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ATTITUDE, SUBJECTIVE NORM, PERCEIVED BEHAVIOURAL CONTROL AND DIGITAL *ṣukūk* ADOPTION IN NIGERIA: THE MEDIATING EFFECT OF AWARENESS

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ABSTRACT

Purpose – There is an increasing number of digital *ṣukūk* issuances worldwide but the level of awareness and adoption in Nigeria is very low. This research examines the mediating effect of awareness on the relationship between attitude, subjective norm, perceived behavioural control and digital *ṣukūk* adoption in Nigeria.

Design/Methodology/Approach – The data for the research were collected from 750 questionnaires that were distributed using the systematic sampling technique to operators of the capital market and individuals in Nigeria, out of which 410 were retained. The partial least squares structural equation modelling (PLS–SEM) algorithm was used for the reliability measurement and constructs validity while the bootstrapping technique was used for testing the study hypotheses.

Findings – The findings reveal that awareness mediated the relationship that exists between subjective norm, attitude, perceived behavioural control, and digital *ṣukūk* adoption in Nigeria. Overall, the empirical findings rejected seven out of 10 null hypotheses developed to answer the research questions.

Originality/Value – The study serves as a pioneering effort towards unlocking the viability of digital *ṣukūk* adoption amongst the Nigerian populace.

Research Limitations/Implications – The findings provide empirical evidence that awareness mediated the interrelationship between the explanatory variables (subjective norm, attitude and perceived behavioural control) towards digital *ṣukūk* adoption in Nigeria.

Practical Implications – The findings suggest the need for the Debt Management Office (DMO) in partnership with the Central Bank of Nigeria (CBN) to facilitate the required regulation and standard pertaining to digital *ṣukūk* issuances and structures.

Keywords – Attitude, Awareness, Digital *ṣukūk* adoption, Perceived behavioural control, Subjective norm

Article Classification – Research paper



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INTRODUCTION

A country can realise its economic growth potential by building a stable and sustainable infrastructure. Recent research and reports by multinational organisations have revealed widespread evidence of a massive infrastructure gap in Nigeria, which has resulted in its low level of economic development. For instance, there is glaring evidence that lack of adequate electricity and roads led to total shutdown of many industries thereby causing significant loss of jobs (Arowolo & Perez, 2020). According to Abdelkafi and Bedoui (2016), experience from several countries indicates that the government alone will not be able to finance the necessary infrastructure for development. The involvement of the private sector in infrastructure financing is regarded as the most effective way of mobilising the additional resources required. On the other hand, private sector capital infrastructure financing is mostly associated with high costs, especially for developing countries like Nigeria.

Ṣukūk (Islamic bonds) represent one of the Sharī'ah-compliant financial instruments that could be used to efficiently mobilise the required resources for financing infrastructural projects. This instrument has been developed to serve as an alternative to interest-based bonds. A *ṣukūk* represents equal value certificates in the ownership of physical assets, services and usufruct (Hoque, 2014). As a means of achieving long-term and sustainable funding for infrastructure projects, the popularity and acceptability of *ṣukūk* have been on the rise since the first issuance in 1990. Malaysia was the first country to issue *ṣukūk*; it was followed by Qatar, Pakistan and Dubai. In Africa, *ṣukūk* issuances have continued to grow in size. The Nigerian government issued the first sovereign *ṣukūk* for a road project in 2017; it issued the second one in 2019 and another one in 2021. It is noteworthy that in all three issuances, the *ṣukūk* were oversubscribed due to the desire of the investing public to invest money in that regard.

In 2013, the Nigerian Securities and Exchange Commission (SEC) promulgated regulations on the *ṣukūk* structure and its issuance to boost Islamic finance transactions, particularly in the country's capital market. The regulations relate to, but are not limited to, the Investments and Securities Act (ISA) 2007. The SEC also introduced supplementary rules in 2013 to standardise *ṣukūk* issuances in Nigeria. Federal, state, and local governments, including public corporations, are permitted to serve as special purpose vehicles (SPVs) under Rule 572 of the SEC Rules, subject to the commission's approval. These regulations facilitated the first *ṣukūk* issuance in the country by the State Government of Osun through the SPV, Osun Sukuk Company PLC (Oladunjoye, 2014).

