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Assessment of the Readiness of Guidance Counselling Professionals in Adapting to Technology in their Practice in Institutions of Learning in Katsina State, Nigeria

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Abstract:

The research examined the readiness of Guidance Counselling professionals to embrace technology in tertiary educational institutions in Katsina State. Four objectives and four research questions guided the study. The study adopted a survey design for the study. Ten (10) tertiary institutions and six two (62) counselors formed the sample of the study. One validated instrument with a reliability coefficient of 0.78 named Readiness of Counselling Professional to adapt to technology in their Practice guided data collection. Data analysis was conducted by providing answers to the study's research questions, where each statement was rated using a simple majority percentage rule, and statements with higher percentages were accepted. The study reveals that guidance counseling professionals in tertiary institutions in Katsina State possess a high level of technological literacy and hold positive attitudes towards adopting technology in their practices. However, significant barriers hinder the effective adoption of technology. Furthermore, the current state of technology integration is inadequate, the study recommends that educational institutions should invest in technology infrastructure, additional training and support, guidelines, and policies that sustain the effective use of technology in Counselling services.

Keywords: Technology, Guidance Counselling, Readiness, Institutions of learning.

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Introduction

Technological advancements have touched almost every aspect of education, transforming how students learn and how educators teach. In recent years, guidance counseling has also felt this impact. Just like in other fields, counseling is undergoing a technological revolution, with these advancements expanding the options available for counselors to address the diverse needs of clients, as well as supporting counselor educators and those in training. Technologically assisted guidance counselling refers to the use of digital tools, such as telecounselling, video conferencing, online platforms, mobile applications, and virtual advisors, to provide guidance, support, interventions, and advice to students in their academic and personal development (Woo, 2020).

Traditionally, counselling has been grounded in face-to-face and corresponding communications between counsellors and their clients. More recently, though, the concept of face-to-face practice has been challenged by those who have encouraged for the use of diverse forms of technology in practice. National Board for Certified Counsellors (NBCC, 2016). Their views have reflected a new model that includes the incorporation of technology into counsellor training and practice, because of its availability, benefits and varied applications specifically, the expansive growth of computer and Internet-based technologies offers new alternatives for the delivery of counselling services (Watts, 2002). For clients, email-based counselling, chat-rooms, cyber therapy, online self-help and support groups, and numerous counselling information websites provide the convenience of professional services regardless of time and location (Barak and Grohol 2011). Internet-based counselling can be attractive and beneficial to many clients as it is likely to increase the ease of clients' access to resources; is less intimidating to certain client populations; is cost effective; and is suitable for those who live in remote areas and/or those who are unable to undertake face-to-face counselling for various reasons.

For counsellors, the need to incorporate technology in their work has also increased. For example, during the COVID-19 pandemic, conducting counselling sessions on-line (e.g., videoconferencing or web-based messaging) has become much closer to being standard practice, given the circumstances and the need to avoid risks of infection in the counselling office (Reidbord 2020). Technological advances being utilized by counsellors relate directly to the various regular elements of counselling (National Board for Certified Counsellors [NBCC], 2016). For example, technologies offer counsellors several opportunities, including taking digitally stored case notes, advertising counselling services to broader client populations, consulting with professional colleagues, even internationally, and receiving and sharing information via professional list servers (McFadden & Jencius 2000). Technologies also make it possible for counsellors to provide and/or participate in distance education, online courses and presentations, web-based messaging, and videoconferencing (Shallcross 2011). As Baltimore (2001) asserted, it is indeed difficult to think of counsellors without them using technology in some form in their practice.

As the use of technology and technological tools in counselor training and practice has evolved as a new dimension, many counselling scholars have begun to explore various topics related to technology integration in their research. This research literature focuses on the conceptualization of certain variables and Unified Theory of Acceptance and Use of Technology (UTAUT) as a theoretical framework.

