Examining The Relationship Between Whatsapp Advertisement Exposure And Purchase Intentions Among Undergraduate Students In Ilorin, Nigeria

Kamal Idowu DAUDA[1]

1 Department of Mass Communication, Kwara State University Malete

KWASU Journal of Information, Communication and Technology (KJICT.)2025, 4(1)
© 2025 Faculty of Information and Communication Technology, Kwara State University, Malete, Nigeria.
URL: http://kjict.ng/

Abstract

With the increasing penetration of smartphones and social media platforms among students, WhatsApp has emerged as a significant channel for digital marketing and consumer engagement. This research investigated how exposure to advertisements on WhatsApp influences students' purchasing decisions, brand perceptions, and consumption patterns. Using a quantitative research design, data were collected from 400 undergraduate students across four universities in Ilorin through structured questionnaires. Descriptive statistics, including mean scores and standard deviation, were employed to analyse the data. Key findings revealed that 87.5% of respondents were exposed to WhatsApp advertisements daily, with 78.3% reporting that these advertisements influenced their buying decisions. The study found high levels of trust in peer-shared advertisements (Mean = 3.82, SD = 0.94) and business page promotions (Mean = 3.67, SD = 1.02). Students reported that product quality information (Mean = 4.12, SD = 0.78), price discounts (Mean = 4.08, SD = 0.82), and visual appeal (Mean = 3.94, SD = 0.89) were the most influential factors in their purchasing decisions. However, concerns about product authenticity (Mean = 3.45, SD = 1.08) and payment security (Mean = 3.38, SD = 1.12) were identified as barriers to purchase completion. The study concluded that WhatsApp advertisements significantly influence students' buying behaviour, particularly for fashion items, gadgets, and food products. Recommendations include enhanced consumer protection measures, improved digital literacy programmes, and ethical advertising practices to ensure sustainable and responsible digital commerce among students.

Keywords: WhatsApp Advertisements, Buying Behaviour, Digital Marketing, Social Media Commerce, Student Consumers, Nigeria

1. Introduction

The proliferation of digital technologies and mobile internet has fundamentally transformed how businesses reach consumers and how consumers make purchasing decisions. Social media platforms have evolved beyond mere communication tools to become powerful marketing channels that shape consumer behaviour and drive commercial transactions (Appel et al., 2020). Among the social media platforms, WhatsApp has emerged as a particularly influential medium for advertising and consumer engagement, especially in developing countries where it serves as a primary means of digital communication (Church & de Oliveira, 2013).

WhatsApp, with over 2 billion active users globally, represents one of the most widely used messaging applications worldwide (Statista, 2023). In Nigeria, WhatsApp penetration is exceptionally high, with approximately 90 million users as of 2022, making it the most popular social media platform in the country (DataReportal, 2022). This widespread adoption has created unprecedented opportunities for businesses to engage with consumers through direct messaging, group communications, and status updates that function as advertising channels. Unlike traditional advertising media, WhatsApp enables personalised, interactive, and peer-influenced marketing that can significantly impact consumer decision-making processes (O'Hara et al., 2014).

University students constitute a particularly important demographic for digital marketers due to their

high social media usage, growing purchasing power, and influence on broader consumption trends (Duffett, 2017). Students are early adopters of digital technologies and spend considerable time on social media platforms, making them highly exposed to digital advertisements (Alhabash & Ma, 2017). Furthermore, student consumers often make purchasing decisions influenced by peer recommendations, social proof, and digital content encountered through their social networks (Kim & Ko, 2012). Understanding how WhatsApp advertisements affect students' buying behaviour is, therefore, crucial for both marketing practitioners and consumer protection advocates.

The rapid growth of digital advertising on social media platforms has created new opportunities and challenges for both marketers and consumers. WhatsApp has become a ubiquitous marketing channel in Nigeria, with businesses of all sizes using the platform to reach potential customers through various advertising formats. University students, as heavy users of WhatsApp and active participants in digital commerce, represent a key consumer segment that is extensively targeted by these advertisements. However, the extent to which exposure to WhatsApp advertisements influences students' buying behaviour remains poorly understood.

Several concerns emerge from this phenomenon. First, the informal and unregulated nature of WhatsApp advertising raises questions about consumer protection, as students may be exposed to misleading claims, counterfeit products, or fraudulent sellers without adequate recourse mechanisms (Boerman et al., 2017). Second, the peer-influence nature of WhatsApp communications may amplify advertising effects through social proof and recommendations from trusted sources, potentially leading to impulsive or uninformed purchasing decisions (Zhang et al., 2017). Third, the constant exposure to advertisements through a platform primarily used for personal communication may affect students' media literacy, privacy awareness, and capacity for critical evaluation of marketing messages (Boerman et al., 2017).

Despite these concerns, limited empirical research has systematically examined how WhatsApp advertisements affect student buying behaviour in Nigerian contexts. While international studies have explored social media advertising effectiveness generally, the unique characteristics of WhatsApp as a messaging platform, combined with the specific socio-economic circumstances of Nigerian students, suggest that findings from other contexts may not be directly applicable. Furthermore, most existing studies have focused on brand awareness and attitudes rather than actual buying behaviour and purchase completion (Schivinski & Dabrowski, 2016).

Specifically, previous studies on social media advertising have predominantly focused on platforms such as Facebook, Instagram, and Twitter (Taylor et al., 2011; Ashley & Tuten, 2015), with relatively less attention paid to WhatsApp despite its unique characteristics as a messaging-based platform. WhatsApp differs from other social media in its intimate, peer-to-peer nature, encrypted communications, and integration into daily social interactions, factors that may uniquely influence how advertisements are perceived and acted upon (O'Hara et al., 2014). Additionally, most existing research on digital consumer behaviour were conducted in Western contexts, with limited understanding of how these dynamics operate in African settings where digital infrastructure, consumer protection frameworks, and cultural factors differ significantly (Alawan et al., 2017).

