INFLUENCE OF SOCIAL MEDIA ON THE BEHAVIORAL FORMATION OF DIGITAL NATIVES: A MODERATION APPROACH

a Bernice Titilola Gbadeyan, b Ümmü Altan Bayrakhtar

ABSTRACT

Purpose: This study examined the influence of social media on the behavioural formation of digital natives in Lagos, Nigeria, with a specific focus on the accessibility and pattern of social media usage, the online experience, and the influence of social media on the behavioural formation of digital natives.

Design/Methodology/Approach: Using a stratified proportionate sample strategy, 450 social media users who grew up in the digital age across 10 local government areas in Lagos, Nigeria, provided the data for this quantitative study, where the heuristic model for the relationship was subjected to a string of tests using the partial least squares structural equation modelling (PLS-SEM) technique.

Findings: Discovery revealed that social media has a favourable impact on the behavioural formation of digital natives, whereby digital natives’ nature moderates the structural relationship between social media and behavioural formation.

Original/Value: The study novelty appears on the side of Technological Determinism Theory postulated on social media as extremely popular among Nigerian digital natives and is one of the key contributors to the deterioration of digital natives’ behavioural formation in terms of morality, secretive information accessing, online insecurity, as well as the propagation of rumor and propaganda.

Practical implications: Because of the established dialectical connection between society and technology, widespread social media literacy is now possible, even among the humblest of households.

Keywords: behavioural formation, digital natives, PLS-SEM, social media.

Received: 31/07/2023
Accepted: 23/10/2023
DOI: https://doi.org/10.55908/sdgs.v11i10.1334
INFLUÊNCIA DAS MÍDIAS SOCIAIS NA FORMAÇÃO COMPORTAMENTAL DE NATIVOS DIGITAIS: UMA ABORDAGEM DE MODERAÇÃO

RESUMO

Objetivo: Este estudo examinou a influência das mídias sociais na formação comportamental de nativos digitais em Lagos, Nigéria, com foco específico na acessibilidade e no padrão de uso das mídias sociais, na experiência online e na influência das mídias sociais na formação comportamental dos nativos digitais.

Design/Metodologia/Abordagem: Usando uma estratégia de amostra estratificada proporcional, 450 usuários de mídia social que cresceram na era digital em 10 áreas do governo local em Lagos, Nigéria, forneceram os dados para este estudo quantitativo, onde o modelo heurístico para o relacionamento foi submetido a uma série de testes usando a técnica de modelagem de equações estruturais de mínimos quadrados parciais (PLS-SEM).

Resultados: A descoberta revelou que as redes sociais têm um impacto favorável na formação comportamental dos nativos digitais, pelo que a natureza dos nativos digitais modera a relação estrutural entre as redes sociais e a formação comportamental.

Original/Valor: A novidade do estudo aparece ao lado da Teoria do Determinismo Tecnológico postulada nas mídias sociais como extremamente popular entre os nativos digitais nigerianos e é um dos principais contribuintes para a deterioração da formação comportamental dos nativos digitais em termos de moralidade, acesso a informações secretas, insegurança online, bem como propagação de boatos e propaganda.

Implicações práticas: Devido à ligação dialética estabelecida entre a sociedade e a tecnologia, a literacia generalizada nos meios de comunicação social é agora possível, mesmo entre os agregados familiares mais humildes.

Palavras-chave: formação comportamental, nativos digitais, PLS-SEM, mídias sociais.

1 INTRODUCTION

As a result of technological advancements, modern-day generations are exposed to a completely novel communications environment, whereby the contemporary technology world has social media playing active roles in almost all aspects of human lives. This has grown to a significant level of human dependence on social media for information, surveillance, interpretation, entertainment, and other initially held responsibilities of the mainstream media (Nitza & Zeev, 2019; Tkalac & Verci, 2013). According to Asemah, Okpanachi, and Edegoh (2013), since the advent of social media, it has become a significant part of daily life and is steadily expanding its influence. There is also an ever-increasing phenomenon of online content generation as a result of the introduction of smartphones. Social media as a technology has improved the mode, dissemination, and speed of communication as compared to the early years (Ardi & Putri, 2020).
While social media may be utilized for purposes such as information gathering, interaction, fashion, entertainment, and education, it can also, for instance, negatively affect digital natives’ thinking and value judgments. Spending a lot of time on social networking sites has negative impacts (Chao, Xue, & Liu, 2020). The ambiance will unavoidably have a detrimental impact on the user's developing mentalities because they spend the majority of their days in this atmosphere. According to Drusell (2012), the dominant users of social media in this contemporary era are those under the age of 35. However, according to Prensky (2001), these people can be categorized into those who actively use information and communication technology and those who do not. Prensky refers to the initial category as "digital natives," and they are also referred to as "students of a thousand years, the Internet generation, cyber children, zapping humans, and grasshopper minds". Supporting this nomenclature, Chao, Xue, and Liu (2020) submit that individuals that have been born into the current digital era, have early exposure to technology, have developed digital vocabulary, and belong to the new learning era are currently referred to as "digital natives.

