Online Consulting Service System Design

Umi Anugerah Izzati[(✉)], Miftahul Jannah, Bachtiar Bachri, and Himawan Wismanadi

Surabaya State University, Surabaya, Indonesia
umianugerah@unesa.ac.id

Abstract. In everyday life, every individual has experienced problems. The increasing variety of problems in daily life makes every individual need consulting service with the psychologist profession. However, not all individuals who need consulting services are willing to get face-to-face services. In this regard, the design of an online consulting service system is made that can make individuals do online consultations wherever they are. This study aims to design an online consulting service system in order to make it easier for the public to get consulting services widely. The method used is Research and Development. The model used is a prototype and data is collected through observation, interviews and literature study. The results of this study indicate that the design of an online consulting service system can be arranged.

Keywords: Planning · System · Service · Online Consultation

1 Introduction

Humans are inseparable from problems in their lives. These problems can occur in every aspect of life, such as education, health, work, and problems in the household. Therefore, each individual will always try to solve the problem both independently and by seeking help from others. One of the problems faced by many people is the problem of mental health. Currently, the issue of mental health has become a matter of public concern, so that the community needs to maintain and improve their mental health condition. Individuals who experience mental health disorders at a low level will usually try to solve their own problems, but for individuals who feel unable to overcome their problems will seek help. One of the efforts made by individuals to seek assistance in overcoming these problems is to consult with experts [1]. Consultation is a service that can provide knowledge, insight, and handling steps that can be taken by clients to overcome the problems they face [2, 3].

Consultation can be considered as an activity to help others in need and the practice is carried out by an expert in a related field by providing direction, alternative problem solving, suggestions or input, and so on [4]. Consultation in relation to mental health is often referred to as counseling. Similar to consultation, counseling is a problem solving process with expert assistance carried out with a series of communication processes and aims to reduce distress, anxiety, and other problems experienced by clients [1]. The use of consultation as an alternative problem solving is considered useful in helping individuals

solve their problems. However, in practice the implementation of this consultation is quite complex to be carried out face-to-face. The direct face-to-face consultation is carried out by making an appointment with an expert, then determining the location of the consultation, coming to the location and conducting consultations, and various other consultation activities. This raises problems in the effectiveness and efficiency of providing consulting services to clients. Therefore, currently there have also been many developments of information technology-based consulting services based on the internet. This online consulting service has proven to be in great demand by all circles because of the very practical use of the service.

Utilization of internet-based media is commonplace and is widely used today. The use of the internet has entered all aspects of people's lives, including health services. Telemedicine is a term for the use of information technology as a medium in providing health services that are carried out remotely by utilizing various internet-based communication media [5, 6]. Services that include telemedicine include the provision of long-distance services by providing information using telecommunication devices involving two parties, namely the client and service providers such as doctors, counselors, or other related parties [7]. Research conducted by [8] states that telemedicine has been effective in bringing health services closer to the community but still cannot be separated from various unfavorable things such as incomplete explanations, network stability which often interferes with the process of internet-based health services [6]. Nevertheless, the use of information technology in relation to providing health services has been proven to facilitate the practice of providing health services, including the practice of providing consulting services. [9] states that there will be an increase in the need for online counseling in Indonesia caused by the rapid development of technology, especially in the field of information and communication technology [1]. Therefore, various agencies providing consulting services are competing to participate in the competition in the digital era, namely by designing a technology-based consulting system or often referred to as online consultation or e-counseling.

The Psychology Service Center is a technical implementation center at the Institute for Learning and Professional Development, Universitas Negeri Surabaya. The Psychology Service Center has a vision and mission to provide professional psychological services to the wider community. The commitment offered by the Psychological Service Center is a professional and good quality service that prioritizes client confidentiality and comfort. Various services available at the Psychological Service Center include psychological examinations, psychological consultations, training, workshops, seminars and various organizational development needs. One type of service available at the Psychological Service Center is a psychological consultation service carried out by expert and professional psychologists. Psychological consulting services at the Psychology Service Center need to improve the types of services in digital form in order to compete in the current digital era. Psychological Service Centers need to improve service delivery by developing a technology-based service program, such as online consultation. The purpose of this research is to design an online consulting service system at the Psychology Service Center, so that it will be able to provide more comprehensive services and can reach a wider community.

2   Research Method

This study uses research and development methods, because the purpose of this study is to design and develop a system [3]. In addition, this study uses an object-oriented approach, which is a strategy in building systems by organizing various systems as objects that contain data and operations that will form the system we want [3]. Unified Modeling Language (UML) is used as a modeling language that will visualize the system to be created using diagrams and supporting text [3].

The system development method used is the prototype method, which consists of five stages according to [10], namely: communication, rapid planning, rapid design modeling, prototyping, and deployment [3]. In more detail, the stages in compiling an online consulting system prototype are as follows [10]: Communication, rapid planning, rapid design modeling, prototyping and deployment.

2.1   Data Collection Technique

The data collection technique used is observation, interview, and literature study. The observation technique was used to directly review the practice of consulting services at the Psychology Service Center. The interview technique was carried out to collect information from various sources who were directly involved with the practice of consulting services at the Psychology Service Center to then find out the advantages and disadvantages as well as the need for the development of the necessary consulting services at the Psychology Service Center. In addition, literature study is also used to collect references from various sources such as journals, books, papers, and other literacy sources to enrich references and get a wider point of view.

