

WEB-BASED DIGITAL TOOLS AND ATTITUDE TO COUNSELLING AMONG FINAL YEAR STUDENTS OF PUBLIC TERTIARY INSTITUTIONS IN CROSS RIVER STATE, NIGERIA.

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Abstract

The purpose of the study was to investigate web-based digital tool and attitude to counselling among final year students of public tertiary institutions in Cross River State. To achieve the purpose of this study three null hypotheses were formulated and tested in the study. Literature review was done according to the variables under study. Survey research design was adopted for the study. A sample of 400 students was selected for the study. The selection was done through the simple sampling technique. The questionnaire titled "Web-based Digital Tool and Attitude to Counselling Questionnaire (WBDTACQ)" was the main instruments used for data collection. The instrument was subjected to face validation by the supervisor and experts in measurement and evaluation, University of Calabar. The reliability estimate of the instrument was established through Split-half reliability method. Population t-test and Simple regression analysis were the statistical analysis technique adopted to test the hypotheses under study to ascertain whether to reject or retain them. All hypotheses were subjected to testing at .05 level of significance. The results of the analysis revealed that, attitude to counselling among final year students is significantly high in the study area. Also that virtual counseling platforms and chatbots significantly predict undergraduates attitude to counselling. Based on the findings of the study, it was recommended among others that universities should strengthen awareness campaigns about the benefits of counseling services to reinforce students' positive attitudes.

Keywords: *Web-based digital tool, Virtual counseling platforms, Chatbots, attitude to counselling, students*

Introduction

Counseling in public universities plays a crucial role in fostering students' academic, emotional, and social development. It provides guidance and support to students, helping them navigate personal challenges, career decisions, and mental health issues. The goal of counseling services in higher institutions is to equip students with coping mechanisms, enhance their self-awareness, and promote overall well-being, thereby improving their academic performance and personal growth.

Counseling is defined as a professional engagement where trained individuals help clients understand and resolve personal, social, or psychological challenges (American Counseling Association, 2014). Counseling can take various forms, including career counseling,

academic counseling, and psychological support, all of which are essential in the university setting to assist students in making informed decisions and dealing with stressors that may impact their educational experience (Bessong et al, 2024; Olowonefa et al, 2023; Adie et al, 2019; Olofu et al, 2019).

The expected attitude of undergraduates towards counseling should be one of openness and willingness to seek help when needed. University students are expected to engage actively with counseling services to gain insights into their academic and personal lives. Seeking counseling should be seen as a proactive step toward self-improvement rather than a sign of weakness. A positive attitude towards counseling fosters resilience, enhances decision-making abilities, and promotes emotional stability among students (Richards & Viganó, 2015).

Despite the benefits of counseling, many undergraduates exhibit poor attitudes toward counseling services. Many students perceive counseling as unnecessary unless faced with severe personal issues, while others are reluctant to seek help due to concerns about confidentiality (Ibu et al, 2019; Hidayat, Sauri, Yudianto, Haryani, & Nurlaela 2023). This negative perception significantly affects their willingness to engage with counseling professionals, thereby limiting the effectiveness of counseling programs in universities.

The authors suspect that the use of web-based digital tools may predict students' attitudes toward counseling. Digital platforms provide a less intimidating and more accessible way for students to seek guidance, reducing the barriers associated with face-to-face counseling. The increased use of technology among students suggests that web-based interventions could enhance engagement with counseling services. Online counseling platforms, mental health applications, and virtual therapy sessions may offer a more convenient, confidential, and engaging approach to addressing students' counseling needs (Ayi & Usanto 2024; Adie et al, 2019; Ihekoronye et al, 2020, Oboqua et al, 2019).

Web-based digital tools refer to internet-based applications that facilitate communication, service delivery, and interaction between users and service providers (Andersson, 2016). These tools include mobile applications, virtual counseling platforms, chatbots, and video conferencing services, all designed to provide mental health support and counseling services. The integration of digital tools in counseling may help bridge the gap between students and counselors by offering 24/7 accessibility, anonymity, and personalized support (Richards & Viganó, 2015; Bessong et al, 2019).

This study is justified by the need to enhance counseling service utilization among final year students of public tertiary institutions in Cross River State.

Statement of the problem

In public universities in Cross River State, students are expected to adopt a positive attitude towards counseling, engaging in available services to improve their academic performance, mental health, and personal growth. However, the reality on ground presents a contrasting picture. Many final-year students exhibit poor attitude towards counseling services, often neglecting or avoiding professional guidance altogether. As a result, students fail to seek help for academic stress, career planning, and psychological challenges, leading to a range of negative outcomes.

