Research Paper

Muslim Non-Cash Transaction Behavior: The Moderating Role of Religiosity

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ARTICLE INFO	ABSTRACT
	Despite years of exploration, empirical evidence regarding the mediating role of religiosity in the relationship between non-cash interest and behavior is still lacking. This study analyzed the behavior related to the use of non-cash transactions by Muslim communities moderated by religiosity based on the TAM model. The sampling technique in this study used purposive sampling with a total of 438 respondents. The data in this study were analyzed using Partial Least Square Structural Equation Model (PLS-SEM) with Smart PLS 3.0. The results of this study reveal that religiosity can moderate the interest and behavior of using non-cash transactions. Besides that, the perceived ease of use and perceived usefulness have a significant positive effect on consumer behavior in using non-cash transactions, which are proxied by attitude and interest. These results indicate that the Muslim community is accepting and even supporting the development of technology in the payment system because technology brings convenience and benefits. As a result, players in the Islamic finance and halal market should pay close attention to the advancements in payment system technology to ensure the Muslim community prefers payment products on the Sharia market. This is an open access article under CC-BY-NC 4.0 license.

Introduction

Technological advancements have considerably assisted the banking industry by introducing countless advances, particularly in the payment system (Sari, 2021). The new payment system controls all transactions by an electronic system. This system is usually

known as electronic money (E-Money) and E-Wallet. According to the Directorate of Accounting and Payment Systems of the Bank Indonesia (2016), E-Money is an electronic-based payment instrument where electronic media is used to store money, and the value of the money is held in server-based and card-based accounts. E-money has currently developed into various payment tools such as E-Wallet or Mobile Money (Rizaldi et al., 2021). Through the Non-cash National Movement (GNNT) program, the Indonesian government promotes the use of electronic money. Several types of e-money and e-wallets that have been widely circulated in the community are credit cards, debit cards, Gopay, Ovo, Funds, Shopee Pay (Maharani & Darmawan, 2020), Mandiri e-Money, BRI Brizzi, BNI Tapcash, BCA Flazz, and Telkomsel Cash (T-cash) as well as those issued by start-up businesses from various fintech companies (Fadillah, 2018).

In Indonesia, the use of credit cards is quite low, which has increased the use of electronic wallets. In Indonesia, the rules governing the distribution of electronic money are outlined in BI Regulation No. 20/6/PBI 2018. In addition, the DSN-MUI fatwa No. 116/DSN-MUI/IX/2017 further explains laws on sharia electronic money. According to previous research, up to 29% of e-commerce transactions in Indonesia involve an e-wallet. Singapore and the Philippines follow closely behind with 20% of their population using digital wallets. Vietnam, which has the lowest rate at 13 percent, requires proof of a bank account, unlike other nations that merely require a mobile phone number. In addition, a survey conducted by Bank DBS Indonesia in 2020 indicated a 66% increase in digital transactions for purchasing goods and services (DBS Bank, 2020). Furthermore, according to CNN Indonesia (2021), the Financial Services Authority (OJK) noted that 88.1% of Indonesians bought non-cash transactions products Based on the report, people from all walks of life rely extensively on digital payments in their daily lives. As a result, e-money and e-wallets have a substantial impact on their daily activities (Mahendra et al., 2022).

The convenience of non-cash transactions has succeeded in encouraging people to make various transactions through e-commerce, e-money, and other digital payments. The advantages and disadvantages of e-money and e-wallets are the main factors that influence consumer behavior or the public's use (Qomar & Arifin, 2020). Consumer behavior refers to the actions customers take when they look for, purchase, use, assess, and discard goods and services that are supposed to satisfy various requirements (Schiffman & Kanuk, 2010). Consumers have the freedom to accept or reject a product, which is an example of consumer behavior. According to Howard and Sheth (1979), consumer behavior may be understood from the process, which involves input in the form of marketing and environment, output in the attitude, intention, and purchase behavior. This basis is used in developing the intention to adopt technology with the Technology Acceptance Model (TAM), which is influenced by two indicators namely perceived usefulness and perceived ease of use (Davis et al., 1989).

