

ANALYSIS OF STUDENT NEEDS FOR THE DEVELOPMENT OF A WEB-BASED CYBER COUNSELING SYSTEM TO SUPPORT MBKM IN HIGHER EDUCATION

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Abstract: This study aims to determine student needs for the development of a web-based cyber counseling system to support the implementation of the MBKM curriculum in universities. The data analysis technique is done by analyzing qualitative and quantitative data analysis and concluded using qualitative analysis. This research is part of R & D research with the 4D development method which is limited to the define and design stage. The stages used in this research are the needs analysis and design stages, the instruments used in this research are observation sheets, interview sheets, and questionnaires for cyber counseling needs in universities. Data collection techniques used observation data, interviews, and questionnaires using Google Forms. The sample data in this study were 111 Guidance Counseling students at Bengkulu University from semesters 1, 3, 5, and 7. The results showed that students strongly agreed that the development of a Web-based Cyber Counseling system was needed to support MBKM in universities.

Keywords: Cyber Counseling; Tutoring.

INTRODUCTION

The Era of Globalization is marked by the emergence of global phenomena which are impacting the development of science. Situations like this will have an impact on the pattern of people's lives and the development of science, which is accompanied by advanced technological advances. Cultural barriers between nations seem meaningless so that some people can easily adopt other (western) cultures into new cultures. The development of the perspective of guidance and counseling cannot be separated from changes in society as a result of globalization.

Global phenomena are marked by the emergence of discourse and awareness such as; 1) dependence on science and technology; 2) free trade; 3) the phenomenon of global power; 4) democratization; 5) human rights; 6) environment; 7) gender equality; 8) multiculturalism. This phenomenon requires the setting of guidance and counseling services that are oriented towards a comprehensive, not partial approach for certain communities/individuals. Information Technology (IT) today has entered the world of education, both formal and semi-formal or non-formal. Therefore, all parts that are integrated into education, especially formal education, will be required to carry out their duties using technology.

Along with the times and the era of globalization which is marked by the rapid use of information technology and products, the conception of the implementation of learning has shifted to modern learning efforts. The rapid development of technology has an impact on all fields, including the field of education. A few years ago all the things a person did in his life could be done alone (still manual or still using the potential within a person), but now this has changed

and is contrary to current conditions. As another example in the field of guidance and counseling a few years ago the use of Guidance and Counseling services had to be done face to face, but the development of process technology for guidance and counseling services can be done by utilizing technology, one of which is by utilizing online counseling or cyber counseling.

Guidance and counseling services are activities carried out through direct contact with service targets/clients relating to certain problems or interests felt by the client. The guidance and counseling service in question is a service that is directed at helping clients to develop into independent, responsible, creative, productive, and honest individuals.

In practice, guidance and counseling apply several types of guidance services, including personal guidance, study guidance, social guidance, and career guidance. And the implementation of this learning system implements a tutoring service system. Tutoring focuses on guidance that lies in the individual's ability to complete learning tasks in both academic and non-academic fields. According to Prayitno and Erman (2013) tutoring is guidance aimed at helping students to recognize, grow and develop themselves, good study habits to master knowledge and skills and prepare them to continue their education at a higher level.

To realize the application of online guidance and counseling services according to Koutsonika (2009), a standardized media is needed and adapted to the needs of students to the availability of technology that can support it. Counselors are also needed who are familiar with patterns of interaction and communication via the internet. One of the innovations in the implementation of guidance and counseling services is to provide *Cyber Counseling services* or often referred to as *online counseling*.

The term online counseling according to Winkel (2005) is two different words, namely "counseling" comes from the word " *Counseling* " (English) and the word " *Online* ". These two words can be further interpreted as follows: Counseling is a series of the most basic activities of guidance to help the counselee/client face to face with the aim that the client can take responsibility for himself on various issues or special problems.

According to John Bloom (2004), *online counseling* is a professional counseling practice and information delivery that occurs when the client and counselor are in separate locations so that both can organize and utilize electronic means to communicate via the internet. In this case, it is possible that students can do counseling even in remote locations and can use internet facilities in conducting counseling. *Online counseling* is an alternative effort made by the counselor, the relationship that exists between the counselor and the counselee communicates via the internet such as zoom, google meet, email, and others.

