KONSELOR

The Development of electronic group counseling (EGC) software to optimize counseling services in Indonesia

Mungin Eddy Wibowo1, Ashari Mahfud2•, & Ujang Khiyarusholeh3
1Universitas Negeri Semarang, Semarang, Indonesia
2Universitas Lampung, Bandar Lampung, Indonesia
3Universitas Peradaban, Brebes, Indonesia

SCROLL DOWN TO READ THIS ARTICLE

Original Article

The Development of electronic group counseling (EGC) software to optimize counseling services in Indonesia

Mungin Eddy Wibowo[1], Ashari Mahfud[2]♦, & Ujang Khiyarusholeh[3]

[1]Universitas Negeri Semarang, Semarang, Indonesia
[2]Universitas Lampung, Bandar Lampung, Indonesia
[3]Universitas Peradaban, Brebes, Indonesia

Abstract: Counseling services are currently an increasing need in society. This is proof that modern life makes people vulnerable to their psychological well-being. However, current counseling services still have limitations such as distance and time with clients. Therefore, the development of electronic group counseling (EGC) software was the reason for its development to optimize services to clients. EGC development was carried out by adopting the Borg & Gall model. These stages include; 1) literature review, 2) product preparation, 3) first stage trial, 4) product revision, 5) second stage trial, 6) final product revision. The trial was carried out involving 25 guidance and counseling teachers, as well as 500 high school level students spread across Central Java province. The selection of subjects in this research was carried out using cluster sampling techniques. The data collected relates to teachers' experiences in using this application in implementing counseling services. Meanwhile, data from students was collected to see students' experiences in using counseling services with the EGC application. Data collection was carried out using the counseling service satisfaction instrument with EGC which had previously been developed by researchers. The results obtained will then be described quantitatively. The results of this development produce EGC software that is ready to use. This software makes it easier for counselors to plan meetings with clients, assess clients' conditions, meet virtually with clients, and create counseling reports. This software complements the findings of cybercounseling products which are currently being developed in Indonesia. Supporting technological advances, counseling comes with various innovations that are able to create more effective and efficient services for clients.

Keywords: Electrounic group counseling; Website application; Software development

INTRODUCTION

The development of technology and information in the millennial era, especially in the field of communication, has had a huge influence and impact on the world of education (Aini & Mudjiran, 2020). Communication plays a very important role and is necessary to support education through various media such as telephone, computer, internet, email, websites and so on. This media assistance is very helpful and makes it easier for educational staff to provide services and develop students' potential. Technological developments must be in line with the innovation and creativity of school counselors in helping students through guidance and counseling services using information technology media (Dores., Geraldo., Carvalho., & Barbosa, 2020).

♦Corresponding author: Ashari Mahfud, Universitas Lampung. Jalan Prof. Dr Jl. Prof. Dr. Ir. Sumantri Brojonegoro No.1, Kota Bandar Lampung, Lampung 35141, Indonesia. Email: asharimahfud.am@gmail.com

Therefore, guidance and counseling teachers are expected to be able to utilize technological developments in helping students through counseling services using information technology media. so that it can have an impact on increasing the professionalism of school counselors' work (Alexius, 2019). Guidance and counseling does not have to be done face to face or in the Guidance and Counseling (BK) room, but can be done through the media, anywhere and at any time, this is to meet students' needs and help their development optimally. Counseling services are guidance and counseling services that allow direct face-to-face contact with guidance teachers/counselors in order to discuss and alleviate problems (Kirana, 2019).