Previous studies have discussed electronic-based payment systems and consumer behavior, such as research conducted by Rizaldi (2021) states that convenience, trust, and lifestyle have a positive and significant influence on people's choices in using non-cash transactions. Meanwhile, risk significantly negatively affects people's intentions to conduct non-cash transactions (Yuliadi & Ariyani, 2021). A study conducted by Cobla & Osei-Assibey (2018) revealed that mobile money can change consumer behavior.

Rehman (2010) explains that Muslim consumers' behavior toward new product adoption or use can be influenced by their religiosity, which is tied to their beliefs about

which products align with their religious values (Rehman & Shabbir, 2010). Religiosity reflects one's behavior in everyday life, and it has both direct and indirect effects on human behavior (Cleveland et al., 2013). This includes factors such as belief, ritual, devotion, experience, and knowledge (Zubairu et al., 2017). According to Fojt (1994), religious nature is defined as a belief in Allah accompanied by the principle of commitment to follow Islamic directions that Allah SWT. Glock and Stark (1962) state that religiosity consists of four dimensions: belief, practice, experience, and knowledge. Besides that, Albelaikhi (1997) also adds that the indicators of religiosity encompass belief and practice, attitude, and knowledge (Albelaikhi, 1997). It can be concluded that consumer behavior has a very close relationship with the aspect of religiosity.

Religiosity plays a significant role in how people utilize mobile banking (Suhartanto et al., 2020). This opinion is also supported by Aji (2020), who researched the moderating variable of usury awareness in the intention to use e-money aligns with this view and recommends that researchers consider the religiosity variable in Islam when investigating the relationship between intention and behavior in non-cash transactions. This study adopts the research model Alkhowaiter (2022) on the use and behavioral intention of m-payments in GCC countries to expand meta-UTAUT with trust with Islamic religiosity as a moderating variable. The study suggests that religiosity could moderate the behavioral intention and use of m-payment variables (Alkhowaiter, 2022).

A previous study has suggested that religiosity be included as a moderator variable to measure consumer behavior in non-cash transactions. However, no bigger sample size study has yet statistically explored the Technology Acceptance Model (TAM) influenced by religiosity. As a result, the current quantitative study seeks to examine consumer cashless behavior via the lens of religiosity as a moderating variable, with TAM serving as the theoretical underpinning. Furthermore, the study intends to evaluate whether the TAM theoretical approach can affect behavior in the use of e-money or e-wallets that are moderated by religiosity.

Hypotheses Development

Various benefits provided by e-money and e-wallets enable users to perform various types of transactions. Electronic money and e-wallets provide benefits (perceived usefulness) that fall into one of the technology acceptance model (TAM) categories. Perceived usefulness can be interpreted as something that can be used to measure the extent to which technology can improve its performance (Shalikah et al., 2020). Rithmaya (2016) states that there is a positive relationship between perceived usefulness and attitudes. Sidharta (2016) describes that the perceived ease of use has a significant positive relationship with the attitude toward using e-commerce.

H1: *Perceived usefulness affect the attitude toward using non-cash transactions*

Perceived ease of use is the degree to which a person believes using technology will be effortless. The Technology Acceptance Model (TAM) includes various technological facilities. Payment transactions can be completed quickly and conveniently by using e-money and e-wallets. Creswell (2008) found that state that perceived ease of use has a significant positive relationship. Bangkara & Mimba (2016) further found that perceived ease of use can affect attitudes toward mobile money.

H2: *Perceived ease of use affects the attitude of using non-cash transactions*

According to Davis et al. (1989), behavioral attitudes are defined as positive or negative feelings from someone if they should carry out the specified behavior. Therefore, TPB assumes that a person's behavior is supported by an intention in behavior. The intention is a function of individual behavior attitudes, subjective norms (subjective norms), and perceptions of behavioral control (Fishbein & Ajzen, 1975). Several studies that support this statement include Sumerta & Waranda (2018) revealing that the attitude variable can increase the adoption *of e-money* in society (Sumerta et al., 2019). In addition, research by Khatimah & Halim (2016) found that attitudes can increase e-money adoption. These results are reinforced by several studies (Liébana-Cabanillas et al., 2017; Teng, 2018; Ting et al., 2016) that attitudes can increase intention in using mobile payments.