Cyber Counseling is one of the virtual guidance and counseling strategies or counseling that takes place through the help of an internet connection. In this case, the counseling process takes place via the internet in the form of a website, e-mail, Facebook, video conferencing (yahoo

messenger), and other innovative ideas. The counseling process uses cyber counseling or virtual counseling, meaning that the counselor and the client are not physically present in the same space and time. *Cyber Counseling* is one of the most appropriate counseling alternatives as a counseling model at this time.

One of the media to respond to the necessity of using information technology and also to deal with the dynamics of society and the rapid development of science and technology is the MBKM Program (Yuherman et al., 2021). The government launched the MBKM program through the Minister of Education and Culture Regulation No. 3 of 2020 concerning National Higher Education Standards (Kodrat, 2021; Oksari et al., 2022). The MBKM program is expected to produce graduates who have the competence to face the times, one of which is in terms of technology (Hudjimartsu et al., 2021).

The use of technology in education, especially in the world of counseling today is very important. Given that in the implementation of conventional counseling there are still many obstacles that occur, such as the number of students who are too many while the number of counselors is not comparable, limited time to conduct counseling activities and the low level of utilization of information technology from the counselor. Technology can certainly make the performance of counselors fast, easy, and handled in providing counseling services so that counselors will be more productive and professional.

The roles and functions of information technology in guidance and counseling are as follows: 1) Publication; Information technology is used as a means of introduction to the wider community and also as a provider of information about guidance and counseling, 2) Services and assistance; based on this function guidance and counseling is carried out in a remote format with the help of information technology, 3) Education; in the information provided through information technology contains elements of education.

The role of counseling in higher education is also very important, this can be seen in the career planning of students when they graduate from college. It is hoped that with this counseling various problems related to students can be given solutions that can have an impact on them in determining their future. Student problems are not small, this can be seen from the extent to which students can complete lectures on time or have difficulties until they resign (Sofyan, 2020).

The WEB-based Cyber Counseling System is also important for universities to meet the demands of education in the 5.0 era which must solve various challenges and social problems by utilizing various innovations that were born in the era of the industrial revolution 4.0 and centered on technology. Basically, with the WEB-based Cyber Counseling System, counselors and students who are not familiar with the internet, directly gain knowledge in their fields, so they do not experience technological stuttering. Schools or colleges that run cyber counseling of course

also have more value in the aspect of technology-based guidance and counseling service strategies. Thus there is no outdated term or technological stutter.

Several previous studies that discussed cyber counseling include research conducted by (MP Sari & Herdi, 2021). The results of his research show that through online-based guidance and counseling services, students and guidance and counseling teachers/coursee can be mutually facilitated because there are many opportunities and benefits available to support the achievement of counseling goals. Similar research was also conducted by (RO Sari, 2021). The results show that the cyber counseling process is almost the same as the face-to-face counseling process, but several things need to be considered, such as the preparation stage which includes the availability of supporting and adequate hardware and software. The advantages of cyber counseling can be accessed anywhere and at an adjustable time so that counselors can reach a wider range of counselees. Furthermore, (Na Separat & Padillah, 2021) in their research on cyber counseling, it was found that cyber counseling can be used to help introverted students who tend to experience social problems such as low communication skills, often fail to interact, and are less proficient in socializing. In research conducted by (Korohama & Gibbons, 2022) The results show that there is a significant effect between the use of cyber counseling and students' self-disclosure, so it can be said that there are sets of using cyber counseling on students' self-disclosure. Then (Malelak, 2022) in his research on cyber counseling stated that the trend of using social media in the implementation of cyber counseling will continue to increase, and will be colored by the emergence of various other social media in the coming years, considering that students are currently in generation Z and Alpha which are identical with technology. Cyber counseling can increase students', self-disclosure, and self-confidence, develop independence, manage emotions and make the right decisions for students' futures.