As put forth by Ededgoh, Asemah, and Ekanem (2013), digital natives spend lots of hours every day with technology (especially social media), and they have a strong preference for media and other technologies that encourage a feeling of connectedness (Carr, 2002). Social media's participatory aspect could, however, have a different influence on digital natives’ behaviour than less interactive technologies (e.g., TV, movies, and music).

Due to the popularity of social media, digital natives are now exposed to a variety of viewpoints and ideals. Castells (2020) submits that information technology, the internet, and the information society that surrounds us all are the distinguishing features of post-modern society. Therefore, with the diminishing age range for social media users, it is unavoidable that participants, mainly digital natives, may be influenced by the content they receive, resulting in differences in their reasoning and belief systems. Slattery (2018) opines that digital natives are particularly exposed to complex and dangerous content that may have a direct impact on their mental processes and sense of morality, which could ultimately end in cultural disorder. So, on social media and digital natives, the tight spot is how much influence these networks have on the ideas and conduct of digital natives, who are presumed to be spending a significant part of their daily routine on them, and their impact on their behaviour.
The influence of social media on the behavioral formation of digital natives has become a significant concern in today's digital age. While social media platforms offer numerous benefits, such as enhanced communication and information sharing, they also expose digital natives to potential risks and negative psychological effects. Understanding the specific ways in which social media shapes the behaviors and attitudes of digital natives is essential for devising effective strategies to mitigate the potential negative impacts. Moreover, identifying the moderating factors that can either amplify or reduce these effects is crucial for promoting healthy online behaviors among digital natives. Hence, this study becomes original going by the heuristic model and the context in a developing nation like Nigeria.

2 LITERATURE REVIEW

2.1 TECHNOLOGICAL DETERMINISM THEORY

This study is hinged on the Technological Determinism Theory (TDT) as coined by Marshall McLuhan in 1962. Technological determinism shows the socio-technical developments of media or technology as a whole as the key mover in history and social change (Williams & Merten, 2009). Most technological determinism theory interpretations take this basic position: that technological development follows a predictable, traceable path that is largely independent of cultural or political influences. Thus, according to this theory, once a technology is brought into a culture, what follows is unavoidable. Most criticisms of this theory are that the idea's proposed cause-and-effect link is too basic to adequately represent the interaction between technology and society. The applicability of this theory to the study is that many Nigerian digital natives have transitioned to a modern world of making friends and seeking acquaintances and companionship via social media, regardless of location. This means that the boundaries of human connection and communication have been eliminated. The rise of the internet and social media has ushered in a new era of technology that has made communication simpler and turned the world into a global village, just as McLuhan predicted.

Likewise, while social media technology has amplified the necessity for strong family ties, moral behaviour, and community living, it has also given digital natives the freedom to act contrary to highly revered and priceless indigenous beliefs and cultures, as in the case of Nigeria. According to Mcluhan, individuals will always find a way to highlight all extensions and downplay all amputations, but doing so puts humans in
jeopardy. Finally, youth have established relationships, changed their behaviour, engaged in transactional negotiations and economic activities, and even changed their mode of dressing, to mention but a few, through social media sites like Facebook and Instagram, WhatsApp etc. Consequently, children in Nigeria maturing into young adults are already abreast of and acquainted with networking and social media platforms.

2.2 SOCIAL MEDIA

To put it simply, social media is a group of web-based apps that build on the underlying technology and ideological premises of the Web 2.0 movement (Olaleye et al., 2021; Prodanova & Van Looy, 2019). In the year 2000, social media first became famous, and it emerged as a real concept with developed features (Ramawela & Chukwuere, 2020). Social media is an online platform that enables people to disseminate information and content and engage with one another. Ramawela and Chukwuere (2020), Loitongbam, Sorokhaibam and Singh, (2023) characterize social media networking platforms as web-based platforms that enable users to create a public appearance within a constrained system, enabling them to communicate with others by sharing an interest or by accessing content all around the network. Therefore, social media has allowed individuals to (a) build a community or mini-community within a precise structure and (b) articulate a list of friends or acquaintances with whom they have interaction (Gneiser et al. 2012).