The consequences of poor attitudes toward counseling are far-reaching. For students, it results in unaddressed academic struggles, mental health issues, and increased stress levels, which can affect their overall well-being and performance. Institutions face reduced effectiveness of counseling programs, leading to a decline in student welfare support systems. On a broader scale, education as a whole suffers as students graduate without adequate personal and professional development, affecting workforce quality and societal growth.

This situation is unacceptable because counseling is supposed to serve as a critical instrument for student support and development. According to the American Counseling

Association (2014), counseling aims to empower individuals to accomplish mental health, wellness, education, and career goals. When students disregard these services, they miss out on crucial support systems designed to help them succeed academically and personally.

Despite efforts by the government and stakeholders to promote counseling services through awareness campaigns, policy initiatives, and infrastructural improvements, these efforts have yielded little or no significant change in students' attitudes. Many students remain resistant to utilizing counseling services, highlighting the need for more innovative approaches. There is an urgent need to combat this issue by exploring alternative methods to improve students' attitudes towards counseling. The integration of digital tools into counseling services may present a viable solution, providing students with a more accessible and less stigmatized platform for seeking help. Thus this study investigated web-based digital tool and attitude to counselling among final year students of public tertiary institutions in Cross River State, hence the rationale of the study.

Web-based digital tools refer to internet-based applications and platforms designed to facilitate various services, including communication, education, and mental health support. These tools encompass a wide range of technologies such as online counseling platforms, mental health apps, virtual therapy sessions, and digital self-help resources. They aim to provide accessible, flexible, and often cost-effective alternatives to traditional in-person services, thereby overcoming barriers related to location, time, and stigma associated with seeking help (Papadatou-Pastou, Goozee, Payne, Barrable & Tzotzoli, 2017). The integration of web-based digital tools into counselling practices has been extensively explored in recent literature. Researchers have highlighted several benefits, including increased accessibility to mental health services, especially for individuals in remote areas or those with mobility constraints. Digital platforms offer anonymity, which can reduce the stigma associated with seeking mental health support and encourage more individuals to engage in counseling services.

The effectiveness of digital counseling platforms is also evident in their ability to cater to diverse student needs, including those who may be introverted or have demanding schedules that limit face-to-face interactions. Cyber counseling has been shown to facilitate self-actualization among students by providing them with flexible access to counseling resources (Dharsana & Sudarsana 2019). Furthermore's research on cyber counseling models indicated that these platforms are not only acceptable but also effective in meeting the counseling needs of high school students in the digital age (Gading 2020). In addition to emotional support, digital counseling platforms can enhance academic performance by promoting self-regulated learning and reducing procrastination. study on cognitive behavior counseling techniques demonstrated that such approaches are effective in mitigating academic procrastination, thereby improving students' academic performance (Novalia 2023). This is complemented by findings from, which highlighted the critical role of resilience and psychological well-being in enhancing school engagement and perceived academic performance

Studies have also examined the effectiveness of digital counseling interventions. For instance, a systematic review by Andersson (2016) found that internet-delivered psychological treatments are effective in reducing symptoms of anxiety and depression, with outcomes comparable to traditional face-to-face therapy. However, the adoption of web-based digital tools in counselling is influenced by various factors, including technological literacy, access to reliable internet services, and cultural attitudes towards digital interventions. Some individuals may prefer face-to-face interactions due to personal comfort or skepticism towards the efficacy of digital tools (Papadatou-Pastou et al., 2017; Olofu et al, 2017). Therefore, while digital tools expand the reach of counseling services, they should complement rather than replace traditional methods, ensuring that clients have options that best suit their needs. The availability and promotion of web-based digital tools have the potential to positively influence individuals' attitudes toward counseling. By providing discreet and user-friendly platforms, these tools can

reduce perceived barriers to seeking help, such as fear of judgment or time constraints. For example, the use of mental health apps and online therapy sessions allows individuals to access support at their convenience, which can lead to increased willingness to engage in counseling services.