Several previous research results that discuss cyber counseling as described above show that cyber counseling has many benefits, including being able to be done anywhere and anytime so that it is flexible. This is certainly very supportive of the implementation of the independent campus program where the word Merdeka here can be interpreted as "not restrained" or "flexible". In addition, the use of cyber counseling will also have a good impact in the future because the trend of using technology in the implementation of counseling will continue to increase considering that students are currently in the Z and Alpha generations which are identical to technology. Thus, it is very appropriate to do development a cyber counseling system to support the implementation of the Merdeka Belajar Kampus Merdeka (MBKM) curriculum.

From the results of the needs analysis that was carried out by 111 students majoring in counseling guidance, it was found that students needed a technology-based counseling system and needed online counseling. Based on the explanation that has been obtained, the researchers will conduct research to analyze the role of Cyber Counseling in Higher Education. This research

is part of the R&D development research with 4D research methods limited to the define stage and the design stage. The results of this study will be useful for further research, namely developing a web-based cyber counseling system to support MBKM in universities.

METHOD

The research used is the research and development method or *Research and Development* (R & D). According to Sugiono (2014), research and development methods are research methods used to produce certain products and test their effectiveness of these products. In the book Sugioyono, Thiagarajan (1974) suggests that the research and development steps are abbreviated as 4D, which stands for *Define, Design, Development, and Dissemination*. This research was conducted at the *define* stage and the *design stage*. The study was conducted on 111 students majoring in Guidance and Counseling in semesters 1, 3, 5, and 7 at Bengkulu University. Data collection techniques in this study are using observation data, interviews, and questionnaires using *Google Forms*. The instruments used in this research are observation sheets, interview sheets, and questionnaires for *cyber counseling needs* in universities. The data analysis technique carried out in this study used qualitative and quantitative data analysis and concluded using qualitative analysis.

The data that has been obtained from the student needs questionnaire is then calculated as the percentage of each aspect of student needs. Guidelines for assessing needs questionnaires are carried out in the form of a Likert scale in Table 1.

Table 1. Assessment Guidelines

Evaluation	Scale Value
Strongly agree	4
Agree	3
Don't agree	2
Strongly Disagree	1

Each item of the student questionnaire was processed using a Likert scale to get the percentage determination results. In this study, to determine the number of respondents who strongly agree, agree, disagree, and strongly disagree, data processing is carried out by making data intervals, and the results obtained are applied in a graph. The data that has been obtained from the student needs questionnaire will be analyzed using average analysis, the formula for calculating the average value is as follows:

$$M_x = \frac{\sum X}{n} \dots\dots\dots (2.1)$$

Where M_x is the *Mean* (average value), $\sum X$ is the number of research answer scores, and n is the number of assessments.

Then to calculate the percentage score can be calculated using the formula, namely:

$$Persentase\ Skor\ (\%) = \frac{Skor_{Rata-rata}}{Skor_{Tertinggi}} \times 100\ \% \dots\dots\dots (2.2)$$

After obtaining the percentage score, then measuring the interpretation of the score using a Likert scale interpretation table. The interpretation table functions so that researchers can see the percentage of assessment results that are feasible or not feasible to be used as teaching aids. The percentage of interpretation score achievement can be seen in Table 2:

Table 2. Likert Scale Interpretation

Percentage (%)	Interpretation
0 % - 25 %	Strongly Disagree
26% - 50%	Don't agree
51% - 75%	Agree
76% - 100%	Strongly agree

From the table above, researchers can see the percentage of assessment results that are appropriate or not used as learning media.

RESULTS AND DISCUSSION

To find out the importance of developing a Web-based *Cyber Counseling* system in supporting MBKM in universities, disclosure students was conducted by distributing questionnaires to 111 students of the guidance and counseling study program. The results can be seen in Table 3 below.

Table 3. Percentage of Student Needs for Web-Based *Cyber Counseling* System Development

Respondent	Total Score (n)	Maximum Score (N)	Percentage $P = x 100 \frac{n}{N} \%$	Category
111 Guidance and Counseling Students	7787	8880	87.69%	Strongly agree

The table provides information that guidance and counseling students at Bengkulu University strongly agree that the development of a Web-based *Cyber Counseling* system is needed to support MBKM in higher education. This is indicated by the large percentage obtained

of 87.69% of the maximum percentage of 100%. And according to the Likert scale interpretation table for data with a percentage of 76% - 100%, it is in the category of strongly agree.

