it occurs because security risks are very dangerous if experienced by customers. A banking institution will certainly maintain the security of

any data from customers properly, whether it is informational data or anything related to customers, the bank is obliged to maintain full security. If there are outside parties who are not responsible for misusing customer data, it will adversely affect the reputation of the bank and also the customer itself. Therefore, security risks if customers have experienced it can affect customer trust in banking institutions that handle it and the bank's image becomes bad.

Based on the TAM theory or *technology acceptance model* about the concept of technology in ATMs that customers have confidence in using ATMs, it greatly facilitates every transaction activity they do because instead of taking money through banks and queuing, people prefer to transfer using ATMs because it facilitates daily activities. This can also be a factor in customers who often use ATMs without paying attention to the surrounding environment in the ATM machine, so that unknowingly there are irresponsible parties who have placed skammer devices to make it difficult for customer money to get out, resulting in customers experiencing losses, one of which is *security risk* when experiencing *skimming crimes*.

In the *security risk* variable, there are several indicators where in these indicators according to the questionnaire that has been distributed by researchers, the results that the average respondent, namely banking customers in Kudus, answered 4.31% on the security guarantee indicator with customers choosing the first statement, namely that the bank provides handling for ATM damage that experiences *skimming crimes*. This is the highest respondent's answer and is a causal factor that has a strong influence on respondents.

In research through the distribution of questionnaires conducted by

researchers, there were several respondents, namely banking customers in Kudus gave a score of 5, one of which was Nia Wati as a customer of BRI bank who had previously experienced *skimming crimes* and she mentioned that the bank, namely BRI bank, provided handling of damage to ATM machines so that *skimming crimes* would not occur again henceforth. In addition, the security risk variable in the lowest answer given by respondents on average answered in the fourth statement with a statement that respondents considered ATMs to be unusable or no longer safe after *skimming crimes* on data confidentiality indicators experienced by customers with an answer of 4.02%.

This is the answer where the customer does have such an assumption because the confidentiality of the customer's identity has been broken into and known by irresponsible parties so that it is a natural thing but is the lowest choice because most customers feel tolerating the incident because the bank has also provided handling for damage to ATM machines affected by *skimming*.

In this study, religiosity as a moderation variable did not have any effect on customer loyalty in using ATMs. This means that the security risk obtained by customers does have an impact on customers, but in the variable of religiosity does not affect customers to continue using ATMs anymore because the answers given by respondents to questionnaires distributed by researchers where the average answer is that banks provide handling of ATM damage and also change ATM PINs to customers by 4.31%. This turned out to be enough to make customers feel tolerating what they experienced so they still want to keep using ATMs. Moreover, banking institutions must be ready to take full

responsibility for what is experienced by their customers. Therefore, the test results conducted by researchers prove that religiosity does not affect or weaken the *security risk* variable for the loyalty of banking customers in Kudus in using ATMs after experiencing *skimming crimes*.

This is also in line with research conducted by Abi Huzaifah in his research on the influence of reference groups, financial literacy, and public perceptions of interest in saving at Islamic banks with variables of religiosity whether they can moderate the variables of reference groups, financial literacy and perception or not. In a study conducted using a sample of online motorcycle taxi drivers in Yogyakarta, researchers used primary data by distributing questionnaires totaling 97 respondents. Where with the results of the study, namely that religiosity as a moderation variable did not affect or did not moderate the independent variables consisting of reference groups as X1, financial literacy as X2 and public perception as X3 in the study. The reason why religiosity does not moderate is due to the lack of socialization from Islamic banks in Yogyakarta, causing online motorcycle taxi drivers to still lack awareness in saving at Islamic banking.

However, in another test carried out, namely the MRA test which was carried out jointly or simultaneously which obtained the results that religiosity as a moderation variable turned out to be able to moderate and also affect the independent variables in this study, one of which was *security risk*. This is evidenced by the results of the significance value seen in R Square, the results of the first regression test of 0.922 and when compared with the results of the second regression test, it increased with the results of R Square of 0.927.

