

Disaster-oriented guidance program of professional school counselors: A systematic literature review

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ABSTRACT

Guidance program services play a strategic role in strengthening students' disaster preparedness by enhancing psychological readiness, social competence, and adaptive behavior in educational settings. This study investigates how guidance program services contribute to strengthening students' disaster preparedness while also exploring the challenges encountered in implementing these services within school settings. Guidance program services are defined as developmental and preventive interventions delivered systematically through classroom guidance, information services, group guidance, and psychoeducational activities to strengthen students' personal, social, and adaptive competencies. This study used a systematic literature review (SLR) of peer-reviewed national and international articles published between 2018 and 2025. The search identified 24 articles, and 17 were selected based on their relevance, quality, research methods, and suitability to the topic. The review was conducted in four stages: identification, screening, eligibility, and inclusion. The findings indicate that information services, classroom guidance, and psychosocial support significantly improve students' disaster awareness, preparedness, resilience, emotional readiness, and adaptive responses. However, the integration of Guidance and Counseling services into Disaster-Safe School programs remains limited and largely conceptual, with few sustainable implementation models. These findings suggest that disaster preparedness should address psychological and emotional resilience alongside physical readiness. Therefore, developing adaptive, integrated, and evidence-based disaster-oriented Guidance and Counseling service models is essential for strengthening school disaster preparedness and fostering safe, inclusive, and disaster-resilient educational environments. The findings also provide directions for future research on disaster-oriented counseling interventions across diverse educational contexts.

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1. Introduction

Disaster Guidance and Counseling plays a crucial role in supporting students in recognizing their potential, understanding their environment, and fostering preparedness in facing various life situations, including emergencies or disasters (Arya & Miharja, 2025; Kurniawan, 2025a). Through various services such as information, classical guidance, and psychosocial support, Disaster Guidance and Counseling contributes to building students' preparedness and adaptability to emergencies, and can also be utilized as an integral part of disaster education efforts in schools (Afati et al., 2023; Handaka et al., 2019; Kurniawan & Prasetiawan, 2019). In this study, guidance program

services refer to preventive and developmental services delivered systematically to all students through classroom guidance, information services, group guidance, and psychoeducational activities. Within this framework, disaster preparedness is positioned as a developmental competency that can be integrated into guidance program services (Aurellia et al., 2025; Rifaldi et al., 2023). Indonesia is highly vulnerable to natural disasters because of its location along the Pacific Ring of Fire. The country is frequently affected by earthquakes, volcanic eruptions, floods, landslides, and tsunamis. These disaster characteristics expose students to significant physical and psychosocial risks (Achmad et al., 2025; Saputra et al., 2026; Simarmata & Kurniawan, 2026b, 2026a; Talango et al., 2025; Vuspita et al., 2026). Therefore, Guidance and Counseling services are urgently needed to strengthen disaster awareness, resilience, emotional preparedness, and adaptive coping skills among students in educational settings.

The high vulnerability of disasters in Indonesia demands the role of Guidance and Counseling teachers in fostering student preparedness from an early age through sustainable services. Disaster Guidance and Counseling Services are important because they not only develop students' personal, social, and career aspects but also strengthen preparedness in facing emergencies (Amri et al., 2016; Desilia et al., 2023). The limited research and service models appropriate to the context of disaster preparedness indicate that the development of disaster guidance and counseling services is not yet optimal (Anggraini & Harahap, 2023; Rifaldi et al., 2023). The main problem is the lack of an adaptive approach to support the creation of a safe, inclusive, and disaster-resilient learning environment (Ana et al., 2017; Kurniawan, 2025a; Kurniawan, Fauziah, et al., 2024).

In an effort to create educational units that are responsive and ready to face various disaster risks, Guidance and Counseling services play a strategic role in strengthening student capacity (Kurniawan, 2025a). The Disaster-Safe Education Unit (DSEU) is a program designed to create safe, resilient, and disaster-prepared educational institutions through the integration of disaster risk reduction into school policies, learning processes, and school culture (Handaka et al., 2019; Kamarudin, 2024; Kartini et al., 2021). Guidance programs and services function to instill knowledge, attitudes, and adaptive skills in students through preventive activities and strengthening disaster preparedness (Aqib, 2020; Ayriza, 2015; Fauzi & Zulyusri, 2024). However, various previous studies indicate that disaster guidance and counseling services are still conceptual and have not developed an implementable model appropriate to the context of Disaster-Safe Education Units (Libayao et al., 2024; Mao et al., 2025; Marliani et al., 2024). The emerging research gap lies in the lack of guidance and counseling service models integrated with the Disaster-Safe Education Unit program and the limited studies on strategies for strengthening student preparedness on a sustainable basis. Therefore, developing a contextual and adaptive disaster guidance and counseling service model is a crucial step to improving disaster preparedness in schools while addressing existing implementation gaps.

