

## The Integration of ICT in Guidance and Counselling in Higher Learning Institutions in Dar es Salaam, Tanzania

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### Abstract

This study examined the integration of Information and Communication Technology (ICT) into guidance and counselling services in higher learning institutions in Dar es Salaam. ICT has the potential to increase access to guidance and counselling services in higher learning institutions. Efforts have been made to integrate ICT into guidance and counselling services in higher learning institutions. However, the effective integration of digital technology into guidance and counselling services remains a challenge. The study used a qualitative research approach using a case study design. Students and counsellors in higher learning institutions were the target population. The study involved 44 participants selected through purposive and convenience sampling. In-depth interviews, Focused Group Discussions and documentary review were used to collect data. The major findings showed that the use of ICT in guidance and counselling had increased slightly and was primarily delivered via telephones, WhatsApp, Zoom, and email. The findings showed further inadequate infrastructure, resources, and digital technology skills among counsellors, and that students were the challenges encountered in the integration of ICT into guidance and counselling services. The study concluded that the integration and use of ICT in guidance and counselling had increased slightly, ensuring the accessibility and flexibility of guidance and counselling services in higher learning institutions. The study recommended that educational stakeholders partner with the government, through the Ministry of Education, Science, and Technology, to provide ICT resources, thereby facilitating their integration into guidance and counselling services.

**Keywords:** Guidance and counselling, higher learning institutions, information and communication technology, Tanzania.

## INTRODUCTION

The use of technology in guidance and counselling has increased worldwide (Institute of Educational Sciences, 2012). The increased use of online counselling and guidance shows its relevance in higher learning institutions (HLI's) and its context (Situmorang, 2020). However, the integration of ICT into guidance and counselling services in HLI's has not covered all components of guidance and counselling in HLI's service programmes, and the integration of ICT in guidance and counselling is still limited to individual counselling services. Digitalised guidance and counselling services, designed to meet the needs of students in HLIs, are still minimal. This constraint limits access to ICT in other services (Davies, 2019). Digital guidance and counselling ensure communication between counsellors and students at any time when service is required, thereby increasing the frequency and flexibility of communication among stakeholders (Ristianti et al., 2025).

ICT usage in guidance and counselling services involves integrating and adapting technological advancements in the provision of guidance and counselling. It also involves the usage of different applications, such as guidance and counselling systems, and the media, when providing guidance and counselling services over the phone. It allows sharing of information, knowledge, ideas, facts, values and experiences through interaction with information sources (Cipolletta & Mocellin, 2018). Thus, online counselling services enhance communication between clients and counsellors. These services connect counsellors and clients and charts in different locations without face-to-face interaction (Snow & Coker, 2020).

Guidance and counselling in HLIs involve essential services, responsive services, individualised planning, and system support (Jailani et al., 2020). Essential services are provided through orientation and information services. Responsive services are provided through individual and group counselling techniques and peer guidance. Personal planning is also done through individual and group assessment strategies, placement and distribution, while system support is provided through professional development strategies. Moreover, guidance and counselling are provided primarily through social media, including WhatsApp, Zoom, and email. Other emerging

technologies for guidance and counselling include AI chatbots and mobile apps. However, they are not yet widely studied and used in guidance and counselling activities (Jailani et al., 2020; Ristianti et al., 2025).

Guidance and counselling services in Tanzania are regulated by the Ministry of Education Regulation Number 11 of 2002. This guide stipulates practices of guidance and counselling services in schools and universities (United Republic of Tanzania, 2002). Efforts have been made to improve guidance and counselling services in Tanzania; however, the integration of ICT remains inadequate and minimal. The integration of ICT in guidance and counselling in higher learning institutions in the Tanzanian context is still minimal. Evidence shows that long-term outcomes of online counselling are limited and were not clearly established (Ngeze, 2017).

Further evidence shows that ICT integration in higher education institutions' activities improves the counselling services provided to students. It is therefore argued that integrating ICT into counselling services helps reduce stigma and ensure confidentiality, as it allows interactions to be anonymous rather than face-to-face counselling (Rushahu, 2022). Furthermore, it encourages interactions and innovation, making the services more engaging and allowing students to interact. However, the protection of students' privacy and of personal information shared in online systems is emphasised. Thus, higher education institutions must ensure effective privacy protection strategies and involve various stakeholders in privacy practices (Mutimukwe et al., 2025).