2.3 DIGITAL NATIVE

Prensky (2001) coined the phrase "Digital Native" to describe young people that are growing up with new technologies like video games, cell phones, and other electronic devices. In contrast to 'digital immigrants,' who learn to utilize these tools and try to adapt to this environment but still struggle to internalize this knowledge, digital natives have evolved new skills spontaneously and have become native users of the new tools. This development occurred as a result of the net generation's internet boom environmental experience (Ardi, 2019).

According to Prensky's (2001) perspective, people who were born into the internet age, who were exposed to technology at a tender age, who enhanced their digital language, and who are the new learner demographic are commonly referred to as digital natives. Digital natives are people who were born after the 1980s and can use computer
games, cognitive capacities, training methods, and modern digital devices like the Internet. In addition, according to Prensky and many other experts, this new generation called 'digital natives' or 'net generation' receives information quickly, prefers visual elements over text, functions best when connected, and prefers games over serious work (Prensky, 2001; Tapscott, 1999).

Many researchers have identified this new generation of people born into the digital innovation era, but they categorize their dates differently. Tapscott (1999) categories the new generation as those born between the years 1977 and 1997, while Prensky didn’t mention a specific date. Palfrey and Gasser (2008), the authors of "Born Digital," expressed that digital natives emerged after 1980, while on the other hand, Oblinger & Oblinger (2005) characterized them as "millennials," that is, those born between 1982 and 1991 (Jones et al., 2010). Prensky (2001) described "digital natives" as a group of people that access information very swiftly. These generations appreciate multiple tasks and processing capabilities. They prefer visuals to text rather than the other way around. They are at their best when connected; they thrive on immediate satisfaction, and they like to be applauded. They prefer playoffs to "hard" work. They work smart, not hard. They have changed our understanding of necessities and the hierarchy of needs.

2.4 BEHAVIOURAL FORMATION

Behavioural formation refers to the process by which individuals acquire and develop patterns of behaviour over time (Boyd & Ellison, 2007). It involves the interplay of various internal and external factors that shape an individual's actions, attitudes, and decision-making processes. Behaviour can be influenced by a range of factors, including social, environmental, cultural, and psychological elements. Individuals develop habits as they work toward their everyday goals. Everyone builds links between situations and responses in their memories when they regularly perform a behaviour in a specific context (Carden & Wood, 2018). Human behaviour is the full range of actions that people take, which depend on factors such as culture, mental states, emotions, values, morals, specialists, compatibility, mesmerizing, influence, impelling, and inherited traits. They further mentioned that the behaviour of people drops within a range, with a few behaviours being common, a few normal, some worthy, and a few outside satisfactory limits (Krishna & Strack, 2017).
In the context of digital natives and social media, behavioural formation refers to the ways in which young individuals' behaviours and attitudes are shaped and influenced by their interactions and experiences on social media platforms. It encompasses the impact of social media on self-perception, social interactions, information consumption, and decision-making processes. Social media platforms provide digital natives with a constant stream of information, social connections, and exposure to diverse perspectives (Fardouly et al., 2015; Van Den Eijnden et al., 2016). These experiences can significantly impact their behavioural development, including self-esteem, social comparison, peer influence, information processing, and mental health. Numerous factors, such as the need to fit in with online communities, the desire for social validation, and the influence of online social norms, frequently affect how digital natives behave on social media. Additionally, the presence of cyberbullying, online harassment, and privacy concerns can also shape their behaviours and attitudes on social media. Understanding the concept of behavioural formation in the context of digital natives and social media is essential for devising effective strategies to promote positive online behaviours, enhance digital well-being, and mitigate the potential risks associated with excessive social media use.

2.5 SOCIAL MEDIA AND DIGITAL NATIVE CULTURE

The outcomes observed when people used social media and evolving technologies led to several types of research being undertaken on the effects of social media. According to many studies (Berger et al., 2018; Gonzalez et al., 2019), social media can help digital natives learn in interesting ways. Digital natives in middle and high school communicate with one another through social media about assignments and collective projects. Some colleges usually employ blogs as teaching tools that improve their students' English written expression and creative thinking skills (Susanty et al., 2022).

Digital natives are discovering that they can conveniently and secretly access online information regarding their health issues (Richards et al., 2015). In addition, the benefit of social media is that it keeps you informed of the most recent events taking place across the world. Digital natives can research and gather facts and accurate information with the aid of social media (Kümpel, 2022). Along with its positive effects, social media also has drawbacks like time waste and addiction. Many digital natives lack the discipline to set limits on how much time they spend on social media (Gonzalez et al., 2019).
Furthermore, users, according to Yerby et al. (2019), find their privacy threatened on social media because there is not enough protection for personal details on social media sites against the deliberate and unplanned invasion of personal space or pages that might occur. Also, there is not enough privacy awareness on social media.