This study examines the role of guidance services in improving students' disaster preparedness in schools. It focuses on the strategies and approaches used by Guidance and Counseling teachers to develop students' awareness, response, and ability to adapt to disasters (Setioputro et al., 2025). In addition, this study examines the challenges and limitations of implementing Disaster Guidance and Counseling services, particularly in integrating the Disaster-Safe Education Unit program, while exploring contextual and adaptive strategies to strengthen disaster preparedness in schools (Fandayati et al., 2024; Kurniawan, Fauziah, et al., 2024; Rahmat & Bimantara, 2023; Saputra et al., 2026).

Unlike empirical research based on primary data from participants, this study uses a SLR to synthesize and critically examine findings from previous research (Vlachopoulos & Makri, 2024). The purpose is not to test hypotheses or measure variables directly, but to identify research trends, conceptual patterns, implementation challenges, and research gaps related to disaster-oriented Guidance and Counseling services. Furthermore, this review contributes by providing a comprehensive synthesis of existing evidence and proposing directions for future research and practice in strengthening school-based disaster preparedness through Guidance and Counseling services (Lailiyah & Afandi, 2020).

This study draws on Bandura's Social Cognitive Theory, which explains how personal factors, behavior, and the environment interact with one another in shaping individuals' preparedness and ability to respond and adapt. In the context of disaster preparedness, Guidance and Counseling

services play a strategic role in strengthening students' self-efficacy, resilience, disaster awareness, and adaptive coping skills through preventive and developmental interventions. Therefore, Social Cognitive Theory provides a relevant theoretical foundation for understanding how Guidance and Counseling services contribute to enhancing students' disaster preparedness in educational settings.

2. Method

2.1 Research design

This study employed a Systematic Literature Review (SLR) design to synthesize evidence regarding the role of disaster-oriented Guidance and Counseling services in enhancing disaster preparedness in educational settings (Sugiyono, 2018). Article selection was carried out using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework, with each study assessed through a systematic and transparent review process. The review followed four stages: identification, screening, eligibility assessment, and inclusion. Articles were searched, screened, and evaluated based on predetermined criteria before being synthesized through thematic analysis. The application of the PRISMA framework enhanced the reliability, transparency, and reproducibility of the review by providing a structured procedure for documenting article identification, selection, and exclusion while minimizing potential selection bias.

2.2 Data extraction

In this SLR, the unit of analysis consisted of scientific publications rather than human participants. The sources reviewed included peer-reviewed journal articles, conference proceedings, and research reports related to disaster preparedness and Guidance and Counseling services in educational settings. Studies published from 2018 to 2025 were included in the review. The database search initially identified 24 articles, and after screening and eligibility assessment, 17 articles were selected for the final review based on the predetermined inclusion criteria. Document selection was conducted purposively based on publication year, topic relevance, methodological quality, and the completeness of information regarding research objectives, methods, and findings (Sugiyono, 2018).

Predetermined inclusion and exclusion criteria guided the article selection process to ensure methodological rigor and relevance. The inclusion criteria were: (1) articles published between 2018 and 2025; (2) peer-reviewed publications; (3) studies focusing on disaster preparedness, disaster education, psychosocial support, or Guidance and Counseling services; and (4) studies conducted in educational settings. Meanwhile, the exclusion criteria comprised: (1) non-peer-reviewed publications; (2) opinion papers, editorials, and book reviews; (3) studies not directly related to disaster preparedness or Guidance and Counseling services; and (4) incomplete or inaccessible full-text articles. These criteria ensured that only high-quality and relevant studies were included in the final synthesis. Applying these selection criteria also enhanced the credibility, transparency, and reproducibility of the systematic review by minimizing potential sources of selection bias. Furthermore, the application of these criteria facilitated a more consistent comparison and synthesis of findings across the included studies despite variations in research designs and educational contexts.