Moreover, digital tools can serve as an introduction to counseling for those hesitant about traditional therapy. Engaging with online resources may help individuals become more comfortable with the counseling process, potentially leading to a transition to face-to-face sessions if needed. However, it is essential to address issues related to digital literacy and ensure that these tools are accessible and user-friendly to maximize their positive impact on attitudes toward counseling (Seth 2024)

Seth (2024) conducted a study on the impact of attitudes toward online counseling on the emotional well-being of distance learners at Knust. The approach to the study is a quantitative research design using the adapted and shaped Positive Emotional Well-being Scale (PEWS) and the adapted and shaped Online Counseling Scale (OCS) questionnaire, which represents the average value on the Likert scale for online counseling was used to help evaluate the weak and strong perceptions regarding attitudes toward online counseling. The purposive sampling technique was used to select 354 students who were distance learners at KNUST. Pearson product moment correlation coefficient was computed to determine the relationship between Attitudes toward Online Counseling and Emotional Well-being scores used to analyze the data. The Attitudes toward Online Counseling and Emotional Well-being were found to be strongly correlated, $r(354) = .587, p < .0001$. In all, there was a significant positive relationship between Attitudes toward Online Counseling and Emotional well-being among distance learners at KNUST. Findings, therefore, showed that a positive and strong attitude toward online counseling is significant in resolving the emotional well-being concerns of distance learning students Joseph, Mathew, Grace, Afua, Augustina and Frank (2023) conducted a study on Attitude of university students towards web-based counselling. The study was carried out using a sample of 600 undergraduates from the University of Cape Coast in Ghana. A descriptive survey was conducted. The data were gathered using a questionnaire with a four point Likert scale. Means, standard deviations provided answers to the two study research questions that guided the survey. Furthermore, the two hypotheses were tested using t-test to analyze the data. Findings from the study indicated that respondents had positive and negative attitudes regarding the use of web-based counselling. In addition, both males and females showed affinity to web-based counselling. Nevertheless, the males were somewhat hostile towards web-based counselling than females.

Kara and Buyruk Genç (2023) conducted a study of adult attitudes toward online and face-to-face counseling according to self-concealment, multidimensional perceived social support, and certain demographic variables during covid-19 pandemic. The study population comprises 508 adults aged 18 or above living in Turkey. The data were collected with the help of "Online and Face-to-Face Counseling Attitudes Scale", "Self Concealment Scale", "Multidimensional Scale of Perceived Social Support", and a "Personal Information Form". Data analysis was based on Pearson's Product-Moment Correlation Coefficient and Multiple Regression Analysis. The results demonstrated that attitudes toward online counseling are predicted by self-concealment, perceived social support, age, and previous experience of online counseling. The findings also showed that attitudes toward face-to-face counseling are predicted by self-concealment, perceived social support, gender, and previous experience with online and faceto-face counseling.

Tracy, Lee and Jerikias (2021) conducted a study on psychotherapists' perceptions and attitudes towards the use of Online Therapy during Covid-19 pandemic in Harare, Zimbabwe. Data was collected via online dissemination of questionnaires 50 practising psychologists, from different areas of specialisations. The results showed their past experience with online

psychotherapy, use of online platforms during the pandemic, the challenges they encountered in online sessions, and their general perceptions and attitudes toward online psychotherapy. Most psychotherapists showed a positive attitude towards online therapy during the pandemic, noting flexibility of the method among many others. The perceptions and attitudes are influenced by clinical experience, availability of ICT tools and the ability to shift from the traditional face-to-face therapy to online therapy.

Knapp, Cohen, Nicholas, Mohr, Carlo, Skerl and Lattie (2022) assessed integration of digital tools into community mental health care settings That Serve Young People: Focus Group Study. Data were analyzed from 5 focus groups conducted with clinicians (n=37) who work with young people at a large community service organization in the United States. The organization provides care to more than 27,000 people annually, most of whom are of low socioeconomic status. The transcripts were coded using thematic analysis. Clinicians first provided insight into the digital tools they were currently using in their treatment sessions with young people, such as web-based videos and mood-tracking apps. They explained that their main goals in using these tools were to help young people build skills, facilitate learning, and monitor symptoms. They offered several considerations for integrating digital tools into mental health care, such as setting up expectations with clients and the importance of human support. Young people have unique considerations related to complex accessibility patterns and technology expectations that may not be observed when adults are the intended users of mental health technologies. Therefore, these findings provide critical insights to inform the development of future tools, specifically regarding connectivity, conditional restraints (e.g. devices taken away as punishment and school restrictions), expectations of users from different generations, and the blended nature in which digital tools can support young people (Itighise et al, 2022).