There has been a rise in recent times of digital *ṣukūk* issuances. Digital *ṣukūk* simply means the use of financial technology in the issuance and management of *ṣukūk* (Saad & Fisol, 2021). Digital *ṣukūk* adoption is important and in certain instances necessary, particularly during pandemics, as digitally issued *ṣukūk* are administered and managed through electronic means, thereby cushioning the adverse effects of a locked down economy. A significant number of citizens in Nigeria live in rural areas where the number of participating *ṣukūk*-issuing banks is limited. Digital *ṣukūk* issuances would alleviate this problem by allowing any interested citizen to subscribe to *ṣukūk*. According to Kunhibava *et al.* (2021), the digitalisation of *ṣukūk* issuance reduces inefficiencies that are related to *ṣukūk* transactions, thereby increasing the transparency of the underlying *ṣukūk* assets and the reduction of issuing costs.

This current study is motivated by the growing prominence of digital *ṣukūk* issuances across the globe and arguments about whether subjective norms, attitudes, and perceived behavioural control can have an influence on digital *ṣukūk* adoption in Nigeria. It follows previous research on the mediating effects of these variables on digital *ṣukūk* adoption in other parts of the world (Awn & Azam, 2020a). Despite regulatory efforts to create an enabling environment for *ṣukūk* issuances in Nigeria, there is no empirical evidence that has examined the influence of subjective norms, attitudes, and perceived behavioural control on digital *ṣukūk* adoption in Nigeria. Therefore, this study fills in this knowledge gap by adopting diffusion of innovation theory (DOI) in predicting investors' digital *ṣukūk* adoption in Nigeria. Precisely, this research attempts to answer the following research question:

Do attitude, subjective norm and perceived behavioural control have a significant relationship in digital *ṣukūk* adoption in Nigeria?

The remaining sections of the paper include: the literature review; the methodology used to achieve the study's objectives; the presentation and discussion of the results; and a summary of the research findings and recommendations based on these findings.

LITERATURE REVIEW

Among the few studies of digital *ṣukūk* is the study of Saad and Fisol (2021) on the first Malaysian digital *ṣukūk* (*Ṣukūk Prihatin*) and its distribution through fintech services. The authors established that digital *ṣukūk* issuance is in line with objectives of Islamic law (*maqāṣid al-Sharī'ah*) and, as such, could be issued to stimulate socio-economic development. On their part, Kunhibava *et al.* (2021) examined *ṣukūk* on blockchain from the legal, regulatory and Sharī'ah perspectives and established that digitalising *ṣukūk* issuances minimises cost and increases transparency in the underlying *ṣukūk* assets. Similarly, Khan *et al.* (2020) examined the tokenisation of *ṣukūk* using Ethereum. The authors reported that small and medium firms hardly meet traditional *ṣukūk* issuance requirements because of the high costs involved while blockchain through tokenisation reduces the cost of *ṣukūk* issuance.

Adoption of Digital *Ṣukūk* and Public Awareness

Awareness refers to knowing or having some understanding of how a specific product functions (Rogers, 1983). According to Bananuka *et al.* (2019), awareness is an important part of Islamic finance adoption, particularly in non-Islamic countries. Therefore, this study reviewed some empirical studies on the relationship between explained and explanatory variables as follows.