H3: *Attitude affects intention to use non-cash transactions*

Intention can be defined as something that can occur after receiving a stimulus from the object he views, and then an intention to test the product arises, resulting in a desire to possess and utilize the product (Kotler, 2016). A person's intentions refer to anticipated or planned future behavior. Consumer attitudes to e-money affect buying intention where the relevant attitude change is changing consumer attitudes to brands without changing their beliefs so that it affects the community as consumers of products or services. Purchase intention refers to the extent to which attitudes are related to future feelings and relates attitudes to own feelings and beliefs. Several studies have been conducted by Alasmari (2014) who state that intention can influence consumer behavior.

H4: *Intention affects consumer behavior in using non-cash transactions*

Alam et al. (2011) argue that the aspect of religiosity has a full moderating role in the relationship between contextual variables and Muslim consumer behavior. The aspect of religiosity can directly or indirectly affect the consumer behavior of Muslims through consumer beliefs about products. Religion can be either intrinsic or extrinsic. Extrinsic religiosity may influence individuals' materialism (Casabayó et al., 2020) but its impact is mainly focused on gaining attention and social acceptance (Çavuşoĝlu et al., 2021). While there has been limited research on how religion influences IT, it has been established that religion can affect environmental attitudes. The principles and practices of Islam have a substantial impact on society at large, including how people use technology (Suhartanto et al., 2020).

H5: *Religiosity can moderate relationships between intentions and behavior in using non-cash transactions*

Method

The population of this study is Muslim consumers who use non-cash transactions in 4 big cities on Java Island namely Jakarta, Bandung, Yogyakarta, and Surabaya. The survey options utilize a five-point Linkert scale ranging from strongly disagree to strongly agree, allowing the respondents to choose the most suitable option. The sampling technique employed is purposive sampling, which selects members of the population based on specific criteria (Creswell, 2008). A minimum of 200 samples must be obtained while utilizing PLS-SEM. The researchers collected 438 respondents from Muslim populations using non-cash transactions in many major cities, including Jakarta, Bandung, Yogyakarta, and Surabaya, for this study. Table 1 shows the characteristics of the respondents in this study.

Table 1. Characteristics of the respondents

	Description	Total	Percentage (%)
Area Distribution	Jakarta	101	23%
	Yogyakarta	103	31%
	Bandung	134	23%
	Surabaya	100	23%
Sex	Male	240	55%
	Female	198	45%
Age	<20 Years old	93	21.20%
	21-30 Years old	157	35.80%
	31-40 Years old	103	23.70%
	41-50 Years old	43	9.80%
	>50 Years old	42	9.80%
Education Level	Junior high school	0	0%
	High school	102	23.50%
	Diploma	143	32.60%
	Bachelor/Master	193	44%
Occupation	Government	103	23.70%
	employees	67	15.30%
	Private employees	131	29.80%
	Enterpriser	137	21.20%
	Student		
Variation of Non-Cash Transaction	LinkAja Sharia	206	46.90%
	Ovo	71	16..20%
	Shopee Pay	133	30.60%
	M-Banking Sharia	28	6.30%

Measurement Variable

The technology acceptance model (TAM) as a motivation variable consists of attitudes toward using, perceived usefulness, and perceived ease of use (Davis, 1993). TAM is derived from the psychological Theory of Reasoned Action (TRA) and the Theory of Planned Behavior (TPB) (Marangunić & Granić, 2015). In addition, TAM also explains that a person's behavior pattern can be influenced by how often that person uses technology (Lee et al., 2003).