Technologically assisted guidance counselling refers to the use of digital tools, platforms, and technology-driven methods to provide guidance and support to individuals seeking counselling services. Murray (2011). This approach influences technology to increase the accessibility, reach, and effectiveness of guidance counselling. The use of various digital tools, such as online platforms, apps, virtual reality, or telecounselling, to facilitate counselling sessions, share resources, and track progress. Studies have shown that technologically assisted guidance counselling can improve access, reduce geographic barriers, and offer innovative ways to address clients' needs. According to Dzemidzic, Tony and Berit (2019) technologically assisted guidance counselling involves the use of digital technologies to provide counselling and support services. This approach extends the reach of counselling beyond traditional face-to-face interactions. Research shows that technology-assisted counselling can enhance accessibility and engagement. Watson (2019) explored the effectiveness of online counselling in higher education. They found that online counselling services were highly accessible and met the diverse needs of students.

Traditional counselling, refers to the conventional approach to providing guidance and support through face-to-face interactions.(Geldard, and Geldard, 2008) This mode of counselling typically involves in-person meetings between the counsellor and the client. Traditional counselling has been the standard practice for many years, emphasizing the importance of a therapeutic relationship, non-verbal communication, and direct personal interaction.(Corey, 2016) While effective, it may present limitations, such as geographical constraints and scheduling conflicts, which technologically assisted counselling aims to address. (Dzemidzic et al., 2019) Traditional counselling refers to in-person counselling sessions conducted between a counselor and a client. This conventional approach has been widely practiced for decades. Dryden and Thorne (2018) discussed the enduring relevance of face-to-face counselling. They highlighted the importance of the therapeutic relationship in traditional counselling.

Readiness in counselling professionals refers to their preparedness and willingness to adopt technology in their practice. Readiness assessments often include evaluations of technological proficiency, attitudes, and training needs. McCullough et al. (2018) conducted a study on counselling professionals' readiness for online counselling. They assessed the technological skills and attitudes of counsellors toward technology adoption. Adapting involves the unified incorporation of technology into counselling practices. It aims to enhance the quality and accessibility of counselling services while considering ethical and practical considerations. Toprac et al. (2021) investigated the integration of telecounselling into university counselling centers. They highlighted the importance of maintaining ethical standards while integrating technology to extend services. The literature reflects a growing interest in the intersection of technology and counselling, with studies exploring the effectiveness, challenges, and ethical considerations associated with technologically assisted guidance counselling. It also highlights the continuing significance of traditional counselling practices, especially in the context of personal relationships and therapeutic relations. The readiness of counselling professionals and the successful integration of technology into counselling services are central focuses in this growing field.

Statement of the problem

The rapid advancement of technology has transform various professional field, including counselling. In many parts of the world, counselling profession have increasingly integrated technological tools and platforms into their practice to enhance service delivery, improve client engagement, and extend the reach of their services. However, in many developing region, including Katsina State, Nigeria, the readiness of counselling professionals to adapt to these technological advancement remains uncertain. Guidance and counselling play vital role in supporting: academic, vocational, emotional and psychological well-being of the students. Several factors may influence the readiness of the guidance counselling professionals, including access to technological resources, training and professional development, attitude toward technology and perceived benefit of technology to counselling practice. The lack of readiness could lead to sub-optimal services delivery, thereby affecting quality of care provided to the students. Therefore, this research assesses the readiness of counselling professionals in Katsina State to adapt to and integrate technology into their practice.

Objectives of the study

The objectives of the study are to:

1. Assess the current level of technological literacy among guidance counseling professional of institutions of learning in Katsina State, toward the adoption of technology in their practice.

2. Investigate the attitude of Guidance Counselling professional of tertiary institutions of learning in Katsina State, toward the adoptive technology in their practice.
3. Identify the perceived barriers concerns, or challenges that may hinder the integration of technology in guidance counselling services in tertiary educational institutions of Katsina state.
4. Examine the current state of technology integration in counselling services within institutions of learning.in Katsina State,

Research Questions

The following research Questions were raised to the study:

1. What is the current level of technological literacy among guidance counseling professional of tertiary institutions of learning in Katsina State, toward the adoption of technology in their practice?
2. What is the attitude of Guidance Counselling professionals of tertiary institutions of learning in Katsina State, toward the adoptive technology in their practice?
3. What are the perceived barriers concerns, or challenges that may hinder the integration of technology in guidance counselling services in education institutions of Katsina state?
4. What is the current state of technology integration in counselling services within tertiary institutions of learning in Katsina State?