For more details, the number of respondents in each category can be seen in Figure 1.

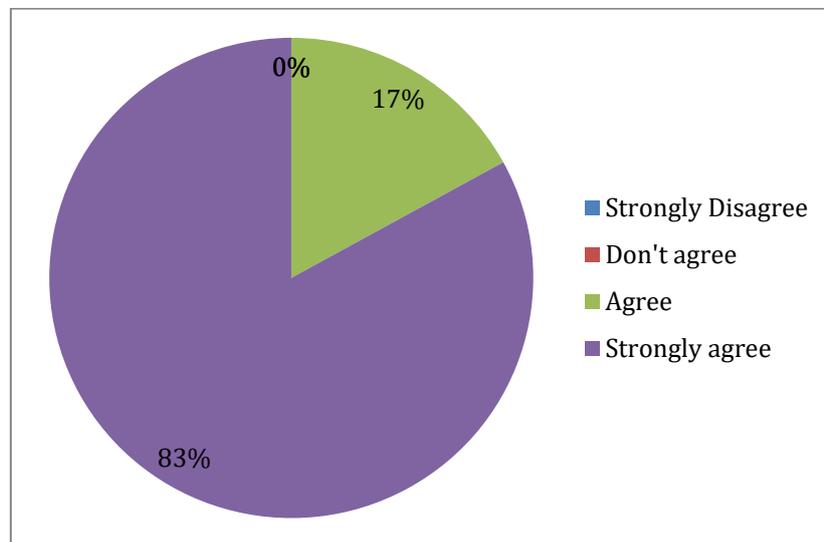


Figure 1Diagram of the Number of Respondents in Each Category

This shows that most of the respondents fall into the category of strongly agree with a percentage of 83% which is indicated by the purple field, then followed by the respondents who fall into the agree on category as much as 17% which is indicated by the green field. Based on these results, it can be said that the development of a Web-based *Cyber Counseling* system is considered necessary and important in supporting MBKM in universities.

In detail, the statements submitted in the questionnaire on student needs for the development of a Web-based *Cyber Counseling* system to support MBKM in universities indicate that students need a system that can accommodate remote counseling activities, which does not require clients to talk face-to-face with counselors so that counseling activities become more flexible in terms of time and place. Students want an internet-based counseling system, which uses electronic media to communicate, which allows faster communication between two parties, and uses technology-based media such as websites. And students also want the counseling system to be accessible to clients more broadly, accessible to many people at once, to be able to choose counselors from far away, to indirectly provide new knowledge for counselors and clients regarding the use of technology so that they are not tech savvy (technological stuttering). In an ever-evolving era, providing service materials that I can download for personal storage, providing service materials that I can read over and over again, the delivery of service materials does not take much time, is not difficult from an administrative point of view, can choose not to identify (anonymous), and don't waste time on travel. Students want a web-based counseling system to

help clients avoid the potential fear of meeting relatives/acq at the counseling location so that acquaintances can feel more comfortable because they are in a familiar place (where they live).

The results obtained in this study are in line with the results of the previous research conducted by (Sangiba et al., 2022). The analysis of user needs in the research begins with an analysis of the current system, namely when going to conventional counseling, you have to go to the counseling place, then make sure whether the counselor is there and willing to serve to counsel, that counseling activities can be carried out. Based on the analysis of the system that runs on the conventional process to conduct counseling. The process for conducting counseling cannot be done anytime and anywhere. To solve these problems, a system was created that could assist in conducting counseling anywhere and anytime without having to go to a counseling center. The proposed system design is a user process to conduct counseling through an application that is made.

CONCLUSION

The research was conducted by collecting questionnaire data regarding student needs for the development of Web-based *Cyber Counseling* to support MBKM in higher education which was filled by 111 students from the Guidance and Counseling study program at Bengkulu University. The results of this study indicate that students strongly agree that the development of Web-based *Cyber Counseling* is necessary and important in supporting Merdeka Belajar Kampus Merdeka (MBKM) curriculum in universities. Suggestions for similar research can use research instruments that are more varied with research samples taken from more universities.

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