Despite preliminary evidence for the efficacy of chatbots and their potential usefulness in working with groups such as young adults, research examining attitudes towards chatbots is scarce (Laranjo, Dunn, Tong, Kocaballi, Chen, Bashir, Surian, Gallego, Magrabi, Lau, & Coiera 2018). As there are strong links between attitudes and intentions regarding help-seeking (El-Hachem, Lakkis, Osman, Issa, & Beshara, 2023), it is imperative to understand attitudes towards using chatbots for psychotherapy to gain insight into its potential as an acceptable mental health intervention. A study exploring Turkish adults' attitudes towards AI-delivered psychotherapy found that 55% of participants preferred AI-delivered psychotherapy to human-delivered psychotherapy (Aktan, Turhan, & Dolu, 2022). Despite Aktan et al. (2022) demonstrating a preference towards AI-delivered psychotherapy, these findings contradict several previous studies examining AI adoption.

For instance, a study examining general attitudes towards AI found that participants felt negatively towards AI performing tasks involving human judgment, empathy, or social understanding, and applications of AI involving psychotherapy were rated *very low* in terms of comfortableness and capability (Schepman & Rodway 2020). Despite these findings revealing negative attitudes towards psychological applications of chatbots, users of mental health chatbots generally report high satisfaction regarding their use (Boucher, Harake, Ward, Stoeckl, Vargas, Minkel, Parks, & Zilca, 2021). However, 32% of participants in the study examining Wysa (Inkster, Sarda, & Subramanian, 2018) found the chatbot unhelpful, with a small proportion of users reporting that the chatbot was 'self-focused' or they were 'bothered' by interactions with it. The negative perceptions of some users indicate that while chatbots may be useful for certain individuals, their current capabilities may be limited in providing support suitable for a diverse range of populations.

Purpose of the study

The purpose of the study is to investigate web-based digital tools and attitude to counselling among final year students of public tertiary institutions in Cross River State, Nigeria. Specifically, the study sought to:

1. Ascertain whether the extent of final year students attitude to counselling in the study area.
2. Assess whether virtual counseling platforms predict attitude to counselling among students.
3. Determine whether chatbots predict attitude to counselling among students.

Hypotheses

1. Attitude to counselling among final year students is not significantly high in the study area.
2. Virtual counseling platforms does no significantly predict attitude to counselling among students.
3. Chatbots does no significantly predict attitude to counselling among students.

Methodology

Survey research design was adopted for the study. A sample of 400 final year students was selected for the study. The selection was done through the simple random sampling technique. Web-based Digital Tool and Attitude to Counselling Questionnaire (WBDTACQ) was the main instrument used for data collection. The instrument was subjected to face validation by the supervisor and experts in measurement and evaluation, University of Calabar. The reliability estimate of the instrument was established through split half reliability method. The instrument was administered to the respondents and retrieved with Zero attrition rate. The data collected were analyzed through Population t-test and simple regression analysis. All hypotheses were subjected to testing at .05 level of significance.

Results

Hypothesis one: Attitude to counselling among final year students is not significantly high in the study area. There is only one variable in this hypothesis, attitude to counselling. Test statistics: t-test of one sample mean (also known as population t-test) was employed to test this hypothesis. The statistical technique deployed to do this comparison was the t-test of one sample mean (also known as population t-test). The results of the analyses are presented in Table 1.

Table 1: Population t-test analysis of whether the extent of attitude to counselling among students (N=400)

Variables	\bar{x}	SD	t-value	p-value
Sample mean	36.13	3.13	69.56*	0.00
Reference Mean	25.00	0.00		

*Significant at .05 level, p-value = .000, df =399

The results presented in Table 1 showed that the mean and standard deviation of the sample the attitude to counselling of students. The comparison of each of these sample means with the reference mean score of 25.00 yielded t-value of 69.56. at p.000 since p(.000) is less than p(.05), the null hypothesis is rejected. This implies that the extent of attitude to counselling of students is significantly high.

Hypothesis two: Virtual counseling platforms does no significantly predict attitude to counselling among students. The independent variable in this hypothesis is virtual counseling platforms; while the dependent variable is attitude to counselling among students. Simple regression analysis the employed to test this hypothesis. The result of the analysis is presented in Table 2.

Table 2: Simple regression result of the prediction of virtual counseling platforms and attitude to counselling among students

Model	R	R. square	Adjusted R. Square	Std error of the estimate	
1	.783(a)	.612	.611	1.94880	
Model	Sum of square	df	Mean square	F	p-value
Regression	2387.947	1	2387.947	628.769*	.000(a)
Residual	1511.530	398	3.798		
Total	3899.478	399			

* Significant at .05 level.