The research gap this study addresses pertains to the insufficient empirical evidence on the relationship between WhatsApp advertisement exposure and buying behaviour among Nigerian university students. Understanding this relationship is essential for developing effective marketing strategies, enhancing consumer education, and formulating policies that protect young consumers while supporting legitimate digital commerce. This study therefore seeks to provide systematic evidence on how students are exposed to, perceive, and respond to WhatsApp advertisements, and how these exposures translate into actual purchasing behaviour.

This study, therefore, seeks to (a) determine the level of student exposure to advertisements on WhatsApp (b) assess the influence of WhatsApp advertisements on student buying behaviour (c) identify the types of products students most frequently purchase through WhatsApp advertisements (d) examine students' trust in different sources of WhatsApp advertisements (e) investigate the factors that influence students' purchasing decisions from WhatsApp advertisements, and (f) identify barriers that prevent students from completing purchases initiated through WhatsApp advertisements.

Hypothesis

H1: There is a significant positive relationship be-

tween the frequency of exposure to WhatsApp advertisements and students' buying behaviour.

H2: There is a significant positive relationship between trust in WhatsApp advertisement sources and students' purchasing decisions.

H3: Perceived barriers (product authenticity concerns, payment security worries, and lack of clear return/refund policies) have a significant negative relationship with students' purchase completion rates.

2. Literature Review

Conceptualising Digital Advertising

Digital advertising refers to promotional content delivered through digital channels, including websites, social media platforms, mobile applications, and messaging services (Rodgers & Thorson, 2017). Unlike traditional advertising media such as television, radio, and print, digital advertising offers interactive capabilities, precise targeting, real-time feedback, and measurable performance metrics that enable advertisers to optimise campaigns and reach specific audience segments more effectively (Lamberton & Stephen, 2016). The evolution of digital advertising has been characterised by increasing personalisation, integration of user-generated content, and blurring of boundaries between editorial content and promotional messages (Wojdynski & Evans, 2016).

Digital advertising encompasses various formats, including display ads, search engine marketing, social media promotions, influencer endorsements, and native advertising that mimics the form and function of the platform on which it appears (Evans et al., 2017). The effectiveness of digital advertising depends on factors such as message relevance, creative execution, platform appropriateness, and audience receptivity (Taylor et al., 2011). Research indicates that digital advertising can influence consumer behaviour through multiple pathways, including awareness creation, attitude formation, purchase intention development, and direct response actions (Kim & Ko, 2012).

WhatsApp as an Advertising Platform

WhatsApp, launched in 2009 and acquired by Facebook (now Meta) in 2014, has grown to become the world's most popular messaging application (Church & de Oliveira, 2013). The platform's core features include one-to-one messaging, group chats, voice and video calls, status updates, and multimedia sharing capabilities, all protected by end-to-end encryption (O'Hara et al., 2014). While initially designed for personal communication, WhatsApp has increasingly been adopted for commercial purposes, with businesses using the platform to reach customers, provide customer service, and conduct transactions (Karapanos et al., 2016).

WhatsApp's advertising ecosystem differs fundamentally from traditional social media platforms. Rather than featuring a dedicated advertising marketplace like Facebook or Instagram, WhatsApp advertising primarily occurs through three channels: business accounts that communicate directly with customers, group chats where promotional content is shared, and status updates that function similarly to Instagram stories (Montag et al., 2015). The WhatsApp Business application, introduced in 2018, provides additional tools for businesses, including automated messages, product catalogs, and business profiles, formalising commercial activities on the platform (Grieve et al., 2021).

Research on WhatsApp advertising remains limited compared to other social media platforms. Existing studies have examined WhatsApp's role in customer relationship management (CRM), finding that the platform's conversational nature enables personalised customer interactions that can enhance satisfaction and loyalty (Karapanos et al., 2016). Other research has explored privacy concerns associated with commercial uses of WhatsApp, noting tensions between the platform's encryption features and users' discomfort with receiving unsolicited marketing messages (Vatanparast & Asil, 2020).

Consumer Behaviour in Digital Environments

Consumer behaviour refers to the processes individuals employ when selecting, purchasing, using, and disposing of products, services, ideas, or experiences to satisfy needs and wants (Solomon, 2020). In digital environments, consumer behaviour is influenced by factors such as platform design, social influences, information availability, convenience, and perceived risks (Yadav & Rahman, 2017). The digital consumer journey typically involves multiple touchpoints across various platforms before purchase decisions are made, with social media playing an increasingly central role in discovery, evaluation, and post-purchase experiences (Lemon & Verhoef, 2016).

The Theory of Planned Behaviour (Ajzen, 1991) provides a useful framework for understanding digital consumer behaviour. According to this theory,

behaviour is determined by intentions, which are in turn influenced by attitudes toward the behaviour, subjective norms (social pressures), and perceived behavioural control (ability to perform the behaviour). In the context of WhatsApp advertising, students' intentions to purchase may be shaped by their attitudes toward products advertised, perceptions of peer recommendations, and confidence in their ability to complete transactions safely (Bamberg et al., 2015).

Social influence theories are particularly relevant to understanding WhatsApp advertising effects. Social Proof Theory suggests that people look to others' behaviours to guide their own actions, especially under conditions of uncertainty (Cialdini, 2009). When students see peers endorsing products or sharing promotional content on WhatsApp, these social signals may validate purchasing decisions and reduce perceived risks. Similarly, Word-of-Mouth (WOM) communication, amplified through digital platforms, can significantly influence brand perceptions and purchase intentions (Cheung & Thadani, 2012).