Individual counseling services are also a way for counselors to provide personal assistance to students who are then expected to be able to overcome the students' existing problems. Guidance and counseling services are not always face-to-face, there are services resulting from the use of information technology that are easier, namely cybercounselling (virtual counseling) which allows clients not to feel embarrassed or awkward and can be done anytime and anywhere (Corey, 2013). The use of information technology is currently relevant when applied in guidance and counseling activities. Cybercounseling can be defined as a professional counseling practice that occurs when the counselee and counselor are located separately and utilize electronic media to communicate via the internet (Dinçyürek., Cyprus., & Uygarer, 2012). Cybercounseling is also called online counseling or virtual counseling. In other words, cybercounseling is an internet connection via video calls, WhatsApp, email, Facebook and social networks. Cybercounseling is a virtual guidance and counseling strategy or counseling that takes place with the help of an internet connection.

Cybercounseling has a wider range of services, because it can be done anywhere and at any time. This is also a form of effort to overcome student problems that often occur in cyberspace. A problem that currently often occurs among students in cyberspace is cyberbullying. A study conducted by Neuropsychology at Universitas Insan Cita Indonesia (UICI) regarding the problem of cyber bullying in Indonesia (2023), revealed that 71% of bullying cases currently occur within the scope of social media (online). This shows that student behavior in cyberspace needs to be handled by optimizing counseling services using information technology media (cybercounseling).

Literature reviews have been carried out by several previous researchers with the keywords "counseling", "online" and "technology" (Fadhilah., Alkindi., & Muhid, 2021; Purwaningrum., Asrowi., Susilo, & Suryawati, 2021; Azizah., Neviyarni., Mudjiran., & Nirwana, 2022; Rasyid., & Muhid, 2020). The results of this study show that there are several advantages when implementing counseling services with the help of technological media (cyber-counseling). The advantages for students based on several previous research results are 1) students are more interested in participating in counseling through cybercounseling, 2) counseling guidance teachers (BK) find it easier to provide information to students through cybercounseling, 3) students can be closer to counseling guidance counselors (BK), 4) students also feel more able to discuss their problems openly with the counseling guidance teacher, and 5) it makes it easier for students to carry out long-distance counseling besides. Apart from that, for counselors, implementing cybercounseling services will further optimize the function of counseling services for clients who need help, but are prevented from meeting in person (Fadhilah., Susilo., & Rachmawati, 2019). Previous research that tested a guidance and counseling service model through web-based cybercounseling to improve self-regulated learning in high school students was proven to be more effective (Gading, 2020). Students can focus on achieving learning goals, foster self-motivation. Even though cyber counseling has many advantages, this service also has weaknesses or limitations, including: (a) the success of counseling is determined by the availability of an internet network (Haryati, 2020); (b) counselors have difficulty building therapeutic relationships with clients (Apsari., Rama., & Prasetyo, 2018); (c) in Indonesia there is no clear law regarding online counseling services; (d) there are still many counselors who lack skills in using internet services; and (e) little research regarding the benefits of online counseling (Hariko, 2017).

However, several other studies suggest that, in implementing online counseling services, several things are currently still needed, namely the existence of technological media that is compatible with various hardware & software. The platforms used in online counseling are counseling applications, websites, telephone, WhatsApp chat, video conferencing, & other social media which can be applied on various types of devices (Finn., & Barak, 2010; Kraus, R. et al. 2011; Ifdil, et.al., 2013). Online counseling can also be done by applying the principles of Psychological First Aid (PFA) with the

adaptation of 6 steps, namely look, listen, give comfort, & give hope. Often, online counseling will be more effective if done together with peers or what is usually called a peer counselor (Arista, dkk, 2017). Apart from that, the platform used in online counseling services is able to facilitate various activities leading up to counseling services, during counseling services and after counseling services are completed/administered (Fadhilah., Alkindi., & Muhid, 2021).

Therefore, we need a technological media that is able to become a platform for implementing cyber counseling services to answer the need for implementing online counseling services. New counseling media involving technology in serving clients in the era of information and communication technology was developed as a platform called electrounic group counseling (EGC). The research objective based on these reasons is a product in the form of electronic group counseling (EGC) which is effective in optimizing counseling services in schools for students. Through EGC services, counselors will be able to serve clients more time-savingly, not depending on location, and more practically because it can be done anywhere and at any time without having to meet in person (Haryati, 2020). In addition, EGC not only facilitates clients to express sensitive problems but also increases access to counseling services for students who live in areas far from counseling service centers (Hidayah, 2013). This research was conducted with the aim of developing a product in the form of electronic group counseling (EGC).