The simple regression analysis of the prediction of virtual counseling platforms on attitude to counselling yielded a coefficient of multiple regression (R) of .783 and a multiple regression R-square (R^2) of .612 and an adjusted R^2 of .611. The adjusted R^2 of .611 indicated that the virtual counseling platforms accounted for 61.1% that virtual counseling platforms is relatively high in the area of the study. The F-value of the Analysis of Variance (ANOVA) obtained from the regression table was $F = 628.769$ at the sig. value of .000 since $p(.000)$ is less than $p(.05)$, the null hypothesis is rejected. The implication of this result is that virtual counseling platforms is significant predictor of attitude to counselling.

Hypotheses three: Chatbots does no significantly predict attitude to counselling among students.

The independent variable in this hypothesis is Chatbots; while the dependent variable is attitude to counselling among students. Simple regression analysis the employed to test this hypothesis. The result of the analysis is presented in Table 3.

Table 3: Simple regression result of the prediction of Chatbots and attitude to counselling among students

Model	R	R. square	Adjusted R. square	Std error of the estimate
1	.867(a)	.752	.751	1.55940

Model	Sum of square	df	Mean square	F	p-value
Regression	2931.648	1	2931.648	1205.580	.000(a)
Residual	967.829	398	2.432		
Total	3899.478	399			

* Significant at .05 level.

The simple regression analysis of the prediction of Chatbots on the perception of unemployment yielded a coefficient of multiple regression (R) of .867 and a multiple regression R-square (R^2) of .752 and an adjusted R^2 of .751. The adjusted R^2 of .751 indicated that the Chatbots accounted for 75.1 % of the determinant attitude to counselling in the study area. This finding is a critical indication that Chatbots is relatively high in the area of the study. The F-value of the Analysis of Variance (ANOVA) obtained from the regression table was $F = 1205.580$ at the sig. value of .000. Since $p(.000)$ is less than $p(.05)$, the null hypothesis is rejected. The implication of this result is that Chatbots is a significant predictor of attitude to counselling.

Discussion of findings

The result of the first hypothesis revealed that the attitude to counselling among final year students is significantly high in the study area. The finding of this hypothesis is in line with the views of Seth (2024) whose study on the impact of attitudes toward online counseling on the emotional well-being of distance learners and shows a positive and strong attitude toward online counseling. Also Joseph, Mathew, Grace, Afua, Augustina and Frank (2023) whose study also indicated that respondents had either positive and negative attitudes or opinions regarding the use of web-based counselling. In addition, both males and females showed affinity to web-based counselling. Nevertheless, the males were somewhat hostile towards web-based counselling than females.

The result of the second hypothesis shows that web-based digital tool significantly predict attitude to counselling among students. The finding is in line with the view of Kara and Buyruk Genç (2023) who conducted a study of adult attitudes toward online and face-to-face counseling demonstrate that attitudes toward online counseling are predicted by self-concealment, perceived social support, age, and previous experience of online counseling. The findings also show that attitudes toward face-to-face counseling are predicted by self-concealment, perceived social support, gender, and previous experience with online and face-to-face counseling.

The result of the third hypothesis revealed that chatbots significantly predict attitude to counselling among final year students. The findings agrees with the views El-Hachem, Lakkis, Osman, Issa, & Beshara (2023) whose study shows a strong links between attitudes and intentions regarding help-seeking. Aktan, Turhan, & Dolu, (2022) who explored Turkish adults' attitudes towards AI-delivered psychotherapy found that 55% of participants preferred AI-delivered psychotherapy to human-delivered psychotherapy. However, 32% of participants in the Inkster, Sarda, & Subramanian, (2018) study found that chatbot unhelpful, with a small proportion of users reporting that the chatbot was 'self-focused' or they were 'bothered' by interactions with it. The negative perceptions of some users indicate that while chatbots may be useful for certain individuals, their current capabilities may be limited in providing support suitable for a diverse range of populations.

Conclusion

The present study examined the attitudes toward counseling among final-year students in public universities in Cross River State, Nigeria, and explored the predictive role of web-based digital tools in shaping these attitudes. The findings revealed a significantly positive disposition among students toward counseling services. Moreover, the utilization of web-based digital tools such as virtual counseling platforms and chatbots emerged as a significant predictor of this favorable attitude. These results underscore the potential of integrating digital platforms into university counseling services to enhance accessibility and engagement.

Recommendations

Based on the findings of the study the following recommended were reached:

1. Universities should strengthen awareness campaigns about the benefits of counseling services to reinforce students' positive attitudes.
2. Universities should invest in user-friendly and secure virtual counseling platforms to ensure privacy and ease of use.
3. Collaborations with tech firms should be encouraged to enhance chatbot functionalities and responsiveness to students' counseling needs.

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