



<http://ijec.ejournal.id>

INDONESIAN JOURNAL OF EDUCATIONAL COUNSELING

ISSN 2541-2779 (print) || ISSN 2541-2787 (online)

UNIVERSITAS MATHLA'UL ANWAR BANTEN



Theoretical/Conceptual Article

Technology Framework In Guidance And Counseling Services

Irfan Fahriza¹, Mamat Supriatna², Ahmad Rofi Suryahadikusumah³, Syari Fitrah
Rayaginansih⁴, Nadia Aulia Nadhirah⁵, Aisha Nadya⁶

^{1,4} Universitas Ma'soem, Indonesia

³ Universitas Islam Negeri Sultan Maulana Hasanuddin Banten, Indonesia

^{2,5} Universitas Pendidikan Indonesia, Indonesia

⁶ Universitas Islam Syekh Yusuf, Indonesia

Article History

Received: 05.01.2023
Received in revised form:
20.01.2023
Accepted: 26.01.2023
Available online: 31.01.2023

ABSTRACT

Much research has been done on guidance and counseling technology but only focuses on proving the effectiveness of technology applications in counseling. Unfortunately, research has yet to be found focusing on the proper framework for utilizing technology in guidance and counseling. This paper aims to formulate a framework for using technology in counseling services. A systematic literature review analyzes and combines information from various sources to obtain a comprehensive concept. Reference search results from 2011-2022 using published or perish (PoP) identified 69 references that met the literature criteria. The results of the study show that the use of technology in counseling must be oriented towards improving service quality by paying attention to the aspects: 1) Cultural and communication processes that will occur through technological devices, 2) Provisions and procedures for using technology-based services are to be agreed upon, 3) Readiness of technical knowledge from counselors as a service manager, 4) User experience in the technology application used.

KEYWORDS: Framework, Technology in counseling, Counselor ICT competence.

DOI: 10.30653/001.202371.247



This is an open access article distributed under the terms of the Creative Commons Attribution 4.0 International License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.
© 2023 Irfan Fahriza, Mamat Supriatna, Ahmad Rofi, Syari Fitrah, Nadia Aulia, Aisha Nadya

INTRODUCTION

Like other professional practices, guidance and counseling face massive technological developments. The era of technology and information is developing daily, from computerization and digitization to artificial intelligence (Artificial Intelligence). These technological developments have not only an impact on communication processes but also on professional frameworks and practices.

¹ Corresponding author's address: Program Studi Bimbingan dan Konseling Universitas Ma'soem; Jl. Raya Cipacing No.22, Cipacing, Kec. Jatinangor, Kabupaten Sumedang, Jawa Barat 45363, Indonesia. Email: irfan.fahriza@gmail.com

Guidance and counseling are encouraged to make adjustments to these technological advances. Adjustments to the guidance and counseling work system can be found in innovations made to planning and designing guidance and counseling service systems, data processing, to cyber counseling practices.

Various evidence related to the development of technology in guidance and counseling practices includes assessment of interest and aptitude tests using computer-based tests (Paramartha & Dharsana, 2021); efficiency of data processing and program development using IKMS software (Prilintia & Anni, 2016); use of microblogging as a medium for career guidance (Suryahadikusumah, 2022); to the use of electronic forms as an evaluation tool for counseling services (Imawanty & Fransiska, 2019). The research and implementation of ICT in counseling services prove that guidance and counseling are increasingly dynamic and innovative in implementing technology-based services.

However, it cannot be denied that the ability of school counselor to adapt to technological advances is not evenly distributed. A survey by Steele, Jacoke, and Stones (Steele et al., 2014) shows that only 28% of school counselors feel that ICT can support the implementation of essential services (guidance curriculum). At the regional level, Sari & Suryahadikusumah's (2020) research shows that despite the lack of ICT facilities, counseling teachers experience obstacles in processing digital information into guidance content and are accustomed to uploading existing counseling service programs.

The issue of innovation and creativity in applying technology returns to technological literacy. school counselor with the knowledge and skills will utilize information technology in guidance and counseling services (Triyono & Febriani, 2018). In line with this opinion, Julius et al. (2020) revealed that counseling teachers need to have basic knowledge about the characteristics of each technological device and the features of the technology and then learn how to use this technology for counseling services. School counselors also need more education about the benefits of each up-to-date digital application (Suryahadikusumah & Nadya, 2020). Another factor that makes school counselor able to optimize technology in counseling services is their attitude toward technology. Based on the results of an assessment of 125 guidance and counseling teachers, it was found that a positive attitude towards ICT predicts the intention to use technology, as well as counseling teachers who consider ICT easy to use, will be more likely to make good use of ICT (Anni, 2018).

