Accessibility Of Technology In Crisis Counseling Services: Facilitating Students With Traumatic Experiences

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Abstract: The purpose of this study was to identify the availability of digital-based crisis counseling services in twenty schools in Medan city. The integration of technology in crisis counseling services is important to support students who experience trauma such as bullying, violence, parental divorce, academic failure and others so that they can overcome post-traumatic stress and improve mental well-being. The research method used a quantitative approach with a descriptive survey design. The participants were 20 Guidance and Counseling teachers from twenty high schools in Medan city with a minimum requirement of working for more than 2 years. The results showed that despite the availability of counseling services, none of the schools had technology-based accessibility for students with trauma experience as indicated by the Mean value: 1.150 and SD 1.565. Therefore, the implication of this study is for schools to develop technology-based counseling services to help students with trauma experiences.

Keywords: crisis counseling; accessibility of technology, recovery, student with trauma experience

Introduction

The school institution allows students to explore themselves and facilitate student development to be more optimal. Schools fulfill students' needs and support social and emotional development in the learning process (Weare, 2017). However, crises or traumatic events can occur in the learning process and threaten students' learning outcomes and well-being. Based on the findings of a study (Finelli & Zeanah, 2019) children exposed to traumatic events exhibit problematic emotional symptoms that affect their future well-being. Crisis conditions or traumatic events at school can take many forms, such as natural disasters, bullying events, sexual violence, parental divorce, parental death, displacement, academic failure, conflict with parents, and illness (Sandoval, 2002)

Indonesia is a country that is prone to natural disasters. According to data from the Natural Disaster Management Agency, until July 2024, there were 1,474 cases of natural disasters that caused deaths, injuries, missing victims and damage to infrastructure, including schools. Furthermore, data from the Head of the National Population and Family Planning Agency (BKKBN) noted that there are 500 divorce cases each year which have an impact on child neglect. The Online Information System for the Protection of Women and Children (SIMFONI-PPA, 2024) recorded 1,993 cases of violence against children.

Furthermore, the Commission for the Protection of Children and Women (KPAI) noted that throughout 2023, as many as 3,800 bullying incidents occurred in schools. These events can cause trauma and post-traumatic stress. In line with what was stated (Dereboy et al., 2018), traumatic events can affect cognitive development and interfere with adolescent self-identity, which ultimately causes risks to the development of child or adolescent psychopathology. Furthermore, at the cognitive level, traumatic events can lead to negative self-beliefs and tend to blame themselves. Trauma also has the potential to cause post-traumatic stress and lead to mental health disorders in the future.

In the school environment, students exposed to crisis events can cause behavioral problems such as not being able to comply with class rules and not following lessons properly (Sandoval, 2002). The results of research conducted (Najam & Kashif, 2018) showed that victims caused by bullying crisis events tend to show problematic behavior in academics, such as not focusing on their assignments and not being able to follow the rules. On the other hand, recent findings reveal that compared to those who have never experienced violence, victims who experience violence have a lifetime risk of mental illness, namely depression, suicide attempts, substance use, risky sexual behavior and chronic physical illnesses such as arthritis and migraines (Rivara et al., 2019). Natural disasters impact victims, such as losing their homes, family members, and neighborhoods. Studies have found that child or adolescent victims of natural disasters exhibit respiratory problems such as shortness of breath and anxiety (Dyregrov et al., 2018). Furthermore, parental divorce increases the risk of emotional and behavioral development, and the impact increases further over the next four years (Tullius et al., 2022).

Therefore, schools have the responsibility to intervene in crises. Crisis counseling refers to interventions carried out in emotionally dangerous conditions characterized by sudden changes in social aspects, changes in individual expectations and altered relationships with others (Sandoval, 2002). (Klein, 2022) further explained that crisis refers to conditions with acute and prolonged distress resulting from emotional harm caused by crisis events and early adult challenges. Crisis counseling is also defined as a brief service to help individuals maintain immediate personal, social and spiritual resources, which may stem from events that have occurred long enough for the individual to return to a higher level of functioning and achieve positive change (Hafen et al., 1982 in Klein, 2022)

Digital service is one such alternative to facilitate students who have experienced trauma. The current research findings showed that counseling using technology could foster meaningful change for individuals struggling with mental and behavioral health (Lattie et al., 2022). Digital-based counseling services refer to the use of technology in delivering interventions to facilitate individuals remotely based on psychological frameworks, which are conducted in a directed or guided manner (Blackie et al., 2024). A recent study by (Yeo et al., 2024) showed that digital literacy interventions proved to optimally impact students' mental health by combining with non-professional active treatments such as peer support, and the results were not significantly different from traditional treatment. Another intervention with internet-based self-help acceptance therapy has been shown to reduce anxiety, depression and stress in university students who participate in it (Trial et al., n.d.). These findings confirm that the existence of access to technology could facilitate students with traumatic experiences.