The data collection technique used is observation, interview, and literature study. The observation technique was used to directly review the practice of consulting services at the Psychology Service Center. The interview technique was carried out to collect information from various sources who were directly involved with the practice of consulting services at the Psychology Service Center to then find out the advantages and disadvantages as well as the need for the development of the necessary consulting services at the Psychology Service Center. In addition, literature study is also used to collect references from various sources such as journals, books, papers, and other literacy sources to enrich references and get a wider point of view.

2.2   Data Analysis Techniques

The data analysis technique used is system analysis. This technique is carried out to analyze the system through breaking the system into components that can be identified in depth regarding the functioning of the components that make up the system [3, 11].

2.3   System Process Flow Analysis

The design of the online consulting service system at the Psychology Service Center aims to provide better services and can reach a wider level of society and utilize technology

to be able to compete in the digital era. The system process flow is described to get a visualization of the process carried out by the flow on the system that is created, in this case the system flow described is the system flow that applies to the client.

For clients who want to get online consultation services at the Psychology Service Center, this can be done through the following channels, starting from the types of psychological services, client registration, payment methods and the implementation of online consultations.

3   Result and Discussion

Based on the results of the data analysis conducted, the design of the online consulting service system at the Psychological Service Center can be understood through the following points: the display of the service type menu, the registration menu display, and the payment menu display and the implementation of online consultations. On the psychological service type display menu, various types of service menus will be displayed including consultation, psychological examination, training, workshops and organizational development. The client registration menu display contains identity which includes name, age, gender, education and filling in the initial identification of the problems encountered as well as the menu of online consultation service hours.

The payment method menu display contains information on how to make a payment. Before making a payment, the client is asked to choose the duration of the online consultation, which is thirty minutes or sixty minutes. After the client selects the time duration, a feature for the nominal amount that needs to be paid will appear. After making payment. Then the proof of transfer can be uploaded to the online system. Furthermore, in the implementation of online consultations, clients who have received a predetermined schedule can conduct online consultations with psychologists. The choice of the duration of the online consultation consists of 30 min or 60 min. If it exceeds the specified time and the client still needs further online consultation, the client can register and pay a consultation fee for the next online consultation meeting.

4   Conclusion

Based on the results of the research conducted, it can be concluded that the online consulting service system design has been completed based on the needs of the client. The design of an online consultation system needs to be carried out by the Psychology Service Center in order to compete in the digital era. The online consulting service system design is arranged systematically based on the client's needs and the institution's ability to facilitate the development of the required system.

Authors' Contributions. Umi Anugerah Izzati Lecturer Psychology Universitas Negeri Surabaya. Miftakhul Jannah Lecturer Psychology Universitas Negeri Surabaya. Bachtiar Syaiful Bachri Lecturer Education Tehnology Universitas Negeri Surabaya. Himawan Wismanadi Lecturer Sport Science Universitas Negeri Surabaya.

References

1. N. Wijayanti, F. T. N. Fiqih, M. R. A. Pratama, R. Setyaningsih, and D. U. Syafitri, "Eksplorasi Jenis Permasalahan Klien Konsultasi Online: Potensi Pengembangan Media Digital Dalam Pelayanan Kesehatan Mental," *Intuisi J. Psikol. Ilm.*, vol. 10, no. 3, pp. 210–218, 2018.
2. T. Sukitman, *Panduan Lengkap dan Aplikatif Bimbingan Konseling Berbasis Pendidikan Karakter*. Diva Press, 2015.
3. M. Manuhutu and J. Wattimena, "Perancangan Sistem Informasi Konsultasi Akademik Berbasis Website," *J. Sist. Inf. Bisnis*, vol. 9, no. 2, p. 149, 2019.
4. M. Kusmadiani, J. Jenih, and T. Sugiarso, "Perancangan Aplikasi Layanan E-Konsultasi Akademik Kemahasiswaan Pada Fakultas Teknologi Informasi Universitas Respati Indonesia," *J. Teknol. Inf.*, vol. 7, no. 1, pp. 1–6, 2021.
5. A. P. Mustikasari, "Informed Consent Dan Rekam Medis Dalam Telemedicine Di Indonesia," *J. Huk. dan Pembang. Ekon.*, vol. 8, no. 2, pp. 89–94, 2020.
6. B. Irianti, F. Fadly, and U. Nursta'adah, "Mendekatkan Pelayanan Bidan Dalam Masa COVID-19 (Konsultasi Online Kebidanan Pada Masa Pandemik)," *Pros. Penelit. Pendidik. Dan Pengabdi. 2021*, vol. 1, no. 1, pp. 1119–1125, 2021.
7. S. A. Sari and Y. Y. Putra, "Gambaran Disonansi Kognitif Pada Lesbian," *J. Ris. Psikol.*, 2020.
8. I. Vahedi, "Applications of telehealth in the practice, upgrading of knowledge, and communication of physicians with their colleagues and patients in Canada." 2017.
9. I. Ifdil and Z. Ardi, "Konseling online sebagai salah satu bentuk pelayanan e-konseling," *J. Konseling dan Pendidik.*, vol. 1, no. 1, pp. 15–22, 2013.
10. M. A. Firdaus and A. Bardadi, "Analisis sistem informasi manajemen perkuliahan pada fakultas ilmu komputer Universitas Sriwijaya," *JSI J. Sist. Inf.*, vol. 2, no. 2, 2010.
11. R. S. Pressman, "Software Engineering: a practitioner's approach McGraw-Hill, new York, 68," 2010.