

COUNSELLORS' UTILIZATION OF DIGITAL TOOLS FOR CAREER GUIDANCE IN SENIOR SECONDARY SCHOOLS IN DELTA STATE

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Received: 10-January-2026

Accepted: 20-February-2026

Published: 03-March-2026

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This article is published in the **MSI Journal of Education and Social Science**

ISSN 3107-5940 (Online)

The journal is managed and published by MSI Publishers.

Volume: 2, Issue: 1 (Jan-Mar) 2026

ABSTRACT: This study examined counsellors' utilization of digital tools for career guidance in senior secondary schools in Delta State. Three research questions guided this study. The descriptive survey research design was employed in the study. The population for the study comprised 488 counsellors from 488 public senior secondary schools in Delta State. Sample size for the study consisted of 244 counsellors drawn at (50%) selected using the proportionate stratified random sampling technique. A 41-item questionnaire developed by the researcher and titled "Counsellors Utilization of Digital Tools for Career Guidance Questionnaire (CUDTCGQ)" structured on a 4-point rating scale, served as the primary instrument for data collection. Both the validity and reliability of the research instrument were established. Data was analyzed using mean statistics rated at 2.50 and standard deviation statistics. Among the findings of the study indicated that the school counsellors in Delta State occasionally used basic digital tools like WhatsApp and SMS for career guidance, however, their adoption of more sophisticated and advanced platforms remained to a very low extent. From the findings, it was

recommended that the Delta State Government in collaboration with the Post Primary Education Board (PPEB) and support from the private sector should prioritize the provision of modern reliable digital infrastructure, including internet connectivity, computers, and stable electricity, to enable counsellors to effectively utilize a wide range of advanced digital tools such as WhatsApp, Facebook, YouTube, Zoom, Google Meet, MS Teams, online career assessment websites, mobile career apps, LinkedIn or other professional networking, school website or portal career section, e-portfolio tools, among others, for career guidance services in senior secondary schools in the State.

Keywords: *Counsellors, Utilization, Digital, Tools, Career, Guidance, Senior, Secondary Schools*

Introduction

In today's knowledge-driven and technology-oriented society, the role of digital tools in education and career development has become increasingly indispensable. Guidance and counselling services, as an essential and indispensable component of secondary education, provides senior secondary school students likewise other learners with direction in personal, academic, social and vocational matters (Egbochuku, 2021). Besides, senior secondary school can be seen as educational institutions that provide the final stage of secondary education, typically for students aged 15–18 years, preparing them for higher education, vocational training, or employment (Federal Ministry of Education [FME], 2019). According to Okoye and Nwachukwu (2020), senior secondary schools are schools offering the last three years of the basic education cycle, emphasizing advanced academic subjects, vocational studies, and career preparation necessary for tertiary education or the labour market. The senior secondary school stage necessitates counsellors effective use of digital tools and resources for students' career guidance. Specifically, career guidance, which is the main thrust of this study, is central in assisting senior secondary school students to make informed career decisions, prepare for higher education, and align with the labour market demands through the assistance and services of a professional school counsellor. Career guidance is a structured process through which students are assisted by school counsellors to understand their

abilities, interests, and opportunities in order to make informed decisions about education, vocational training, and career paths (Agu & Eze, 2021). According to Eze and Amadi (2022), career guidance encompasses counselling, mentorship, and provision of relevant information by school counsellors to assist learners in selecting suitable career options and planning their future academic and professional paths. Hence, career guidance can be organized by the school counsellors (also using various digital tools and devices) in form of individual counselling - which involves one-on-one sessions to identify career interests and strengths, group counselling - conducted with a group of students to discuss career choices and pathways, career fairs - which includes organizing events where students interact with industry professionals, online career assessment - using digital platforms to assess skills and aptitudes, and mentorship programmes – by pairing students with professionals for career advice and guidance (Eze & Amadi, 2022). Besides school counsellors are trained professionals in educational settings who provide guidance, support, and interventions to help students manage academic, career, and personal/social development. They facilitate students' educational planning and career decision-making by offering counselling, mentoring, and advisory services (Amadi & Okeke, 2021). According to Odetunde and Onuoha (2022), school counsellors are specialists who assist students in developing self-awareness, coping skills, and career preparedness through structured guidance programmes, psychological assessment, and personalized counselling sessions. Traditionally, school counsellors have provided such guidance through old conventional methods such as face-to-face counselling sessions, printed materials, and manual assessments without the assistance of digital tools. However, with the advent of digital technologies has transformed counselling practices and interventions by offering more innovative, interactive and accessible platforms (UNESCO, 2023).

Digital tools refer to software applications, platforms, and devices that enable information sharing, communication, and resource access. They are technological resources, software, and online platforms that enable information processing, communication, learning, and management activities. They are increasingly integrated into educational practices to enhance teaching, learning, and counselling processes (Nwafor et al., 2023). Digital tools are electronic applications or