Ramdhony (2013) conducted research on the awareness of customers of Islamic banking products. The study indicated that 82 per cent are aware of Islamic banking products, while the remaining 14 per cent responded negatively. From Ramdhony's work, awareness plays an important role in the adoption of Islamic banking products. As a result, awareness can mediate the relationship between endogenous and exogenous variables in the adoption of digital *ṣukūk* in Nigeria. It is also assumed that the more people are aware of digital *ṣukūk* the more likely they will be to use it. Moreover, Abdullah and Abdul Rahman (2007) conducted a survey on Islamic banking education and strategy using Malaysian bank managers and found that participants got to know about Islamic finance products in less than five years. Similarly, Rammal and Zurbrugg

(2007) examined the awareness of Islamic banking products among Muslims in Australia and postulated that some respondents are not aware of the profit-and-loss sharing concept of Islamic finance. Awn and Azam (2020a) investigated awareness as a moderator in their investigation of Libyan investors' intentions towards investment in *ṣukūk*. The study administered 309 questionnaires, and the evidence explains the effect of *ṣukūk*'s compatibility with the Sharī'ah and the investor's attitude towards investing in *ṣukūk*. The findings also revealed the critical role of subjective pressure exerted by Islamic scholars in raising investor awareness and encouraging investment in *ṣukūk*.

In 2017, the Nigerian Debt Management Office (DMO) announced its plan to issue a sovereign *ṣukūk* worth 100 billion Nigerian Naira (USD240 million) for the development of infrastructure such as roads, railways and electricity across the six zones (north west, north east, north central, south east, south south) of the country; hence, the need for public awareness and a campaign on the benefits of the issuance. This will go a long way towards the diversification of government funding, the deepening of the market for domestic securities, and financial inclusion (DMO, 2017).

Based on the above literature review, awareness is likely to mediate the association between attitude, subjective norm, perceived behavioural control and digital *ṣukūk* adoption in Nigeria. The study thus tests the following null hypotheses:

- H₀₁: Awareness does not mediate the relationship between attitude and digital *ṣukūk* adoption.
- H₀₂: Awareness does not mediate the relationship between perceived behavioural control and digital *ṣukūk* adoption.
- H₀₃: Awareness does not mediate the relationship between subjective norm and digital *ṣukūk* adoption.
- H₀₄: Awareness does not mediate the relationship between attitude, perceived behavioural control, subjective norm and digital *ṣukūk* adoption.

Attitude and Use of Digital Software

Attitude can be seen as a mindset to act in a particular way as a result of an individual's experience and knowledge (Buchari *et al.*, 2014). In most cases, attitude is regarded as the foundation of an intention. Attitude is hypothesised to influence investors' intentions towards digital *ṣukūk* adoption in this research paper, and can be defined as the extent to which individuals' attitudes are favourably or unfavourably related to *ṣukūk* adoption (Suki, 2011). Awn and Azam (2020b) examined the association between intention and attitude towards investing in *ṣukūk* amongst investors in Libya, using data drawn from 291 respondents across three regions, notably Benghazi, Tripoli and Sabha, and the study's findings revealed a significantly positive relationship between Libyan investors' attitudes and intentions to invest in *ṣukūk*. The expectation is that attitude will influence stakeholders' behavioural intention towards the adoption of digital *ṣukūk* in the Nigerian capital market.

From the above literature review, it can be deduced that some studies have established a positive and significant relationship between attitude and *ṣukūk* adoption, while others have documented a negative relationship. It is important to note that in all the literature reviewed no one used awareness as a mediating variable to mediate the relationship between the explained

and the explanatory variables (attitude and adoption), despite the logical reasoning that awareness is the origin of attitude. Therefore, this research tests the following null hypotheses:

H₀₅: A significant relationship does not exist between attitude and digital *ṣukūk* adoption in Nigeria.

H₀₆: A significant relationship does not exist between attitude, awareness and digital *ṣukūk* adoption in Nigeria.

Subjective Norms and Adoption of Digital Software

According to the theory of planned behaviour, subjective norm is sometimes referred to as the second antecedent behaviour for intention. According to Ajzen and Fishbein (1975), what could be referred to as societal pressure influences individual beliefs and is usually weighted by innovative compliance. The study conducted by Ramdhony (2013) for both Muslim and non-Muslim banking customers reported that returns from invested assets and religion motivate a potential customer to choose Islamic banking products and services. The study also emphasises the importance of third-party influence in persuading people to use Islamic banking products. It is also found that subjective norms have a significant impact on business zakat (Islamic tax) payment (Saad & Haniffa, 2014).