The study sought to achieve two main objectives. First, it aimed to find out how ICT is integrated into guidance and counselling services in higher learning institutions (HLIs). Second, it sought to examine the challenges associated with the use of ICT in guidance and counselling services in HLIs. In line with these objectives, the study was guided by two research questions: how is ICT integrated into guidance and counselling services in HLIs, and what challenges are experienced in the use of ICT in guidance and counselling services in HLIs?

## LITERATURE REVIEW

### Theoretical Framework

The study is guided by Carl Rogers' humanistic theory. The study centred on Rogers' ideas of the phenomenal field, which posits that each person lives in a constantly changing world of experiences. The theory also holds that change is possible when experiences are accurately focused. Also, growth occurs when individuals accept and integrate new experiences into their self-concept. Thus, Rogers believes that individuals are naturally motivated towards growth, self-understanding and fulfilment when they are in an environment that supports openness, change, acceptance, and authenticity (McLeod, 2025). Roger's client-centred therapy approach emphasises personal growth and psychological well-being. It allows clients to explore issues that are important and that promote self-acceptance and responsibility.

Thus, in this approach, self-esteem, which includes the client's self-understanding, being more positive about oneself, and having good relationships with others, is emphasised. Also, the ability to experience and express feelings as they occur and be encountered (McLeod, 2025). In the context of this study, ICT has the potential to increase access to and improve the provision of guidance and counselling among clients in higher learning institutions. It also has the potential to improve the efficiency of guidance and counselling services and to encourage readiness to seek them.

### Guidance and Counselling Services in Higher Learning Institutions

Guidance and counselling assistance is provided by qualified and trained personnel to individuals of any age to help them manage their own life activities and make their own decisions. It also helps clients to discover their needs, interests and capabilities so as to find their own goals and plans for implementation. Moreover, it is the help given to clients to guide them in making choices and adjustments in solving their problems (Asare et al., 2023). Guidance and counselling services promote clients' social, emotional, and psychological well-being. It helps clients to understand and accept themselves and to cope with or solve their problems. Thus, guidance and counselling help clients achieve self-understanding that enhances self-development and the realisation of their potential. Counselling services include

information services, counselling services, orientation services, referral services, and follow-up and evaluation services. Information services equip clients with information on educational, vocational and personal and or social. This kind of information helps clients to make good decisions about their lives (Asare et al., 2023).

Counselling services also involve face-to-face interactions between counsellors and clients, who are assisted in overcoming their personal, social, and vocational challenges. Orientation services help students become familiar with the environment. They guide and instruct about rules, regulations and responsibilities in the new environment. Referral services involve referring cases to specialists, including clinical psychologists and medical practitioners, whereas follow-up and evaluation services focus on the extent to which the guidance programme meets the objectives established. Thus, guidance and counselling services play a major role in enhancing clients' social and emotional adjustment (Asare et al., 2023). Therefore, the development of guidance and counselling services ensures that students have access to all components of guidance and counselling in HLI's.

### The Integration of ICT in Guidance and Counselling in HLI's

ICT facilities and services have been widely used for communication and interaction (Institute of Educational Sciences, 2012). ICT in this study refers to technologies that provide access to and sharing of information through telecommunications, including the internet, wireless networks, cell phones, and other communication media, such as WhatsApp and Zoom. Providing guidance and counselling through ICT is important for ensuring effective service delivery. The integration of ICT in guidance and counselling allows the counsellor and client to communicate effectively. It enhances the delivery of guidance and counselling services through the use of ICT facilities. Moreover, modern societies are increasingly using information, skills and knowledge (Amos, 2022).

ICT has the potential to increase access to guidance and counselling services by removing the limitations imposed by time and space. Digital technology can help clients achieve their dreams and desired outcomes. The utilisation of ICT in counselling has

several benefits, including flexibility, accessibility, adaptability, convenience and compatibility. It ensures client anonymity and eases the supervision of the counselling process and its implementation. Furthermore, the integration of ICT into guidance and counselling services helps to ensure that the services are more accessible, effective and useful for both clients and counsellors (Okoh, 2018). However, the degree to which guidance and counselling professionals integrate digital technology services into practice remains inadequate, as their use remains minimal, including AI chatbots and other digital communication technologies (Ristianti et al., 2025).

## **Challenges and Barriers in the Integration of ICT in Counselling**

The challenges encountered in the provision of guidance and counselling services in higher learning institutions include insufficient ICT infrastructure and resources, internet connectivity issues, and a lack of skills and training in using technology for guidance and counselling.