instruments that facilitate efficient delivery, access, and engagement with information, resources, and services in various professional domains, including education and career guidance (Eze et al., 2022). In the context of school counselling, these tools include online career assessment platforms, counselling management systems, social media, mobile applications, virtual seminars (webinars), and artificial intelligence-powered guidance tools (Kettunen & Sampson, 2019). Their utilization provides opportunities for counsellors to deliver career-related information more effectively, conduct aptitude tests, and connect students with professional mentors and online resources. Utilization of digital tools and resources refers to the practical application or deployment of technological resources, tools, or services to achieve a specific purpose (Onyema & Chukwu, 2022). In education, it implies the extent to which teachers or counsellors actively integrate instructional or guidance resources into their daily practices. Utilization is the effective and purposeful use of available tools, technologies, or services to meet desired objectives, enhance productivity, or solve problems in a structured manner (Okafor & Nwosu, 2023). For senior secondary schools, where students face crucial career decision-making moments, utilization of digital tools and resources can bridge the gap between traditional counselling practices and modern career development needs (Ibrahim, 2022). In Nigeria, particularly in Delta State, senior secondary education is a critical stage for career preparation, where learners are expected to make subject and career choices that will shape their future occupations. The Federal Republic of Nigeria (2014) in the National Policy on Education (NPE) emphasizes the need for career guidance to prepare youths for “useful living within the society and higher education”. Yet, despite this recognition, many schools in Nigeria still underutilize or fall short of these digital tools and resources in their counselling programmes, often relying on conventional methods (Nwosu & Igbokwe, 2020). This reality raises concerns about whether students are adequately supported to meet the career challenges of a rapidly evolving digital economy. Furthermore, the utilization of digital tools by school counsellors is influenced by multiple factors, including their digital literacy, availability of infrastructure, and institutional support (Adebowale & Afolabi, 2020; Ede et al., 2021; Okeke & Ogbuanya, 2021). While digital platforms can enhance counsellors’ effectiveness, barriers such as poor internet connectivity, inadequate

training, lack of institutional funding, and resistance to technology adoption remain persistent challenges in Nigerian schools (Achor & Ugwuanyi, 2020; Olatunji, 2022). Addressing these barriers is critical to ensure that career guidance in senior secondary schools remains relevant and effective in equipping students for future career paths. To investigate the issues in connection to counsellors' utilization of digital tools for career guidance in senior secondary schools in Delta State; the study focused on identifying the types of digital tools commonly employed by counsellors in providing career guidance in senior secondary schools; examining the extent to which counsellors utilize digital tools for career guidance in senior secondary schools in Delta State; coupled with the challenges hindering counsellors in the utilization of digital tools for career guidance in senior secondary schools in Delta State.

Discussing issues on the types of digital tools, previous studies like those of Amgbara (2022), ERIC (2024), Eze, Obi and Okafor (2022), Fundaspring (2024), Hooley and Dodd (2017), Kettunen et al. (2019), Ojonugwa and Agbaje (2020), Okolie et al. (2021), and ONET Resource Center(2025), among others, have shown that there are several digital tools which can be used by counsellorship career guidance. These digital tools as indicated by the afore-mention authorities include the following: Online career assessment platforms (self-administered inventories) with such examples like the ONET career tools, Holland/RIASEC-based quizzes, interest and values inventories, which helps students to identify interests/aptitudes and suggest occupational clusters; generate printable or digital reports counsellors can discuss with students. In practice, secondary schools often use free or low-cost versions; counsellors interpret results in face-to-face follow-up. Another digital resource or device is the video-conferencing platforms (synchronous counselling and webinars) and examples includes Zoom, Microsoft Teams, and Google Meet, which enables one-to-one remote counselling, group career talks, and virtual guest-speaker sessions. During periods of restricted face-to-face activity (e.g., pandemic) many Nigerian schools adopted video conferencing for counselling, though reliability depends on bandwidth and data costs. Social messaging and social media platforms with such examples as the WhatsApp groups, Facebook pages, Telegram channels, are digital resources used for quick dissemination of information (application deadlines, scholarship notices), group discussions, appointment scheduling. These

are the most widely used digital channels in Nigerian schools because they are low-cost and familiar to students and staff. Career information portals and job boards which includes national job portals, LinkedIn, and local graduate recruitment pages, are used to provide labour-market information, entry requirements, employer profiles and internship opportunities. Counsellors can use these to update students on available pathways and employer expectations. In Nigerian secondary schools, counsellors often curate links and share them via school WhatsApp or noticeboards. E-portfolios and digital portfolios with such examples as the Google Sites, Microsoft Sway, portfolio modules in LMS are essential for students to build evidence of skills, achievements, and reflective career statements useful for applications. Portfolios are increasingly recommended but underused in many secondary schools due to lack of guidance and time to implement. Career management and case-management systems with such examples as Morrisby (career management), school counselling software are equally used to track students' counselling history, outcomes of interventions, referrals to tertiary institutions or employers. Such systems increase professionalism but are rarely available in resource-constrained Nigerian schools. Mobile apps are useful digital resources or tools for career exploration and skills mapping. Its examples include short and accessible tools like Career Explorer, My Majors, and localized Nigerian career apps, used for students to explore careers on phones and helpful where smartphone access is widespread. Adoption in Nigerian secondary schools is emerging but uneven. Webinars and pre-recorded multimedia (asynchronous resources) with such examples as the YouTube career playlists, recorded talks by professionals and alumni, provides flexible access to career talks for large groups and can be replayed; popular where live events are impractical. Schools often compile such resources for classroom or self-study use.