METHOD

The development of electronic group counseling (EGC) was developed in several stages adopted from Borg and Gall's R&D research model (Assyauqi, 2020). Starting from literature reviews, to product trials (Figure 1). Literature study activities, interviews and observations were carried out at the beginning of the research to see the field's need for the availability of cybercounseling products. After obtaining the information, researchers will design and determine product specifications that will be developed to address field needs related to the implementation of cybercounseling. At the planning stage, researchers determined the scope of Electronic Group Counseling (EGC) product development, identified the objectives of Electronic Group Counseling (EGC) and information needs to achieve the desired goals in accordance with the needs of online counselors. The involvement of several experts was carried out at this stage in focus group discussion (FGD) activities with 7 teachers from the Indonesian Counseling Guidance Association of Central Java Province (ABKIN-Jateng), as well as 18 online counselor practitioners who work in educational environments. All of these experts and practitioners live in the province of Central Java which was selected as a cluster.
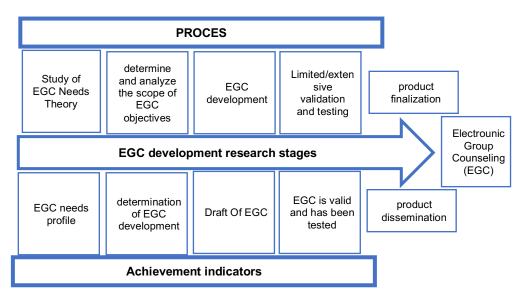

Figure 1. EGC product development flow, an adaptation of the Borg & Gall development model

The next stage is the preparation of Electronic Group Counseling (EGC) which is carried out with an application development orientation. The draft product specifications that have been previously determined from the results of the FGD activities are entered into a programming language so that they can be run in the form of an application. After EGC was developed, Electronic Group Counseling (EGC) was assessed by online counseling experts (2 people) and information technology experts (2 people). The results of the expert assessment are used to carry out revision I of the EGC product. Next, an EGC trial was carried out involving 25 guidance and counseling teachers, as well as 500 students in Central Java Province. Test subjects were selected using cluster sampling to represent the entire region of Central Java province. The data obtained relates to the satisfaction of EGC users from guidance and counseling teachers and students in using EGC during the counseling process. The data is then analyzed in quantitative descriptive form. The results of this trial are used as information to conduct a study of the final product before final dissemination, and dissemination of EGC products so that they can be utilized by related parties.

RESULTS AND DISCUSSION

Existing technological developments have influenced all aspects of life, one of which is guidance and counseling services. Advances in information and communication technology have had a major influence on counseling guidance services (Ifdil., & Ardi, 2013). As time goes by, counseling is no longer done face to face, but can be done remotely using an internet network called cyber counseling (Kirana, 2019). Cybercounseling can be carried out using electronic group counseling (EGC) software. This service makes it easier for someone who wants to do counseling but cannot attend in person (Kraus, et al. 2011). The existence of this media requires counselors and guidance and counseling teachers to master cyber counseling services.

Counselors or BK teachers are required to be able to provide counseling services in various new, creative and innovative ways (McLeod, 2006). The presence of electronic group counseling (EGC) software media in schools certainly makes students feel helped if they want to do counseling but don't have time to meet the guidance and counseling teacher directly.
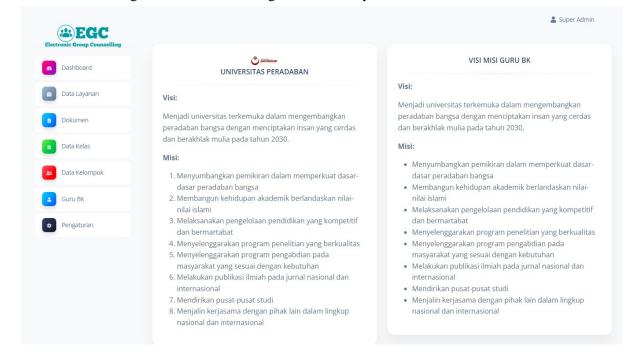

Figure 2. Front view of electronic group counseling software.