Methodology

The research design adopted for the study was survey research design. The population of the study consists of all Guidance Counselling professionals in the entire tertiary institutions of learning in Katsina state. Ten (10) tertiary institutions where selected randomly from three (3) political senatorial zones in the state. Equally, six two (62) counselor formed the sample of the study from the sampled institutions in the region. One validated instrument developed by the researchers, with reliability coefficient of 0.78 named, Readiness of Counselling Professional to adapt to technology in their Practice guided data collection.

Data Analysis

The data collected from the administration of the questionnaire to the respondents was sorted, collated, organized and use for data analysis. The analysis was conducted by providing answers to the research questions of the study where each statement was rated using simple majority percentage rule, where statements with higher percentages are accepted.

Research Question 1: What is the current level of technological literacy of guidance counselling professional toward the adoption of technology in their practice in tertiary institutions in Katsina State?

Table 1: Current level of technological literacy of guidance counselling professional toward adoption of technology in their practice in tertiary institutions in Katsina state

SN	Items	SA (%)	A (%)	D (%)	SD (%)	UD (%)
1	I am very confident in my ability to operate basic computer software such as word processing and email and alike.	24 (29.3)	35 (57.4)	01 (1.6)	01 (1.6)	-
2	I am very familiar with using digital devices such as computers, smartphones, or tablets etc.	30 (49.2)	29 (47.5)	-	02 (3.3)	-

3	I have received formal training in using technology for counseling purposes.	21 (34.4)	26 (42.6)	10 (16.4)	03 (4.9)	01 (1.6)
4	I am very comfortable with using online communication tools, such as telecounselling, video conferencing etc., for counseling sessions.	23 (37.7)	27 (44.3)	07 (11.5)	-	04 (6.6)
5	I am very familiar with using counseling software or client management systems.	21 (34.4)	22 (36.1)	13 (21.3)	04 (6.6)	01 (1.6)
6	I engage with technology in my daily work as a guidance counselor.	16 (26.2)	34 (55.7)	09 (14.8)	01 (1.6)	01 (1.6)
7	I am able to troubleshoot/solve a problem of basic technological issues that may arise during counseling sessions.	19 (31.1)	31 (50.8)	09 (14.8)	01 (1.6)	01 (1.6)
8	I feel confident in my ability to adapt to new technological advancements in the field of counseling.	21 (34.4)	38 (62.3)	01 (1.6)	-	01 (1.6)
	Cumulative aggregate	175 (35.9)	242 (49.6)	50 (10.2)	12 (2.5)	09 (1.8)

The table 1 presents the current level of technological literacy among guidance counseling professionals regarding the adoption of technology in their practice within tertiary institutions in Katsina State. The responses are categorized into five levels of agreement: Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD), and Undecided (UD). A significant majority (86.7%) of respondents feel confident in their ability to operate basic computer software, indicating a strong foundational technological literacy among guidance counselors. Almost all respondents (96.7%) are familiar with using digital devices, suggesting that they are well-equipped to integrate technology into their counseling practices. While a majority (77%) have received some form of training, a notable 16.4% disagree, indicating a gap in formal training that could hinder effective technology adoption in counseling. Approximately 82% of respondents are comfortable using online communication tools, reflecting a positive attitude towards telecounselling and video conferencing, essential for modern counseling practices. About 70.5% are familiar with counseling software, but a significant portion (21.3%) disagrees, indicating a need for more exposure and training in specialized counseling technologies.

Over 81% of respondents engage with technology in their daily work, suggesting that technology is becoming integral to their counseling practices. Approximately 81.9% of respondents feel capable of troubleshooting basic technological issues, which is crucial for maintaining smooth counseling sessions. A strong majority (96.7%) express confidence in adapting to new technologies, indicating a readiness to embrace advancements in the counseling field. The cumulative data shows that 85.5% of respondents either strongly agree or agree with the statements regarding their technological literacy. This indicates a generally high level of confidence and familiarity with technology among guidance counselling professionals in Katsina State. However, the presence of disagreement in certain areas, particularly regarding formal training and familiarity with counseling software, suggests that there are still opportunities for improvement in technological literacy and training programs to enhance the effectiveness of technology adoption in their practice.

Research Question 2: What are the attitudes of Guidance Counselling professional toward the adoption of technology in their practice in tertiary institutions in Katsina State?