Most digital natives do experience sexing or cyber-sexing issues (sending, receiving, or transferring sexually explicit text messages, photos, or images over a smartphone, tablet, or other digital device), whereby the majority of pictures or images sent over the internet spread in a twinkle of an eye.

According to a recent poll, 20% of teenagers have sent or posted nude or seminal images or videos of themselves (Chitra & Jebaseelan, 2021). Some governments are currently classifying such actions as juvenile-law delinquency, but some minors who have engaged in cyber sexing have received threats or have been charged with criminal child pornography.

On this note, with this mixed reaction as to the nexus between social media and digital natives, the researchers postulate that:

H₁: Social media have positive and significant influence on the behavioral formation of digital natives.

H₂: Social media significantly influences digital native’s culture.

H₃: Being a digital native strengthens the relationship between social media and behavioral formation.

In light of this, the researcher makes the following research propositions about the relationship between the study variables as displayed in Figure 1 below:

Figure 1: research model

Source: Preparation of the Authors, 2023
3 METHODOLOGY

3.1 RESEARCH DESIGN, POPULATION, AND SAMPLING PROCEDURE

This study used a quantitative descriptive approach focusing on the educational sector in Nigeria, with youth (digital natives) as the focus of debate. This study involves a population of 337,724 senior secondary school students in Lagos, which is the state housing the most populace of youth with adequate knowledge of technology. A convenience sampling technique was adopted, whereby four hundred and fifty (450) digital natives were drawn from ten secondary schools across ten (10) local government areas of Lagos as sampling units because they fit the characteristics of the target population using the raffle draw system.

3.2 MEASURES AND ANALYSIS

Following the precedent set by the existing research, a well-structured survey was adopted and modified to collect data. Following the methodology of Van den Eijnden, Lemmens, and Valkenburg (2016), we triangulated our assessments of participants' social media usage. The scale consisted of 27 items, spanning nine criteria: preoccupation, tolerance, withdrawal, displacement, escape, problems, deception, displacement, and conflict. Previous studies (Ajzen & Fishbein, 1977; Bagozzi & Yi, 1989; Warshaw & Davis, 1985) have demonstrated the use of ten items for behavioural formation. Finally, the Digital Native Assessment Scale (DNAS), with 21 item measures, was developed and adopted from the study conducted by Teo (2013) in measuring digital natives. Hence, all items for this study were adapted and modified with ratings on a "5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree)".

Inferential statistics were employed to draw conclusions from the data gathered in the research. Using descriptive statistics, the sample population frame was described. Correlation analysis showed how the variables interact, and the suggested structural model was tested for multicollinearity and psychometric validity before it was confirmed using "Partial Least Squares Structural Equation Modelling" (PLS-SEM). Also, the bootstrapping technique was used to investigate the connection between the degree of significance and the path coefficients.
4 RESULTS AND DISCUSSION

4.1 FINDINGS

Evidence from Table 1 shows the accessibility and extent of social media usage among digital natives. It was revealed that most digital natives are introduced through friends. Secondly, the table shows that most digital natives use Instagram as a social media site; this might be because Instagram emphasizes more visuals and is more interactive than other social media sites (Bump, 2021). It further goes on to reveal that the majority of digital natives spend more than 3 hours a day on social media. These are, however, expected, and according to the report of Datareportal (2022), the report stated that the average internet user consumes over 40% of their waking moments online. We spend more time online than ever before, with an estimated average increase of 4 minutes (+1.0%) over the previous year. Furthermore, Item 4 shows that the majority of digital natives use the phone as a means of accessing social media networking, which has the relative advantages of mobility and privacy compared to other media of accessibility. Finally, in examining the range of relationships established via social media, the table’s final item revealed that the majority of digital natives have more than 500 friends on social media. Deductively, it is seen from the table that the digital natives are heavy users of social media and have a significantly wide range of relationships via the social media platform.

