

## Management of Counselling Services and Digitalization of Early Detection Mental Health Disorders Reducing High Risk in Education

Awang Saputra<sup>1(⊠)</sup> and Muhamad Fauzi<sup>2</sup>

<sup>1</sup> Islamic Educational Management, Muhammadiyah Jakarta University, South of Tangerang City, Indonesia 20210530170001@student.umj.ac.id

<sup>2</sup> Syariah Finance, Technology and Business Ahmad Dahlan Jakarta Institute, South of Tangerang City, Indonesia

**Abstract.** Management is an essential reference in overcoming problems to achieve goals, including mental health counseling services in schools that require students to obey them. The low awareness of stigma and shame towards early detection of mental health both require management to create mental health schools and are at high risk in educational institutions. The research aims to determine the management of mental counseling services in schools and determine the early digital detection of mental health. This study uses a qualitative study with library research techniques, primary data sources from research samples with purposive sampling techniques, and secondary data from the internet or android-based application. The research sample was private junior high school students in Serang City, Banten Province, Indonesia totaling 156 respondents using the purposive sampling technique. The results showed that management of counseling services made it easier for counseling guidance teachers and opportunities for early detection of mental disorders. Mental Health, Psikitech-Diagnos, and Riliv application are the most widely used digital technology. The implication is to reduce the high risk of education from increasing mental disorders for students through the management of mental counseling services and digitization of early detection of mental health disorders.

**Keywords:** Counselling Management · Digitalization · Early Detection ·

Education · Mental Health

### 1 Introduction

Management of counseling services in schools is essential to support learning activities and students' personalities to know current developments and future successes. One of the managers of counseling services is a teacher. However, the competency of counseling guidance teachers is still limited, and their performance is low [1], especially in mental counseling services. Can cause the successful management of counseling services to be

not optimal. According to [2], managing counseling services needs to optimize resources and information systems.

The performance and optimization of counseling services in schools is an integral part of management in the goal of the national education system, namely educating the nation's life. According [3] views, management has a job to determine, interpret, and achieve organizational goals with a management function. As counseling service teachers in schools, they should have good planning for counseling through several approaches.

Suppose the planning function of the counseling service does not achieve the expected success. In that case, students and the role of stakeholders will suffer losses because mental counseling services in Indonesia are the largest in Southeast Asia, with 27.3 million people. However, there are losses of Rp. 20 trillion/year and Rp. 12 million/patient/year, while adolescents (15–24 years) have as many as 12 million patients [4]. Especially in the Covid-19 pandemic situation in Indonesia, which shows the age of 15–18 years, 59.5% of adolescents experience psychological problems in the form of psychological distress and social dysfunction [5]. These two facts are a concern for the world of education to avoid increasing risks or losses to the development of education in Indonesia. For this reason, it is necessary to make efforts to detect potential mental health disorders early, quickly, and affordably.

Why is it essential that students' early detection of mental health is carried out? Because mental health for adolescents is important, it will determine the nation's quality [6]. Constraints on the openness of students and parents to the accompanying mental disorders make them closed so that many people do not know. The negative stigma of mental health disorders makes families close and hide it [7–12]. This condition indicates that some people do not understand the true meaning of mental health disorders. It is necessary to build good education because it has the potential and can happen to anyone.

The constraints of stigma in the community include a gap in the number of people with mental disorders with mental health services [13]. It will deepen and expand the potential for people with mental health disorders. Suppose these two things are not attempting to reduce the gap. In that case, it will increase the socio-economic burden, disrupt the learning process, reduce school productivity, and darken the face of future generations. The counseling services in schools need to integrate preventive health, education systems, management services, improvement system, mental health management, school health services as preventive measures, early detection, and health interventions [14–19].

However, the parties are worried that students with mental health disorders are at very high risk because they must be inactive in school and provide counseling services [20, 21]. These indicators will interfere with learning activities and create fear for other students. They should be left to mental health support services in hospitals with more professional psychiatrists and psychiatrists.

The prevent Covid-19, counseling services can be carried out in schools by students and parents independently. Then report to teachers who manage counseling services so that the school gets periodic progress reports about the mental health conditions of their students. It is done as an effort for early detection or early prevention by reducing direct or face-to-face interactions between teachers and students. Preventive efforts for early

detection of mental disorders use digital technology systems by a website and android applications [22–25].

Based on the problems and theories above, early detection of mental health disorders is very important for every student in the school to achieve educational success. This paper presents the efforts to manage counseling services in schools by knowing students' independence doing early detection through independent tests using applications or websites about indicators of mental health disorders.