The article selection process was guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework and carried out through four stages: identification, screening, eligibility assessment, and inclusion. This systematic approach enhanced the transparency, consistency, and reproducibility of the review process by clearly documenting article identification, selection, and exclusion. The PRISMA framework also minimized potential selection bias and strengthened the credibility of the synthesized findings. At each stage, predefined inclusion and exclusion criteria were applied to retain only studies that were relevant to the objectives of the review. The use of a structured selection process facilitated the systematic filtering of the available evidence while maintaining methodological rigor throughout the review. Consequently, the final body of included studies provided a reliable and comprehensive evidence base for the subsequent thematic synthesis and interpretation of findings. The screening process progressively narrowed the initial records through duplicate removal, title and abstract screening, and full-text assessment using predefined criteria, ensuring a consistent and valid selection of relevant studies. Figure 1 shows the overall process used to select the articles for this review.

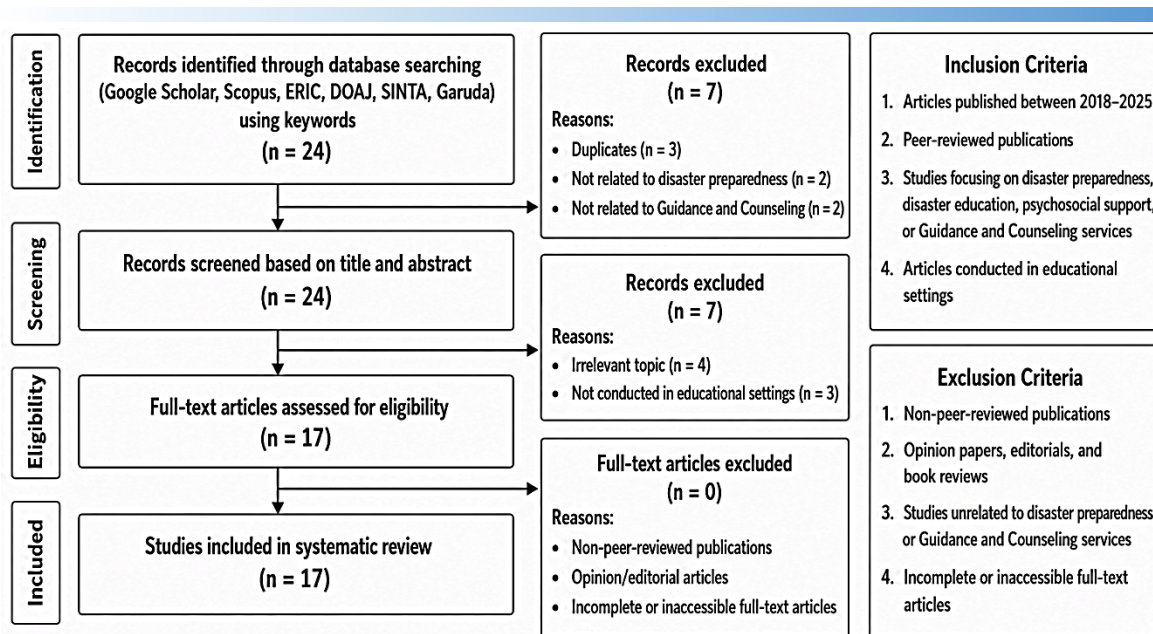


Fig. 1. PRISMA flow diagram of the study selection process

2.3 Data collection tools

The main tool for data collection was a literature review sheet used to systematically record and organize relevant information from each selected publication. The review sheet documented publication identity, research objectives, research design, participants or research objects, data collection methods, intervention characteristics, and principal findings. This standardized instrument ensured consistency, transparency, and accuracy throughout the data extraction process by enabling comparable information to be collected from all eligible studies. Relevant literature was identified through searches in several academic databases, including Google Scholar, Scopus, ERIC, DOAJ, SINTA, and Garuda. The search strategy employed the keywords "disaster preparedness," "disaster education," "guidance and counseling," "school counseling," "psychosocial support," "student resilience," and "disaster-safe school," combined using Boolean operators (AND and OR) to improve search precision and relevance. The retrieved records were subsequently screened and documented on the literature review sheet, ensuring a systematic, transparent, and reproducible data-collection process throughout the review.