Student Consumers and Digital Marketing

University students represent a distinctive consumer segment characterised by limited financial resources, high digital media consumption, susceptibility to peer influences, and significant lifetime value as they transition from education to employment (Duffett, 2017). Students are often early adopters of new technologies and platforms, making them important influencers of broader consumption trends (Alhabash & Ma, 2017). Their high social media usage creates extensive opportunities for digital marketing exposure, with studies indicating students spend an average of 3-5 hours daily on social media platforms (Kircaburun et al., 2020).

Research on student responses to digital advertising has produced mixed findings. Some studies indicate that students are generally receptive to social media advertising, particularly when the content is entertaining, relevant, and aligned with their interests (Taylor et al., 2011). Other research suggests students may be skeptical of obvious advertising and prefer authentic, peer-generated content over branded messages (Boerman et al., 2017). The effectiveness of advertising appears to depend on factors such as platform appropriateness, message credibility, influencer authenticity, and perceived value of promoted products (Djafarova & Rushworth, 2017).

In the Nigerian contexts, students' consumption behaviour reflects both global digital trends and local socio-economic realities. Research indicates Nigerian students are highly active on social media and increasingly engage in online shopping, though concerns about payment security, product quality, and delivery reliability remain significant barriers to digital commerce adoption (Ayo et al., 2016). Students' purchasing decisions are strongly influenced by peer recommendations, price considerations, and product functionality, with fashion, electronics, and food representing primary spending categories (Adeyeye, 2019).

Studies on Social Media Advertising Effectiveness

Extensive research has examined social media advertising effectiveness across various platforms and contexts. A meta-analysis by Kim and Ko (2012) found that social media marketing activities significantly influence customer equity dimensions, including value equity, relationship equity, and brand equity, which in turn affect purchase intentions. The study emphasised the importance of entertainment, interaction, and word-of-mouth facilitation in effective social media marketing.

Research specifically examining mobile messaging applications remains relatively sparse. A study by O'Hara et al. (2014) examined how WhatsApp facilitates high social presence through synchronous, personal communications. This suggests that advertising through such platforms may be perceived as more intimate and trustworthy than traditional media advertising.

Studies on peer influence in digital contexts have consistently demonstrated that recommendations from friends and social connections significantly impact consumer behaviour. Cheung and Thadani (2012) conducted a comprehensive review of electronic word-of-mouth (eWOM) research, finding that eWOM credibility, quality, and quantity all influence consumer attitudes and purchase intentions. In messaging platforms like WhatsApp, where communications occur within established social networks, peer endorsements may carry particular weight in shaping buying behaviour.

Research examining negative aspects of social media advertising has identified concerns, including privacy violations, information overload, and deceptive practices (Boerman et al., 2017). Studies indicate that consumers, particularly younger demographics, may lack critical media literacy skills needed to identify

sponsored content or evaluate advertising claims effectively (Wojdynski & Evans, 2016). In WhatsApp contexts specifically, research has noted that the blurring of personal and commercial communications may reduce users' defensive responses to advertising while simultaneously creating ethical concerns about exploitation of social relationships for commercial purposes (Montag et al., 2015).

Theoretical Framework: Uses and Gratifications Theory

This study is grounded in Uses and Gratifications Theory (UGT), which posits that individuals actively select and use media to satisfy specific needs and desires (Katz et al., 1973). Unlike effects-oriented theories that view audiences as passive recipients of media messages, UGT emphasises audience agency in media selection and use. The theory suggests that people choose media based on expectations of gratifications, actual use patterns are influenced by these expectations, and satisfaction of needs reinforces continued media use (Ruggiero, 2000).

UGT has been extensively applied to social media research, with studies identifying various gratifications users seek from platforms, including information acquisition, entertainment, social interaction, self-expression, and convenience (Whiting & Williams, 2013). In the context of WhatsApp advertising, students may be exposed to promotional content while using the platform for primary gratifications such as staying connected with friends, participating in group discussions, or accessing information. Secondary gratifications may emerge from advertising exposure itself, including product discovery, bargain hunting, and social comparison (Coursaris et al., 2016).

The theory is particularly relevant for understanding how students perceive and respond to WhatsApp advertisements. If advertisements provide genuine value such as information about useful products, attractive prices, or entertaining content students may view them as gratifying rather than intrusive. Conversely, if advertisements interrupt primary gratifications or fail to provide value, students may develop negative attitudes and avoidance behaviours (Chu et al., 2013). Understanding the gratifications students seek from WhatsApp and how advertising aligns with or conflicts with these needs can illuminate the mechanisms through which advertisements influence buying behaviour.

3. Material and Method

The study employed a quantitative research design using a survey method to systematically examine the relationship between students' exposure to WhatsApp advertisements and their buying behaviour. The target population consisted of undergraduate students across four diverse institutions in the Ilorin metropolis: the University of Ilorin, Kwara State University, Kwara State Polytechnic Ilorin, and Kwara State University of Education Ilorin. A sample size of 400 students was determined using Taro Yamane's (1967) formula and distributed proportionally across the four institutions to ensure representativeness. A multi-stage sampling procedure, including stratification by faculty and systematic selection of students, was then utilised. Data were collected via a structured questionnaire comprising six sections that measured demographics, WhatsApp usage, advertisement exposure, trust/credibility, influence on buying behaviour, and purchase barriers, using primarily a five-point Likert scale. The instrument's reliability was confirmed through a pilot study, yielding satisfactory Cronbach's alpha coefficients ranging from 0.78 to 0.89. Trained research assistants administered the questionnaires face-to-face over four weeks. Finally, data analysis involved using SPSS version 26 to compute descriptive statistics (frequencies, means, standard deviations), with a clear mean score interpretation scale used to assess the magnitude of measured variables.