Ab Rahim and Amin (2011) collected data from 176 valid responses and found that subjective norms have an influence on the acceptance of Islamic insurance. Most prominently, this construct was sourced from the Ajzen and Fishbein (1975) theory of planned behaviour. The theory predicts an individual's intention to engage in a behaviour at a specific time and place. It explains all types of behaviour over which people have the ability to exert self-control. Therefore, this current study tests the following null hypotheses on the subjective norms and digital *ṣukūk* adoption in Nigeria:

H₀₇: A significant relationship does not exist between subjective norm and digital *ṣukūk* adoption in Nigeria.

H₀₈: A significant relationship does not exist between subjective norm, awareness and digital *ṣukūk* adoption in Nigeria.

Perceived Behavioural Control and Adoption of Digital Software

The extent to which a person interprets a situation to be under his own control is referred to as perceived behavioural control (Ajzen, 1985). The more resources a person has at his disposal, the higher the perception of his behavioural control. According to Kura *et al.* (2013), there are basically two aspects of perceived behavioural control. The first is 'control belief' that reflects the extent to which a person controls his or her own behaviour. The other has to do with 'control of belief', which is based on a person's confidence concerning his or her aptitude to act in a particular manner. Perceived behavioural control is reported to be one of the main factors that determine consumers' behaviour in various domains (Ajzen & Fishbein, 1975).

In the context of this research, perceived behavioural control is expected to predict the perception of individuals towards the adoption of digital *ṣukūk* as a result of experiences of online transactions. Previous works have established the significance of perceived behavioural control, including its contextual relevance to this research. In this regard, the work of Bhatti and Husin (2019) reported a significant positive relationship between perceived behavioural control

and the adoption of Islamic insurance by investors of the United Arab Emirates. The regression results revealed that participants' attitudes influenced their decision to invest in Islamic insurance. Similarly, Antara *et al.* (2016) empirically examined the influence of perceived behavioural control on the intention of Muslims to invest in green investment using a sample of 270 respondents. The authors reported a significant influence of perceived behavioural control and intentions of Muslims towards green investments.

Having established a logical connection between perceived behavioural control and adoption, it is expected that awareness would mediate the association between perceived behavioural control and digital *ṣukūk* adoption in Nigeria. Therefore, this study tests the following null hypotheses on the relationship between perceived behavioural control and digital *ṣukūk* adoption in Nigeria:

H₀₉: A significant relationship does not exist between perceived behavioural control and digital *ṣukūk* adoption in Nigeria.

H₀₁₀: A significant relationship does not exist between perceived behavioural control, awareness and digital *ṣukūk* adoption.

RESEARCH METHODOLOGY

The study makes use of a survey research design where questionnaires were distributed to various categories of respondents including investors, practitioners and individuals considered as important stakeholders in Nigeria's capital market. The study has a total population of 750 respondents from Kano, Lagos, Port Harcourt and Abuja. The first three cities are main centres of business activity in Nigeria while Abuja is the federal capital of Nigeria where most of the practitioners of the capital market are located. The questionnaires were administered over the period September 2018 to March 2019. The survey questionnaire consisted of the following six parts:

1. Respondents' demographic details consisting of religion, gender, employer, qualification and social responsibility.
2. Respondents' opinion on digital *ṣukūk* adoption.
3. Respondents' self-evaluation of their attitude towards digital *ṣukūk* adoption.
4. Respondents' awareness about investment in online *ṣukūk* issuances.
5. Respondents' perceived behavioural control.
6. Respondents' subjective norms.

The survey also required respondents to complete observed variables for the theory of planned behaviour (TPB) model, consisting of five elements, namely, subjective norms, attitude, perceived behavioural control, awareness, and digital *ṣukūk* adoption.

After retrieving the distributed questionnaires from the respondents, the data collected were analysed using the partial least squares structural equation modelling (PLS-SEM) software application, and the results were presented in the software format. The PLS-SEM software is an excellent and flexible tool for statistical prediction and analysis (Hair *et al.*, 2012). The data screening and coding were carried out using the SPSS software application package.