Table 1: accessibility and extent of social media usage among digital natives

<table>
<thead>
<tr>
<th>Variables</th>
<th>Responses</th>
<th>Freq (n=450)</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>What/who introduced you to social media?</td>
<td>Through Friends</td>
<td>139</td>
<td>30.9</td>
</tr>
<tr>
<td></td>
<td>Via Main Stream media (TV, Radio, Newspaper, Magazine, Books, Film)</td>
<td>113</td>
<td>25.1</td>
</tr>
<tr>
<td></td>
<td>Via internet</td>
<td>118</td>
<td>26.2</td>
</tr>
<tr>
<td></td>
<td>Found in Phone</td>
<td>80</td>
<td>17.8</td>
</tr>
<tr>
<td>Social Media Sites used by Digital native</td>
<td>Facebook</td>
<td>64</td>
<td>14.2</td>
</tr>
<tr>
<td></td>
<td>Instagram</td>
<td>169</td>
<td>37.6</td>
</tr>
<tr>
<td></td>
<td>YouTube</td>
<td>17</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td>WhatsApp</td>
<td>110</td>
<td>24.4</td>
</tr>
<tr>
<td></td>
<td>LinkedIn</td>
<td>14</td>
<td>3.1</td>
</tr>
<tr>
<td></td>
<td>Twitter</td>
<td>31</td>
<td>6.9</td>
</tr>
<tr>
<td></td>
<td>Pinterest</td>
<td>17</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td>Snapchat</td>
<td>12</td>
<td>2.7</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>16</td>
<td>3.6</td>
</tr>
<tr>
<td>How many hours do you engage in social media daily?</td>
<td>30mins</td>
<td>88</td>
<td>19.6</td>
</tr>
<tr>
<td></td>
<td>1hr</td>
<td>27</td>
<td>6.0</td>
</tr>
<tr>
<td></td>
<td>2hrs</td>
<td>32</td>
<td>7.1</td>
</tr>
<tr>
<td></td>
<td>3hrs</td>
<td>109</td>
<td>24.2</td>
</tr>
<tr>
<td></td>
<td>More than 3hrs</td>
<td>194</td>
<td>43.1</td>
</tr>
</tbody>
</table>
4.2 TEST OF HYPOTHESES

4.2.1 Measurement models

Summary of measurement results for the model; contains "Partial Least Squares Structural Equation Modelling (PLS-SEM)" for evaluating the psychometric properties of the variables (social media, digital natives, and behavioural formation). In order to assess how well the model measures latent components, psychometric tests are conducted on each one. Specifically, "the outer loading, average variance extracted (AVE), composite reliability (CR), Cronbach's alpha (CA), rho A values, and the convergent validity of items related to their constructs" (Hair et al., 2017) are evaluated. The convergence validity of the measurement model was confirmed by Cronbach's alpha, composite reliability, and rho_A values that were all greater than 0.5; likewise, the AVEs are over the threshold of 0.5 (Dijkstra & Henseler, 2015; Fornell & Larcker, 1981). The reduced AVE value of changed scales provides support for their "convergent validity" (Anifowose et al., 2022; Iyer, 2017; Mustapha et al., 2023; Olaleye et al., 2021; 2020). Therefore, the aggregate metric shows a satisfactory match and substantial predictive potential.

<table>
<thead>
<tr>
<th>How do you access your networking?</th>
<th>Phone</th>
<th>394</th>
<th>87.6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Laptops</td>
<td>38</td>
<td>8.4</td>
</tr>
<tr>
<td></td>
<td>Ipad</td>
<td>14</td>
<td>3.1</td>
</tr>
<tr>
<td></td>
<td>Cyber Cafe</td>
<td>4</td>
<td>0.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How many friends do you have over social media?</th>
<th>100</th>
<th>76</th>
<th>16.9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>200</td>
<td>56</td>
<td>12.6</td>
</tr>
<tr>
<td></td>
<td>300</td>
<td>22</td>
<td>4.9</td>
</tr>
<tr>
<td></td>
<td>400</td>
<td>26</td>
<td>5.8</td>
</tr>
<tr>
<td></td>
<td>More than 500</td>
<td>269</td>
<td>59.8</td>
</tr>
</tbody>
</table>

Source: Author’s survey and computation, 2023
## Reliant on graphics for communication

<table>
<thead>
<tr>
<th>Variable</th>
<th>RGC2</th>
<th>RGC3</th>
<th>RGC4</th>
<th>RGC5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.976***</td>
<td>0.961***</td>
<td>0.957***</td>
<td>0.966***</td>
</tr>
</tbody>
</table>

## Thrive on Instant Gratification & Reward

<table>
<thead>
<tr>
<th>Variable</th>
<th>TGR1</th>
<th>TGR2</th>
<th>TGR3</th>
<th>TGR4</th>
<th>TGR5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.953***</td>
<td>0.912</td>
<td>0.976</td>
<td>0.976</td>
<td>0.981</td>
</tr>
</tbody>
</table>