2.4 Research procedures

The review was conducted based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework through a structured process involving the formulation of review objectives and research questions, comprehensive literature searches across selected academic databases, duplicate removal, title and abstract screening, and full-text eligibility and methodological quality assessment. The assessment considered the clarity of research objectives, appropriateness of research design, adequacy of data collection procedures, and completeness of reported findings, while relevant data were extracted using a standardized review sheet. The extracted data were synthesized through thematic analysis to identify recurring themes, research trends, implementation strategies, challenges, and research gaps concerning disaster-oriented Guidance and Counseling services, thereby ensuring methodological rigor, transparency, consistency, and reliability of the review findings.

2.5 Data analysis

Braun & Clarke (2006) describe thematic analysis as a qualitative approach that involves identifying, organizing, analyzing, and interpreting recurring patterns or themes across the reviewed literature. In this study, the selected studies were analyzed using thematic analysis. Each article was examined comprehensively to identify key concepts related to disaster-oriented Guidance and Counseling services, including intervention strategies, implementation approaches, student

outcomes, supporting factors, and reported challenges. Relevant findings were systematically coded and categorized into thematic groups based on similarities and conceptual relationships.

The researchers then synthesized the identified themes using a descriptive-comparative approach to examine similarities, differences, emerging trends, and research gaps across the included studies. This process enabled the integration of evidence from multiple sources into a coherent understanding of the contribution of Guidance and Counseling services to disaster preparedness in educational settings. The synthesized findings also served as the basis for developing evidence-based recommendations regarding the integration of disaster-oriented Guidance and Counseling services into school-based disaster preparedness programs and for identifying directions for future research.

3. Results and Discussion

The PRISMA selection process initially identified 24 articles from the selected databases. The researchers then screened and assessed the eligibility of these articles, resulting in 17 studies that met the inclusion criteria for the systematic review. The selected studies were subsequently analyzed through thematic analysis to identify recurring topics, patterns, and research trends related to disaster-oriented Guidance and Counseling services.

The thematic categories presented in Table 1 are not mutually exclusive. A single article may contribute to more than one thematic category depending on its focus, objectives, and findings. Therefore, the total frequency across themes exceeds the number of included studies ($n = 17$). The table illustrates thematic patterns identified through the synthesis process rather than the number of unique articles.

Table 1. Thematic Synthesis of Reviewed Studies

No.	Theme	Number of studies (n)	Main findings
1	The role of guidance programs in disaster preparedness	14	Information services, classroom guidance, and preventive counseling contribute to improving students' disaster awareness, preparedness, responsiveness, and adaptive skills.
2	Contribution of disaster Guidance and Counseling to psychosocial support	11	Guidance and Counseling interventions strengthen resilience, emotional readiness, stress management, and adaptive coping skills among students.
3	Integration with Disaster-Safe Education Unit programs	6	The integration of Guidance and Counseling services into school disaster preparedness programs remains limited and has not yet become a systematic component of school policy.
4	Development of disaster-oriented Guidance and Counseling models	8	Existing models are predominantly conceptual and require contextual adaptation and practical implementation in schools.
5	Challenges and limitations in implementation	7	Major challenges include limited teacher training, lack of operational guidelines, insufficient institutional support, and weak curriculum integration.
Total articles reviewed		17	Thematic categories are not mutually exclusive; one article may contribute to multiple themes.

The database search initially yielded 24 articles. After applying the inclusion and exclusion criteria during the screening and eligibility stages, the researchers retained 17 articles for thematic synthesis. Table 2 presents the characteristics, thematic categories, and key findings of the included studies. The number of studies reported in each theme represents thematic frequency rather than unique articles, as a single study may address multiple aspects of disaster-oriented Guidance and Counseling services. Therefore, the total frequency across themes exceeds the number of included studies ($n = 17$).

As presented in Table 2, the most frequently discussed theme was the role of guidance programs in enhancing students' disaster preparedness (14 studies), followed by psychosocial support and resilience development (11 studies). These findings indicate that Guidance and Counseling services perform important preventive and developmental functions by strengthening students' disaster awareness, adaptive behavior, emotional readiness, and resilience. However, the synthesis also identified several important research gaps. Only six studies examined the integration

of Guidance and Counseling services within Disaster-Safe Education Unit programs and school curriculum implementation, suggesting that counseling services and disaster preparedness initiatives are still commonly implemented as separate activities rather than as integrated components of school disaster management.