Various studies on the theme of guidance and counseling technology focus on proving the effectiveness of technology products in counseling. Therefore, this article attempts to formulate a framework for using technology in counseling services, starting from the meaning of the nature of technology, the basis for using technology in counseling services, and the steps that need to be taken so that the use of technology becomes effective in counseling services. Hopefully, this paper will contribute to forming a positive and motivating attitude to provide transformative and effective counseling services.

METHOD

This study uses the systematic literature review method, which analyzes and combines various information from various sources of literature to obtain comprehensive results. The literature review examined the main concepts of technology utilization in counseling guidance services, then analyzed research results in scientific journals. The reference sources used are online articles indexed at Ebsco, Base, Sinta, or

eric.ed.gov. The criteria for selecting articles include publications in the last ten years, specifically for Indonesian publications. It has a Sinta score of 2-4, articles processed at international seminars, and an H-Index.

FINDING AND DISCUSSION

Researchers identified literature related to the use of technology in counseling. The results of identifying references from 2011-2022 using published or perish (PoP) identified 69 references that met the literary criteria that could be used as research data. Furthermore, the researchers combed back based on the citations of the found literature data, which are presented in table 1 below.

Table 1. Literature Matrix

Cites	Authors	Title	Year	Source	Publisher	G.S. Rank
77	DDB Situmorang	Are online/cyber counseling services in the COVID-19 outbreak really new?	2020	Journal of Pastoral Care & Counseling	journals.sagepub.com	70
49	A Haryati	<i>Online Counseling Sebagai Alternatif Strategi Konselor dalam Melaksanakan Pelayanan E-Counseling di Era Industri 4.0</i>	2020	Bulletin of Counseling and Psychotherapy	journal.kurasinstitute.com	21
23	MB Scholl, SCW Hayden...	<i>Promoting optimal student engagement in online counseling courses</i>	2017	... of Humanistic Counseling	Wiley Online Library	38
9	MN Riswandha, N Maulidyah	<i>Aplikasi E-Counseling dalam Pemanfaatan Layanan Bimbingan dan Konseling untuk Mengatasi Siswa Terisolir menggunakan Metode Backward Chaining (Studi ...</i>	2017	Jurnal Ilmiah: Lintas Sistem ...	jurnal.narotama.ac.id	2
5	Zadrian Ardi, M. Rido Mulia Putra, Ifdil Ifdil	Ethics And Legal Issues In Online Counseling Services: Counseling Principles Analysis	2017	Jurnal Psikologi Pendidikan dan Konseling: Jurnal Kajian Psikologi Pendidikan dan Bimbingan Konseling	Universitas Negeri Makassar	65
5	Zadrian Ardi, Frischa	<i>Konseling Online: Sebuah Pendekatan Teknologi Dalam</i>	2013	Jurnal Konseling dan	Indonesian Institute for Counseling,	782

	Meivilona Yendi, Ifdil Ifdil	<i>Pelayanan Konseling</i>		Pendidikan	Education, and Therapy (IICET)	
4	M. Harwansyah Putra Sinaga, Khairina Qurrata, Vina Andini	<i>Pola Pelaksanaan Manajemen Bimbingan dan Konseling di Sekolah Menengah Atas</i>	2022	Bulletin of Counseling and Psychothera PY	Kuras Institute	501
4	Ifdil Ifdil, Zadrian Ardi	<i>Konseling Online Sebagai Salah Satu Bentuk Pelayanan E- konseling</i>	2013	Jurnal Konseling dan Pendidikan	Indonesian Institute for Counseling, Education, and Therapy (IICET)	721
3	Vany Dwi Putri	<i>Layanan Bimbingan Dan Konseling Daring Selama Masa Pandemi Covid-19</i>	2020	Coution: journal of counseling and education	Institut Agama Islam Bunga Bangsa Cirebon	263
3	Hardi Prasetiawan, Hardi Prasetiawan	<i>Cyber Counseling Assisted With Facebook To Reduce Online Game Addiction</i>	2016	GUIDENA: Jurnal Ilmu Pendidikan, Psikologi, Bimbingan dan Konseling	Muhamma diyah Metro University	441
3	Muhamma d Ilham Bakhtiar	<i>Pengembangan Video Ice Breaking Sebagai Media Bimbingan Konseling Dalam Meningkatkan Keterampilan Sosial</i>	2015	Jurnal Psikologi Pendidikan dan Konseling: Jurnal Kajian Psikologi Pendidikan dan Bimbingan Konseling	Universitas Negeri Makassar	933
2	Achmad Gozali	<i>Layanan Bimbingan Dan Konseling Berbasis Teknologi Informasi Pada Masa PSBB (Pembatasan Sosial Berskala Besar)</i>	2020	Coution : journal of counseling and education	Institut Agama Islam Bunga Bangsa Cirebon	370
2	Siti Sutarmi Fadhilah, Agus Tri	<i>Konseling Daring bagi Mahasiswa Universitas Sebelas Maret,</i>	2019	Indonesian Journal of Educational	Universitas Mathla ul Anwar	472