RESULTS AND DISCUSSIONS

This section presents the results from the analyses of data through the PLS-SEM path modelling. All measurement models were also assessed for verification of their reliability, discriminant validity and individual item internal consistency. The structural model results were equally reported (e.g., significance of path coefficients, R-squared level values, significance of the model and the effect of size). Lastly, the complementary results of the PLS-SEM analysis are presented, which examined the mediating effect of awareness on the structural model.

Demographic Profile of Respondents

As presented in **Table 1**, males constituted the majority of the respondents, representing 74 per cent. The respondents were mainly from the age group 20–29 years, followed by the age group 30–39 years. Moreover, a high proportion of the respondents were degree holders, representing 40.6 per cent of the sample. This is followed by those with masters, representing 23.8 per cent, while 2.8 per cent were PhD holders. The respondents came from two major religions in Nigeria, notably Islam (85 per cent) and Christianity (13 per cent).

Table 1: Demographic Profile of Respondents

Item	Frequency	Percentage
AGE		
Under 20 years	45.1	11
20–29 years	184.5	45
30–39 years	98.4	24
40–49 years	61.5	15
50–59 years	12.3	3
60 years and above	8.2	2
GENDER		
Male	303.4	74
Female	106.6	26
STATUS		
Capital market investor	82	20
Capital market operator	65.6	16
Others	262.4	64
RELIGION		
Islam	348.5	85
Christianity	53.3	13
Others	8.2	2
QUALIFICATION		
Bachelor degree	166.46	40.6
Masters	97.58	23.8
PhD	11.48	2.8
Others	134.48	32.8
EMPLOYER		
Government institution	156	27.5
Private	278	49.2
Others	132	23.3

Source: Authors' own

Response Rate

A total of 750 questionnaires were distributed to various respondents comprising practitioners, investors and individuals. To achieve a higher response, telephone calls including short messages (SMS) were made as a reminder to the respondents as suggested by Salim *et al.* (2002). A total of 567 respondents returned their questionnaires, representing a 75.6 per cent response rate. However, only 410 questionnaires were used for the analysis, as 157 questionnaires were not properly completed by the respondents. Valid responses thus accounted for 55 per cent of the responses, which met Sekaran's (2003) suggestion that a response rate above 30 per cent could be adequate for survey research.

Constructs' Validity and Reliability

This study uses composite reliability to measure the research constructs for the following reasons. The use of composite reliability enables the researcher to take into account those indicators that have different factor loadings which can be interpreted the way Cronbach's is interpreted. Hair *et al.* (2011) suggested internal consistency reliability to be above 70 per cent, while 60 per cent and below indicated a lack of reliability. It is important to note that the study's internal consistency was based on the suggestion of Bagozzi and Yi (1988) that it should be above 40 per cent. Therefore, out of the 24 items used in the questionnaires, four were identified and subsequently deleted because they represented a loading below a threshold of 40 per cent. Hence, only 20 items were retained, representing a loading of 0.54 to 0.85. The data pertaining to the constructs' validity and reliability are presented in **Table 2**.

Table 2: Constructs' Validity and Reliability

Constructs	Cronbach's Alpha	rho_A	Composite Reliability	(AVE)
Attitude	0.683	0.687	0.807	0.512
Awareness	0.535	0.552	0.760	0.516
Perceived behaviour	0.699	0.700	0.816	0.526
Subjective norm	0.777	0.786	0.857	0.600
Digital <i>ṣukūk</i> adoption	0.750	0.762	0.834	0.504

Source: Authors' own

The average mean values for extracted variances ranged between 0.716 and 0.774, as shown in **Table 3**. According to the table, all variables are positively correlated, and the results obtained on all explanatory and explained variables have no perfect correlation; the *ṣukūk* subjective norm has the highest correlation with a value of 0.77, while the subjective norm and awareness have a correlation of 0.37. The correlation between digital *ṣukūk* adoption and attitude is 0.63, representing the correlation between the explained variable (digital *ṣukūk* adoption) and the explanatory variable (attitude). Overall, the correlation between the variables is within acceptable bounds.