Table 2 further shows that eight studies proposed disaster-oriented Guidance and Counseling models; however, most remained conceptual and lacked empirical validation in educational settings. In addition, seven studies reported recurring implementation challenges, including inadequate professional training, limited institutional support, insufficient disaster-related counseling guidelines, and weak curriculum integration. These findings demonstrate that although disaster-oriented Guidance and Counseling has received increasing scholarly attention, greater emphasis is needed on developing empirically validated intervention models and strengthening institutional support to enable systematic, sustainable, and context-sensitive implementation in schools.

Table 2. Literature review results per author/article

No	Author(s) & year	Focus of study	Context / subject	Key findings
1	Handoyo et al. (2020)	Guidance programs in disaster preparedness	Educational institutions	Information services and classroom guidance play a role in increasing students' disaster awareness and mental preparedness
2	Kumiawan & Prasetiawan (2019)	Guidance and counseling as part of disaster education	Schools	Guidance and counseling contribute to shaping responsive attitudes and adaptive behaviors toward disaster risks
3	Halim (2022)	Preventive guidance and counseling services	Students	Guidance programs support preparedness through preventive and educational approaches
4	Rizal (2022)	Role of guidance and counseling in student preparedness	Secondary schools	Guidance and counseling help students understand disaster risks and basic preparedness measures
5	Mardiana (2023)	Strengthening adaptive attitudes through guidance and counseling	Educational institutions	Guidance and counseling services help develop adaptive and responsive attitudes toward emergencies
6	Sukarya & Miharja (2025)	Guidance and counseling and disaster preparedness	Schools	Guidance programs as the foundation for developing students' disaster preparedness
7	Septikasari (2018)	Guidance and counseling and post-disaster psychosocial support	Students	Guidance and counseling help reduce trauma and support psychological recovery
8	Insani et al. (2022)	Disaster guidance and counseling and resilience	Schools	Guidance and counseling contribute to strengthening resilience and emotional readiness
9	Saripudin et al. (2022)	Role of school counselors in preparedness	Educational institutions	School counselors act as facilitators of students' emotional and social preparedness
10	Afiati et al. (2023)	Guidance and counseling and emotional readiness	Students	Guidance and counseling services improve students' emotional readiness in facing disasters
11	Rahmat (2023)	Disaster guidance and counseling in schools	Schools	Guidance and counseling support psychosocial preparedness, but implementation remains limited
12	Rahmat et al. (2024)	Integration of guidance and counseling with the Disaster-Safe Education Unit Program	Educational institutions	Integration of guidance and counseling into the Disaster-Safe Education Unit Program is not yet systemic and remains partial
13	Suhami et al. (2023)	Disaster-Safe Education Unit Program and the role of guidance and counseling	Schools	Guidance and counseling have not been positioned as a core component in program implementation
14	Rachmat (2018)	Model of disaster guidance and counseling	Schools	Disaster guidance and counseling services remain conceptual and not yet practical
15	Rahmat (2019)	Implementation of disaster guidance and counseling	Educational institutions	There is no sustainable operational model for disaster guidance and counselling
16	Kumiawan et al. (2024)	Context-based adaptive disaster guidance and counseling	Schools	Approaches should be tailored to local disaster vulnerability contexts
17	Susilawati (2025)	Challenges in disaster guidance and counseling	Schools	Limited guidelines, training, and policy integration are the main challenges

Table 2 shows that the reviewed studies consistently highlight the role of Guidance and Counseling services in strengthening students' disaster preparedness through information provision, classroom guidance, preventive interventions, and psychosocial support. Across the included studies, these interventions were found to strengthen disaster awareness, adaptive behavior, emotional readiness, and resilience, highlighting the preventive and developmental functions of Guidance and Counseling within school disaster preparedness. These findings further suggest that integrating Guidance and Counseling into comprehensive school disaster risk reduction programs can contribute to developing students' preparedness competencies in a more systematic and sustainable manner.

The thematic synthesis identified five major patterns. The majority of studies emphasized the contribution of Guidance and Counseling services to disaster preparedness and psychosocial resilience. In contrast, relatively few studies examined the integration of Guidance and Counseling services into Disaster-Safe Education Unit programs or evaluated disaster-oriented counseling models through empirical research. Several studies also reported recurring implementation barriers, including limited counselor training, inadequate operational guidelines, insufficient institutional support, and weak curriculum integration.