	Susilo, Indriyana Rachmawati	<i>Surakarta, Indonesia</i>		Counseling	Banten	
2	Kushendar Kushendar, Indra Lacksana, Nurul Enggar Permana, Reni Yunita	<i>Development Goals 2030: Teknologi Mudah Guna dalam Bimbingan dan Konseling</i>	2019	Bulletin of Counseling and Psychothera py	Kuras Institute	549
2	Jason S Zack	<i>The Technology of Online Counseling</i>	2011	Online Counseling	Elsevier	688
2	T Kurniawan	<i>Pengembangan Aplikasi Pengenalan Bimbingan Dan Konseling Berbasis Android Sebagai Media Layanan Informasi Untuk Siswa Smp Negeri 3 Gresik</i>	2017	Jurnal BK UNESA	Universitas Negeri Surabaya	21
2	MI Bakhtiar, R Wulandari, ...	<i>Layanan bimbingan klasikal menggunakan media konseling berbasis teknologi aplikasi Google Classroom</i>	2019	<i>Konvensi Nasional Bimbingan dan Konseling XXI</i>	proceedings .upi.edu	14

Based on the findings in table 1, several keywords intersect with the use of technology in counseling guidance: communication, online, and application. The framework for using technology in guidance and counseling will be discussed based on the keywords most commonly found in these studies and studies.

Communication

Communication is a term that is always juxtaposed with technology. Ardi et al. (2017) explained that technology used in counseling guidance services must encourage and support continuous communication and create an atmosphere of counseling relationships that can be developed further. Guidance and counseling technology development must refer to the counseling communication process that is carried out.

The changing communication culture also affects the shift in client interest in utilizing counseling guidance services. The emergence of cyber counseling and the use of social media is driven by students who communicate more textually (chatting) and are less comfortable with face-to-face counseling. (Kushendar et al., 2019). The culture of communication that must be understood is not only the habit of communicating but also needs to understand how much students' ability to listen and understand information. For example, in the case of zoom fatigue during a pandemic, it is advisable to use a zoom meeting not to last one hour because the audience's attention span is getting shorter (Nesher Shoshan & Wehrt, 2022).

In the development of media and counseling technology, the counselor must determine the role and function of the media. Zack (2011) gave an example in his writing when the counselor is going to make brochures/pamphlets, and he must

consider whether the media is just static or interactive information media, besides that when using a website in counseling services, it is necessary to think about the design of the website which will give the nuance (tone) of the counseling process to be held. Thus the technology used will represent the experience of the guidance and counseling services.

Online

Online is a term that refers to the implementation system. Online can also be interpreted as a way for someone to obtain information. Today's guidance and counseling services tend to develop towards implementing online guidance services. Especially during the pandemic two years ago, massively various innovations in implementing online services appeared practically and in research.

An online system occurs if it is carried out through an intermediary in a network or wirelessly. Its application refers to the use of the internet and between computer devices. Technology is utilized to implement online counseling guidance in the form of live chat, audio, and video prepared using a smartphone, computer, or another device (Fadhilah et al., 2019; Putri, 2020; Zack, 2011). A stable network and adequate devices are prerequisites for online services to occur.

Over the past two decades, online/cyber counseling has been well-accepted as a strategy for implementing counseling services. Anonymity in online counseling provides flexibility in expressing problems but makes it more difficult for counsees to disclose their data (Situmorang, 2020). Therefore, in the online implementation system, it is necessary to prepare protocols and provisions that apply so that the counseling process runs appropriately. Ardi et al. (2017) stated the need for provisions or regulations that must be obeyed by anyone involved. Provisions or standard procedures must be established, even in the pre-counseling preparation stage (pre-counseling). (Ifdil & Ardi, 2013).