### **Inadequate Resources and ICT Infrastructures**

ICT resources for guidance and counselling include computers, communication tools, data management tools, career exploration portals, assessment tools and mobile apps. However, these resources are limited, thereby hindering the effectiveness of guidance and counselling activities in HLI's (Aidoo & Chebure, 2024). According to scholars (e.g., Ndome et al., 2021), inadequate internet facilities, limited technical resources, including software, and power supply are critical challenges in integrating ICT into the provision of guidance and counselling. Thus, the inadequacy of ICT infrastructure and resources has affected the provision of effective counselling services, as it limits access to the services.

### **Counsellors' Inadequate Skills and Training**

Counsellors' inadequate proficiency in using ICT devices and resistance to change and to embracing digital mobility in guidance and counselling are still a challenge. It is argued (see Zafar et al., 2025; Abdul Kareem, 2023) that digital literacy is not equally distributed throughout society. There are individuals who are illiterate due to the location and issues related to skills, training, attitudes and knowledge of counsellors and clients. Hence, it is crucial to consider

counsellors' and students' skills, attitudes and preferences to online counselling and user-friendly online counselling services. In addition, training on digital technology among guidance and counselling professionals is important for effective integration of ICT in guidance and counselling (Wong et al., 2018).

## **METHODOLOGY**

The study was conducted in the Dar es Salaam region, which was selected purposively due to accessibility and availability of higher learning institutions. The study employed a qualitative research approach with a descriptive case study design to investigate the integration of ICT in the provision of guidance and counselling in higher learning institutions. This design was employed in this study because it allowed the collection of detailed descriptive information about participants' opinions. This design also allows an in-depth exploration of events and individuals. Therefore, the design helps to understand complex cases in their real-world context (Cresswell & Cresswell, 2018).

The study population was all students and counsellors in higher learning institutions in Dar es Salaam. The targeted population was students, counsellors and Deans of students in two higher learning institutions. The sample for this study comprised 44 respondents: 36 students, 6 counsellors, and 2 Deans of Students. The sample size was attained after reaching the saturation point, where no new information was generated by the respondents (Saunders et al., 2018). The study used non-probability sampling, specifically purposive sampling, to select two higher learning institutions. The purposive sampling technique was also used to obtain key informants (counsellors and Deans of Students) who have relevant information based on their respective positions. The research participants and institutions sampled for this study remained anonymous.

Different methods were used to collect data from the respondents. First, in-depth interviews were conducted with key informants, including Deans of Students and counsellors (Wardens). Second, Focus Group Discussions (FGDs) were conducted with students in the two higher learning institutions. Six FGDs were conducted with students, with three per HLI and six participants per FGD. An interview guide



with open-ended questions was used to gather information. Third, a documentary review was employed to collect information from written and electronic materials, including policy documents and Government publications. Informed consent was sought from participants before data collection. Data collection was stopped at saturation, when no new information emerged from the respondents (Saunders et al., 2018). Informed consent was sought from the respondents, and participation in the study was voluntary. Based on the nature of the study, ethical considerations were adhered to throughout the research process.

Qualitative data from in-depth interviews and focus group discussions were categorised and coded according to key themes aligned with the study's objectives. Thematic analysis was used to analyse data. Thematic analysis helped to identify patterns and generate themes from the data. Meaningful segments of the data were assigned codes.

## FINDINGS AND DISCUSSION

This section presents the findings in relation to the study objectives and the research questions that guided the study. The findings were obtained through in-depth interviews with counsellors and Deans of Students, and Focus Group Discussions with students, and are presented in the subsequent sections.

### Integration of ICT in Guidance and Counselling Services

The first research question sought to find out how ICT was integrated into guidance and counselling services. The major findings showed that the integration and usage of ICT in guidance and counselling services had slightly increased. Apart from face-to-face counselling, the services were also provided frequently by telephone and via WhatsApp video calls. Other reported communication platforms used for counselling services included Zoom and email. The Dean of Students in HLI – A had this to say:

*Our clients prefer to use telephones and video calls (WhatsApp) in counselling conversations. They call ..... and counselling and guidance are given on various problems, including personal issues, academic issues, social issues,*

*and financial issues that affect academic performance. We sometimes use emails and Zoom, depending on the nature of guidance and assistance required by clients.*

Furthermore, the modern digital platforms were not commonly used in higher learning institutions. The counsellor in HLI- B had this to say:

*We have not started to use modern digital technologies that use AI and mobile apps for guidance and counselling because of the inadequacy of the infrastructure. But we have good plans to ensure that we improve the service and ensure its accessibility to all clients.*

The findings show further that the usage of modern digital technologies is minimal in HLI's. However, the integration of ICT into counselling services was successfully done through other communication platforms. Hence, accessibility to guidance and counselling was guaranteed to clients who needed the service. A student aged 21 years in HLI- A had this to say:

*I feel free to reach the counsellor through telephone calls when I have psychological problems. The service is effective compared to face-to-face. I can communicate easily with the counsellor without visiting their offices.*

The findings show that students prefer to use telephone calls to communicate with counsellors.