Overall, the findings indicate that disaster-oriented Guidance and Counseling services contribute significantly to enhancing students' disaster preparedness through preventive, developmental, and psychosocial interventions. However, the review also reveals important gaps in institutional integration, empirically validated intervention models, and implementation support across educational settings. These findings provide a strong foundation for further discussion on the strategic role of Guidance and Counseling services in strengthening comprehensive school-based disaster preparedness and informing future research and practice.

Building upon the thematic synthesis presented in Table 2, this review suggests that disaster-oriented Guidance and Counseling services extend beyond their conventional educational function by serving as preventive and developmental interventions for disaster risk reduction. Rather than merely increasing students' disaster knowledge, these services foster disaster awareness, emotional readiness, adaptive behavior, and resilience, thereby strengthening comprehensive disaster preparedness in educational settings (Irawan et al., 2024). Across the reviewed studies, information services, classroom guidance, and preventive counseling were consistently identified as important mechanisms for increasing students' disaster awareness, responsiveness, and adaptive skills. These findings indicate that disaster preparedness should not be understood solely as a matter of technical knowledge or emergency procedures. Rather, preparedness involves a broader developmental process that encompasses cognitive understanding, emotional readiness, and behavioral adaptation. Therefore, Guidance and Counseling services have the potential to function as an essential component of disaster risk reduction efforts within schools (Kahfi et al., 2025).

These findings support the principles of Social Cognitive Theory, which emphasize the interaction between personal factors, environmental conditions, and individual behavior. Students' preparedness behaviors are not formed merely through exposure to disaster information but also through the development of self-efficacy, resilience, and adaptive coping skills. Guidance and Counseling services contribute to these processes by providing structured opportunities for students to understand risks, reflect on their emotional responses, and develop confidence in their ability to respond appropriately during emergency situations (Yuliyani et al., 2025). Consequently, preparedness becomes a learned and reinforced behavior rather than a one-time outcome of disaster training activities.

Another important finding concerns the contribution of disaster-oriented Guidance and Counseling services to psychosocial preparedness (Floridi, 2018). The reviewed studies consistently highlighted the role of counseling interventions in strengthening resilience, reducing anxiety, and improving emotional readiness. This finding extends the traditional perspective of disaster education, which has often focused on physical preparedness, evacuation procedures, and emergency response mechanisms. The present review suggests that psychological readiness is equally important because students who are emotionally prepared are more likely to remain calm, make appropriate decisions, and adapt effectively during disaster situations (Kurniawan, 2021; Kurniawan et al., 2021; Rahady & Kurniawan, 2023). As a result, Guidance and Counseling teachers should be recognized not only as educational facilitators but also as key actors in promoting students' psychosocial preparedness.

Despite these positive contributions, the review identified a substantial gap in the integration of Guidance and Counseling services within Disaster-Safe Education Unit programs (Khusna et al., 2025). Only a limited number of studies explicitly discussed how counseling services can be systematically incorporated into school disaster preparedness policies and practices. This finding suggests that disaster preparedness initiatives in schools continue to focus predominantly on structural and procedural dimensions, such as evacuation routes, safety infrastructure, and simulation activities. While these elements remain essential, the limited attention given to psychosocial preparedness may reduce the overall effectiveness of disaster risk reduction programs. A more comprehensive approach requires the integration of Guidance and Counseling services into school preparedness frameworks, curriculum planning, and disaster management policies (Kurniawan, 2025b; Kurniawan, Prasetyo, et al., 2024; Lailiyah & Afandi, 2020).

The review also revealed that most existing disaster-oriented Guidance and Counseling models remain conceptual rather than operational (Pohan et al., 2024). Although several studies proposed frameworks and intervention strategies, few provided empirically validated models that can be directly implemented by Guidance and Counseling teachers. Furthermore, recurring challenges such as insufficient professional training, lack of operational guidelines, limited institutional support, and weak curriculum integration continue to hinder implementation efforts. These findings indicate that the future development of disaster-oriented Guidance and Counseling services should prioritize practical implementation models that are context-sensitive, sustainable, and adaptable to local disaster characteristics (Irawan et al., 2024).