Through the use of smartphones, students can carry out counseling with guidance and counseling teachers. The presence of cyber counseling implemented in schools is an alternative for providing counseling services for counselors. Counselors are expected to be able to develop counseling models and develop their skills, especially in the IT field. This is important so that counselors are able to provide the best service for students at school.
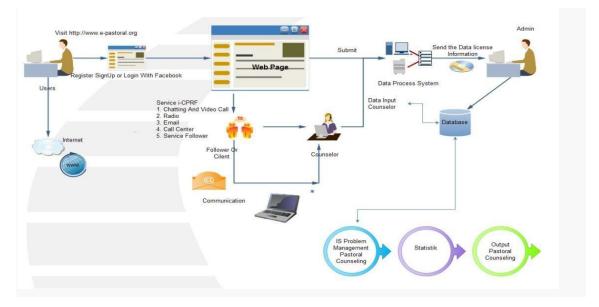

Figure 3. Electronic Group Counseling product specifications

Development of electronic group counseling software as an answer to the need for counseling services that are in line with current societal developments. Its development is carried out through measuring the condition of the need for counseling services in schools. Therefore, EGC is presented as a counseling medium that will facilitate counseling services by teachers in schools using the specifications provided in this application.

Electrounique group counseling software is a medium that can be used well in the guidance and counseling process to help solve student problems without having to meet them in person. However, electronic group counseling media has shortcomings and weaknesses that become obstacles in its implementation. These obstacles include network connections which have an impact on the counseling process. The solution to this problem is to provide a more stable WiFi network, especially for guidance and counseling teachers and students when they are at school or at home. The counseling process using EGC software requires an electronic device such as a laptop, tablet, cellphone or other device and is connected to network-based software.

The use of electronic group counseling has three stages in the cyber counseling service process, namely: Preparation stage, including preparation of hardware and software used in the counseling process between the counselor and the counselee. EGC has a light memory capacity. So the support can be used by involving the processors in cellphones and computers owned by students and teachers. The hardware used must have facilities to connect to the connection. So it is possible to connect students with teachers in counseling services through EGC media.

The second stage is the guidance and counseling service process, namely providing counseling to students (clients) through EGC media. Before carrying out counseling, students (clients) who need this counseling service will first register themselves via the menu/toolbar provided in the EGC. This registration is carried out so that students get a user ID and password that can be used to enter EGC. Registration is done by filling in the form provided in the EGC. This form contains personal data which will be directly integrated into the student's account and the teacher's account as a counselor. After students successfully enter EGC, students will receive notification regarding offers regarding time options and choices of counselors who will provide services to them. Thus, an agreement emerged between students and counseling teachers to be able to meet at EGC. The implementation of cyber-

counseling using EGC is developed using general techniques and special techniques that are adapted by counselors according to the characteristics and needs of students. Implementation of cybercounseling with EGC emphasizes student independence in solving problems,

The final stage is ending the counseling process. This stage consists of two types of endings, namely; termination of counseling sessions and termination of counseling services as a whole. The student can end the counseling session independently by pressing the "end meeting" button on the menu provided. After the termination is complete, students can see the counseling report as a form of reflection on themselves. Complete termination can be done by mutual agreement between the counseling teacher and the student. Students terminate counseling services when they feel they no longer need counseling. When the counseling service ends, students can download the overall counseling results as a final report of the counseling services that have been carried out. After the service is completed, students must provide an evaluation of the success of counseling and follow-up, as a form of survey of satisfaction of users of counseling services with EGC. This is used by counseling teachers and application developers to evaluate the services that have been provided. There are four possibilities that occur in the evaluation process, including: (a) the success of the counseling process is marked by the condition of the client fulfilling an effective daily life, (b) counseling continues face-to-face, (c) counseling services continue face-to-face. next session, and (d) the client is referred to another counselor.