Table 3: Discriminant Validity

Variables	Attitude	Awareness	Perceived Behavioural Control	Subjective Norm
Attitude	0.716			
Awareness	0.502	0.718		
Perceived behavioural control	0.552	0.461	0.726	
Subjective norm	0.475	0.376	0.586	0.774
Digital <i>ṣukūk</i> adoption	0.625	0.468	0.512	0.485

Source: Authors' own

One of the primary reasons for screening data is to identify, examine and treat 'outliers' which may have a negative impact on the results. An outlier is an observation that lies at an abnormal distance from other values in a random sample from a population (Hair *et al.*, 2003). As a result, applying multivariate analysis has become necessary for outlier treatment. Thus, univariate outliers were checked using the SPSS software, and coded values of 157 were identified and deleted accordingly in the analysis. Furthermore, no unusual outliers were discovered after running the Mahalanobis in SPSS, but the data coefficient was not greater than 0.05.

Chin (1998) suggested higher factor loadings as compared to cross-loadings. **Table 4** compares the indicator loadings with other indicators. It shows that all the indicator loadings are higher than the cross-loadings. This suggests that discriminant validity should be investigated further.

Structural Model

This section presents the outcome of the structural model used to test the hypotheses formulated to achieve the objective of the study. Therefore, the PLS path approach was used to conduct the main effects tests. In addition, using the PLS bootstrapping output, the effects of mediation were also calculated. The standard bootstrapping procedure as suggested by Ringle *et al.* (2015) assesses the significance of path coefficients with a 5000 number of bootstrap samples. **Table 5** presents the results of the hypotheses testing.

PLS Bootstrapping Structural Result

Based on the PLS-SEM results, awareness as a mediating variable provided significant support for the mediation effects on the association between subjective norms, attitude, perceived behavioural control and digital *ṣukūk* adoption in Nigeria. Specifically, the path coefficients found a significant negative relationship between subjective norm and digital *ṣukūk* adoption. This result is consistent with the findings of Khurshid *et al.* (2020), which established that subjective norm is statistically not significant in measuring the relationship with *ṣukūk* adoption in Qatar. On the other hand, the research findings indicated a positive and significant association between perceived behavioural control and digital *ṣukūk* adoption, while awareness mediated the relationship between attitude and digital *ṣukūk* adoption.

Table 4: Cross-Loading

Variables	Attitude	Awareness	Perceived Behavioural Control	Subjective Norm
AT1	0.700	0.293	0.393	0.314
AT2	0.728	0.369	0.332	0.232
AT4	0.752	0.421	0.435	0.443
AT5	0.681	0.344	0.414	0.356
AW1	0.384	0.726	0.350	0.267
AW3	0.404	0.790	0.370	0.325
AW4	0.281	0.631	0.262	0.202
PB1	0.422	0.288	0.774	0.469
PB2	0.372	0.327	0.723	0.413
PB3	0.364	0.363	0.721	0.399
PB4	0.442	0.363	0.682	0.419
SA1	0.339	0.344	0.331	0.265
SA2	0.428	0.335	0.410	0.376
SA3	0.492	0.317	0.379	0.364
SA4	0.415	0.283	0.302	0.322
SA5	0.521	0.381	0.387	0.380
SN1	0.317	0.301	0.440	0.728
SN2	0.350	0.314	0.418	0.826
SN3	0.402	0.227	0.464	0.756
SN4	0.404	0.316	0.499	0.783

Source: Authors' own

Table 5: Results of the Hypotheses Testing

Variables	Original Sample (O)	Sample Mean (M)	Standard Deviation	t-statistics	P values
Attitude → Awareness → Digital <i>ṣukūk</i> adoption	0.049	0.049	0.019	2.531	0.012
Perceived behavioural control → Awareness → Digital <i>ṣukūk</i> adoption	0.033	0.032	0.014	2.397	0.017
Subjective norm → Awareness → Digital <i>ṣukūk</i> adoption	0.012	0.013	0.010	1.189	0.235

Source: Authors' own

Confidence Level

The confidence levels of 0.089 and 0.059 in the structural model as presented in **Table 6** are within the expected range, which suggests that attitude and perceived behavioural control have a significant positive relationship with digital *ṣukūk* adoption in Nigeria. On the other hand, subjective norms reveal a negative relationship with digital *ṣukūk* adoption in Nigeria. The p-value of 0.235 indicates an insignificant relationship between subjective norms and digital *ṣukūk* adoption in Nigeria.