The synthesis of the included studies indicates that a conceptual framework can be proposed in which Guidance and Counseling services function as the primary intervention through information services, classroom guidance, preventive counseling, and psychosocial support. These interventions contribute to the development of disaster awareness, emotional readiness, resilience, adaptive coping skills, and responsive behavior among students. Their effectiveness depends on several supporting factors, including teacher competence, institutional support, disaster-related policies, and integration into the curriculum. Through these mechanisms, Guidance and Counseling services contribute to strengthening school-based disaster preparedness and fostering disaster-resilient educational institutions. This framework is described in Figure 2 and provides a theoretical and practical foundation for future efforts to integrate counseling services into comprehensive school disaster preparedness programs.

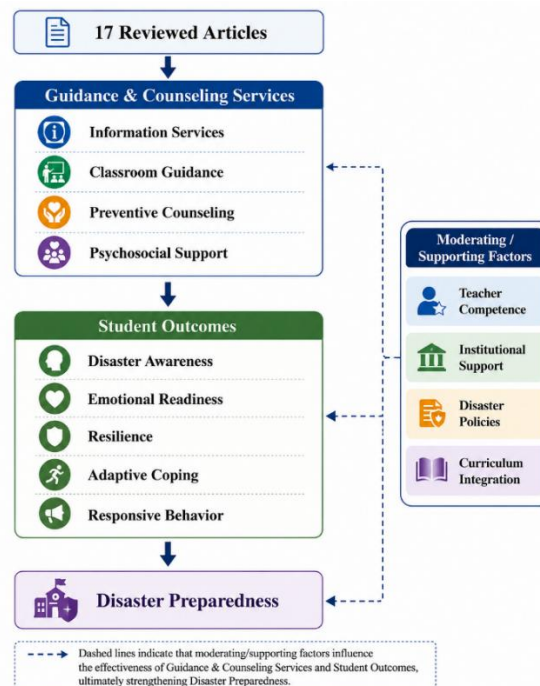


Fig. 2. Conceptual framework

The findings from the 17 reviewed studies show that four core Guidance and Counseling interventions were consistently identified: information services, classroom guidance, preventive counseling, and psychosocial support. These interventions contribute directly to disaster awareness, emotional readiness, resilience, adaptive coping skills, and responsive behavior among students. Their effectiveness is strengthened by supporting factors, including teacher competence, institutional support, disaster policies, and curriculum integration. Collectively, these components form a conceptual framework in which Guidance and Counseling services serve as the primary mechanism for enhancing school disaster preparedness and resilience.

This study has several limitations. First, the review included only 17 articles that met the established inclusion criteria, which may not fully represent the broader body of literature on disaster-oriented Guidance and Counseling services. Second, most of the reviewed studies were conceptual or descriptive in nature, resulting in limited empirical evidence regarding the effectiveness of implementation models. Third, variations in educational contexts, disaster characteristics, and research methodologies may influence the generalizability of the findings.

Future studies should focus on developing and empirically testing disaster-oriented Guidance and Counseling service models in various educational settings. Further research is also needed to examine the effectiveness of integrating Guidance and Counseling services into Disaster-Safe Education Unit programs, curriculum frameworks, and school disaster management policies. Longitudinal and intervention-based studies are recommended to evaluate the long-term impact of Guidance and Counseling services on students' preparedness, resilience, and adaptive behavior. Additionally, comparative studies across different disaster contexts and educational levels would provide a more comprehensive understanding of how Guidance and Counseling interventions can be adapted to diverse student needs and environmental conditions.

The findings from this review offer useful insights for educational practice and policy. Guidance and Counseling services should be recognized as a core component of school disaster preparedness programs rather than merely supplementary support. Schools should strengthen the integration of Guidance and Counseling services within disaster education initiatives, while policymakers should develop operational guidelines and professional development programs to support Guidance and Counseling teachers in disaster preparedness efforts. Such integration can contribute to the development of safe, inclusive, and disaster-resilient educational institutions.

4. Conclusion

Based on a SLR of 24 scientific articles published during the 2018–2025 period, this study concludes that guidance program services play a strategic role in strengthening students' disaster preparedness in educational settings. Of the 24 articles identified, 17 met the inclusion criteria and demonstrated that Guidance and Counseling services contribute significantly to enhancing disaster awareness, responsiveness, adaptive skills, resilience, and emotional preparedness through classroom guidance, group guidance, information services, and psychosocial support. These findings indicate that disaster preparedness depends not only on physical and procedural readiness but also on students' psychological and emotional readiness, which are important areas addressed through Guidance and Counseling services. The review also revealed that the integration of Guidance and Counseling services into Disaster-Safe Education Unit programs remains limited. Most existing studies position Guidance and Counseling services as complementary rather than integral components of school disaster preparedness systems. Furthermore, disaster-oriented Guidance and Counseling models remain largely conceptual, with limited evidence of practical and sustainable implementation in educational contexts.