### 2 Research Methods

The method used in this research is a literature review by collecting data sources and reports and scientific research [26]. Understand and implement broadly and deeply knowledge by summarizing, analyzing, and synthesizing [27]. The research sample used purposive sampling, according to [28], with specific determination techniques and considerations obtained from private middle high school and high school students in Serang City, Banten province. Who had downloaded applications or accessed websites, Daylio, Mind Diagnostic, Wysa, Riliv, Depression Test, Moodpath, Psikitech-Diagnos, and Sehat Jiwa? The focus of management studies is student counseling services in schools with a digital system for the early detection of mental disorders—Internet data sources in a website on based mental counseling services and android applications.

### 3 Result and Discussion

### 3.1 Finding

From 78 junior high school students, only 71 respondents downloaded the application filled out and reported it to the counseling guidance teacher. While from 92 high school students, only 85 respondents filled in and reported it to the counseling guidance teacher, as shown in the Table 1.

No	Type Application	Mid School	High School	Total	(%)
1.	Daylio	-	-	0	0
2.	Mind Diagnostic	-	-	0	0
3.	Wysa	-	-	0	0
4.	Depresi Test	-	-	0	0
5.	Moodfit	-	-	0	0
6.	Psikitech-Diagnos	5	8	13	8,33
7.	Riliv	1	1	2	1.28
8.	Sehat Jiwa	65	76	141	90,39
Total		71	85	156	100

Table 1. Distribution of Respondents to Access Types of Applications

The data above shows that students download the application, then fill it in according to the questions or statements. This is to find out how to independently detect mental health disorders digitally through the dominance of downloaded and used applications. In contrast, 13 respondents (8.3%) use the Psiktech-Diagnos application. The Riliv application has as many as two respondents (1.28%). The Sehat Jiwa application is 141 respondents (90.39%). Other students do not download and use applications because they do not have supporting facilities, do not have Android-based cellphones, and do not have an internet quota.

The dominant factor is the eight mental health disorder detection applications that we offer. The respondents use only three applications, including Psikitech-Diagnos, Riliv, and Mental Health. The language used is Indonesian to quickly understand and fill in the question or statement in question. According to [29], students' lack of interest in understanding and reading English texts becomes an obstacle to learning. This opinion is supported by [30] as many as 77% of students who think English is still confusing. For this reason, it is very natural for students to use an Indonesian mental health detection application.

After the respondent filled out the application and submitted the results to the counseling guidance teacher, it was found that (Table 2).

From the data above, it can be seen that the applications used by respondents are only three types of applications, namely Psikitech-Diagnos, Riliv, and Sehat Jiwa. The results of filling out applications by respondents and sending test results via screenshots to teachers via WhatsApp. It is known that 132 respondents (84.61%) based on the test, the three applications were declared normal. In contrast, as many as 24 respondents (15.39%) were declared mental health disorders (Table 3).

No	Type Application	Method	Sum	(%)	Diagnosa	Diagnosa		
					Normal	%	Disorder Indicate	%
1.	Psikitech-Diagnos	Q 14	13	8,33	10	84,61	3	15,39
2.	Riliv	Sleep Diary	2	1.28	2		0	
3.	Sehat Jiwa	GDS 15	141	90,39	120		21	
Tota	l		156	100	132		24	

**Table 2.** Distribution of Respondents on the Results of Early Detection with Applications

**Table 3.** Participation Rates and Reviews on Applications

No	Type Application	Rating	Sum Download	Sum Review
1.	Psikitech-Diagnos	4,5	50.000	169
2.	Riliv	4,7	500.000	8000
3.	Sehat Jiwa	3,5	10.000	79

The data above shows that the Riliv application has the highest number of downloads, followed by the Psikitech-Diagnos and Sehat Jiwa applications. The rating based on stars is the same. It is indicated that the Riliv application is the first application in Indonesia to detect mental health disorders independently.

### 3.2 Alternative to Digital Application-Based School Counseling Services

During the Covid-19 pandemic, teachers provided the importance of counseling services to students. However, face-to-face services can be transferred to the online form due to social restrictions. It is intended so that teachers continue to pay attention to the condition of their students, so they do not experience problems disorders, including mental health disorders. The reason that guidance and counseling as part of the education are also required to use information technology, which aims to facilitate all learning processes and supporting activities to be accepted by the wider community [31].