The results of research on the development of the EGC platform are in response to the needs of several previous studies related to online counseling services. The results of previous research show that, in implementing online counseling services, several things are currently still needed, namely the existence of appropriate technological media with various hardware & software. The platforms used in online counseling are counseling applications, websites, telephone, WhatsApp chat, video conferencing, & other social media which can be applied on various types of devices (Assyauqi, 2020; Alexius Endy Budianto, Nur Hidayah, 2019; Ifdil, et.al., 2013). Online counseling can also be done by applying the principles of Psychological First Aid (PFA) with the adaptation of 6 steps, namely look, listen, give comfort, & give hope. Often, online counseling will be more effective if done together with peers or what is usually called a peer counselor (Rasyid., & Muhid, 2020). Apart from that, the platform used in online counseling services is able to facilitate various activities leading up to counseling services, during counseling services and after counseling services are completed/administered (Fadhilah., Alkindi., & Muhid, 2021).

Apart from that, EGC also supports the application of techniques and approaches in counseling services. Through video conferences, as well as live chat features that allow counselor and client interactions to feel more real. Febrianti and Wibowo (2019) stated that online counseling is not a simple process. Online counseling not only requires counseling skills, but also requires skills in using technology. EGC becomes an online counseling service platform with more concrete service updates to cover the shortcomings that have been encountered during the implementation of online counseling services. As stated by Febrianti & Wibowo (2019), meetings that are not face to face also make it difficult for counselors to see facial expressions or gestures so that information is not fully obtained. Ifdil (2011) describes three stages of e-counseling, namely: preparation, counseling process, and post-counseling. Prepare means preparing all the necessities before counseling, such as preparing the equipment that will be used in the online counseling process. The EGC platform will be a medium that counselors can use to prepare counseling services and analyze various findings.

Currently, the implementation of counseling services still raises various discussions regarding the negative impacts it causes. This impact was obtained because there were still shortcomings resulting from the implementation of online counseling services. However, apart from this, the need for counseling services for students is currently increasing. Mintasih (2016) explains that the current generation has never been separated from technology in their lives. For them, technological sophistication is normal. E-Counseling is part of technological progress. The use of technology in counseling can be done anytime and anywhere. Rasyid and Muhid (2020) explained that e-counseling can make it easier for counselors to help their clients. Technology is used to create comfort for clients in telling stories. The same thing was also explained by Bambling, et al (2008) that online counseling provides young people with safety in expressing their emotions. Apart from that, e-counseling can also be done anytime and anywhere. Mallen (2005) explained that in the next few years the need for online counseling services will increase. During this pandemic, online counseling has not only increased, but

it is mandatory to avoid direct social contact, especially at school. Hanley (2006) concluded that online counseling has great potential for young people. Young people may prefer to use internet services to need help and feel comfortable (King et al., 2006). Ifdil (2013) explained that online counseling is quite effective. Clients who do not have the opportunity or are constrained by distance, online counseling is the solution to this problem. Finn & Barak (2010) in their research on 93 counselors explained that overall online counselors were satisfied with their practice and believed that online counseling was quite effective.