Artificial Intelligence (AI) chatbots and personalized recommendation engines with such examples as AI career advisors, chatbots that suggest courses and pathways, are used to offer 24/7 basic guidance, CV tips, and personalized suggestions by interpreting user inputs. These tools are promising for scaling services (international evidence) but remain scarce in the average Nigerian secondary school due to cost, customization and trust considerations. Immersive and simulation tools

(VR/interactive simulations) which includes such examples as Virtual workplace tours, and career-specific VR experiences, help students “experience” work environments and improve realism in career exploration. These are high-value tools but have very low penetration in Nigerian secondary schools because of equipment and cost barriers. Similarly, recent literature and practice from a few scholars indicate that counsellors draw on a broad palette of digital resources that can be grouped into: (a) assessment and exploration tools (b) communication and delivery platforms, (c) information repositories and labour-market resources, and (d) administrative and case-management systems. Assessment/exploration platforms (e.g., ONET resources, online interest inventories) help match students’ interests, skills and values to occupations; communication platforms (video conferencing, WhatsApp) enable remote or blended career counselling; information repositories (career portals, job boards) provide up-to-date labour-market intelligence; and case-management systems allow counsellors to track follow-up, referrals and outcomes electronically (Herath & Reviewers, 2024; ONET, 2025). These categories reflect how digital tools extend and reshape traditional guidance tasks: assessment, information, counselling and placement. In the Nigerian context, studies from multiple States report growing awareness of digital tools among counsellors but inconsistent adoption due to infrastructural and skills gaps (Amgbara, 2022; research on Rivers, Ondo and Cross River states). Where used, the most common platforms are social messaging apps (WhatsApp), video conferencing, basic career assessment websites, and locally adapted e-resources; advanced systems (AI-driven profiling, VR simulations) remain rare in many secondary schools because of cost and connectivity limitations. Together, all these tools show the technological breadth available to modern career guidance programmes. In Delta State, as elsewhere in Nigeria, practice tends to concentrate around low-cost, mobile-friendly channels (WhatsApp, YouTube, simple assessment websites), with limited use of formal career management systems, AI or VR, largely for different reasons. Empirical studies across Nigeria show that utilization is variable and generally modest: many counsellors use one or two basic digital channels (e.g., WhatsApp, YouTube, simple online assessments) but rarely integrate a full suite of digital career services into routine programming (Adegboyega et al., 2022; Amgbara, 2022; Iroegbu & Eze,

2021; Nwokolo & Anyamene, 2019; Okeke & Ogbuanya; Okorodudu & Ijeoma, 2022; Vuorinen et al.2021). Main limiting patterns are (1) opportunistic use (ad hoc WhatsApp groups, occasional webinars) rather than systematic service design, (2) unequal access between urban and rural schools, and (3) heavy dependence on counsellors' personal devices and initiative rather than school-funded systems (ERIC review; ResearchGate Nigeria studies). These patterns likely apply to Delta State, as well given similar regional constraints reported across southern Nigerian States.

Additionally, discussing the challenges hindering counsellors in the utilization of digital tools for career guidance in senior secondary schools in Delta State, several literatures such as those of Akpan and Eze (2022),Eze and Okeke (2021),Hooley et al. (2021), OECD (2021), Okeke and Okonkwo (2023), among others, have identified multiple, often interacting, barriers that constrain counsellors' effective use of digital tools, and they include: inadequate infrastructure and connectivity, limited digital literacy and professional training for counsellors, financial constraints and lack of institutional support, policy gaps and weak integration into school systems, cultural and attitudinal factors, content relevance and localization challenges, and issues relating to sustainability and maintenance (technical support).Many Nigerian schools experience unreliable electricity and low-bandwidth internet or high data costs as a result of inadequate infrastructure and connectivity, which limit the viability of synchronous tools (video conferencing) and cloud-based platforms (ERIC review; Ondo and other state studies). Where connectivity exists, it is frequently restricted to urban centres (ERIC, 2024;ResearchGate, 2024/2025). Counsellors often lack formal training in ICT-enhanced counselling techniques, assessment interpretation from online tools due to limited digital literacy and professional training, or ethical/privacy management in digital spaces. Studies show awareness exists, but readiness and competence to use social media, AI tools or case-management software are inconsistent. Professional development has not kept pace with technology adoption (ERIC, 2024; ResearchGate, 2024/2025). Also, procurement of licensed career platforms, subscription fees for premium assessment tools, and purchase of devices require budgets many schools do not have due to financial constraints. Counsellors frequently rely on personal devices and out-of-pocket data, making sustained, equitable service delivery difficult (ERIC, 2024).

Where ICT policies exist, they often prioritize instructional uses (teaching/learning) and neglect guidance and counselling. This lack of explicit policy reduces allocation of resources to counselling digitalization and means career services are not systematically monitored or supported (ERIC, 2024). Resistance to change, especially concerns about data privacy, and preference for face-to-face interaction reduce adoption of some digital modalities hinders utilization of these digital tools and resources in career guidance. Parents and school leaders may also undervalue digital career services relative to established methods (ResearchGate, 2024/2025). Many high-quality digital career resources are globally oriented and may not reflect local labour-market realities (Nigerian entry requirements, local trades, informal sector pathways), reducing perceived usefulness for counsellors and students. Customization requires expertise and resources. Once procured, digital tools require ongoing updates, training refreshers and technical support, resources that many schools cannot guarantee. As a result, initiatives often decline after an initial pilot phase (ERIC, 2024). These interrelated challenges explain why uptake of advanced digital career tools in Delta State's senior secondary schools is likely to be uneven: basic, low-cost tools (WhatsApp, recorded videos, basic online assessments) dominate, while integrated systems, AI tools, and immersive resources remain largely aspirational unless addressed by targeted reforms (policy, funding, capacity building) (ResearchGate, 2024/2025).