Table 2: Attitudes of Guidance counselling professional toward the technology adoption in their practice in tertiary institutions in Katsina state

SN	Items	SA (%)	A (%)	D (%)	SD (%)	UD (%)

1	I believe that integrating technology into counseling improves its effectiveness	29 (47.5)	29 (47.5)	01 (1.6)	01 (1.6)	01 (1.6)
2	I am open to learning new technologies to improve counselling.	31 (50.8)	30 (49.2)	-	-	-
3	I see technology as a valuable tool for engaging with students in counseling.	31 (50.8)	30 (49.2)	-	-	-
4	I am committed to investing time and effort into integrating technology into counseling.	26 (42.6)	33 (54.1)	01 (1.6)	-	01 (1.6)
5	I reach agreement that, technology can overcome problems to access to counseling services.	25 (41.0)	29 (47.5)	03 (4.9)	-	04 (6.6)
6	I am aware that technology facilitates better communication and collaboration between counselors and students	29 (47.5)	30 (49.2)	01 (1.6)	01 (1.6)	-
7	I am willing to adapt counselling techniques to incorporate technology when appropriate.	26 (42.6)	30 (49.2)	02 (3.3)	01 (1.6)	02 (3.3)
	Cumulative aggregate	197 (46.1)	211 (49.4)	08 (1.9)	03 (0.7)	08 (1.9)

The table 2 outlines the attitudes of guidance counseling professionals towards the adoption of technology in their practice within tertiary institutions in Katsina State. A total of 95% of respondents believe that integrating technology improves counseling effectiveness, indicating a strong positive attitude towards technology's role in enhancing counseling services. All respondents are either strongly agreeing or agreeing that they are open to learning new technologies, reflecting a proactive mindset towards professional development and adaptation to technological changes. Similar to the previous item, 100% of respondents recognize technology as a valuable tool for engaging with students, highlighting its perceived importance in the counseling process. Approximately 96.7% of respondents express a commitment to investing time and effort into integrating technology into counseling, indicating a strong willingness to embrace technological advancements. About 88.5% believe technology can help overcome access issues to counseling services, suggesting a recognition of technology's potential to enhance service delivery, although some uncertainty remains as indicated by the disagreements.

A large majority (96.7%) are aware that technology facilitates better communication and collaboration between counselors and students, reinforcing the positive view of technology's role in counseling. Around 91.8% of respondents are willing to adapt counseling techniques to incorporate technology, indicating flexibility and readiness to evolve their practices in line with technological advancements. The cumulative data reveals that 95.5% of respondents either strongly agree or agree with the statements regarding their attitudes towards technology adoption. This indicates a generally positive attitude among guidance counseling professionals in Katsina State towards integrating technology into their practices. The low percentage of disagreement and undecided responses suggests that most professionals recognize the benefits and necessity of technology in enhancing counseling effectiveness and accessibility. However, the presence of some dissenting opinions highlights the need for ongoing training and support to address any concerns and facilitate a smoother transition to technology-enhanced counseling practices.

Research Question 3: What are the perceived barriers or challenges that may hinder the integration of technology in guidance counselling services in educational institutions of Katsina state?

Table 3: Perceived barriers or challenges that hider the integration of technology in guidance counselling services in educational institutions of Katsina state

SN	Items	SA (%)	A (%)	D (%)	SD (%)	UD (%)

1	I am concerned about the privacy and confidentiality of client information when using technology in counseling services.	20 (32.8)	38 (62.3)	02 (3.3)	01 (1.6)	-
2	I believe that lack of adequate training or expertise among counseling staff hinders the integration of technology in counseling services.	36 (59.0)	18 (29.5)	05 (8.2)	02 (3.3)	-
3	I perceive counseling staff to be resistant towards adopting new technology in their practice.	16 (26.2)	26 (42.6)	07 (11.5)	11 (18.0)	01 (1.6)
4	I think lack of support from institutional leadership hinders the integration of technology in counseling services.	25 (41.0)	32 (52.5)	03 (4.9)	01 (1.6)	-
5	I consider funding constraints to be a hindrance in integrating technology in counseling services.	24 (39.3)	34 (55.7)	02 (3.3)	01 (1.6)	-
6	I believe that confrontation to change among some counsellors within our institution affects the integration of technology in counseling services.	18 (29.5)	26 (42.6)	10 (16.4)	02 (3.3)	05 (8.2)
7	I notice lack of awareness among counseling staff regarding the potential benefits of technology integration in counseling services hold back incorporation of technological usage.	19 (31.1)	29 (47.5)	10 (16.4)	01 (1.6)	02 (3.3)
	Cumulative aggregate	158 (37.0)	203 (47.5)	39 (9.1)	19 (4.4)	08 (1.9)