Attitude is defined as a learned position predisposition to respond consistently to an object, either to likes or dislikes (Schiffman & Kanuk, 2010). Moreover, Davis et al. (1986) stated that behavioral intention is defined as the level of how firm a person's intention is in performing certain behaviors. Behavioral intention is the desire to achieve the behavior (Davis, 1989). Consumer behavior describes a person's behavior in choosing, paying, implementing, assessing, and ending the consumption of goods/services and ideas (Kowel, 2015). The selection of these dimensions is carried out according to the dimensions presented by Taai (1985), namely Beliefs and Practice. In addition, several other scholars also use beliefs and practices as a dimension in determining religiosity (Albelaikhi, 1997). In addition, Tiliouine & Belgoumidi (2009) mention that Beliefs, Practices, Altruism, and Enrichment are part of the dimensions of religiosity.

Results

The evaluation of the measurement model encompasses tests for loading vectors, average variance, and composite reliability, collectively referred to as convergent validity, while the assessment of discriminant validity includes the loading vector test and correlation of latent variables, both convergent and discriminant validity are essential for establishing content validity, which can be confirmed by examining the item loading factors (Hair et al., 2017). PLS is used for construct measurement models evaluated by testing convergent and discriminant validity.

Convergent Validity

Table 2 shows the loading factor value of the questionnaire is above 0.60. This shows that the loading factor value has a higher contribution to explaining the latent construct (Leguina, 2015). Table 2 shows that indicators of all dependent variables, namely attitude, behavior, ease of use, intention, perceive usefulness, and the independent variable, namely religiosity, are categorized as valid in this study.

Table 2. Outer Loading Factor Vactor

Variable	Indicator	Outer Loadings
Attitude	ATD1	0.849
	ATD2	0.874
Behavior	BHV3	0.858
	BHV4	0.765
Ease of Use	EU1	0.798
	EU5	0.824
Intention	INT2	0.759
	INT3	0.705
	INT4	0.761
Perceive Usefulness	PU2	0.877
	PU5	0.699
Religiosity (Moderating)	Rel3	0.666
	Rel7	0.884
	Rel8	0.672

Average Variance Extracted (AVE) is used to assess the validity convergence of each latent construct (Leguina, 2015). The output of the estimated AVE can be seen from the choice of reliability and construct validity. It can be said to be valid if the value is 0.50. The results are presented in Table 3.

Table 3. Average Variance Extracted

Construct Reliability and Validity	AVE	Description
Attitude	0.742	Valid
Behavior	0.660	Valid
Ease of Use	0.658	Valid
Intention	0.551	Valid
Perceive Usefulness	0.547	Valid
Religiosity (Moderating)	0.559	Valid

This study used the composite reliability test. The latent variable can be said to have good reliability if the value is more than 0.70 (Sekaran & Bougie, 2016). Table 4 shows the composite reliability test results. All the Composite Reliability in this study namely attitude, behavior, ease of use, intention, perceived usefulness, and religiosity already have good money reliability or have Composite Reliability that meets the requirements.

Table 4. Composite Reliability

Variable	Composite Reliability	Description
Attitude	0.852	Reliable
Behavior	0.795	Reliable
Ease of Use	0.794	Reliable
Intention	0.786	Reliable
Perceive Usefulness	0.700	Reliable
Religiosity (Moderating)	0.788	Reliable

Discriminant Validity

A construct is said to be valid by comparing the root value of the AVE (Fornell-Larcker Criterion) with the correlation value between latent variables. The AVE root value must be greater than the correlation between latent variables. To assess discriminant validity is the Fornell Larcker Criterion, a traditional method that has been used for more than 30 years, which compares the square root value of the Average Variance Extracted (AVE) of each construct with the correlation between other constructs in the model (Henseler et al., 2015). If each construct's AVE square root value is greater than the correlation value between constructs and other constructs in the model, the model is said to have a good discriminant validity value (Wong, 2013). The results are provided in Table 5. Based on the table below, all the roots of the AVE (Fornell-Larcker Criterion) for each construct are greater than their correlations with other variables. the Average Variance Extracted (AVE) value of ATD (MV1) is 0.742, and its square root is 0.862, which is greater than the correlation values with other constructs such as BHV (Y), EU (X1), INT (MV2), PU (X2), and REL (Moderating) at 0.282, 0.570, 0.457, 0.572, and 0.279 respectively.