To increase meaningful utilization, the literature recommends a combination of: targeted professional development for counsellors on digital tools and ethics, central procurement or subsidized access to core career platforms to ensure equity across schools, investment in basic infrastructure (reliable power, school Wi-Fi or data packages), and localizing content (aligning online resources with Nigerian/Delta labour-market realities). Pilot projects that combine training, technical support and low-cost tools (e.g., curated resource banks + WhatsApp outreach + periodic webinars) have shown practical promise in similar Nigerian contexts and can be scaled if accompanied by monitoring and policy integration (ResearchGate, 2024/2025). Existing evidence shows the technological potential to transform career guidance in Delta State's senior secondary schools but also documents a consistent pattern: awareness and sporadic use of digital tools are growing, yet systematic,

equitable and sustained utilization is constrained by infrastructure, training, policy and finance. This study's empirical focus on types, extent and challenges is therefore timely and necessary to produce actionable recommendations for policymakers, school leaders and counsellor training programmes. It based on this background that the researcher is motivate to investigate counsellors' utilization of digital tools for career guidance in senior secondary schools in Delta State.

Statement of the Problem

Career guidance definitely plays a vital role in senior secondary education, equipping students with the knowledge and skills needed to make informed career choices and to successfully transition into higher education or the world of work. In Nigeria, where unemployment and skills mismatch remain pressing challenges, career guidance is expected to help students align their aspirations with labour market demands as indicated in the studies of Nwosu and Igbokwe (2020). Traditionally, counsellors in schools have relied on face-to-face counselling sessions, printed career manuals, and classroom talks to guide students. However, with the increasing integration of information and communication technology (ICT) in education, school counsellors are now expected to utilize digital tools such as online career assessment platforms, webinars, e-counselling systems, mobile applications, and social media for career guidance. Despite the potential of these digital tools to enhance counselling services, evidence indicated that their utilization by school counsellors in Nigeria remains low and inconsistent as identified in the background by some previous studies. Several factors, including inadequate digital literacy among counsellors, insufficient infrastructure, limited internet connectivity, and lack of institutional support, among others, have hindered the full integration of digital tools into guidance services. This reality raises concerns about whether secondary school students in Delta State are receiving career guidance that meets the demands of the 21st-century workplace. Moreover, while many studies in Nigeria have examined issues such as the general provision of guidance and counselling services, counsellors' professional development, or students' career decision-making, fewer have specifically focused on the utilization of digital tools for career guidance in the

context of senior secondary schools. Most existing studies emphasize ICT use in teaching and learning rather than in counselling and career guidance.

Consequently, there is a paucity of empirical data on the types of digital tools school counsellors employ for career guidance, the extent of utilization of such tools, and the peculiar challenges counsellors face in adopting them in Delta State. If these gaps remain unaddressed, there is a risk that senior secondary school students will continue to rely on outdated methods of career guidance that do not reflect the realities of a digitized economy. This misalignment may contribute to poor career choices, increased unemployment, and a lack of preparedness for higher education and the labour market. This present study sought to fill the gap by providing empirical evidence on the utilization of digital tools by school counsellors for career guidance in senior secondary schools in Delta State. Unlike previous works that focused broadly on counselling services or ICT use in teaching, this study narrows its scope to the specific integration of digital tools in career guidance, thereby identifying the types of digital tools commonly used, the extent of their utilization, and the challenges hindering their adoption. The findings of this study are expected to guide policymakers, educational stakeholders, and school administrators in improving counselling practices and promoting effective use of digital technologies for career development among secondary school students.

Purposes of the Study

The purpose of this study was to examine counsellors' utilization of digital tools for career guidance in senior secondary schools in Delta State. Specific objectives of this study sought to:

1. Identify the types of digital tools commonly employed by counsellors in providing career guidance in senior secondary schools in Delta State.
2. Investigate the extent to which counsellors utilize digital tools for career guidance in senior secondary schools in Delta State.
3. Examine the challenges hindering counsellors in the utilization of digital tools for career guidance in senior secondary schools in Delta State.

Research Questions

The following research questions guided the study:

1. What are the types of digital tools commonly employed by school counsellors in providing career guidance in senior secondary schools in Delta State?
2. To what extent do counsellors utilize digital tools for career guidance in senior secondary schools in Delta State?
3. What challenges hinder counsellors in the utilization of digital tools for career guidance in senior secondary schools in Delta State?

Methods

The descriptive survey research design was employed in the study. This research design entailed conducting a field investigation using a research instrument, that is, a researcher-self developed questionnaire to collect data from a sample of counsellors within their large population of counsellors in public secondary schools in Delta State. Information retrieved from the sample of counsellors were analyzed using an appropriate statistical tool in order to generate data and draw generalization on the study based on the findings. The population for the study comprised 488 counsellors from 488 public senior secondary schools in Delta State. Justification for selecting only the school counsellors was because they were directly involved in the study and were in better position to describe their utilization of digital tools for career guidance in senior secondary schools in Delta State. Sample size for the study consisted of 244 counsellors drawn at (50%) selected using the proportionate stratified random sampling technique. The proportionate stratified random sampling technique was employed in order to enable the researcher stratify and draw sample of the counsellors according to their geographical locations and schools. Nworgu (2015) opined that sample which ranged from 10% to 80% is representable and enough in situations where there is a large population in a study. As regards the sample used in the present study is sizeable enough to conduct the study. A 41-item questionnaire developed by the researcher and titled “Counsellors Utilization of Digital Tools for Career Guidance Questionnaire (CUDTCGQ)” served as the primary instrument for