However, in the educational context of Indonesia, access to technology has been carried out in the learning process during COVID-19. In previous studies, cyber counseling research was conducted for low student interest in counseling and was proved to increase student interest in attending counseling (Prasetya et al., 2020). Further more, studies found that digital learning has several barriers that can obstruct the efficient and optimal use of technology, especially for students who are located in rural areas that are constrained by signal, inadequate facilities and human resources that help them to operate it (Budiyanto et al., 2024) which significantly limits the access and quality of psychological interventions. In line with findings (Saifuddin Amin, 2023), the integration of technology in education has the opportunity to improve students' cognitive and socio-emotional development. However, these benefits are only obtained by schools located in urban areas and not evenly distributed in rural areas (Yuanti et al., 2024). Therefore, this study aims to provide an overview of technology access as part of an intervention for students with traumatic experiences at school. It is also expected to contribute to the development of digital-

based counseling services as a practice implementation to improve the well-being of students with traumatic experiences.

Methods

This research was conducted using a quantitative approach with a descriptive survey design. Descriptive survey design involves collecting data to explain a condition (Gay, 2012). In the context of this study, a descriptive design was used to explain the accessibility of technology in facilitating students with trauma experiences.

The research respondents were 20 Guidance and Counseling Teachers at the SMA / SMK level distributed in Medan City, with the requirement to have been teaching for 2 years or more, and the study was conducted using a simple random sampling technique. This technique allows each participant to have the same opportunity without influencing others. Sampling with a random sampling technique involves selecting a sample so that all individuals in the specified population have an equal and independent opportunity to be selected as a sample (R Gay et al., 2021)

Data collection used a technology-based counseling service access instrument developed by the researcher. The instrument contains aspects of technology-based crisis counseling services to identify and help traumatized students and aspects of conventional crisis counseling services that have been tested for reliability. The McDonald's value obtained was > 0.60, 0.795, and the Gutmann value was > 0.60, 0.855. Data collection procedures were carried out using a survey distributed using the Google Form application. Descriptive analysis techniques were used to describe and interpret each aspect based on two categorizations: having and not having.

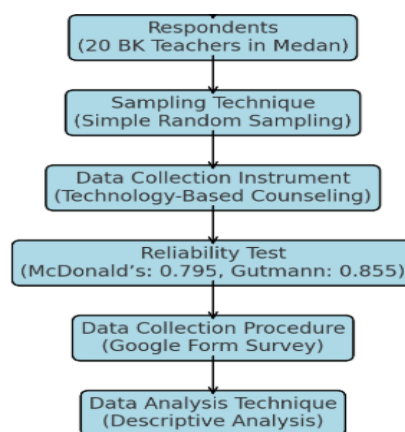The design of the research is represented in the diagram shown below:

Figure 1. Design of research

Results and Discussion

This study found that technology-based counselling services in schools are not accessible. However, services for students with trauma experiences are available. The analysis results of technology accessibility and conventional service aspects are presented in the following table.

Table 1. An overview of technology accessibility and conventional services for students with traumatic experiences at school

	n	Mean	Std. Deviation	Category
Technology Acsess		4.950	2.390	
Technology	20	1.150	1.565	No having acsess
Service		3.800	1.508	Having acsess

The specific aspects of technology access for students with trauma experiences are shown in the following table.

Table 2.

Description of access aspects of technology-based crisis counselling services for students with trauma experience

Acsess Technology	Mean	SD	Category
The school provides a special contact number as a facility for students with experience with trauma.	0.238	0.436	No acsess
The school provides a website/email for students with traumatic experiences.	0.283	0.463	No acsess
The school provides information related to how to overcome post-traumatic stress in students on school social media.	0.333	0.483	No acsess
The school provides the name of a website outside the school to help students overcome post-traumatic stress.	0.238	0.436	No acsess
Total	**1.150**	**1.565**	**No acsess**

Based on the results of data analysis of the description of aspects of access to technology-based services for students with trauma experience with a value of (Mean: 1.150; SD: 1.565), this result shows that overall, the aspect of access to technology for students with trauma experience in schools does not exist, marked by the absence of a special contact number, website or email specifically for students with trauma experience. Furthermore, the school also does not provide information related to trauma and how to overcome it. However, conventional crisis counselling services are well met. This is presented in Table 3.

Table 3. Description of access to conventional crisis counselling services

Service	Mean	SD	Category
The counsellor provides students with a mobile number/email as follow-up counselling for students with trauma experiences.	0.905	0.224	Having acsess
The counsellor conducts assessments to identify students who have experienced trauma.	0.700	0.470	Having acsess
The counsellor prepares a special schedule for crisis counselling	0.700	0.470	Having acsess
The counsellor conducts crisis counselling for students based on the assessment results.	0.700	0.470	Having acsess
The counsellor conducts crisis counselling specifically for students who are victims of bullying/violence (outside the assessment results) regularly.	0.750	0.444	Having acsess
Total	**3.800**	**1.508**	

Based on the results of the analysis, the description of conventional crisis counseling services for students with trauma experience has a value of (Mean: 3.800; SD 1.508). These results indicate that each aspect of conventional crisis counseling services for students with traumatic experiences has been well fulfilled, which is marked by conducting assessments for students with traumatic experiences, counseling teachers providing personal contact numbers as a follow-up for students with traumatic experiences, making unique schedules for crisis counseling in general and specifically for victims of bullying/violence.