This means that the variable of religiosity moderates *security risk* to customer loyalty in using ATMs after experiencing *skimming crimes*.

Where in this case, in line with research conducted by Suryari Purnama, et al. with research on the role and influence of religiosity as a moderation variable on the relationship of experience in conducting online transactions to customer satisfaction of Islamic banking where the relationship of experience as X1 and customer satisfaction as Y with the results of the study, namely religiosity strengthens the influence of the variable relationship of online interaction experience on customer satisfaction Islamic banking.

Although from the tests carried out together, the variable of religiosity turned out to affect the independent variable against the dependent, but according to the formulation of the problem and the hypothesis in the research that the researcher conducted that indeed religiosity as a moderation variable in fact does not moderate the independent variable if tested according to the MRA method, both the second and third regression models. So in this case it can be concluded *that security risk or security risk* cannot be moderated by religiosity because there are several factors or causes among which many of the respondents feel that they do not mind the risks they experience, especially security risks because the bank has provided handling to customers in the form of more guaranteed security so that even though customers have a high sense of religiosity it still does not affect One of the risks obtained is the security risk.

3) **The influence of religiosity as a moderation variable in the relationship between *trust risk* and the loyalty of banking customers in**

Kudus in using ATMs after the *skimming case*

In the variable of religiosity as a moderation variable in the relationship between *trust risk* and loyalty of banking customers in Kudus in the test conducted by the researcher obtained the results of a ^{calculated} t value of 0.884 < t_{table of} 1.989 with a significance value of 0.379 > 0.05. Thus, H0 is accepted and H1 is rejected which means that the variable of religiosity does not moderate the relationship between *trust risk* and loyalty of banking customers in Kudus in using ATMs after *the skimming* incident.

Trust risk is one of the factors obtained by banking customers after experiencing *skimming crimes* where the risk obtained is about trust. In this case, respondents get trust risk by risking their loyalty as customers, where some respondents answered that they would choose to use other bank ATMs that do not experience *skimming crimes so that in this case their trust is reduced as a result of the skimming crimes they experience*.

This is also in line with the theory explained by Gefen where belief is a feeling that describes sensitivity to the actions of someone who thinks that what is done is real and believes in what is done. Trust becomes an important factor in a person's behavior because the greater the trust, the more interest in something.

Based on TAM or *technology acceptance model* about the concept of technology in ATMs that customers have confidence in using ATMs so that it greatly facilitates every transaction activity carried out by customers because instead of taking money through banks and queuing, people prefer transfers using ATMs because it facilitates daily activities. This can also be a factor in customers who often use ATMs without paying attention to the surrounding environment in the ATM

machine, so that unknowingly there are irresponsible parties who have placed skammer devices to make it difficult for customer money to get out, resulting in customers experiencing losses, one of which is *trust risk* when experiencing *skimming crimes*.

In this case, being a customer must be able to understand and learn a little to know what *skimming* crimes are so that when customers will use ATMs they can be careful and more aware of the surrounding environment. In addition, TAM also has a positive impact because in the structure model in TAM, namely the usefulness, perception and confidence in using technology, customers have applied TAM in their daily lives by using ATMs in today's era. Moreover, the development of technology makes it easier for customers to access every transaction they want to do. However, in that case, customers must also be careful when using ATMs so that unwanted things do not happen because the use of technology certainly also has a negative impact (Lee, 2009; Soemitra, Muda, Abdullah, & Lubis, 2022; Sukmawati et al., 2021).

In the *trust risk variable*, there are several indicators where in these indicators according to the questionnaire that has been distributed by researchers, the results that the average respondent, namely banking customers in Kudus, answered 4.23% on the constancy indicator with customers choosing the first statement, namely that respondents will continue to use ATMs even though they have experienced *skimming* crimes. This is the highest respondent's answer and is a causal factor that has a strong influence on respondents.