data collection. Construction of the research instrument was based on the purpose of the study and research questions. The response items on the questionnaire were structured on a 4-point rating scale of Strongly Agree (SA) – 4 points, Agree (A) – 3 points, Disagree (D) – 2 points and Strongly Disagree (SD) – 1 point, in order to answer research question 1 and 3. While a rating scale of Very High Extent (VHE) – 4 points, High Extent (HE) – 3 points, Low Extent (LE) – 2 points and Very Low Extent (VLE) – 1 point, was used to answer research question 2. The questionnaire was validated by one expert from guidance and counselling department, one expert from Educational Technology and one Measurement and Evaluation expert, from Nnamdi Azikiwe University Awka, Anambra State. The experts validated the questionnaire to determine its face and content validity. Few corrections were made on the questionnaire by the experts based on double-barrel items, content coverage and sentence/language construction. The instrument was corrected before its final administration to the counsellors. Reliability of the instrument was ascertained through a pilot test conducted once by administering the instrument to a sample of 15 counsellors from 15 secondary schools in Delta State, which were not part of the study. Data obtained from these counsellors were computed using the Cronbach Alpha method to give internal consistency reliability coefficients of 0.84, 0.89 and 0.93, for the three clusters respectively and were added up and divided to give an overall reliability value of 0.89, indicating a high level of internal consistency of reliability. This result showed that the instrument was reliable and dependable to conduct the study. Data were retrieved from the respondents through direct and face to face contact with the help of three research assistants. An on-the-spot method was employed as well, which enabled the researcher and the three research assistants to meet the respondents, that is, school counsellors in their respective schools to wait and collect the necessary information from them. The research assistants were instructed on how to collect the necessary information from the school counsellors using the questionnaire. At first, the research assistants took permission from the principal before administering the questionnaire to the school counsellors. Distribution of the questionnaire to the respondents took a period of five working days in which data were collated and sent for data analysis. A total of 244 copies of the questionnaire were distributed to 244 counsellors and all of them were retrieved

at a 100% rate of return. Data were analyzed using mean rated at 2.50 and standard deviation statistics. The decision rule for taking decisions on the items on the questionnaire was that any mean score which rated at 2.50 and above was regarded to be in support of the statement and therefore termed as agree or high extent. Any mean score rated below 2.50 was regarded as not in support of the statement and therefore termed disagree or low extent.

Results

Research Question 1: What are the types of digital tools commonly employed by school counsellors in providing career guidance in senior secondary schools in Delta State?

Table 1: Mean Score Rating and SD of Counsellors on Types of Digital Tools Commonly Employed by School Counsellors in Providing Career Guidance in Senior Secondary Schools in Delta State
N = 244 Counsellors

S/N	Please share your agreement concerning the types of digital tools commonly employed in providing career guidance for senior secondary school students in your school	SA	A	D	SD	Mean	SD	Decision
1.	WhatsApp groups including messages for career announcements	76	105	36	27	2.94	0.95	Agree
2.	Facebook page likewise group for school career info	22	44	109	69	2.08	0.90	Disagree
3.	YouTube (pre-recorded career talks / playlists)	34	58	99	53	2.30	0.96	Disagree
4.	Zoom, Google Meet including MS Teams for webinars in career guidance or counselling	49	64	74	57	2.43	1.06	Disagree
5.	Online career assessment websites	27	68	83	66	2.23	0.97	Disagree

	(interest/aptitude quizzes)								
6.	Mobile career apps (e.g., career exploration apps)	24	59	90	71	2.15	0.95	Disagree	
7.	LinkedIn or other professional networking sites (used by students including counsellors)	42	53	72	77	2.25	1.08	Disagree	
8.	SMS (text) alerts about career events or opportunities	78	114	40	12	3.06	0.82	Agree	
9.	School website or portal career section	44	46	89	65	2.28	1.05	Disagree	
10.	E-portfolio tools (Google Sites, MS Sway, etc.)	38	40	75	91	2.10	1.07	Disagree	
11.	Career information portals including job boards (national/local)	15	27	82	120	1.74	0.88	Disagree	
12.	Career case-management software likewise digital records	26	47	107	64	2.14	0.93	Disagree	
13.	AI chatbots including automated career guidance tools	39	51	115	39	2.37	0.93	Disagree	
14.	Virtual reality (VR) or simulation experiences for workplace tours	43	60	85	56	2.37	1.02	Disagree	
Grand Mean Score & SD						=	2.32	1.02	Disagree

Analysis of data from Table 1 indicated that only items 1 and 8 were rated above 2.50 of the acceptable mean scores by the school counsellors in order to show that they agreed with these statements. All the other items from 2 - 7 and 9 - 14 were rated below 2.50 of the acceptable mean scores by the school counsellors in order to show that they disagreed with these statements. The grand mean score and standard deviation scores are 2.32 and 1.02, showing that there was no wide spread deviation in the respondents' negative responses respectively. The result therefore, revealed that the types of digital tools commonly employed by school counsellors in providing career guidance in senior secondary schools in Delta State, which was only in the

aspects of use of WhatsApp groups including messages for career announcements and SMS (text) alerts about career events or opportunities. All the other digital tools were not commonly employed by school counsellors in providing career guidance in senior secondary schools in Delta State.