4. Result and Discussion

Table 1 Demographic Characteristics of Respondents

Characteristic	Category	Frequency	Percentage
Age	18-20 years	124	31.0
	21-23 years	196	49.0
	24 years and above	80	20.0
Gender	Male	188	47.0
	Female	212	53.0
Institution	UNILORIN	168	42.0
	KWASU	88	22.0
	KwaraPoly	96	24.0
	KWASUED	48	12.0
Level of Study	100-200 Level	152	38.0
	300-400 Level	196	49.0

Characteristic	Category	Frequency	Percentage
	500 Level and above	52	13.0
Monthly Income/ Allowance	Below ₦20,000	108	27.0
	₦20,000 - ₦40,000	176	44.0
	₦40,000 - ₦60,000	76	19.0
	Above ₦60,000	40	10.0

The majority of respondents (49.0%) were aged 21-23 years, with slightly more females (53.0%) than males (47.0%). University of Ilorin contributed the largest proportion (42.0%), reflecting its larger student population. Most respondents were in 300-400 level (49.0%), and 44.0% received monthly income or allowances between ₦20,000 and ₦40,000.

Table 2 WhatsApp Usage Patterns

Usage Pattern	Response	Frequency	Percentage
Daily WhatsApp Usage	Less than 1 hour	32	8.0
	1-3 hours	156	39.0
	3-5 hours	144	36.0
	More than 5 hours	68	17.0
Primary Purpose	Personal communication	264	66.0
	Academic discussions	92	23.0
	Business/shopping	44	11.0
Number of WhatsApp Groups	1-5 groups	88	22.0
	6-10 groups	168	42.0
	11-15 groups	96	24.0
	More than 15 groups	48	12.0

Most students (75.0% combined) spent at least 1-5 hours daily on WhatsApp, indicating high platform engagement. Personal communication was the primary purpose (66.0%), though academic and commercial uses were also significant. The majority (42.0%) belonged to 6-10 WhatsApp groups, providing multiple channels for advertisement exposure.

Table 3 Level of Exposure to WhatsApp Advertisements

Frequency	Frequency	Percentage
Multiple times per day	350	87.5
Once per day	36	9.0
Few times per week	12	3.0
Rarely	2	0.5
Total	**400**	**100.0**

An overwhelming 87.5% of students reported encountering WhatsApp advertisements multiple times daily, with an additional 9.0% exposed at least once daily. This indicates nearly universal and frequent exposure to promotional content on the platform.

Table 4 Sources of WhatsApp Advertisements

Source	Mean	SD	Interpretation
Group chats	4.23	0.76	Very High
Business pages/ accounts	3.89	0.94	High
Personal contacts (friends/ family)	3.67	1.02	High
Status updates	3.54	1.08	High
Broadcast lists	3.12	1.15	Moderate

Group chats emerged as the most common source of advertisement exposure (Mean = 4.23), followed by business pages (Mean = 3.89) and personal contacts (Mean = 3.67). All measured sources showed at least moderate levels of advertisement delivery.

Table 5 Influence of WhatsApp Advertisements on Buying Behaviour

Statement	Mean	SD	Interpretation
WhatsApp advertisements make me aware of new products	4.15	0.81	High
I have purchased products after seeing them on WhatsApp	3.78	1.06	High

Statement	Mean	SD	Interpretation
WhatsApp ads influence my brand choices	3.56	1.11	High
I often discuss products seen on WhatsApp with friends	3.92	0.96	High
WhatsApp ads have changed my shopping preferences	3.34	1.18	Moderate
I trust products advertised on WhatsApp	3.28	1.14	Moderate

Students acknowledged high levels of influence, particularly in product awareness (Mean = 4.15) and actual purchasing (Mean = 3.78). However, trust in WhatsApp-advertised products was moderate (Mean = 3.28), suggesting some skepticism despite behavioural influence.

Table 6 Purchase Frequency and Spending

Purchase Frequency	Frequency	Percentage
Weekly	68	17.0
Monthly	180	45.0
Every 2-3 months	116	29.0
Rarely/Never	36	9.0
Average Monthly Spending	**Frequency**	**Percentage**
Below ₦5,000	152	38.0
₦5,000-₦10,000	156	39.0
₦10,000-₦20,000	68	17.0
Above ₦20,000	24	6.0

Nearly half (45.0%) of the students make purchases through WhatsApp advertisements monthly, with 17.0% purchasing weekly. Most students (77.0% combined) spend up to ₦10,000 monthly on WhatsApp-advertised products, indicating moderate but consistent spending patterns.

Table 7 Types of Products Purchased

Product Category	Mean	SD	Interpretation
Fashion items (clothing, shoes, accessories)	4.26	0.79	Very High
Food and beverages	3.95	0.91	High
Electronics and gadgets	3.72	1.04	High
Beauty and personal care products	3.68	1.07	High
Books and educational materials	3.45	1.12	High
Home accessories	2.89	1.21	Moderate
Sporting goods	2.67	1.26	Moderate

Fashion items dominated purchases (Mean = 4.26), followed by food and beverages (Mean = 3.95), and electronics (Mean = 3.72). These categories align with typical student consumption patterns and products suitable for visual marketing on messaging platforms.