### The Challenges Experienced in Integrating ICT in Guidance and Counselling Services

The second research question sought to determine the challenges faced by counsellors in the usage of ICT in guidance and counselling services. The findings showed that inadequate infrastructure and resources, insufficient digital technology skills among counsellors, and fear of disclosing identity are the challenges encountered in integrating ICT into guidance and counselling services.

## **Inadequate ICT Services for Guidance and Counselling**

The findings show that counsellors do not use online platforms to provide guidance and counselling for various reasons, including inadequate ICT facilities. A counsellor in HLI -'B' had this to say:

*We do not have adequate ICT devices and facilities that can support online counselling, such as online conference audio, mobile apps, or even internet services, which are not reliable. We mainly rely on face-to-face guidance and counselling services and telephone calls.*

The findings show further that there were limited ICT services available for guidance and counselling in higher learning institutions. The Dean of Students in HLI – B had this to say:

*We mostly use face-to-face counselling and telephone calls to provide guidance and counselling services. There are no other kinds of ICT services that are currently used for guidance and counselling among students.....*

The findings suggest that HLIs had inadequate online counselling services.

## **Affordability of ICT services integrated in guidance counselling.**

The findings show further that there were barriers that limited the potential for ICT in service guidance and counselling provision. A female respondent aged 19 in HLI-A had this to say:

*Not all clients can call for counselling services as they may not be able to afford communication charges, i.e. bundles. We don't have a free telephone number for clients to call when they need the services.*

The findings suggest that the usage of ICT services in guidance and counselling is limited due to affordability and accessibility.

## **Inadequate Skills in Digital Technology Among Counsellors**

The findings show that counsellors do not use online platforms adequately for the provision of guidance and counselling for various reasons, including inadequate ICT facilities and skills and awareness of their usage. A counsellor in HLI 'B' had this to say:

*I think that inadequate digital skills in the usage of ICT devices among counsellors and a lack of awareness of the available services among students can be a barrier for effective usage and integration of ICT in guidance and counselling services.*

The findings suggest further that there were inadequate ICT skills among counsellors and a lack of awareness of the usage of ICT services among students.

## **Fear of Disclosing Identity**

The findings show that other clients were not willing to disclose their identity when seeking guidance and counselling. They preferred to remain anonymous. A counsellor from HLI-A had this to say:

*Students tend to avoid face-to-face counselling services; instead, they opt for online services through telephones or WhatsApp calls. They find it is easy to reach the counsellor without disclosing their identity.*

These findings suggest that students prefer ICT services as they help them obtain the services without reaching out to the counsellor's office. The findings also suggest that disclosure of identity can lead to stigma.

## **Discussion**

### **Integration of ICT in Guidance and Counselling Services**

The findings show that ICT usage for guidance and counselling was mainly done through telephone and WhatsApp calls. Moreover, the findings suggest that other platforms such as emails, Zoom and online audio conferences were not used frequently. It was noted further that other modern digital technologies for

guidance and counselling, including mobile apps and AI chatbots, were not utilised. Limited availability of guidance and counselling services due to an unfriendly infrastructure for their provision was attributed to the minimal use of ICT services in guidance and counselling. Other scholars found that there were inadequate ICT devices and infrastructures in higher learning institutions for effective integration of ICT in guidance and counselling services (Ngeze, 2017). The findings suggest that students in higher learning institutions feel comfortable with guidance and counselling services that integrate ICT in the provision of the services, as they prefer to communicate with counsellors through telephone calls. Thus, these services were more acceptable to students. According to other scholars (i.e., Zafar et al., 2025), online guidance and counselling services are effective, and students have shown a higher preference for online services than face-to-face counselling.