Research Question 2: To what extent do counsellors utilize digital tools for career guidance in senior secondary schools in Delta State?

Table 2: Mean Score Rating and SD of Counsellors on the Extent to which they Utilize Digital Tools for Career Guidance in Senior Secondary Schools in Delta State
N = 244 Counsellors

S/N	Please share your agreement concerning the extent to which you utilize the under listed digital tools in career guidance for senior secondary school students in your school	VHE	HE	LE	VLE	Mean	SD	Decision
15.	WhatsApp groups including telegram channels messages for social messaging, career announcements, group discussions	46	34	89	75	2.21	1.08	Low Extent
16.	Facebook page likewise group for school career information (career video display, application deadlines, scholarship notices)	26	30	79	109	1.89	0.99	Low Extent
17.	YouTube (pre-recorded career talks / playlists) for quick dissemination of information	17	42	116	69	2.03	0.86	Low Extent
18.	video-conferencing platforms or digital resource such as Zoom, Google Meet including MS Teams for webinars in career guidance or synchronous counselling enabling one-to-one remote counselling, group career talks, and virtual guest-	33	47	107	57	2.23	0.96	Low Extent

	speaker sessions							
19.	Online career assessment websites or platforms (interest/aptitude quizzes/values inventories), helping students to identify interests/aptitudes and suggest occupational clusters	22	34	112	76	2.01	0.90	Low Extent
20.	Mobile career apps (e.g., career exploration apps) for career exploration likewise skills mapping	31	44	83	86	2.08	1.02	Low Extent
21.	LinkedIn or other professional networking sites used by students including counselors to facilitate connections with other industry professionals in the labour-market	33	29	85	97	1.99	1.03	Low Extent
22.	School website or portal career section which provides up-to-date labour-market intelligence and networking including offering resources to help students explore different career paths or interests	40	31	101	72	2.16	1.03	Low Extent
23	SMS (text) alerts about career events or opportunities	39	26	113	66	2.16	1.00	Low Extent
24.	E-portfolio tools (Google Sites, MS Sway, etc.) essential for students to build evidence of skills, achievements, and reflective career statements useful for applications	27	30	106	81	2.01	0.95	Low Extent
25.	Career information portals including job boards (national/local) used to provide labour-market information, entry requirements, employer profiles and internship	21	35	80	108	1.87	0.96	Low Extent

	opportunities								
26.	Career case-management software likewise digital records useful for tracking students' counselling history, outcomes of interventions, referrals to tertiary institutions or employers	26	43	81	94	2.00	0.99	Low Extent	
27.	AI chatbots including automated career guidance tools used to offer 24/7 basic career guidance, CV tips and personalized suggestions by interpreting user inputs	20	38	99	87	1.96	0.92	Low Extent	
28.	Virtual reality (VR) or simulation experiences for workplace tours which help students "experience" work environments and improve realism in career exploration	15	48	103	78	2.00	0.87	Low Extent	
Grand Mean Score & SD						=	2.04	0.97	Low Extent

Analysis of data from Table 2 indicated that none of the items were rated above 2.50 of the acceptable mean scores by the school counsellors in order to show that they agreed with any of these statements to a high extent. All the other items from 15-28 were rated below 2.50 of the acceptable mean scores by the school counsellors in order to show that they disagreed with these statements to a low extent. The grand mean score and standard deviation scores are 2.04 and 0.97, showing that there was no wide spread deviation in the respondents' negative responses respectively. The result therefore, revealed that the extent to which the school counsellors utilized digital tools for career guidance in senior secondary schools in Delta State, was to a low extent.

Research Question 3: What challenges hinder counsellors in the utilization of digital tools for career guidance in senior secondary schools in Delta State?

Table 3: Mean Score Rating and SD of Counsellors on the Challenges that Hindered them in Utilization of Digital Tools for Career Guidance in Senior Secondary Schools in Delta State

N = 244Counsellors

S/N	Please share your agreement concerning the challenges that hinder utilization of digital tools in career guidance for senior secondary school students in your school	SA	A	D	SD	Mean	SD	Decision
29.	Unreliable electricity or power outages	103	88	29	24	3.11	0.96	Agree
30	Poor or costly internet including data connectivity	111	102	21	10	3.29	0.79	Agree
31.	Lack of school budget for procurement of digital tools including subscriptions and paid career platforms due to high cost	117	107	13	7	3.37	0.72	Agree
32.	Poor mobilization of digital devices (such as smartphones, tablets, computers)for students including school counsellors	102	95	25	22	3.14	0.93	Agree
33.	Limited digital literacy including ICT skills or proficiency among school counsellors	105	101	20	18	3.20	0.88	Agree
34.	Insufficient training on using digital career tools for both students and counsellors	107	112	16	9	3.30	0.75	Agree
35.	Lack of technical support including IT maintenance at school	104	113	12	15	3.25	0.81	Agree
36.	Absence of school policy supporting digital guidance counselling services	99	94	31	20	3.11	0.92	Agree