CONCLUSIONS

The EGC application has been developed in 2 types, namely application and website. So, it is hoped that this media can answer the needs of guidance and counseling teachers in running counseling service programs that are not bound by space and time limitations. Thus, counseling services in schools can be optimized again with a wider range of services. Apart from that, the function and role of counselors in schools can be developed and expanded, becoming a service that is able to touch all levels of society at school. This counseling service will be integrated into the school's counseling service program in realizing educational goals through a psychological service empowerment assistance program for students. This media has been developed by the research team. So, the next stage needs to be a field trial to see the level of effectiveness of the model that has been developed in developing various psychological aspects of students. At the trial stage, it is possible that there will be shortcomings and further development after the trial to maximize the function of this EGC counseling application/model. Therefore, researchers will continue to invite and offer user partners to jointly monitor and develop this application.

ACKNOWLEDGEMENTS

REFERENCES

Aini, H., & Mudjiran, M. (2020). Southeast Asian Journal of Technology and Science Cybercounseling as one of the skills in the guidance and counseling service in the 21st century Corresponding Author. *Southeast Asian Journal of Technology and Science*, *1*(1), 23–26. https://doi.org/10.29210/81058000

Alexius Endy Budianto, Nur Hidayah, A. A. (2019). *Aplikasi Cyber Counseling Dengan Mengoptimalkan Whatsapp Berbasis Komputasi Mobile*. *2,* 182–193. https://doi.org/10.33479/kurawal.v2i2.266

Apsari, F. Y., Rama, M. D., dan Prasetyo, E. (2018). *Konseling Berbasis Teks Menggunakan Riliv-Aplikasi Android*. *5*(1), 45–49. DOI: https://doi.org/10.33508/exp.v6i1.1790

Arista, D. A. dkk. (2017). Aplikasi Cyco (Cybercounseling) Sebagai Salah Satu Alternatif Model Konseling di Sekolah. *Seminar Nasional BK FIP-UPGRIS*. 230–238.

Assyauqi, M. I. (2020). Model Pengembangan Borg and Gall. *Researchgate, no. December*.

Azizah, Z., Neviyarni, N., Mudjiran, M., & Nirwana, H. (2022). Konseling Berbasis Digital, Tren Dalam Layanan Bimbingan Konseling: Literature Review. *Jurnal Inovasi Penelitian*, *3*(6), 6671-6676. https://doi.org/10.47492/jip.v3i6.2129

Badan Pusat Statisik. (2018). Profil Generasi Milenial. Jakarta: KemenPPA.

Bambling, Matthew, King, R., Reid, W., & Wegner, K. (2008). Online counselling: The experience of counsellors providing synchronous single-session counselling to young people. *Counselling and Psychotherapy Research: Linking Research with Practice*, *8(2)*. https://doi.org/10.1080/14733140802055011

Corey, G. (2013). *Teori dan Praktek Konseling dan Psikologi*. Bandung: Refika Aditama.

Dinçyürek, S., Cyprus, N., & Uygarer, G. (2012). Conduct Of Psychological Counseling And Guidance Services Over The Internet: Converging Communications. In *TOJET: The Turkish Online Journal of Educational Technology*, *11*(3).

Dores, A. R., Geraldo, A., Carvalho, I. P., & Barbosa, F. (2020). The use of new digital information and communication technologies in psychological counseling during the COVID-19 pandemic. *International journal of environmental research and public health*, *17*(20), 7663. https://doi.org/10.3390/ijerph17207663

Fadhilah, M. F., Alkindi, D., & Muhid, A. (2021). Cyber Counseling sebagai metode meningkatkan layanan Bimbingan dan Konseling di sekolah: Literature Review. *Counsellia: Jurnal Bimbingan dan Konseling*, *11*(1), 86-94. http://doi.org/10.25273/counsellia.v11i1.8393

Fadhilah, S. S., Susilo, A. T., & Rachmawati, I. (2019). Konseling Daring bagi Mahasiswa. *Indonesian Journal of Educational Counseling*, *3*(3), 283–289. https://doi.org/10.30653/001.201933.111

Febrianti, Thrisia & Wibowo, D. E. (2019). Kajian Hubungan Terapeutik dalam *E-Counseling* di Era Distrupsi. *Seminar Nasional Pasca Sarjana 2019*