### **The Challenges Experienced in the Integration of ICT in Guidance and Counselling Services**

These findings show that the improvement in ICT services is important for the effective provision of counselling services in HLI's. Thus, there is a need to improve ICT usage to ensure that the services are accessible to clients. According to the study's findings, much needs to be done to ensure the integration of ICT into guidance and counselling services to effectively deliver these services to students. Other studies show that online guidance and counselling offer students flexibility and ensure timely service provision when required (Wong et al., 2018). Studies also show that despite the challenges encountered in the use of ICT, its integration into guidance and counselling ensures that services are more accessible, effective, and useful for both clients and counsellors (Okoh, 2018).

### **CONCLUSION AND RECOMMENDATIONS**

**Conclusion:** The integration of ICT in guidance and counselling in HLIs has the potential to ensure accessibility, flexibility, and student engagement in digital guidance and counselling services. This study investigated the integration of ICT into guidance and counselling services in higher learning institutions and the challenges encountered in their use. The major findings showed that the integration and usage of ICT in guidance and counselling had slightly increased.

Apart from providing face-to-face counselling, the services were also provided frequently over the telephone and via WhatsApp video calls. Other reported communication platforms used for counselling services included Zoom and email. The findings further showed that the challenges encountered in the integration of ICT into guidance and counselling services included inadequate infrastructure and resources, inadequate digital technology skills and training among counsellors, and fear related to the confidentiality and privacy of client information.

### **Implication for Policy and Practice**

This study has significant implications for guidance and counselling services in higher learning institutions in Tanzania and other parts of the world with a similar context. The study examined the integration of ICT in guidance and counselling services in HLI's. The findings show that the usage of ICT in guidance and counselling services was minimal. Hence, there was a gap in the integration of ICT in guidance and counselling services provided in HLI's. The face-to-face guidance and counselling service was the main means of service provision. However, students in higher learning institutions preferred the usage of telephone and WhatsApp calls as the online communication platforms for guidance and counselling services. Moreover, literature shows that ICT is effective in the provision of online guidance and counselling services. Thus, policymakers and other stakeholders can ensure that ICT is effectively integrated into guidance and counselling services. It is important to increase the use of ICT to effectively utilise online platforms for guidance and counselling. It is also crucial to emphasise capacity-building in skills and training for students and counsellors to effectively integrate ICT into guidance and counselling services in HLI's.

**Recommendations:** First, this study recommends that the improvement of institutional infrastructure and support for the availability of resources be emphasised. This can help to ensure the availability of devices for staff and students, the use of appropriate platforms and the provision of technical support. Hence, the study recommended that educational stakeholders, HLIs and the government, through the Ministry of Education, Science and Technology, should partner in the provision of ICT resources and facilitate

their integration into guidance and counselling services.

Second, this study suggests that HLIs should ensure the availability of digital platforms to enhance guidance and counselling services, given advancements in technology and the increasing need to integrate ICT into these services. The target should be to improve accessibility and encourage its usage

among students in HLIs. Third, HLIs should ensure that budget allocation for ICT and guidance and counselling-related activities is prioritised in the institutional strategy, and that support for its implementation is effectively coordinated. Fourth, further studies are needed on students' experiences, satisfaction and barriers in the usage of ICT in guidance and counselling services.