Online counseling services generally make it easier for anyone to do counseling anywhere. However, Ifdil & Ardi (2013) emphasizes that online counseling should be done when the counselee feels the problems experienced must be resolved immediately and there is no opportunity to do face-to-face counseling.

The online counseling service system can be hampered if one party experiences network or device interference (Haryati, 2020; Zack, 2011). These concepts imply the importance of counselors having technical knowledge readiness on the internet and technological devices. Zack (2011) stated that counselors must be familiar with the devices they use to respond quickly to technical problems experienced when carrying out online counseling.

Apps/Software

Apps/Software refers to the tools used to package guidance and counseling services on digital platforms, especially mobile applications. Mobile applications are applications that can be downloaded and have specific functions that they add to the functions of the device itself based on the presented features (Prabowo et al., 2021). Application development is carried out so guidance and counseling services can be accessed on computers and tablets, smartphones, and other devices. Applications are also used to connect counselors and counsees in achieving service targets.

Kurniawan (2017) is developing Apps/software to introduce guidance and counseling services. The developed android-based application provides information related to four areas of service, motivation, and self-reflection features. The advantage of this application is that students can directly write down reflections obtained from the material presented in the application. Thus, the application stimulates direct student involvement in the material introduced.

The mobile application can also be part of the individual counseling process. Riswandha & Maulidyah (2017) tested the use of e-counseling applications with the Backward Chaining method. The application helps students to understand themselves and draw conclusions regarding the isolated conditions they experience. The main features developed are 1) the factor menu is to input data regarding things that cause him to be isolated, 2) the solution menu is a solution suggestion based on the data entered on the factor menu, and 3) consultation, if students want to explore the problem and carry out consultations in a comprehensive manner. Live. With the help of this application, students can more easily believe and make decisions regarding solving the problems they face based on the facts collected in the application.

Technology can also be utilized using the features already available in commonly used e-learning applications. As done by Bakhtiar et al. (2019), take advantage of the features of the google classroom application to conduct classical guidance. The features used are conveying material, carrying out follow-up assignments on material, using the grading feature as a measurement of student performance, storing performance data, and communication features so that teachers and students can communicate through posts and comments in the application.

The key to using application-based technology is that the features must follow the targets and work steps for each service implemented. A good application has a good user experience design too, which can emotionally impact beliefs, preferences, perceptions, comfort, behavior, and success before, when, and after using a product. (Gandhi et al., 2022). There is a humanist value in using applications, where applications must be developed and used based on the user's or users' needs. In addition, it is necessary to describe the flow of using features like the working system of the application. Considering this, the applications used in guidance and counseling services will have usability, effectiveness, and efficiency (easy to use).

CONCLUSION

The use of technology in guidance and counseling must be as an effort to strengthen the quality of guidance services. Technology-based guidance and counseling services not only keep up with existing technological developments but provide a counseling experience that is easier to follow and efficient in terms of resources, time, and the stages of achieving service goals. To get there, in using or developing technology in counseling services, consider 1) the culture and communication process that will occur through technological devices, 2) the provisions and procedures for using technology-based services that will be standardized upon, 3) the readiness of technical knowledge from the counselor as a service manager, and 4) the user experience that will arise from the technology used.

REFERENCES

- Anni, C. T. (2018). School Counselors' Intention to Use Technology: The Technology Acceptance Model. *Turkish Online Journal of Educational Technology-TOJET*, 17(2), 120–124.