## BEHAVIORAL FORMATION

<table>
<thead>
<tr>
<th>Variable</th>
<th>BFORM1</th>
<th>BFORM2</th>
<th>BFORM3</th>
<th>BFORM4</th>
<th>BFORM5</th>
<th>BFORM6</th>
<th>BFORM7</th>
<th>BFORM8</th>
<th>BFORM9</th>
<th>BFORM10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.797***</td>
<td>0.665</td>
<td>0.945</td>
<td>0.958</td>
<td>0.952</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## SOCIAL MEDIA

| Variable   | SM     | CON1  | CON2  | CON3  | DEC1  | DEC2  | DEC3  | DIS1  | DIS2  | DIS3  | ESC1  | ESC2  | ESC3  | PER1  | PER2  | PER3  | PRE1  | PRE2  | PRE3  | PRO1  | PRO2  | PRO3  | TOL1  | TOL2  | TOL3  | WIT1  | WIT2  | WIT3  |
|------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|            | 0.547 | 0.967 | 0.972 | 0.970 | 0.879 | 0.931 | 0.932 | 0.956 | 0.937*** | 0.939*** | 0.940*** | 0.946 | 0.946 | 0.965 | 0.927*** | 0.955*** | 0.956*** | 0.939*** | 0.941*** | 0.923*** | 0.971*** | 0.942 | 0.969 | 0.969 | 0.980 | 0.932*** | 0.875 | 0.929 | 0.931 | 0.954 | 0.963*** | 0.880 | 0.931 | 0.936 | 0.956 | 0.963*** | 0.880 | 0.931 | 0.936 | 0.956 | 0.921*** |

Source: Author’s computation, 2023.

### 4.2.2 Discriminant validity

Using the Fornell-Larcker (1981) criterion, "the square root of AVE for each latent variable is greater than the inter-construct correlation for every other construct", except for digital native, which has an AVE square root less than its correlation value. Additionally, criticisms of the Fornell-Larcker (1981) criterion resulted in the...
establishment of an alternate proposed technique, the Heterotrait-Monotrait (HTMT) correlation ratio, establishing its dominance in the "Fornell and Larcker approach" (Henseler et al., 2015). As affirmed by Kline (2005), the HTMT values directly above the AVEs’ square roots indicate a prevalence of discriminant validity among the model constructs since they fell below the limits of 0.85 (see Table 3). The correlation between the means and standard deviations of the variables is demonstrated in Table 4 below.

Table 3: Discriminant Validity (Fornell-Larcker Criterion and Heterotrait-Monotrait Ratio)

<table>
<thead>
<tr>
<th>Variables</th>
<th>BFORM</th>
<th>DGN</th>
<th>SM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Formation (BFORM)</td>
<td>0.815</td>
<td>b</td>
<td>0.388</td>
</tr>
<tr>
<td>Digital Native (DGN)</td>
<td>0.404</td>
<td>0.860</td>
<td></td>
</tr>
<tr>
<td>Social Media (SM)</td>
<td>0.521</td>
<td>0.897</td>
<td>0.740</td>
</tr>
</tbody>
</table>

Notes: *Diagonal values in bold are the square root of AVE; HTMT ratio are values italicized and placed above the diagonal values in bold format.

Source: Author’s computation, 2023.

Table 4. Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Formation (BFORM)</td>
<td>3.736</td>
<td>1.074</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Digital Native (DGN)</td>
<td>3.116</td>
<td>1.326</td>
<td>.404**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Media (SM)</td>
<td>3.156</td>
<td>1.317</td>
<td>.521**</td>
<td>.897**</td>
<td></td>
</tr>
</tbody>
</table>

Notes: N = 450; M = means; SD = standard deviation; ** p < 0.01.

Source: Author’s computation, 2023.

4.2.3 Structural model

Both the measurement and structural models were tested and analyzed. The structural model is often used to evaluate the instrument’s causal constructs. It uses bootstrapping of 5000 re-sampling processes to estimate the path coefficient and the R-squared, among other statistics like the t-statistic, the P-value, and the f².

Researchers found that social media has a positive influence on behavioural formation (H1: = 0.775, t = 7.020, p < 0.05), and digital nature (H2: = 0.001, t = 2.639, p < 0.05). In addition, substantial indirect effects exist where digital nature was said to moderate the relationship between SM and behavioural formation (H3: β = 0.208, t = 2.630, p < 0.05). This analysis supports all direct and indirect theoretical paths.

The coefficient of the determinant (R²) served to assess the model's predictive power. Falk and Miller (1992) suggested using an R² of at least 0.10 in this investigation. R² is estimated at 0.314, which is interpreted as a low and weak effect in determining the dependent variable (BFORM), as illustrated in Figure 2 and Table 5.