Table 6: Structural Model

Constructs	Original Sample (O)	Sample Mean (M)	2.5%	97.5%
Attitude → Awareness → Digital <i>ṣukūk</i> adoption	0.049	0.049	0.013	0.089
Perceived behavioural control → Awareness → Digital <i>ṣukūk</i> adoption	0.033	0.032	0.008	0.059
Subjective norm → Awareness → Digital <i>ṣukūk</i> adoption	0.012	0.013	-0.003	0.036

Source: Authors' own

Table 7 presents the summary of the results from the hypotheses testing and the decision for supporting or not supporting the hypotheses formulated.

Table 7: Summary of Hypotheses Testing

Hypothesis	Statement	Findings
H ₀₁	Awareness does not mediate the relationship between attitude and digital <i>ṣukūk</i> adoption.	Reject
H ₀₂	Awareness does not mediate the relationship between perceived behavioural control and digital <i>ṣukūk</i> adoption.	Reject
H ₀₃	Awareness does not mediate the relationship between subjective norm and digital <i>ṣukūk</i> adoption.	Fail to reject
H ₀₄	Awareness does not mediate the relationship between attitude, perceived behavioural control, subjective norm and digital <i>ṣukūk</i> adoption.	Reject
H ₀₅	A significant relationship does not exist between attitude and digital <i>ṣukūk</i> adoption in Nigeria.	Reject
H ₀₆	A significant relationship does not exist between attitude, awareness and digital <i>ṣukūk</i> adoption in Nigeria.	Reject
H ₀₇	A significant relationship does not exist between subjective norm and digital <i>ṣukūk</i> adoption in Nigeria.	Fail to reject
H ₀₈	A significant relationship does not exist between subjective norm, awareness and digital <i>ṣukūk</i> adoption in Nigeria.	Fail to reject
H ₀₉	A significant relationship does not exist between perceived behavioural control and digital <i>ṣukūk</i> adoption in Nigeria.	Reject
H ₀₁₀	A significant relationship does not exist between perceived behavioural control, awareness and digital <i>ṣukūk</i> adoption.	Reject

Source: Authors' own

Summary of Findings

The findings of the research indicate that among the variables used in the study, perceived behavioural control and attitudes have positive and significant associations with digital *ṣukūk* adoption in Nigeria. On the other hand, the relationship between subjective norm and digital *ṣukūk* adoption in Nigeria is negatively related with a p-value above 5 per cent as depicted in the structural model in **Table 6**. The regression analysis contributed 80 per cent towards explaining the relationship that exists between the explained and the explanatory variables of the research. In the structural model, the regression results also show that all the constructs have average variance that is above 0.5, further suggesting that awareness, attitude, subjective norm and perceived behavioural control as explanatory variables are statistically significant.

In addition, the regression results indicated a positive and significant association between the explanatory variables (awareness, attitude, and perceived behavioural control) and digital *ṣukūk* adoption (explained variable). In particular, the results of the analysis have also shown a positive correlation between all the variables in the study. In the bootstrapping analysis, awareness has positively mediated the relationship between attitude and digital *ṣukūk* adoption, with a p-value of 0.012. In essence, the path coefficients found a negative association between subjective norm and digital *ṣukūk* adoption in Nigeria, with a t-value of 1.189 and a p-value of 0.235. A positive association was also established between perceived behavioural control and digital *ṣukūk* adoption in Nigeria, with a t-value of 2.397 and a p-value of 0.017. In regard to the mediating effect of awareness and digital *ṣukūk* adoption, the results established a positive relationship between attitude, perceived behavioural control and digital *ṣukūk* adoption in Nigeria, thus supporting the hypothesised positions.