The first finding related to access to technology-based crisis counseling services shows that, in general, no school has access to technology to facilitate students with trauma. On the other hand, trauma has an impact on adolescent mental health. In line with the findings (Naslund et al., 2017), technology plays a role in addressing the mental health needs of adolescents, which, if not addressed, will have lifelong impacts such as social isolation, increased risk of suicide, substance abuse and the inability to pursue education and careers. Furthermore (Naslund et al., 2017) stated that with young people's ability to adopt technology, it will be easier to help them overcome mental problems. Similarly, findings suggest that trauma could be treated and its effects reduced. Other findings suggest that the lasting effects of trauma occur with inadequate intervention systems and unsupportive data systems (Lawson, Hal A.; Caringi, James C.; Gottfried, Ruth; Bride, Brian E.; Hydon, 2019). In addition, the accessibility of technology can be used to measure emotional fluctuations based on perceived trauma experiences and provide psychoeducation about difficulties that aim to inform children (Bucci et al., 2019). In addition,

using technology in crisis counseling services can help adolescents who have difficulty meeting people in person and sharing their problems.

According to recent studies, adolescents experience many barriers to conventional counseling due to stigma, including negative family beliefs about mental health services. However, the accessibility of technology-based counseling services increases adolescents' sense of safety, especially when disclosing information in online spaces (Lattie et al., 2022); (Ersahin & Hanley, 2017). Technology accessibility in counseling services also increased the number of adolescents who reported being more comfortable communicating through video conferencing and disclosing more information than in face-to-face sessions. Furthermore, these findings also explain that having access to technology in counseling services can reduce feelings of loneliness and isolation after leaving clinical facilities and increase the discussion of sensitive topics (Holland et al., 2021).

Although research on technology-based crisis counseling services is still limited, some findings have used technology in guidance and counseling services. Research carried out (Fahyuni et al., 2021) related to online counseling services in schools is still limited to academic problems and aims to improve development in the academic aspects of students. In addition, a study conducted by (Rappetang & Latif, 2022) integrating Android with counseling services aims to attract students' interest in using guidance and counseling services at school. On the contrary, other findings suggest that technology-based counseling services still need development, as some mental health apps share user data without consent in their privacy policies (Rudd & Beidas, 2020).

Furthermore, the second finding depicts that conventional crisis counseling services have been implemented well. However, each individual has the right to make choices in communication. This aligns with recent studies stating that some people are more comfortable choosing and seeking support from others online or expressing their feelings and experiences through blogs (Bucci et al., 2019). Crisis counseling can provide support to students in reducing the harm of trauma, improving coping strategies and preventing long-term impacts (Sokol et al., 2021). However, it must be stressed that adolescents tend to feel free when disclosing their problems on computers, and it has been proven effective in counseling services (McManama O'Brien et al., 2017).

In summary, the findings of this study explain that crisis counseling services are more frequently provided conventionally. However, the guidance teachers showed their sensitivity in facilitating students with traumatic experiences. This was seen from extending personal emails or personal contact to students. However, this action can cause other problems, such as guidance and counseling teachers not having limited working hours because students with traumatic experiences can communicate regardless of time because they require support or guidance and counseling teachers respond for a long time, which impacts students' emotional condition who need support. Therefore, access to technology with the integration of counseling interventions can more easily facilitate students without having to wait for a response from the guidance and counseling teacher. In accordance with the findings (Rudd & Beidas, 2020) the integration of counseling services with technological accessibility has an excellent opportunity to overcome mental health as a result of the trauma felt by students.

Furthermore, this finding clarifies that guidance and counseling teachers have been sensitive to the possibility of students experiencing trauma by conducting assessments and preparing schedules to provide interventions. However, this study has limitations in terms of the number of participants, the level of education and the instrument, so the results are not generalizable. Further research can be conducted by considering the number of participants and the school level, either junior high school or high school / vocational school.

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Conclusion

The results showed that crisis counseling is done chiefly traditionally. Digital integration in crisis counseling services has not been implemented in schools. However, guidance and counseling teachers show empathy by identifying and preparing unique schedules for students with trauma experiences. On the other hand, access to technology has an important role in supporting the mental health of adolescents who have experienced trauma, especially adolescents who feel uncomfortable communicating their problems face-to-face and are worried about negative stigma from their environment when attending conventional crisis counseling services. However, digital integration in crisis counseling still requires human interaction as a form of social support and to maximize services. Furthermore, this finding can be a recommendation to stakeholders in collaboration with guidance and counseling teachers to create services using technology access as an effort to pay attention to students' mental health in schools. Guidance and counseling teachers in rural areas can start by learning the use of technology in counseling services to provide adequate services to students with traumatic experiences.

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