Sullivan and Feinn (2012) suggest reporting the substantive significance (F²) as well as the “beta coefficient, and statistical significance (p-value). Using Cohen's (1988)
thresholds of 0.02, 0.15, and 0.35, they recommend classifying impacts as small, moderate, and large. All reported effect sizes were of low and moderate since the $f^2$ values were between the 0.02 and 0.15 thresholds. Finally, the model fit assessment is not strictly necessary to report in PLS-SEM; it was performed here because the NFI (0.839) was close to 1 and the SRMR value (0.061) was below the threshold of 0.08 (Hair Jr. et al., 2017) at which model fit is established. As a result, we know the model employed to investigate the underlying concept is accurate.

Table 5: Results of the Path Analysis

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Direct Effects</th>
<th>Model Fit Indices: SRMR= 0.061; NFI = 0.839; Chi-square = 1,116.961</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: SM → BFORM</td>
<td><strong>Std. Beta</strong></td>
<td><strong>t-value</strong></td>
</tr>
<tr>
<td>H2: SM → DGN</td>
<td>0.775</td>
<td>7.020***</td>
</tr>
<tr>
<td>H2: SM → DGN</td>
<td>0.001</td>
<td>2.630***</td>
</tr>
</tbody>
</table>

Indirect effect (Moderation)

<table>
<thead>
<tr>
<th>H3: DGN_ MOD*SM → BFORM</th>
<th><strong>Std. Beta</strong></th>
<th><strong>t-value</strong></th>
<th><strong>P-values</strong></th>
<th>$f^2$</th>
<th>$R^2$</th>
<th><strong>Decision</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>H3: DGN_ MOD*SM → BFORM</td>
<td>0.208</td>
<td>4.548***</td>
<td>0.000</td>
<td></td>
<td></td>
<td>Supported</td>
</tr>
</tbody>
</table>

***p < 0.05 (based on two-tailed test). **Significant at the p < 0.10 level (two-tailed)"

Source: Author’s computation, 2023.

Figure 2. Path Analysis

Source: Results of analysis by authors
5 DISCUSSION AND CONCLUSIONS

The present study remains highly relevant as it examines the influence of social media on the behavioural formation of digital natives in the commercial capital and most populous city of the Nigerian State. According to the first objective, which focused on the level of accessibility and pattern of social media usage among digital natives, it revealed that digital natives are heavy users of social media and have a significantly wide range of relationships via the social media platform. Childers and Boatwright (2021), however, explained the possible causes: that digital natives are heavy users of social media; that digital natives spend more than 3 hours on social media daily; that such an amount of time can’t be spent on secret affairs or usage because they will be involved in other daily activities; this presupposes that digital natives don’t hide their usage of social media. These are, however, expected, and according to the report of Datareportal (2022),
the report stated that the average internet user consumes over 40% of their waking moments online. We spend more time online than ever before, with an estimated average increase of 4 minutes (+1.0%) over the previous year. In terms of dominant social media used, they are more likely to use Instagram as compared to other social media; this might be because Instagram emphasizes more visuals and is more interactive than other social media sites (Bump, 2021).

Secondly, other findings of the study, which focused on the online experience of the digital natives on social media platforms, revealed that social media exposes the digital natives to both positive and negative online experiences, depending on the way one chooses the trend. This result shows that social media occupy a significant space in their daily experience, which, by implication of social learning and cultivation tenets, defines their behavioural formation. This submission agrees with the submission of Charles (2023) that digital natives use social media for their social, economic, and educational purposes; however, they are faced with the need to navigate through social media ills such as cyberbullying and hacking, peer pressure, addiction to porn, depression, poor sleeping habits, and addiction, which affect their studies. It aligns with the submission of Griffiths (2010) that young people express their views to both known and unknown users at the other end of the system, as well as Bhui, Everitt, and Jones (2014), who posit that social media empower youth by broadening their circle of contacts, welcoming assembly among them, and granting avenues for exercises such as informing, site creation, journals, photograph collections, and music or video transferring and downloading. This further explains Prabandari (2020)'s submission that the generation known as "digital natives" are internet and technologically acclimated and will continue to advance; as a result, digital technology is an essential component of their daily lives and they cannot be separated from it.