In the research through the distribution of questionnaires conducted by researchers, there were several respondents, namely banking customers in Kudus gave a score of 4,

one of which was Hamzah Saifullah as a customer of BRI bank who had previously *experienced skimming crimes* and he mentioned that he would continue to use BRI ATMs even though he had previously experienced *skimming crimes*. This is because the respondents themselves have several factors, one of which has long been a loyal customer by BRI so that when they experience *skimming crimes* for the first time, they can still tolerate. This is also in accordance with the constancy indicator in the trust risk variable. In addition, on the confidence risk variable, the lowest answer given by respondents on average answered in the second statement with a statement that respondents considered that banks provide guarantees or compensation to customers on the preferred indicator experienced by customers with an answer of 3.74%.

In this study, religiosity as a moderation variable did not have any effect on customer loyalty in using ATMs. This means that the trust risk obtained by customers does have an impact on customers, but in the variable of religiosity does not affect customers to continue using ATMs anymore because the answers given by respondents on questionnaires distributed by researchers where the average answer is that banking customers in Kudus continue to use ATM cards by 4.23%. However, on the one hand, the answer with the same value of 4.23% given by respondents answered that they had an interest in using other bank ATMs.

This turns out to have an influence on customers and this must be a concern by banks regarding the trust that can be lost in customers if banks do not act immediately as appropriate. Therefore, the test results conducted by researchers prove that religiosity does not affect or weaken the trust risk variable for the loyalty of banking

customers in Kudus in using ATMs after experiencing *skimming* crimes.

This is also in line with research conducted by Abi Huzairah in his research on the influence of reference groups, financial literacy, and public perceptions of interest in saving at Islamic banks with variables of religiosity whether they can moderate the variables of reference groups, financial literacy and perception or not. In a study conducted using a sample of online motorcycle taxi drivers in Yogyakarta, researchers used primary data by distributing questionnaires totaling 97 respondents. Where with the results of the study, namely that religiosity as a moderation variable did not affect or did not moderate the independent variables consisting of reference groups as X1, financial literacy as X2 and public perception as X3 in the study. The reason why religiosity does not moderate is due to the lack of socialization from Islamic banks in Yogyakarta, causing online motorcycle taxi drivers to still lack awareness in saving in Islamic banking.

However, in another test carried out, namely the MRA test which was carried out jointly or simultaneously which obtained the results that religiosity as a moderation variable turned out to be able to moderate and also affect the independent variables in this study, one of which was trust risk. This is evidenced by the results of the significance value seen in R Square, the results of the first regression test of 0.922 and when compared with the results of the second regression test, it increased with the results of R Square of 0.927. This means that the variable of religiosity moderates trust risk to customer loyalty in using ATMs after experiencing *skimming crimes*.

Where in this case, in line with research conducted by Suryari Purnama, et al. with research on the

role and influence of religiosity as a moderation variable on the relationship of experience in conducting online transactions to customer satisfaction of Islamic banking where the relationship of experience as X1 and customer satisfaction as Y with the results of the study, namely religiosity strengthens the influence of the variable relationship of online interaction experience on customer satisfaction Islamic banking.

Although from the tests carried out together, the variable of religiosity turned out to affect the independent variable against the dependent, but according to the formulation of the problem and the hypothesis in the research that the researcher conducted that indeed religiosity as a moderation variable in fact does not moderate the independent variable if tested according to the MRA method, both the second and third regression models. So in this case, it can be concluded that trust risk or trust risk cannot be moderated by religiosity because there are several factors or causes, among which many of the respondents feel that they do not mind the risks they experience, especially trust risks because the customers themselves have a high sense of loyalty to the bank, so even though customers have a high sense of religiosity, it still does not affect the risk obtained. One of them is the risk of such trust.

CONCLUSION AND RECOMMENDATION

The findings of this study show that the variable of religiosity does not have a moderation influence on customer loyalty due to *skimming* cases. The researcher reasoned from the data obtained that respondents saw the factor of *skimming* cases was due to the lack of fast handling of ATMs and there was a lack of security

from the Bank on customer data protection. The recommendation of this study is that banks need to improve ATM repair services, as well as provide guarantees of protection for customer data.

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