Mental counseling services in schools are the management of early detection since the admission of new students and at the beginning of each semester as well as parents. The convenience of student mental counseling services provides opportunities for early detection. Although you do not have to meet the counseling teacher using digital technology, Riliv is an application on your smartphone that provides counseling services, provides counseling and meditation features [32]. This application is exceptionally designed to connect the counselee online. In contrast, the psychological assistance in this application is carried out by professionals or psychologists.

Psikitech-Diagnos caters to all ages, screens for psychiatric conditions early on, and studies their classification. This application is used to assist counseling teachers in providing services to their students in conducting consultations. In diagnosing a good depression, you will need a system that can diagnose depression and store student or client data for consultation, and build a structured consultation closeness [33].

Sehat Jiwa serves mental health disorders and depression. This application is a free application created and distributed by the ministry of health of the Indonesian Republic to provide various information about mental health with a wide selection of features that can be used.

The three types of counseling service applications for early mental health disorders are part of several similar application services. This indicates that the importance of digital school counseling services is unavoidable. It is ensured that students' mental health will be better because it is pursued through early detection of mental health disorders. For this reason, mental health guidance services for prosperous students will develop school strategies and activities [34].

Then [35] explained that training in mental health early detection counseling services through web-based early detection improves mental health cognitive and psychomotor abilities. Applications offered by mental counseling services will provide information and detect students' mental health early on so that business losses in education can be suppressed.

# 3.3 The Effectiveness of Health Problem Detection Counseling Services with the Internet

According to [34], cyber counseling services are considered adequate for students in conducting early detection independently of their disorder. While for counseling guidance teachers, it is easy to get initial information about the condition of their students because it is not limited by time and distance. This opinion explains that counseling services do not have to be done face-to-face but can use applications or internet networks [35].

From the explanation above, the online counseling services become effective if they are carried out regularly, either online or face-to-face, providing feedback between teachers and students in guidance and counseling services. Online counseling is an effective alternative because it can find out the progress of students with counseling strategies prepared by the teacher, so both of them are required to master the procedures from virtual media or applications used and contain ethical principles in online counseling [36].

### 3.4 Management of Counseling Guidance Services for Digital-Based Teachers

In conducting the management of counseling guidance services, teachers are required to plan the application that will be used to detect students' mental health early and then provide socialization first. Stages need to be carried out to run well and immediately get results in the form of a diagnosis. In contrast, normal ones need to be maintained and improved mental health. In contrast, for those indicated, mental health disorders are expected to be absent from class because it will affect other students and the school environment.

According to [37], management is needed for teachers to conduct online counseling to find out if there are mental health disorders, namely: the *first* phase is hardware preparation, including using techniques that support online activities. The *second* phase is conducting online counseling with the same treatment as offline with delivery, interpretation, coaching, assessment, and sustainability stages. The *third* phase is the post-counseling process, which continues the first and second phase assessments. In contrast, the assessment in this phase is marked by the client's condition, face-to-face, and counselor openness.

#### 3.5 Mental Health Disorder Detection Awareness for Students

The importance of awareness of the detection of mental health disorders for students will encourage them to maintain their mental health to reduce the risk of contracting this mental health disorder. It follows the opinion of [38], they explained an increase in students' awareness after and before being given several questionnaires describing their mental health.

### 4 Conclusion and Implication

Management of mental health counseling services in schools with digital early detection helps counseling guidance teachers know the condition of their students. Starting with the

planning carried out by the counseling guidance teacher. These setting applications are recommended for students to fill out and regularly report so that students' awareness is formed to carry out early detection of mental health independently through digital applications. The results show that health detection applications use Riliv, Psikitech-Diagnos, and Sehat Jiwa because they are familiar and understood by Indonesian students. The self-diagnosis by students explained that their condition of students was more normal than those indicated by mental disorders. The implication is to reduce the high risk of education from increasing mental disorders in students through the management of mental counseling services and digitization of early detection of mental health disorders. Recommendations for those who have indicated mental health disorders should be consulted further with psychologists and medical personnel for further attention. Efforts to detect mental health independently using digital applications will reduce the risk of business losses in the education sector during the Covid-19 pandemic.

**Acknowledgments.** Thank you to PPM School of Management for the opportunity given to present papers at an international seminar on 18–20 May 2022 in Surabaya-Indonesia. Thank you to Professor Adi Fahrudin, PhD, Mr. Muhamad Badrus and related parties.