Finn, J & Barak, A. (2010). A descriptive study of e-counsellor attitudes, ethics, and practice. *Counselling and Psychoterapy Research*, *10(4)*. https://doi.org/10.1080/14733140903380847

Gading, I. K. (2020). The Development of Cyber counseling as a Counseling Service Model for High School Students in the Digital Age. *9*(2), 301–313. https://doi.org/10.23887/jpi-undiksha.v9i2.25469

Hanley, T. (2006). Developing youthfriendly online counseling services in the United Kingdom: A small scale investigation into the views of practitioners. *Counselling and Psychotherapy Research*, *6*. https://doi.org/10.1080/14733140600857535

Hariko, R. (2017). Landasan Filosofis Keterampilan Komunikasi Konseling. *Jurnal Kajian Bimbingan Dan Konseling*, *2*(2), 41–49.

Haryati, A. (2020). Online Counseling Sebagai Alternatif Strategi Konselor dalam Melaksanakan Pelayanan E- Counseling di Era Industri 4 . 0. *2*(2), 27–38. https://doi.org/10.51214/bocp.v2i2.33

Ifdil & Ardi, Z. (2013). Konseling Online Sebagai Salah Satu Bentuk Pelayanan E-Konseling. *Jurnal Konseling Dan Pendidikan*, *1(1)*

Ifdil, I., & Ardi, Z. (2013). Konseling Online Sebagai Salah Satu Bentuk Pelayanan E-konseling. *Jurnal Konseling Dan Pendidikan*. *1*, 15–21.

Ifdil. (2011). *Penyelenggaraan Layanan Konseling Online Sebagai Salah Satu Bentuk Pelayanan E-Konseling dalam Syamsu Yusuf LN*. (2011) Contemporary and Creative Caunseling Techniques: How to Improve Your Counseling Skill and to be More Creative ini Counseling Sesion. Bandung: Rizqi Press.

King, R., Bambling, M., Lloyd, C., Gomurra, R., Smith, S., Reid, W., &Wegner, K. (2006). Online counselling: The motives and experiences of young people who chose the internet instead of face-to-face or telephone counseling. *Counselling and Psychotherapy Research*, *6*. https://doi.org/10.1080/14733140600848179

Kirana, D. L. (2019). Cyber Counseling Sebagai Salah Satu Model Perkembangan Konseling Bagi Generasi Milenial. *Al-Tazkiah: Jurnal Bimbingan dan Konseling Islam*, *8*(1), 51-63. https://doi.org/10.20414/altazkiah.v8i1.1101

Kraus, R. et al. (2011). *A Handbook for Mental Health Professionals*. India: Elsevier Inc.

Mallen, Michael J. David L. Vogel, dkk. (2011). Online Counseling, Psychology Framework:, The Counseling Psychologist. *Society of Counseling Psychology*, *33(6)*. https://doi.org/10.1177/0011000005278624

McLeod, J. (2006). *Pengantar Konseling: Teori dan Studi Kasus*. (Diterjemahkan oleh A. K. Anwar). Jakarta: Kencana Prenada Media Group.

Mintasih, D. (2016). Merancang Pembelajaran Menyenangkan Bagi Generasi Digital. *Jurnal ELTarbawi*, *9(1)*.

Purwaningrum, R., Asrowi, A., Susilo, A. T., & Suryawati, C. T. (2021). Aplikasi konseling online pada masa pandemi Covid-19: systematic literature review. *TERAPUTIK: Jurnal Bimbingan dan Konseling*, *5*(2), 185-198. https://doi.org/10.26539/teraputik.52705

Rasyid, A., & Muhid, A. (2020). Pentingnya E-Counseling dalam Pelayanan BK di Sekolah pada Masa Pandemi Covid-19: Literature Review. *EduPsyCouns: Journal of Education, Psychology and Counseling*, *2*(2), 110-116.