Table 5. Discriminant Validity (Fronell-Lacker Criteria)

Indicator	ATD	BHV	EU	INT	PU	REL
ATD	0.862					
BHV	0.282	0.813				
EU	0.570	-0.122	0.811			
INT	0.457	0.588	0.207	0.742		
PU	0.572	-0.303	0.782	0.033	0.740	
REL (Moderating)	0.279	0.739	0.059	0.306	-0.145	0.747

Partial Least Square Assumption

The assumption that must be met in the analysis of the outer model is that there is no multicollinearity problem, which is a problem with strong intercorrelation or correlation between indicators. The limit is the correlation value > 0.9, which is usually indicated by the Variance Inflating Factor (VIF) value at the indicator level > 5 (Sarstedt et al., 2021).

Thus, if there is a VIF indicator value is more than 5, there is a multicollinearity problem. The consequence is that dropping or removing one of the strongly correlated indicators can be done. Table 6 shows the results of the VIF analysis at the indicator level. Based on the Outer VIF table 4.14 shows that all indicators have a VIF value < 5 so that all indicators do not experience multicollinearity problems.

Table 6. The Variance Inflating Factor (VIF) Value

Indicator	VIF
ATD1	1.308
ATD2	1.308
BHV3	1.118
BHV4	1.118
EU1	1.111
EU5	1.111
INT2	1.286
INT3	1.210
INT4	1.150
PU2	1.011
PU5	1.011
Rel3	1.266
Rel7	1.601
Rel8	1.304

The valuation was done by looking at the criteria for the R-Square value and the significance value. The following are the steps taken in testing the structural model (Inner Model). Figure 1 illustrates the path diagram.
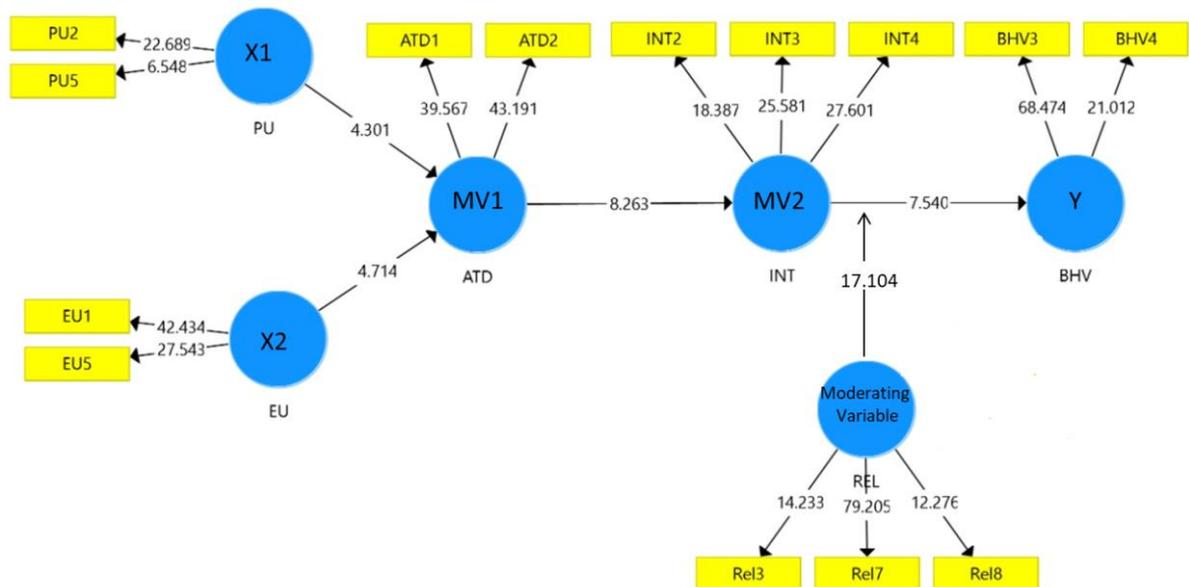

Figure 1. Structural Model Bootstrapping

R-Square Values

R square is a value that shows how much the independent variable (exogenous) affects the dependent variable (endogenous). The data are presented in Table 8. The value of R Square is 0.695. Thus, it can be concluded that the variable of behavior can be explained by the variables of perceived usefulness, ease of use, attitude, intention, and religiosity of 69.5%, which are included in the strong category. Because the value of R-Square is close to 1, it can be said that the model is good. Therefore, the assessment criteria are by the Goodness of Fit (GoF).