### References

- 1. Bahri, S. (2020). Studi Evaluasi Kinerja Guru Bimbingan dan Konseling di Sekolah. *Jurnal Pencerahan*, 14(1), 1–23.
- Zamroni, E., & Rahardjo, S. (2015). Konseling Berbasis Permendikbud Nomor 111 Tahun 2014. Jurnal Konseling GUSJIGANG, 1(1).
- 3. Handoko, T. (2012). Manajemen Personalia dan Sumber Daya Manusia. BPFE
- 4. Isnaini, I., Abdullah, A., & Saputra, I. (2018). Kerugian Ekonomi Akibat Schizophrenia Pada Penderita Rawat Inap Di Rumah Sakit Jiwa Aceh Tahun 2016 Dan Estimasi Nilai Kerugian Pada Tahun Berikutnya. *JUKEMA*, 4(2), 313–322.
- Rahmayanthi, D., Moeliono, M. F., & Kendhawati, L. (2021). Adolescents mental health during Covid-19 pandemic. *Insight Jurnal Ilmiah Psikologi*, 23(1), 91–101. http://ejurnal.mercubuana-yogya.ac.id/index.php/psikologi/article/view/1417
- Indarjo, S. (2009). Kesehatan Jiwa Remaja. KEMAS: Jurnal Kesehatan Masyarakat, 5(1), 48–57. https://doi.org/10.15294/kemas.v5i1.1860
- 7. Undiyaundeye, F., & Angela, A. (2020). Management of mental health issues and academic. In *Proceedings of research world international conference* (no. July, pp. 1–6).
- Putri, A. K., Gustriawanto, N., Rahapsari, S., Sholikhah, A. R., Prabaswara, S., Kusumawardhani, A. C., & Kristina, S. A. (2021). Exploring the perceived challenges and support needs of Indonesian mental health stakeholders: a qualitative study. *International Journal of Mental Health Systems*, 15(1), 1–9. https://doi.org/10.1186/s13033-021-00504-9
- Dewi, E. I., Wuryaningsih, E. W., & Susanto, T. (2020). Stigma against people with severe mental disorder (PSMD) with confinement 'Pemasungan.' *NurseLine Journal*, 4(2), 131. https://doi.org/10.19184/nlj.v4i2.13821
- Kemenkes, R. I. (2019). Situasi Kesehatan Jiwa di Indonesia. *InfoDATIN. Kemenkes RI, Jakarta*, p. 12.
- 11. Akbar, K. F., Darmiati, D., & Wati, I. (2020). Gambaran Stigma Masyarakat Terhadap Pasien Gangguan Jiwa Di Desa Buku. *Jurnal Perawat Indonesia*, 4(3), 446. https://doi.org/10.32584/jpi.v4i3.705