The table 3 outlines the perceived barriers or challenges that may hinder the integration of technology in guidance counseling services within educational institutions in Katsina State. A significant majority (95.1%) of respondents express concern about the privacy and confidentiality of client information when using technology in counseling. This highlights a critical barrier, as fears regarding data security can impede the willingness to adopt technological solutions. An overwhelming 88.5% of respondents believe that inadequate training or expertise among counseling staff is a significant barrier to technology integration. This indicates a strong need for professional development programs to enhance staff capabilities in using technology effectively. While 68.8% perceive some level of resistance among counseling staff towards adopting new technology, the presence of 18% who strongly disagree suggests that this resistance may not be universal. Nonetheless, it points to a potential challenge that could be addressed through change management strategies. A total of 93.5% of respondents believe that insufficient support from institutional leadership hinders technology integration. This indicates that leadership buy-in and support are crucial for successful implementation of technological initiatives in counseling services.

About 95% of respondents consider funding constraints a significant barrier to integrating technology in counseling services. This emphasizes the need for adequate financial resources to support technology adoption and infrastructure development. A total of 72.1% perceive that resistance to change among some counselors affects technology integration. This suggests a need for strategies that foster a culture of adaptability and openness to new methods within counseling practices. Approximately 78.6% of respondents believe that a lack of awareness regarding the benefits of technology integration holds back its incorporation. This indicates the necessity for educational initiatives to inform counseling staff about the advantages and potential of technology in their practice. The cumulative data reveals that 84.5% of respondents either strongly agree or agree with the perceived barriers to technology integration. This indicates a strong consensus on the challenges faced in adopting technology in guidance counseling services. Key barriers include concerns about privacy, lack of training, resistance to change, insufficient support from leadership, funding

constraints, and lack of awareness of technology's benefits. Addressing these barriers through targeted training, leadership engagement, and resource allocation will be essential for enhancing the integration of technology in counseling services in Katsina State.

Research Question 4: What is the current state of technology integration in counselling services within institutions of learning in tertiary institutions in Katsina State?

Table 4: Current state of technology integration in counselling services within institutions of learning in tertiary institutions in Katsina state

SN	Items	SA (%)	A (%)	D (%)	SD (%)	UD (%)
1	I am very satisfied with how frequently technology based counselling services are offered at my institution	05 (8.2)	22 (36.1)	27 (44.3)	04 (6.6)	03 (4.9)
2	My institution has a comprehensive policies in place regarding the use of technology in counselling services	10 (16.4)	12 (19.7)	28 (45.9)	09 (14.8)	02 (3.3)
3	I am strongly helpful with the level of support provided by my institution for integrating technology into counselling services.	10 (16.4)	15 (24.6)	28 (45.9)	04 (6.6)	04 (6.6)
4	I believed technology integration has significantly improved the access to counselling services for students at my institution.	20 (32.8)	17 (27.9)	19 (31.1)	02 (3.3)	03 (4.9)
5	I am very satisfied with the current state of technology integration in counselling at my institution.	14 (23.0)	13 (21.3)	26 (42.6)	04 (6.6)	04 (6.6)
	Cumulative aggregate	59 (19.3)	79 (25.9)	128 (42.0)	23 (7.5)	16 (5.2)

The table 4 presents the current state of technology integration in counseling services within tertiary institutions in Katsina State. Only 44.5% of respondents are satisfied with the frequency of technology-based counseling services offered at their institutions, indicating a significant level of dissatisfaction (44.3%). This suggests that technology-based services may be underutilized or insufficiently integrated into the counseling practices. A majority (65.7%) of respondents disagree that their institution has comprehensive policies regarding technology use in counseling services. This highlights a critical gap in institutional support and governance for technology integration, which could hinder effective implementation. Similar to the previous item, 72.5% of respondents feel unhelpful about the level of support provided by their institution for integrating technology into counseling services. This lack of support may contribute to the challenges faced in adopting technology effectively. While 60.7% of respondents believe that technology integration has improved access to counseling services, a notable percentage (31.1%) disagree. This indicates mixed perceptions regarding the effectiveness of technology in enhancing service accessibility, suggesting that while some see benefits, others may not experience these improvements.