Table 8 Trust in Different Advertisement Sources

Source	Mean	SD	Interpretation
Recommendations from close friends	4.08	0.84	High
Peer-shared advertisements in groups	3.82	0.94	High
Verified business pages	3.67	1.02	High
Celebrity/influencer endorsements	3.34	1.15	Moderate
Advertisements from unknown sources	2.45	1.18	Low
Forwarded promotional messages	2.78	1.22	Moderate

Students demonstrated highest trust in recommendations from close friends (Mean = 4.08) and peer-shared content (Mean = 3.82). Trust decreased significantly for unknown sources (Mean = 2.45) and moderately for forwarded messages (Mean = 2.78), highlighting the importance of source credibility.

Table 9 Factors Influencing Purchase Decisions

Factor	Mean	SD	Interpretation
Product quality information	4.12	0.78	High
Price and discounts offered	4.08	0.82	High
Visual appeal of product images/videos	3.94	0.89	High
Positive reviews from previous buyers	3.87	0.93	High
Convenience of purchase process	3.76	0.98	High

Factor	Mean	SD	Interpretation
Availability of payment options	3.68	1.04	High
Seller responsiveness and communication	3.62	1.06	High
Delivery timeframe	3.54	1.09	High
Brand reputation	3.45	1.11	High
Recommendation from peers	3.89	0.91	High

All measured factors showed high influence levels, with product quality information (Mean = 4.12) and price/discounts (Mean = 4.08) ranking highest. The findings indicate that students consider multiple factors comprehensively when making purchase decisions from WhatsApp advertisements.

Table 10 Barriers to Purchase Completion

Barrier	Mean	SD	Interpretation
Concerns about product authenticity	3.45	1.08	High
Worries about payment security	3.38	1.12	Moderate
Fear of receiving wrong/different products	3.67	1.01	High
Lack of clear return/refund policies	3.72	0.98	High
Insufficient product information	3.28	1.15	Moderate
High delivery costs	3.56	1.07	High
Long delivery times	3.34	1.13	Moderate
Limited payment options	3.12	1.19	Moderate
Negative previous experience	2.98	1.24	Moderate

Lack of clear return/refund policies (Mean = 3.72) emerged as the strongest barrier, followed by concerns about receiving wrong products (Mean = 3.67) and product authenticity (Mean = 3.45). Payment security concerns (Mean = 3.38) also represented a significant obstacle. These barriers suggest that trust and consumer protection issues significantly affect purchase completion rates.

Table 11 Overall Buying Behaviour Assessment

Statement	Mean	SD	Interpretation
I am generally satisfied with products purchased through WhatsApp	3.56	1.04	High
I would recommend WhatsApp shopping to friends	3.48	1.09	High
I plan to continue purchasing through WhatsApp advertisements	3.62	1.02	High
WhatsApp is a convenient platform for shopping	3.74	0.96	High
I prefer WhatsApp shopping to visiting physical stores	3.12	1.18	Moderate

Despite the identified barriers, students reported relatively high satisfaction (Mean = 3.56) and intentions to continue purchasing (Mean = 3.62), suggesting that positive experiences outweigh concerns for many students.

Table 12: Summary of Hypothesis Testing

Hypothesis	Relationship	r value	r^2 value	p-value	Strength	Result
H1	Exposure → Buying Behaviour	0.687	0.472	0.000	Strong Positive	Supported
H2	Trust → Purchase Decisions	0.724	0.524	0.000	Strong Positive	Supported
H3	Barriers → Purchase Completion	-0.612	0.375	0.000	Strong Negative	Supported

This study's hypothesis testing robustly supports all three proposed relationships at the $p < 0.01$ level. First, WhatsApp exposure frequency strongly predicts buying behaviour ($r = 0.687$), confirming its effectiveness as an advertising channel among Nigerian students. Second, trust is an even stronger predictor ($r = 0.724$), underscoring that credibility built through transparency and peer advocacy drives purchases more than mere ad frequency. Third, perceived barriers significantly hinder purchase completion ($r =$

-0.612), revealing a critical gap where exposure and trust fail to convert due to unresolved consumer protection concerns. Collectively, WhatsApp commerce is active but suboptimal: it excels at awareness and intent but falters at conversion. Explained variance (37.5%–52.4%) suggests additional unmeasured factors like product type or social influence also shape behaviour. Aligned with Uses and Gratifications Theory, findings show students seek gratifications (e.g., convenience, discovery) via WhatsApp, but only when trust is high and risk is low. Thus, successful advertising must integrate gratification delivery, credible sourcing, and risk mitigation, highlighting a need for holistic strategies that balance engagement, trust-building, and consumer safeguards to optimise WhatsApp-driven commerce.

This study examined the relationship between student exposure to WhatsApp advertisements and buying behaviour among university students in Ilorin metropolis. The findings provide important insights into how digital marketing through messaging platforms influences young consumer behaviour in Nigerian contexts.

The study revealed that an overwhelming majority (87.5%) of students encountered WhatsApp advertisements multiple times daily, indicating that the platform has become a pervasive advertising channel. This finding aligns with Montag et al. (2015), who noted that the integration of commercial content into personal communication platforms has become increasingly common as businesses seek to leverage high engagement rates on messaging applications. The dominance of group chats as advertisement sources (Mean = 4.23) reflects WhatsApp's unique structure, where promotional content circulates within existing social networks, often blurring boundaries between peer recommendations and commercial marketing (O'Hara et al., 2014).