- 12. Bikker, A. P., Lesmana, C. B. J., & Tiliopoulos, N. (2021). The Indonesian mental health act: Psychiatrists' views on the act and its implementation. *Health Policy and Planning*, *36*(2), 196–204. https://doi.org/10.1093/heapol/czaa139
- 13. Ningdyah, A. E. M., Helmes, E., Kidd, G., & Thompson, C. (2016). Preparing for mental health care services: professional psychology curricula in Indonesia. In *International conference on health and well-being (ICHWB)* (pp. 40–53).
- 14. Hadiyani, W., & Juniarni, L. (2019). The effectiveness of integrated management of mental health care using interactive KIE towards attitude of person with mental disorder's family. *KnE Life Sciences*, 2019, 648–656. https://doi.org/10.18502/kls.v4i13.5321
- Rosmalina, A. (2019). Kolaborasi Konseling dengan Kesehatan Jiwa. Prophetic: Professional, Empathy, Islamic Counseling Journal, 2(1), 83. https://doi.org/10.24235/prophetic.v2i1.4752
- 16. Edwards, M. S., Martin, A. J., & Ashkanasy, N. M. (2021). Mental health and psychological well-being among management students and educators. *Journal of Management Education*, 45(1), 3–18. https://doi.org/10.1177/1052562920978252
- Lee, A., St Leger, L. H., Ling, K. W., Keung, V. M., Lo, A. S., Kwong, A. C., & Armstrong, E. S. (2018). The Hong Kong healthy schools award scheme, school health and student health: An exploratory study. *Health Education Journal*, 77(8), 857–871. https://doi.org/10.1177/0017896918779622
- 18. Suryaputra, D., & Adik, W. (2019). Analysis of system and service management improvement for mental health at mental hospitals: A systematic review. In *The 6th international conference on public health* (p. 293). https://doi.org/10.26911/the6thicph.04.55
- Baltag, V., Pachyna, A., & Hall, J. (2015). Global overview of school health services: Data from 102 countries. *Behavior and Policy Review*, 2(4), 268–283. https://doi.org/10.14485/ hbpr.2.4.4
- Benton, S.A. (2006). The scope and contex of the problem. In College student mental health: effective services and strategies across campus, Washington, DC: National Association of Student Personnel Administrators.
- 21. Gallagher, R. (2012). *National survey of college counseling*. International Association of Counseling Services.
- 22. Prasetyo, A. E., Osmond, A. B., & Rumani, M. (2018). Aplikasi Deteksi Dini Gangguan Depresi Pada Anak-Anak Berbasis Android. *e-proceeding of engineering*, 5(3), 6050–6057.
- Rahmawati, F. D., Eryando, T. (2019). Pengembangan Situs Web Deteksi Dini Kesehatan Jiwa. *Journal of Information Systems for Public Health*, 4(2), 1–8. https://journal.ugm.ac.id/ jisph/article/view/12265/30823
- 24. Mutiarani, M. N. (2021). Efektivitas Penggunaan Aplikasi Mhgap-Ig Berbasis Mobile Dalam Deteksi Dini Gejala Depresi, vol. 10, no. 2, pp. 240–249.
- Novianti, E., Tobing, L. D., & Wibisono, B. (2020). Promotive and preventive efforts for mental health through web-based detection early. *Jurnal Keperawatan Jiwa*, 8(1), 1–6.
- 26. Zed, M. (2008). Metode Penelitian Kepustakaan. Yayasan Obor Indonesia
- Xiao, Y., & Watson, M. (2019). Guidance on conducting a systematic literature review. *Journal of Planning Education and Research*, 39(1), 93–112. https://doi.org/10.1177/0739456X17723971
- 28. Sugiyono, A. (2016). Metode Penelitian Kuantitatif, Kualitatif dan R&D. Alfabeta.
- 29. Susanthi, I. G. A. A. D. (2020). Kendala dalam Belajar Bahasa Inggris dan Cara Mengatasinya. Linguistic Community Services Journal, 1(2), 64–70. https://www.ejournal.warmadewa.ac.id
- Tambunsaribu, G., & Galingging, Y. (2021). Masalah Yang Dihadapi Pelajar Bahasa Inggris Dalam Memahami Pelajaran Bahasa Inggris. *Dialektika: Jurnal Bahasa, Sastra Dan Budaya*, 8(1), 30–41. https://doi.org/10.33541/dia.v8i1.3110
- 31. Mansyur, A. I., Badrujaman, A., Imawati, R., & Fadhillah, D. N. (2020). Konseling Online Sebagai Upaya Menangani Masalah Perundungan Di Kalangan Anak Muda. *Jurnal Pendidikan Ilmu Sosial*, 29(2), 140–154. https://doi.org/10.23917/jpis.v29i2.8501

- 32. Apsari, Y., Darmawan, M., & Prasetyo, E. (2018). Pemanfaatan Teknologi Bagi Generasi Millenial: Konseling Berbasis Teks Menggunakan Riliv-Aplikasi Android. *Experientia*, 6(1), 47. http://journal.wima.ac.id/index.php/EXPERIENTIA/article/view/1790
- 33. Auliasin, E., Rusdianto, D. S., & Soebroto, A. A. (2019). Pengembangan Aplikasi Diagnosis Gejala Depresi pada Mahasiswa Fakultas Ilmu Komputer Studi Kasus Fakultas Ilmu Komputer Universitas Brawijaya. *Jurnal Pengembangan Teknologi Informasi dan Ilmu Komputer*, *3*(9), 8823–8830. http://j-ptiik.ub.ac.id
- 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. https://doi.org/10.25273/counsellia.v11i1.8393
- 35. Ifdil, I., Fadli, R. P., Suranata, K., Zola, N., & Ardi, Z. (2020). Online mental health services in Indonesia during the COVID-19 outbreak. *Asian Journal of Psychiatry*, *51*(April), 102153. https://doi.org/10.1016/j.ajp.2020.102153
- 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), 27–38. https://doi.org/10.51214/bocp.v2i2.33
- 37. Ardi, Z., & Ifdil, I. (2013). Konseling Online Sebagai Salah Satu Bentuk Pelayanan E-konseling. *Jurnal Konseling dan Pendidikan*, *I*(1), 15–22.
- 38. Nurtanti, S., & Handayani, S. (2020). Peningkatan Pengetahuan Siswa Tentang Deteksi Dini dan Pencegahan Depresi di SMK Muhammadiyah Baturetno. *Warta LPM*, 24(1), 134–144. https://doi.org/10.23917/warta.v24i1.10007

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