Only 44.3% of respondents are satisfied with the current state of technology integration in counseling at their institution, with a significant 42.6% expressing dissatisfaction. This indicates a critical need for improvement in how technology is integrated into counseling services. The cumulative data shows that only 45.2% of respondents either strongly agree or agree with the statements regarding the current state of technology integration in counseling services. In contrast, a

substantial 42% disagree, indicating widespread dissatisfaction with the integration efforts. The findings suggest that while there is some recognition of the potential benefits of technology in counseling, significant barriers remain, including inadequate policies, insufficient support, and a lack of satisfaction with the frequency and quality of technology-based services offered. Addressing these issues will be crucial for enhancing the effectiveness of counseling services through technology in Katsina State's educational institutions.

Discussion of Results

From the data analysis, on the current level of technological literacy, the results revealed that significant majority of guidance counseling professionals feel confident in operating basic computer software and are familiar with digital devices. While many respondents have received some formal training in technology for counseling, there is still a notable portion who have not, indicating a need for enhanced training programs. Most respondents are comfortable using online communication tools and express confidence in adapting to new technological advancements and the data suggests a strong foundation of technological literacy among professionals, but highlights areas for improvement in specialized training and software familiarity. In support of this finding, Liu and Gentile (2008) emphasize that successful technology integration in counseling relies on proper training and design of technology use. Their studies indicate that while initial levels of technology integration are being explored, there is a critical need for higher levels of integration that focus on effective design and implementation in counseling education and practice.

On attitudes toward technology adoption, large majority of respondents believe that integrating technology improves counseling effectiveness and are open to learning new technologies. Respondents see technology as a valuable tool for engaging students and enhancing access to counseling services and there is a strong commitment among professionals to invest time and effort into integrating technology, although some concerns about the challenges of doing so remain. In line with this finding is the work by Woo (2020) who showed an increasing acknowledgment of technology's role in counseling, with many scholars advocating for its integration into counselor training and practice. This reflects a growing consensus on the need for technology to meet diverse client needs.

On the perceived barriers to technology integration, a significant number of respondents express concerns about privacy and confidentiality when using technology in counseling. Many believe that inadequate training among staff is a major barrier to effective technology integration. Perceptions of resistance among counseling staff towards adopting new technology were noted, although this was not universally agreed upon and respondents identified a lack of support from institutional leadership and funding constraints as critical challenges hindering technology integration. To support this finding a study by Barnett (2014) and Godine and Barnett (2013) highlights that school counselors face challenges in integrating technology due to a lack of institutional support and funding, which aligns with the findings that emphasize the need for comprehensive policies and resources to facilitate technology use in counseling.

On the current state of technology integration, there is considerable dissatisfaction regarding the frequency of technology-based counseling services offered at institutions. A majority of respondents feel that their institutions lack comprehensive policies for the use of technology in counseling. While some respondents believe that technology has improved access to counseling services, a substantial number disagree, indicating mixed perceptions about its effectiveness, and the cumulative data reveals low satisfaction with the current state of technology integration in counseling, highlighting significant room for improvement. In line with this finding is a study by Woo (2020) who reveals that despite the increasing interest in technology integration, only a small percentage of

articles discuss its practical application in counseling settings. This gap suggests that while there is recognition of technology's potential, practical implementation remains limited. Also, Eichenholtz (2001) found that while access to technology in counseling has improved significantly, ongoing discussions about the effective integration of these tools continue. This reflects the mixed perceptions about technology's actual impact on service delivery and accessibility.