37.	Concerns over student privacy including data protection in career guidance	87	69	52	36	2.85	1.07	Agree	
38.	Resistance to change from school leadership, counsellors or parents to online methods	94	83	26	41	2.94	1.08	Agree	
39.	Difficulty in localizing global digital career content to local labour market	89	92	35	28	2.99	0.98	Agree	
40.	Lack of time to design likewise curate digital resources	100	116	11	17	3.23	0.83	Agree	
41.	Students' low digital skills or digital distraction	97	90	38	19	3.09	0.93	Agree	
Grand Mean Score & SD						=	3.14	0.91	Agree

Analysis of data from Table 3 indicated that all the items from 29 - 41 were rated above 2.50 of the acceptable mean scores by the school counsellors in order to show that they agreed with these statements. None of these items were rated below 2.50 of the acceptable mean scores by the school counsellors in order to show that they disagreed with the statements. The grand mean score and standard deviation scores are 3.14 and 0.91, showing that there was no widespread deviation in the respondents' negative responses respectively. The result therefore revealed the challenges which hindered counsellors in the utilization of digital tools for career guidance in senior secondary schools in Delta State.

Discussion of Findings

It was discovered through the findings of this study that the only digital tools commonly employed by the school counsellors in providing career guidance in senior secondary schools in Delta State, were WhatsApp groups including messages for career announcements and SMS (text) alerts about career events or opportunities. All the other advanced digital tools which included the use of Facebook page likewise group for school career info, YouTube (pre-recorded career talks / playlists),

Zoom, Google Meet including MS Teams for webinars, online career assessment websites (interest/aptitude quizzes), mobile career apps (e.g., career exploration apps), LinkedIn or other professional networking sites (used by students including counsellors), school website or portal career section, e-portfolio tools (Google Sites, MS Sway, etc.), career information portals including job boards (national/local), career case-management software likewise digital records, AI chatbots including automated career guidance tools, Virtual reality (VR) or simulation experiences for workplace tours, were rarely or not commonly employed by school counsellors in providing career guidance in senior secondary schools in Delta State. This finding indicated a limited adoption of diverse digital platforms despite the global growth of technology integration in career guidance counselling. Similar trends were reported by the findings of Okolie et al. (2021) study which found that Nigerian school counsellors still relied on basic ICT tools such as SMS, emails and WhatsApp, while neglecting interactive platforms like webinars and online assessment tools. This finding further agrees and concurs with the findings of Ede et al. (2021) study which found out that counsellors in Nigerian schools often depend on the most accessible and low-cost communication tools such as SMS and WhatsApp for counselling services due to infrastructural challenges. Similarly, Ojinaga and Agbaje (2020) reported that Nigerian school counsellors tend to adopt digital tools that are mobile-friendly, low-cost, and require minimal technical expertise. Likewise, the present study finding corroborates and aligns with the findings of Adebowale and Afolabi (2020) study which confirmed that African school counsellors underutilized modern career platforms due to infrastructural limitations. In contrast, the findings of empirical studies from developed contexts (e.g., Hooley & Dodd, 2017; Kettunen et al., 2019) confirmed the widespread use of online career assessment websites, e-portfolios and professional networking platforms as integral to modern career guidance practices. This contrast indicates a digital divide between Nigerian schools and their counterparts globally.

It was also discovered through this finding that the extent to which the school counsellors utilized all these digital tools such as: WhatsApp groups, Facebook page and group, YouTube (pre-recorded career talks/playlists), Zoom, Google Meet including MS Teams for webinars, online career assessment websites

(interest/aptitude quizzes), mobile career apps (e.g., career exploration apps), LinkedIn or other professional networking sites, school website or portal career section, SMS (text) alerts, among others, for career guidance in senior secondary schools in Delta State, were all to a low extent. This finding implied that counsellors' extent of utilization of digital tools was generally low, even for tools that were available. While WhatsApp and SMS were employed occasionally, other tools such as YouTube, Zoom, and LinkedIn were rarely used. This indicates that digital counselling practices have not been institutionalized in most schools across Delta State. This finding resonates with the findings of Nwokolo and Anya Mene (2019) study which reported that secondary school counsellors in Nigeria still underutilize digital platforms in providing career guidance, relying mainly on traditional methods like face-to-face sessions. Likewise, this finding agrees and conforms with the findings of Iroegbu and Eze (2021) which found that counsellors in Nigerian secondary schools were underutilizing ICT-based resources despite acknowledging their potential benefits for student career development. The present study finding is also consistent with the findings of Adegboyega et al. (2022) study which showcased low adoption of ICT tools in guidance and counselling across Nigerian secondary schools, largely due to poor infrastructure and lack of institutional support. Similarly, the findings of Okoro Dudu and Ijeoma (2022) study confirmed that although some Nigerian schools had access to online tools, their adoption was low due to lack of adequate training and technical support. However, research from European contexts (e.g., Vuorinen et al., 2021) demonstrates that digital platforms are increasingly integrated into school counselling to promote students' career decision-making and readiness for the labour market. Thus, the low utilization observed in Delta State highlights a missed opportunity to leverage digital innovations for enhancing career guidance. These findings indicate that the problem is not lack of awareness but systemic barriers that limit active implementation.