Table 8. R-square

	R Square	R Square Adjusted
BHV	0.695	0.693

Path Coefficient (Direct Effect)

Path Coefficient was used to examine the significance of the relationship between latent variables. A bootstrap process generates a t-statistic value (in the Smart PLS program, create a p-value). The value of the t-statistic was compared with the t-table. The variable is said to be significant if the t-statistic is greater than the t-table. In addition, to determine the significance of the effect, it can be seen from the p-value. If the p-value is less than 0.01, then it can be said to have a significant effect (p-value< 0.01). A positive value in the path coefficient indicates that the related variable has a positive effect, otherwise, if the path coefficient value is negative, the variable has a negative effect.

The value of path coefficients closer to the +1 value indicates the relationship between the two constructs is getting stronger. A relationship that is closer to -1 indicates that the relationship is negative. The analysis of the path coefficients reveals that there is a positive influence of attitude, ease of use, intention, perceived usefulness, and religiosity on cashless behavior, as all the coefficients have positive values.

Table 9. Path Coefficient Model Results Using Bootstrapping

	Path Coefficient	T-table	T Statistics (|O/STDEV|)	P Values	Results
ATD -> INT	(+) 0.457	1.649	8.278	0.000	Accepted
EU -> ATD	(+) 0.317	1.649	4.678	0.000	Accepted
INT -> BHV	(+) 0.399	1.649	9.328	0.000	Accepted
PU -> ATD	(+) 0.324	1.649	4.424	0.000	Accepted
Moderating Effect	(+) 0.617	1.649	17.514	0.000	Accepted

Discussion

This study shows that the high level of perceived usefulness is likely to lead to a positive attitude of Muslim consumers towards non-cash transactions. On the other hand, the attitude of consumers toward non-cash transactions will be low if they perceive fewer benefits of using such transactions. This is in line with previous research conducted by Rithmaya (2016) which states that there is a positive relationship between perceived usefulness and attitudes. Sidharta and Sidh (2014) also state that the perception of convenience has a significant positive relationship with the attitude of using e-commerce.

The attitude of Muslim consumers toward using e-money or e-wallets in transactions will be influenced by the ease of utilizing non-cash transactions. This is in line with previous research (Davis et al., 1989; Fishbein & Ajzen, 1975; Mathieson, 1991) that the higher the perceived ease of use, the better the attitude towards service. However, differently, according to Kim-Soon et al. (2016), if an individual perceives that utilizing a new technology will not require significant effort, their attitude towards that technology will be similar to their perception of how easy it is to use.

Attitudes also influence the intention to use non-cash transaction services such as e-money and e-wallets. Attitudes are characterized as a person's positive or negative use of non-cash transaction services, as well as their loves and dislikes of non-cash transaction services. It was revealed that the higher the positive attitude of Muslim consumers, the intention in using non-cash transaction services will also increase. The more the user understands and feels the benefits and conveniences supplied by e-money or e-wallet, the more positive his attitude will be, and his intention to always use e-money or e-wallet will increase. Theoretically, the Technology Acceptance Model and Theory of Planned Behavior say that attitudes can predict a person's behavioral intention. The results of this study are the same as those of Yudhi & Novi (2015) and Arthana & Rukhviyanti (2015). Besides, Kim-Soon et al. (2016), and Davis & Davis (1989) describe that the benefit derived from using a product is a measurable or empirical aspect, while attitudes and behavior are dynamic or active aspects.