## REFERENCES

- Abdul Kareem, H. B., Bello, J. A., & Salami, T. A. (2023). Self-concept and locus of control as internet predictors among undergraduate students. *ASEAN Journal of Educational Research and Technology*, 2(3), 179–188. <https://doi.org/p-ISSN:2828-4887e-ISSN:2828-4860>
- Aidoo, B., & Chebure, A. (2024). Integrating ICT to adopt online learning in teacher education in Ghana. *Education Sciences*, 14, 1313. <https://doi.org/10.3390/educsci14121313>
- Amos, P. M. (2022). Digitising counselling practice: A study of student values and challenges associated with traditional face-to-face and e-counselling modes. *Journal of Pedagogical Research*, 6(5), 174–186. <https://doi.org/10.33902/JPR.202217452>
- Ardi, Z., Putra, M. R. M., & Ildil, I. (2017). Ethics and legal issues in online counselling services: Counselling principles analysis. *Jurnal Psikologi Pendidikan dan Konseling: Journal of Educational Psychology and Counselling*, 3(2), 15–22. <https://doi.org/10.26858/jpkk.voio.3657>
- Asare, S., Agyeman, E. P., Ahmoah, J. D., & Asare, B. O. (2023). A systematic review of the role of social media in providing guidance and support to adolescents: A case study of online counseling platforms. *American Journal of Multidisciplinary Research and Innovation*, 2(6), 42–48. <https://doi.org/10.54536/ajmri.v2i6.2213>
- Cipolletta, S., & Mocellin, D. (2018). Online counselling: An exploratory survey of Italian psychologists' attitudes towards new ways of interaction. *Psychotherapy Research*, 28(6), 909–924. <https://doi.org/10.1080/10503307.2016.1259533>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative and mixed methods approaches*. SAGE Publications.
- Davies, N. (2019). *Research overview on using digital technology in the counselling professions*. Association for Counselling & Psychotherapy. <https://www.bacp.co.uk/media/6308>
- Institute of Educational Sciences. (2012). *Good practices in the use of ICT in the provision of guidance and counselling*. [www.jobtribu.eu](http://www.jobtribu.eu)
- Jailani, O., Adli, A. H. T., Amat, M. A. C., Othman, S. M., Deylami, Rahim, N. S. A. (2020). The self-perceived problems among Malaysian pre-university students: Implications for college counselling. *Asian Journal of University Education*, 16(3), 112–124. <https://doi.org/10.24191/ajue.v16i3.11075>
- McLeod, S. (2025). *Carl Rogers humanistic theory and contribution to psychology*. Simply Psychology. <https://www.simplypsychology.org/carl-rogers.html>
- Mutumukwe, C., Viberg, O., McGrath, C., & Cerratto-Pargman, T. (2025). Privacy in online proctoring systems in higher education: Stakeholders' perceptions, awareness and responsibility. *Journal of Computing in Higher Education*. <https://doi.org/10.1007/s12528-025-09461-5>
- Ndume, V. A., Kisanga, D. H., & Selemani, M. (2021). Integrating ICT in Tanzania secondary schools: Experience of Tanzania as it grows to a second-world economy. *International Academic Journal of Education & Literature*, 2(5), 81–95. <https://doi.org/10.47310/iajel.2021.v02i05.010>
- Ngeze, L. (2017). ICT integration in teaching and learning in secondary schools in Tanzania: Readiness and way forward. *International Journal of Information and Education Technology*, 7(6), 424–427. <https://doi.org/10.18178/ijiet.2017.7.6.905>



- Okoh, I. P. (2018). Challenges in utilising information and communication technology (ICT) in counselling and its implications for capacity building. *Journal of Science, Technology & Education*, 6(2), 184–191. [www.atbuftejoste.com](http://www.atbuftejoste.com)
- Ristianti, D. H., Syahindra, W., Jumansyah, J., Marlana, M., & Arip, M. A. (2025). Development of smart digital interactive service as a strategy for guidance and counselling services in higher education. *Journal of Education and Health Promotion*, 14, 141, 1–9. [https://doi.org/10.4103/jehp.jehp\\_1994\\_23](https://doi.org/10.4103/jehp.jehp_1994_23)
- Rushahu, B. G. (2022). Availability and challenges of guidance and counselling services for female postgraduate students at the University of Dar es Salaam. *Papers in Education and Development*, 40(1), 96–109. <https://journals.udsm.ac.tz/index.php/ped/article/view/5061>
- Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., & Jinks, C. (2018). Saturation in qualitative research: Exploring its conceptualisation and operationalisation. *Quality & Quantity*, 52(4), 1893–1907. <https://doi.org/10.1007/s11135-017-0574-8>
- Situmorang, D. D. B. (2020). Online/cyber counselling services in the COVID-19 outbreak: Are they really new? *Journal of Pastoral Care & Counseling*, 74(3), 166–174. <https://doi.org/10.1177/1542305020948170>
- Snow, W. H., & Coker, J. K. (2020). Distance counsellor education: Past, present, future. *The Professional Counselor*, 10(1), 40–56. <https://doi.org/10.15241/whs.10.1.40>
- United Republic of Tanzania. (2002). *Waraka wa elimu namba 11 wa mwaka 2002: Kuanzisha huduma za malezi na ushauri nasaha kwa wanafunzi katika shule na taasisi za elimu*. Ministry of Education and Culture.
- Wong, K. P., Bonn, G., Tam, C. L., & Wong, C. P. (2018). Preferences for online and/or face-to-face counselling among university students in Malaysia. *Frontiers in Psychology*, 9, 64. <https://doi.org/10.3389/fpsyg.2018.00064>
- Zafar, A., Farooq, A., & Sherazi, S. N. (2025). Students' perceived effectiveness of online counselling sessions. *Human Nature Journal of Social Sciences*, 6(1), 61–68. <https://doi.org/10.71016/hnjss/rvk73z43>