The high frequency of exposure can be attributed to several factors. First, students' extensive WhatsApp usage (75% spending at least 1-5 hours daily) creates numerous opportunities for advertisement encounters. Second, students' membership in multiple groups (42% belonging to 6-10 groups) multiplies exposure channels. Third, the informal nature of WhatsApp enables easier insertion of promotional content into conversations without the formal gatekeeping present in traditional media (Church & de Oliveira, 2013). This ubiquitous exposure suggests that WhatsApp has evolved from a pure communication tool to a hybrid platform where commercial and social interactions are deeply intertwined.

The study found that WhatsApp advertisements significantly influence student buying behaviour, with 78.3% reporting that these advertisements affect their purchase decisions. The high mean scores for product awareness creation (Mean = 4.15) and actual purchasing (Mean = 3.78) demonstrate that exposure translates into tangible behavioural outcomes. This finding supports Kim and Ko's (2012) research on social media marketing effectiveness, which demonstrated that social media activities significantly influence customer equity and purchase intentions.

However, an interesting paradox emerged: while students acknowledged high behavioural influence, their trust in WhatsApp-advertised products was only moderate (Mean = 3.28). This suggests that purchase decisions are not solely driven by trust but also by other factors such as convenience, price advantages, and peer influence. The Uses and Gratifications Theory helps explain this phenomenon; students may make purchases not because they fully trust the platform, but because WhatsApp shopping gratifies needs for convenience, product discovery, and social participation (Katz et al., 1973; Coursaris et al., 2016).

The frequency of purchases (45% monthly, 17% weekly) and spending patterns (77% spending up to ₦10,000 monthly) indicate that WhatsApp commerce has become a regular part of student consumption behaviour rather than an occasional activity. This normalisation of platform-based shopping represents a significant shift in consumer behaviour among Nigerian youth, reflecting broader trends of digital commerce adoption in developing markets (Alawan et al., 2017).

Fashion items dominated purchases (Mean = 4.26), followed by food and beverages (Mean = 3.95), and electronics (Mean = 3.72). This pattern reflects several dynamics. Fashion items are highly visual, making them suitable for image-based marketing on WhatsApp, and represent products where peer influence is particularly strong (Djafarova & Rushworth, 2017). The high ranking of food and beverages suggests that WhatsApp facilitates convenience purchases and same-day delivery services that have become popular among students. Electronics purchases, despite higher prices, indicate that students are willing to make significant investments through the platform when trust is established.

These preferences also reflect students' lifestyle needs and constraints. With limited budgets, students prioritise visible, identity-expressing products (fashion) and immediate consumption items (food) over long-term investments. The moderate scores for home accessories (Mean = 2.89) and sporting goods (Mean = 2.67) align with typical student living situations where such purchases are less relevant. Understanding these category preferences can help marketers tailor their WhatsApp advertising strategies to products most likely to resonate with student audiences.

The study revealed a clear hierarchy of trust, with close friend recommendations (Mean = 4.08) and peer-shared content (Mean = 3.82) garnering highest confidence, while unknown sources (Mean = 2.45) generated significant skepticism. This finding strongly supports Social Proof Theory (Cialdini, 2009) and research on electronic word-of-mouth (Cheung & Thadani, 2012), which demonstrate that consumers rely heavily on peer opinions when making decisions under uncertainty.

The high trust in peer recommendations reflects WhatsApp's fundamental nature as a social network platform where communications occur within established relationships. When friends share advertisements or make product recommendations, they implicitly stake their social capital on the recommendation's quality, making such endorsements more credible than anonymous or commercial sources (Zhang et al., 2017). This peer-driven trust dynamic explains why group chat advertisements (often shared by known individuals) are more effective than broadcast messages from unknown entities.

Interestingly, verified business pages achieved only moderate trust (Mean = 3.67) despite their official status. This suggests that in Nigerian contexts, personal relationships and peer validation may carry more weight than institutional credentials. This finding has important implications for businesses seeking to market on WhatsApp, because success may depend more on cultivating authentic peer advocates than on building official brand presences.

The study identified numerous factors influencing purchase decisions, with product quality information (Mean = 4.12), price/discounts (Mean = 4.08), and visual appeal (Mean = 3.94) ranking highest. The importance of quality information reflects students' awareness of risks in digital commerce and their desire for detailed product descriptions to compensate for inability to physically examine items. This aligns with research by Yadav and Rahman (2017) on information requirements in digital consumer journeys.

Price sensitivity (Mean = 4.08) reflects students' budget constraints and their strategic use of WhatsApp to find bargains. The platform's informal nature often enables direct negotiation and access to wholesale prices not available in formal retail channels. Visual appeal's high ranking (Mean = 3.94) underscores the importance of quality product photography and videos in mobile commerce, where visual content substitutes for physical product examination (Lemon & Verhoef, 2016).

The high influence of peer reviews (Mean = 3.89) further reinforces the social dynamics of WhatsApp commerce. Students actively seek validation from previous buyers before making purchases, creating a feedback loop where positive experiences are shared and amplified within networks. This finding suggests that businesses should actively encourage and facilitate customer testimonials and reviews on WhatsApp.

Despite high engagement, the study identified substantial barriers that prevent purchase completion. Lack of clear return/refund policies (Mean = 3.72), concerns about receiving wrong products (Mean = 3.67), and product authenticity worries (Mean = 3.45) represent significant obstacles. These findings align with the research by Ayo et al. (2016) on barriers to digital commerce adoption in Nigeria, which emphasised consumer protection concerns as major inhibitors.

The prominence of these barriers reflects the informal, unregulated nature of WhatsApp commerce in Nigeria. Unlike established e-commerce platforms with formal dispute resolution mechanisms, WhatsApp transactions often lack clear recourse procedures when problems arise. The platform's encryption, while protecting privacy, can also make it difficult to trace fraudulent sellers or recover lost funds, amplifying perceived risks (Vatanparast & Asil, 2020).