Based on the study's results, intention has a significant positive effect on Muslim consumer behavior. This demonstrates that the more the intention of Muslim consumers to use non-cash transactions, the more likely it is that Muslim consumers will continue to utilize non-cash transactions in the form of e-money and e-wallets. Consumer attitudes toward e-money influence purchase intention, where the relevant attitude shift is influencing consumer attitudes toward the brand without changing their views, affecting the general public as consumers of goods or services. Seetharaman and Raj (2009) in their study proved that the intention in using mobile wallets has a positive effect on behavior using mobile wallets. These results are also supported by previous research (Sunny & George, 2018; Anthony & Mutalemwa, 2014) which found that intention influences online purchase behavior.

Lastly, it was found that religiosity can moderate the relationship between intention and behavior in using non-cash transactions. This demonstrates that the higher a person's level of religiosity, the stronger the relationship between intention and conduct in using non-cash transactions, because customers are more aware of transactions using e-money or e-wallets are more effective and efficient. This research is supported by previous research conducted by A-Khowaiter (2022) which used religiosity as a moderating variable. Besides that, the results of this study strengthen several previous studies (Schneider et al., 2011; Soesilowati, 2018) that also examined the relationship between religiosity and consumer behavior.

The studies indicate that religiosity encourages consumers to perform certain behaviors. Islamic teachings serve as a fundamental basis for determining the religiosity of a Muslim, which is used as a point of reference (Alam et al., 2011). Religiosity is regarded as a mandatory component in Islam and plays an important part in establishing positive behavior. The influence of religion on behavior indicates that Muslim individuals act following their devotion to gaining divine approbation by keeping divine

commandments and abstaining from any prohibited activities. This study reveals significant findings in terms of the relationship between religiosity and consumer behavior in the use of non-cash transactions, which have not been explored by previous research in the context of e-money or e-wallet. This finding implies that religiosity has a significant effect on consumer behavior in using non-cash transactions in line with a previous study conducted by Alam (2011).

The theoretical implication of this research is that consumer behavior is not only influenced by social factors as described in the theory of planned behavior, namely attitudes, subjective norms, and perceptions of behavioral control. Based on this research, it can be seen that consumer behavior can be influenced by external factors such as technological developments, especially in the payment system. The perceived ease of use and perceived usefulness provided by payment technology to consumers influence consumer behavior.

The more religious people are, the more intentioned they will be to use non-cash transactions, both e-money, and e-wallet. Moreover, since Indonesia has a significant Muslim population, this presents an opportunity for Islamic banks to innovate by introducing sharia-compliant e-money and e-wallet products that can serve as a means of facilitating transactions for the Muslim community. This study will be utilized as a reference for future research in the field of consumer behavior in non-cash transactions, particularly Muslim consumer behavior. As a result, the practical implications of this research are beneficial to banks and e-money and e-wallet providers, allowing them to continue to improve the quality of their services.

Conclusion

Overall, this study found that perceived usefulness, perceived ease of use, attitude, and intention had a significant positive effect on people's behavior in using non-cash transactions. In addition, religiosity can moderate the relationship between intention and behavior in non-cash transactions. This suggests that employing non-cash transactions such as e-wallets and e-money can improve the connection between intention and behavior. Religiosity does not reject or restrict the use of technology in people's life, such as non-cash transactions. It, on the other hand, can improve the association between TAM and consumer behavior when utilizing e-money or e-wallets. The usefulness and convenience of use of payment technology that can facilitate the community's economic transactions, in other words, presenting *mashlahah* to its users.

The research is limited to the variables of perceived usefulness, perceived ease of use, attitude, intention, religiosity, and consumer behavior regarding cashless payment. This study recommends Islamic Bank develop e-money or e-wallet systems so that people are increasingly intentioned in using non-cash transactions issued by Islamic banking. Further research that will use the same model can focus on the product of e-money or e-wallet sharia in the wider population.

Authors' Declaration

The authors made substantial contributions to the conception and design of the study. The authors took responsibility for data analysis, interpretation and discussion of results. The authors read and approved the final manuscript.

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