The analysis of the research questions reveals a generally positive attitude toward technology among guidance counseling professionals in Katsina State, coupled with a strong foundational literacy in basic technological skills. However, significant barriers exist, including concerns about privacy, lack of training, and insufficient institutional support. The current state of technology integration in counseling services is viewed with dissatisfaction, emphasizing the need for comprehensive policies, enhanced training programs, and greater institutional commitment to effectively leverage technology in counseling practices. Addressing these challenges is crucial for improving the effectiveness and accessibility of counseling services in educational institutions.

Conclusion

The study reveals that guidance counseling professionals in tertiary institutions in Katsina State possess a high level of technological literacy and hold positive attitudes towards the adoption of technology in their practices. This strong foundation suggests that they are well-prepared to integrate digital tools into their counseling services. However, significant barriers hinder the effective adoption of technology. Privacy and confidentiality concerns, lack of training and expertise, resistance to change, insufficient institutional support, and funding constraints are prominent challenges. Furthermore, the current state of technology integration is inadequate, with dissatisfaction noted in the frequency of technology-based services, the comprehensiveness of policies, and institutional support. Addressing these barriers is crucial to fully harness the potential of technology in enhancing counseling services.

Recommendations

The following recommendations are proposed:

Institutions in collaboration with counseling professionals should establish clear policies and guidelines for the use of technology in counseling services, addressing issues such as privacy, confidentiality, and ethical considerations.

Institutions should invest in targeted training and professional development programs to enhance the technological literacy of counseling staff. These programs should include training on the use of online communication tools, counseling software, and client management systems.

Institutions should actively work to foster a culture of adaptability and openness to change among counseling staff. This may involve implementing change management strategies, providing support for those struggling with the transition, and highlighting the benefits of technology integration to encourage buy-in and engagement.

Institutions should allocate sufficient resources, including funding and infrastructure, to support the integration of technology in counseling services. This may involve investing in hardware, software, and technical support to ensure that counseling professionals have the necessary tools and resources to effectively combine technology in their practice.

Institutions should regularly evaluate the effectiveness of their technology integration efforts and make continuous improvements based on feedback from counseling professionals and students. This may involve conducting surveys, gathering user feedback, and monitoring basic performance

indicators to identify areas for improvement and ensure that technology is being used effectively to enhance counselling services.

References:

1. Abiodun, T. F, Opatoki, O.O, Adeyemo, D. T, & Obi C. C. (2020). Assessment of Boko Haram Insurgents' Threats to Educational Development in the Northeast Nigeria: The Way Forward. African Journal of Social Sciences and Humanities Research. 3, (1);31-43.
2. Emaikwu, S. O. (2008). Fundamentals of educational research methods and statistic. Revised Edition, Kaduna. Deray print Ltd.
3. Haruna, S. (2023): Teachers perception on impact of corruption on quality Education and attainment of Primary Social Studies objectives in North Central Zone, Nigeria. A Unpolished Ph.D. Thesis submitted to the Department of Arts and Social Science Education, Ahmadu Bello University, Zaria.
4. Isah, M. C, Tukur, M, & Auwal, M F. (2023). A Study on Effects of Pervasive Teaching and Learning Conditions amid Insecurity. A Case Study of Some Selected Affected Areas in Katsina State in International Journal of Inclusive and Sustainable Education. Vol. 2 (7), 38 – 48.
5. Mohammed, F. J & Olowoselu, A. (2015). Effects of Insurgency on girls' education in North Eastern Nigeria. European Journal of Education and Development Psychology, Published by European Centre for Research Training and Development UK (www.eajournals.org). 3, (1).44-50,
6. Ogunode, N, J., Ahaotu, G. N., & Musa (2021) Effects of Incessant Closure of Schools on School Administration in Northern Nigeria, International Journal of Innovative Analyses and Emerging Technology 1, (4), and 98-103 27
7. Olawuwo, A. A., Atiku, M. B, & Hussaini, A. k. (2023) Impact of Insecurity on Students' Enrolment, Attendance and Retention in Secondary Schools in Katsina State, Nigeria (2017-2022). International Journal on Integrated Education IJIE | Research Parks Publishing (IDEAS Lab). 6, (7), 207 – 222.
8. Umaru, A & Terhemba, G. A. (2014). Effects of Insecurity on Primary School Attendance in Damaturu Metropolis Yobe State, Nigeria in Journal of Research in Education and Society, Vol. 5, (1), 32 – 38.