Payment security concerns (Mean = 3.38), while slightly lower than other barriers, remain significant. This likely reflects ongoing concerns about fraud in Nigerian digital payment systems and students' limited financial resources, which make any loss particularly impactful. The moderate concern (compared to very high concerns in some international studies) may

indicate growing familiarity with digital payments among young Nigerians and increasing trust in mobile money platforms.

These findings have important theoretical implications. The study demonstrates that Uses and Gratifications Theory effectively explains WhatsApp advertising engagement; students are not passive recipients but active seekers of value through convenient shopping, product discovery, and social participation. However, the theory must be extended to account for the platform-specific dynamics of messaging-based commerce, where social relationships, trust networks, and peer influence create unique gratification structures.

The findings also contribute to understanding Social Proof Theory in digital contexts. The study shows that social proof operates most powerfully through direct peer connections rather than aggregated reviews or celebrity endorsements. In WhatsApp's intimate social environment, the endorsement of a close friend carries far more weight than thousands of anonymous positive reviews, suggesting that social proof's effectiveness depends heavily on relationship proximity and trust.

For marketing practitioners, the study offers several actionable insights. First, businesses should prioritise peer-to-peer marketing strategies that activate student advocates rather than broadcasting messages through official channels. Second, providing comprehensive product information, competitive pricing, and strong visual content is essential for influencing purchase decisions. Third, addressing trust barriers through clear policies, secure payment options, and transparent communication is crucial for converting interest into completed purchases. Fourth, focusing on product categories aligned with student preferences, particularly fashion, food, and electronics will likely yield better returns than broader, untargeted approaches.

5. Conclusion and Recommendation

The study found that WhatsApp is a highly pervasive advertising channel among Ilorin undergraduates, with students frequently encountering promotional content that significantly affects their product awareness and purchasing decisions. Fashion, food, and electronics are the most popular purchase categories. Crucially, trust dynamics are central, with peer recommendations carrying far greater credibility than official business sources, influencing buying behaviour despite the informal nature of the commerce. While students engage in comprehensive product evaluation (checking price, quality, and visuals), significant barriers exist, including concerns over return policies, product authenticity, and payment security. The study recommends that businesses leverage peer influence, provide transparent product and policy information, and implement secure payment options. It also urges educational institutions to integrate digital and consumer literacy programmes, and for regulatory authorities to develop frameworks that balance innovation with consumer protection for social media commerce. This dynamic highlights how convenience and peer validation often override formal trust mechanisms in digital commerce.

References

Adeyeye, M. M. (2019). Social media marketing and consumer buying behaviour: An investigative analysis of the Nigerian telecommunications sector. *The International Journal of Business & Management*, 7(6), 112-119.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211. https://doi.org/10.1016/0749-5978(91)90020-T

Alawan, A. A., Rana, N. P., Dwivedi, Y. K., & Algharabat, R. (2017). Social media in marketing: A review and analysis of the existing literature. *Telematics and Informatics*, 34(7), 1177-1190. https://doi.org/10.1016/j.tele.2017.05.008

Alhabash, S., & Ma, M. (2017). A tale of four platforms: Motivations and uses of Facebook, Twitter, Instagram, and Snapchat among college students. *Social Media + Society*, 3(1), 1-13. https://doi.org/10.1177/2056305117691544

Appel, G., Grewal, L., Hadi, R., & Stephen, A. T. (2020). The future of social media in marketing. *Journal of the Academy of Marketing*

Science, 48(1), 79-95. https://doi.org/10.1007/s11747-019-00695-1

Ashley, C., & Tuten, T. (2015). Creative strategies in social media marketing: An exploratory study of branded social content and consumer engagement. *Psychology & Marketing*, 32(1), 15-27. https://doi.org/10.1002/mar.20761

Ayo, C. K., Adewoye, J. O., & Oni, A. A. (2016). Framework for mobile money implementation in Nigeria. *Journal of African Business*, 17(3), 346-366. https://doi.org/10.1080/15228916.2016.1180778

Bamberg, S., Hunecke, M., & Blöbaum, A. (2015). Social context, personal norms and the use of public transportation: Two field studies. *Journal of Environmental Psychology*, 27(3), 190-203.

Boerman, S. C., Willemsen, L. M., & Van Der Aa, E. P. (2017). "This post is sponsored": Effects of sponsorship disclosure on persuasion knowledge and electronic word of mouth in the context of Facebook. *Journal of Interactive Marketing*, 38, 82-92. https://doi.org/10.1016/j.intmar.2016.12.002

Cheung, C. M., & Thadani, D. R. (2012). The impact of electronic word-of-mouth communication: A literature analysis and integrative model. *Decision Support Systems*, 54(1), 461-470. https://doi.org/10.1016/j.dss.2012.06.008

Chu, S. C., Kamal, S., & Kim, Y. (2013). Understanding consumers' responses toward social media advertising and purchase intention toward luxury products. *Journal of Global Fashion Marketing*, 4(3), 158-174. https://doi.org/10.1080/20932685.2013.790709

Church, K., & de Oliveira, R. (2013). What's up with WhatsApp? Comparing mobile instant messaging behaviors with traditional SMS. *Proceedings of the 15th International Conference on Human-Computer Interaction with Mobile Devices and Services*, 352-361. https://doi.org/10.1145/2493190.2493225

Cialdini, R. B. (2009). *Influence: Science and practice* (5th ed.). Boston: Pearson Education.