Finally, it was found out through this finding that the challenges which hindered counsellors in the utilization of digital tools for career guidance in senior secondary schools in Delta State included the following: unreliable electricity or power outages, poor or costly internet including data connectivity, lack of school budget for procurement of digital tools including subscriptions and paid career platforms due to

high cost, poor mobilization of digital devices (such as smartphones, tablets, computers) for students including school counsellors, limited digital literacy including ICT skills or proficiency among school counsellors, insufficient training on using digital career tools for both students and counsellors, lack of technical support including IT maintenance at school, absence of school policy supporting digital guidance counselling services, concerns over student privacy including data protection in career guidance, resistance to change from school leadership, counsellors or parents to online methods, difficulty in localizing global digital career content to local labour market, lack of time to design likewise curate digital resources, and students' low digital skills or digital distraction. This finding is in consonance and corresponds with the findings of Eze and Okeke (2021) study which also discovered that data costs, unreliable power supply, and low institutional support discouraged secondary school counsellors from employing modern digital tools.

On a global level, OECD (2021) similarly identified issues of privacy, digital divide and contextual adaptation as challenges even in technologically advanced nations. These challenges echo the findings of Okeke and Okonkwo (2023) study which identified lack of ICT infrastructure, poor funding, and digital skill gaps as significant obstacles to integrating ICT in school counselling services in Nigeria. Similarly, the findings of Akpan and Eze (2022) study reported that counsellors often face difficulty in adapting global digital career content to local labour market realities, which undermines the contextual relevance of career guidance. These challenges are consistent with the findings of Achor and Ugwuanyi (2020) study which indicated that infrastructural deficits and poor ICT skills were major barriers to digital adoption in Nigerian schools. Moreover, this study resonates with global perspectives. For instance, Hooley et al. (2021) argued that digital career tools such as LinkedIn, e-portfolios, and career assessment websites are increasingly vital for preparing students for a dynamic labour market. However, in low-resource contexts like Nigeria, counsellors are unable to harness such platforms effectively. The findings further align with the OECD (2021) which emphasized that digital divides in internet access, affordability and ICT literacy significantly affect the effectiveness of online career guidance in developing countries. The persistence of these barriers in Delta State highlights the urgent need for policy reforms, digital infrastructure

investments, and targeted capacity-building programmes for counsellors. Without addressing these barriers, school counselling will continue to lag in providing students with career services aligned to 21st-century realities. While counsellors in Delta State show willingness to adopt digital tools, their usage is restricted to simple, accessible platforms like WhatsApp and SMS. The underutilization of more advanced digital career guidance tools highlights systemic barriers that must be addressed through infrastructural support, capacity building, and supportive policies to enable counsellors to deliver effective career guidance in the digital era. Overall, the findings of this study confirmed that while school counsellors in Delta State occasionally used basic digital tools like WhatsApp and SMS for career guidance, their adoption of more sophisticated platforms remains at a very low extent. The challenges identified including infrastructural, financial, technical, and policy-related barriers, mirror findings from previous Nigerian and African studies, yet contrast sharply with the progressive integration of digital career guidance tools in developed countries like Nigeria, particularly, Delta State. This indicates that improving the capacity, infrastructure, and enabling environment for counsellors is essential to advancing digital career guidance practices in Nigerian secondary schools, especially, in the study area, Delta State.

Conclusion

This study examined the types of digital tools, the extent of their utilization, and the challenges hindering their use by school counsellors in senior secondary schools in Delta State. The study, however, concludes and submits that although school counsellors in senior secondary schools in Delta State have shown awareness of digital tools for career guidance, their actual utilization is limited to basic platforms such as WhatsApp and SMS to a low extent. More advanced tools like online career portals, e-portfolios, YouTube channels, and videoconferencing platforms remain largely underutilized. The findings further revealed that systemic challenges including poor ICT infrastructure, unstable electricity supply, inadequate funding, low digital literacy among counsellors and lack of institutional support, were among the major obstacles hindering effective utilization of digital tools for career guidance in senior secondary schools in Delta State. These barriers have restricted the capacity

of the school counsellors to provide comprehensive, interactive and globally competitive career support to students. Overall, the study confirmed that digital tools have substantial potential to enhance career guidance and counselling services in the secondary schools by improving student access to important career information, engagement and decision-making capacity. However, without deliberate investment in ICT infrastructure, counselor professional development, capacity building training and retraining likewise, supportive policies, the full benefits of digital career guidance in enhancing students' preparedness for dynamic labour markets in Delta State's secondary schools, remain unrealized. This study indicates the need for coordinated interventions that align technological resources with counsellors' professional capacity and school-level institutional support.

Recommendations

Based on the findings of this study, the following recommendations were proffered:

1. Delta State Government in collaboration with the Post Primary Education Board (PPEB) and support from the private sector should prioritize the provision of modern reliable digital infrastructure, including internet connectivity, computers, and stable electricity, to enable counsellors to effectively utilize a wide range of advanced digital tools such as WhatsApp, Facebook, YouTube, Zoom, Google Meet, MS Teams, online career assessment websites, mobile career apps, LinkedIn or other professional networking, school website or portal career section, e-portfolio tools, among others, for career guidance services in senior secondary schools in the State.
2. Regular professional development programmes should be organized by the school administrators and authorities through support of the regulatory agency – PPEB and State Ministry of Education in order to equip school counsellors with digital literacy skills and competencies in using modern digital career guidance tools such as online career portals, e-portfolios, and interactive counselling platforms, among others, for enhancement of career guidance in senior secondary schools in Delta State.

3. Education policymakers, including curriculum developers and other education practitioners in Delta State should enforce guidelines that integrate digital career guidance into school counselling practices. This includes allocating specific budgets for the integration of ICT/digital tools in counselling units and encouraging collaboration with technology providers to ensure sustainability and improve career guidance services in all senior secondary schools in the State.

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