Based on hypothesis one, researchers have found a link between social media use and the behavioural formation of digital natives, as the present study revealed a significant and positive influence of social media on behavioural formation among digital natives in secondary school in Lagos State, Nigeria. However, there is a need to be mindful of the extreme use of social media; this is because digital natives occasionally believe they have unrestricted freedom to express a wide range of viewpoints, facts, and ideas via various status updates on social networks, which they regard as their domains or private areas. As a result, constraints on the right to freedom of speech are very necessary, specifically...
when it comes to these issues that can result in instigation and propaganda. In tune with the rejection of government regulation by the respondents, it is, however, essential to note that Inobemhe (2021) opines that, if everyone has the right to free expression in a government, it is regarded as a failure of the democratic ethos. Free speech is one way that all citizens can engage in the political process in a democracy. However, this freedom of speech can be restricted if it’s going to be a threat to the peace and orderliness of the state or government. Everyone has limitations. Sections 39(3) and 45 of the Nigerian constitution permit limitations on the right to freedom of expression: for preventing the leak of information that was given to you in confidence; for preserving the legitimacy and impartiality of the judiciary due to holding a particular position in the government; for being a member of the armed forces, police, or another security organization; and for the sake of the safety, security, peace, morality, and health of the general population.

In conclusion, the influence of social media on the behavioural formation of digital natives is a topic of significant concern and relevance in today’s digital age. Understanding the specific impacts and moderating factors can inform the development of interventions, educational programs, and policies aimed at promoting digital well-being, enhancing critical thinking skills, and fostering positive online communities. This study holds immense value in addressing the challenges and harnessing the potential of social media for the healthy development of digital natives.

IMPLICATIONS IN THEORY AND PRACTICE

The fact that social media is a part of the digital natives' lives, especially since they were born in this era of advancing technology, made most of them feel as if they couldn't live without it. The study revealed that the excessive use of social media has also exposed digital natives to some social vices, such as cyberbullying, porn addiction, indecent dressing, cybercrime, and rejection. It was also revealed in a study that the strength of social media users is on the rise, and as a result, many more problems are surfacing. Therefore, based on the submission of Harold Innis, who believes there is a dialectical affiliation between society and technology in influencing each other equally, it is recommended that there be training on the usage of new media, i.e., new media literacy. Given that new media has provided the opportunity for every user to be a content
producer, it is therefore imperative that new media literacy be considered even by the family circle to build a modest world.

As social media increasingly becomes an integral part of young individuals' lives, it is crucial to understand the potential consequences of excessive social media use. By exploring the behavioural impacts, the study can inform the development of strategies and interventions aimed at promoting digital well-being and minimizing the risks associated with social media. Furthermore, this study contributes to the existing body of research by examining the influence of social media on the behavioural formation of digital natives from a moderation perspective. By exploring the factors that amplify or mitigate the effects of social media, researchers can gain insights into the complex interplay between social media use and behavioural outcomes. This knowledge can inform the development of effective strategies and interventions to promote healthy digital behaviours among digital natives.

Understanding the influence of social media on the behavioural formation of digital natives is crucial for policymakers, educators, and parents. Findings from this study can inform the development of policies and guidelines that promote responsible social media use, protect digital natives from online risks, and foster positive online behaviours. Additionally, educational institutions can integrate media literacy and digital citizenship education into curricula to equip digital natives with the necessary skills and knowledge to navigate the online world effectively.

Furthermore, all parties, particularly the Nigeria Communication Commission and network providers, should devise methods of screening content that reaches users via social media platforms. This will help limit their exposure to pornographic and other inappropriate items. Finally, social media platforms should take designated steps toward verifying users' ages. Domestic laws should place this responsibility on social media firms. Achieving social media balance may be crucial to achieving safe and healthy communities in the near future as the digital increasingly controls the physical.

**LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH**

Despite the study's strong contributions, the targeted population for the study was Nigerian digital natives in Lagos State, which is a commercial urban city. In other words, the researcher was limited to the Nigerian digital natives that are exposed to urban life;
hence, future studies could also research digital natives in both urban and rural areas of the nation. Second, instead of a cross-sectional design, future research may examine the causal effect of any selected factors over a lengthy period of time. Thirdly, considering the population of the study, it will be interesting for future research to explore the relationship between the use of new media and behavioural change among digital natives in the rural settings of Nigeria, and a comparative study stands to be important in making a decision as to the level of awareness in a developing nation like Nigeria. Finally, the research mainly focused on the influence of social media on the behavioural formation of digital natives, neglecting the role of control variables; future studies can combine their interaction by introducing intervening variables to widen the study's scope.
REFERENCES


Yang, C. C. (2016). Instagram use, loneliness, and social comparison orientation: interact and browse on social media, but don’t compare. Cyberpsychology, behavior, and social networking, 19, 703–708.