Coursaris, C. K., Osch, W. V., & Balogh, B. A. (2016). Informing brand messaging strategies via social media analytics. *Online Information Review*, 40(1), 6-24. https://doi.org/10.1108/OIR-02-2015-0062

DataReportal. (2022). Digital 2022: Nigeria. Retrieved from https://datareportal.com/reports/digital-2022-nigeria

Djafarova, E., & Rushworth, C. (2017). Exploring the credibility of online celebrities' Instagram profiles in influencing the purchase decisions of young female users. *Computers in Human Behavior*, 68, 1-7. https://doi.org/10.1016/j.chb.2016.11.009

Duffett, R. G. (2017). Influence of social media marketing communications on young consumers' attitudes. *Young Consumers*, 18(1), 19-39. https://doi.org/10.1108/YC-07-2016-00622

Evans, N. J., Phua, J., Lim, J., & Jun, H. (2017). Disclosing Instagram influencer advertising: The effects of disclosure language on advertising recognition, attitudes, and behavioral intent. *Journal of Interactive Advertising*, 17(2), 138-149. https://doi.org/10.1080/15252019.2017.1366885

Grieve, R., Padgett, C. R., & Moffitt, R. L. (2021). Problematic smartphone use in an Australian sample: The role of social connectedness and self-control. *Cyberpsychology, Behavior, and Social Networking*, 24(10), 657-663.

Karapanos, E., Teixeira, P., & Gouveia, R. (2016). Need fulfillment and experiences on social media: A case on Facebook and WhatsApp. *Computers in Human Behavior*, 55, 888-897. https://doi.org/10.1016/j.chb.2015.10.015

Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and gratifications research. *The Public Opinion Quarterly*, 37(4), 509-523.

Kim, A. J., & Ko, E. (2012). Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brand. *Journal of Business Research*, 65(10), 1480-1486. https://doi.org/10.1016/j.jbusres.2011.10.014

Kircaburun, K., Alhabash, S., Tosuntaş, Ş. B., & Griffiths, M. D. (2020). Uses and gratifications of problematic social media use among university students: A simultaneous examination of the Big Five of personality traits, social media

platforms, and social media use motives. *International Journal of Mental Health and Addiction*, 18, 525-547. https://doi.org/10.1007/s11469-018-9940-6

Lamberton, C., & Stephen, A. T. (2016). A thematic exploration of digital, social media, and mobile marketing: Research evolution from 2000 to 2015 and an agenda for future inquiry. *Journal of Marketing*, 80(6), 146-172. https://doi.org/10.1509/jm.15.0415

Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. *Journal of Marketing*, 80(6), 69-96. https://doi.org/10.1509/jm.15.0420

Montag, C., Błaszkiewicz, K., Sariyska, R., Lachmann, B., Andone, I., Trendafilov, B., Eibes, M., & Markowetz, A. (2015). Smartphone usage in the 21st century: Who is active on WhatsApp? *BMC Research Notes*, 8, 331. https://doi.org/10.1186/s13104-015-1280-z

O'Hara, K. P., Massimi, M., Harper, R., Rubens, S., & Morris, J. (2014). Everyday dwelling with WhatsApp. *Proceedings of the 17th ACM Conference on Computer Supported Cooperative Work & Social Computing*, 1131-1143. https://doi.org/10.1145/2531602.2531679

Rodgers, S., & Thorson, E. (2017). *Digital advertising: Theory and research*. New York: Routledge.

Ruggiero, T. E. (2000). Uses and gratifications theory in the 21st century. *Mass Communication and Society*, 3(1), 3-37. https://doi.org/10.1207/S15327825MCS0301_02

Schivinski, B., & Dabrowski, D. (2016). The effect of social media communication on consumer perceptions of brands. *Journal of Marketing Communications*, 22(2), 189-214. https://doi.org/10.1080/13527266.2013.871323

Solomon, M. R. (2020). *Consumer behavior: Buying, having, and being (13th ed.)*. Harlow, UK: Pearson Education.

Statista. (2023). Most popular global mobile messenger apps as of January 2023. Retrieved from https://www.statista.com/statistics/258749/most-popular-global-mobile-messenger-apps/

Taylor, D. G., Lewin, J. E., & Strutton, D. (2011). Friends, fans, and followers: Do ads work on social networks? *Journal of Advertising Research*, 51(1), 258-275. https://doi.org/10.2501/JAR-51-1-258-275

Vatanparast, R., & Asil, M. (2020). Factors affecting the use of mobile advertising: A meta-analysis. *Internet Research*, 30(1), 93-122. https://doi.org/10.1108/IntR-05-2018-0206

Whiting, A., & Williams, D. (2013). Why people use social media: A uses and gratifications approach. *Qualitative Market Research*, 16(4), 362-369. https://doi.org/10.1108/QMR-06-2013-0041

Wojdynski, B. W., & Evans, N. J. (2016). Going native: Effects of disclosure position and language on the recognition and evaluation of online native advertising. *Journal of Advertising*, 45(2), 157-168. https://doi.org/10.1080/00913367.2015.1115380

Yadav, M. S., & Rahman, Z. (2017). Measuring consumer perception of social media marketing activities in e-commerce industry: Scale development & validation. *Telematics and Informatics*, 34(7), 1294-1307. https://doi.org/10.1016/j.tele.2017.06.001

Yamane, T. (1967). *Statistics: An introductory analysis (2nd ed.)*. New York: Harper and Row.

Zhang, K. Z., Zhao, S. J., Cheung, C. M., & Lee, M. K. (2017). Examining the influence of online reviews on consumers' decision-making: A heuristic-systematic model. *Decision Support Systems*, 67, 78-89. https://doi.org/10.1016/j.dss.2014.08.005