- Ardi, Z., Putra, M. R. M., & Ifdil, I. (2017). Ethics And Legal Issues In Online Counseling Services: Counseling Principles Analysis. *Jurnal Psikologi Pendidikan dan Konseling: Jurnal Kajian Psikologi Pendidikan dan Bimbingan Konseling*, 3(2).
- Bakhtiar, M. I., Wulandari, R., & Marlina, E. (2019). Layanan bimbingan klasikal menggunakan media konseling berbasis teknologi aplikasi Google Classroom. *Konvensi Nasional Bimbingan dan Konseling XXI*, 78–81.
- Fadhilah, S. S., Susilo, A. T., & Rachmawati, I. (2019). Konseling Daringbagi Mahasiswa Universitas Sebelas Maret. *Indonesian Journal of Educational Counseling*, 3(3).
- Gandhi, L. M. A. A., Sianturi, R. S., & Kharisma, A. P. (2022). Perancangan User Experience Aplikasi Mobile Online Therapy untuk Mengatasi Depresi bagi Remaja menggunakan Metode Human-Centered Design. *Jurnal Pengembangan Teknologi Informasi dan Ilmu Komputer*, 6(7).
- Haryati, A. (2020). Online Counseling Sebagai Alternatif Strategi Konselor dalam Melaksanakan Pelayanan E-Counseling di Era Industri 4.0. *Bulletin of Counseling and Psychotherapy*, 2(2).
- Ifdil, I., & Ardi, Z. (2013). Konseling Online Sebagai Salah Satu Bentuk Pelayanan E-konseling. *Jurnal Konseling dan Pendidikan*, 1(1).
- Imawanty, I., & Fransiska, A. B. (2019). Optimalisasi Asesmen dan Evaluasi Bimbingan dan Konseling dengan Memanfaatkan Aplikasi Formulir Daring Jotform. *Konvensi Nasional Bimbingan dan Konseling XXI*, 129–135.
- Julius, A., Fahriza, I., & Wulandari, P. (2020). DIGITAL LITERACY AS A SCHOOL COUNSELOR COMPETENCE IN THE DEVELOPMENT OF MEDIA IN GUIDANCE SERVICES. *Jurnal Penelitian Bimbingan dan Konseling*, 5(2).
<https://doi.org/http://dx.doi.org/10.30870/jpbk.v5i2.10106>
- Kurniawan, T. (2017). Pengembangan Aplikasi Pengenalan Bimbingan Dan Konseling Berbasis Android Sebagai Media Layanan Informasi Untuk Siswa Smp Negeri 3 Gresik. *Jurnal BK Unesa*, 7(2).
- Kushendar, K., Lacksana, I., Permana, N. E., & Yunita, R. (2019). Development Goals 2030: Teknologi Mudah Guna dalam Bimbingan dan Konseling. *Bulletin of Counseling and Psychotherapy*, 1(1).
- Nesher Shoshan, H., & Wehrt, W. (2022). Understanding "Zoom fatigue": A mixed-method approach. *Applied Psychology*, 71(3).
- Paramartha, W. E., & Dharsana, I. K. (2021). Pengembangan Asesmen Minat-Bakat Berbasis Computer Based Test. *Jurnal Bimbingan dan Konseling Indonesia*, 6(2), 199–206.
- Prabowo, I. A., Wijayanto, H., Yudanto, B. W., & Nugroho, S. (2021). *Buku Ajar: Pemrograman Mobile Berbasis Android (teori, latihan dan tugas mandiri)*. Lembaga Penelitian dan Pengabdian pada Masyarakat Universitas Dian Nuswantoro.
- Prilintia, U., & Anni, C. T. (2016). Studi Deskriptif Penggunaan Software IKMSA® dalam Perencanaan Program Bimbingan dan Konseling. *Indonesian Journal of Guidance and Counseling: Theory and Application*, 5(2).
- Putri, V. D. (2020). Layanan bimbingan dan konseling daring selama masa pandemi COVID-19. *Coution: journal of counseling and education*, 1(2).
- Riswandha, M. N., & Maulidyah, N. (2017). Aplikasi E-Counseling dalam Pemanfaatan Layanan Bimbingan dan Konseling untuk Mengatasi Siswa Terisolir menggunakan Metode Backward Chaining. *Jurnal Ilmiah: Lintas Sistem Informasi dan Komputer (LINK)*, 26(1).
- Sari, K., & Suryahadikusumah, A. R. (2020). Identifikasi kendala guru BK kelompok millenials

- dalam menggunakan ICT di kota Palembang. *TERAPUTIK: Jurnal Bimbingan dan Konseling*, 4(1).
- Situmorang, D. D. . (2020). Online/cyber counseling services in the COVID-19 outbreak: are they really new? *Journal of Pastoral Care & Counseling*, 74(3).
- Steele, T. M., J.E., J., & Stones, C. B. (2014). An examination of the role of online technology in school counseling. *Professional School Counseling*, 18(1), 125–135.
- Suryahadikusumah, A. R. (2022). Improving Student Career Adaptability Through Microblogs. *Jurnal Educative: Journal of Educational Studies*, 7(1), 1–12.
- Suryahadikusumah, A. R., & Nadya, A. (2020). *Digital Literacy and Innovation for Guidance and Counseling Program*. 462(Isgc 2019), 190–195. <https://doi.org/10.2991/assehr.k.200814.041>
- Triyono, T., & Febriani, R. D. (2018). Pentingnya Pemanfaatan Teknologi Informasi oleh Guru Bimbingan dan Konseling. *Jurnal Wahana Konseling*, 1(2), 74–83.
- Zack, J. S. (2011). The technology of online counseling. In *Online counseling* (hal. 67–84). Academic Press.