Theoretically, the study contributes to the empirical literature by providing practical evidence on the influence of awareness (mediator) on the relationship between explanatory variables used in the study and digital *ṣukūk* adoption in Nigeria. This study has enriched the literature by further validating the previous findings of Bhatti and Husin (2019) and Khurshid *et al.* (2020). Methodologically, the PLS-SEM was utilised for the analysis, which validates the processes of the construct measurements. This study used PLS-SEM modelling tool, which provides an opportunity for rigorous testing and analytical power of the techniques in a study that integrates the association between perceived behavioural control, attitude (explanatory variable) and digital *ṣukūk* adoption in Nigeria. Also, the insignificant relationship of subjective norm and *ṣukūk* adoption may be attributed to the fact that large numbers of individuals in Nigeria are not aware of *ṣukūk* and most likely some respondents might have subjected themselves to their religious belief or to the people whom they emulate or consider important in the society. This is in line with the theory of planned behaviour proposed by Ajzen and Fishbein (1975), who argued that subjective norm has to do with the perception of people to reject or adopt certain services or products. Therefore, in Nigeria, religious connotation plays a vital role in the individual decision to adopt or reject a new product. For instance, the first *ṣukūk* issued by Osun State Government in 2013 was confronted with strict resistance by the Christian counterpart in the state, who perceived it as an attempt by the Government to Islamise the state public fund (Lawal & Imam, 2016). Thus, the negative relationship between subjective norm and digital *ṣukūk* adoption might not be unconnected to normative religious belief of the respondents considering the contexts of a country such as Nigeria, a multi-ethnic and multi-religious nation.

Practically, the findings of this study will be beneficial to Nigeria's SEC, the highest regulatory institution of the capital market, in intensifying awareness campaigns towards promoting *ṣukūk* financing for economic growth and development of Nigeria.

CONCLUDING REMARKS

This study tested awareness as a mediator in the relationship between explanatory variables (subjective norms, attitude, perceived behavioural control) and digital *ṣukūk* adoption in Nigeria. The empirical results rejected seven out of 10 null hypotheses developed in the research questions. The overall findings suggest that attitudes and perceived behavioural control have a significant relationship with digital *ṣukūk* adoption in Nigeria. Equally, attitudes and perceived behavioural control are significantly related to the awareness of digital *ṣukūk* in Nigeria. Similarly, the current study concludes that awareness plays a significant role in mediating the association between perceived behavioural control, attitude, subjective norms and digital *ṣukūk* adoption in Nigeria. Therefore, the study concludes by establishing a positive relationship between awareness and perception of digital *ṣukūk* as explained by the theory of planned behaviour.

In view of the conclusions drawn above, the study makes some recommendations as follows: Governments at all levels should patronise the digital *ṣukūk* structure to finance the huge infrastructural deficit confronting the entire country. This is because of the limited resources available to Nigeria's federal, state, and local governments for infrastructure purposes. The issuance of digital *ṣukūk* may be a better option. Nigeria's capital market regulator should encourage governments at all levels, Islamic institutions, and other corporate organisations to issue digital *ṣukūk* as a liquidity management tool. However, there is a need for regulatory harmonisation to conform to Islamic guidelines pertaining to digital *ṣukūk* issuances in Nigeria. Accordingly, the DMO must work in partnership with the Central Bank of Nigeria (CBN) to facilitate the required regulations and standards pertaining to digital *ṣukūk* issuances. The federal government should establish an Islamic money market to boost the online trading of *ṣukūk* instruments on the Nigerian Stock Exchange by constituting a strong Sharī'ah Advisory Council (SAC) that will comprise notable scholars from Nigeria and abroad who will advise on the operation of online *ṣukūk* issuances. Finally, there is a need for the SEC of Nigeria to intensify an awareness campaign about digital *ṣukūk* processes, as the findings revealed a positive relationship between awareness, attitude, perceived behavioural control and digital *ṣukūk* adoption in Nigeria.

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