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Declarations

- Author contribution** : FAK served as the lead author and was primarily responsible for the conceptualization of the study, data collection, formal analysis, and the preparation of the original manuscript draft. WNES contributed as a supporting author by providing supervision, methodological guidance, and critical revisions to enhance the academic rigor of the manuscript. IBH, LA and DFS also contributed as a supporting author through validation, as well as review and editing processes to ensure the accuracy, clarity, and coherence of the manuscript. All authors reviewed and approved the final version of the manuscript.
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- Additional information** : No further information related to this paper is provided.

References

- Achmad, R., Hamid, F., Saprudin, S., Rahman, N. A., Rahman, M., Muhammad, N., & Sahjat, S. (2025). Pioneer and mentoring disaster preparedness schools (SSB) at Statte Junior High School 13, Ternate City, North Maluku Province. *Mattawang: Jurnal Pengabdian Masyarakat*, 6(1), 54-60. <https://doi.org/10.35877/454ri.mattawang3771>
- Afiati, E., Zidny, R., Rahmawati, R., Handoyo, A. W., & Saripudin, M. (2023). Peningkatan keterampilan guru bimbingan dan konseling dalam menyelenggarakan layanan bimbingan dan konseling berorientasi Education for Sustainable Development (ESD): Sebuah studi kasus di Banten, Indonesia. *Jurnal Studi Kasus Kegiatan Masyarakat*, 1(1), 1-7. <https://doi.org/10.53889/jskkm.v1i1.256>
- Amri, A., Bird, D., Ronan, K., Haynes, K., & Towers, B. (2016). Disaster risk reduction education in Indonesia: Challenges and recommendations for scaling up. *Natural Hazards and Earth System Sciences*, 17(4), 595-612. <https://doi.org/10.5194/nhess-17-595-2017>
- Ana, A., Wibowo, M. E., & Wagimin, W. (2017). Bimbingan kelompok dengan teknik role playing untuk meningkatkan self-efficacy dan harapan hasil (outcome expectations) karir siswa. *Jurnal Bimbingan Konseling*, 6, 49-53. <http://dx.doi.org/10.30870/jpbk.v8i1.22618>
- Anggraini, A., & Harahap, A. P. (2023). Efektivitas layanan bimbingan kelompok teknik role playing untuk meningkatkan regulasi emosi siswa. *Ghaidan: Jurnal Bimbingan Konseling Islam dan Kemasyarakatan*, 7(2), 155-163. <https://doi.org/10.19109/ghaidan.v7i2.19470>
- Aqib, Z. (2020). *Bimbingan dan Konseling*. Bandung: Yrama Widya.
- Arya, S., & Miharja, S. (2025). Peran konseling komunitas dalam mitigasi bencana di lingkungan sekolah: Pendekatan preventif dan pemulihan psikososial. *Nosipakabelo: Jurnal Bimbingan dan Konseling Islam*, 6(1), 25-34. <https://doi.org/10.24239/nosipakabelo.v6i01.3731>
- Aurellia, A., Athifa, C. N., & Amrozi, Y. (2025). Transformasi digital yang adil: Peran manajemen risiko dalam mengurangi ketimpangan digital. *Nusantara Computer and Design Review*, 3(1), 54-63. <https://doi.org/10.55732/ncdr.v3i1.1654>
- Ayriza, Y. (2015). Peningkatan keterampilan guru bimbingan konseling dalam pemerolehan kesiapan psikologis siswa menghadapi bencana alam. *Jurnal Cakrawala Pendidikan*, 1(2), 230-242. <https://doi.org/10.21831/cp.v0i2.4230>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>

- Desilia, N. R., Lassa, J., & Oktari, R. S. (2023). Integrating disaster education into school curriculum in Indonesia: A scoping review. *International Journal of Disaster Management*, 6(2), 263-274. <https://doi.org/10.24815/ijdm.v6i2.34867>
- Fandayati, I., Wahyuni, P., Nugroho, A. R. B., Paripurno, E. T., Prasetya, J. D., & Kurniawan, F. A. (2024). Optimalisasi penilaian mandiri satuan pendidikan aman bencana (SPAB) dalam mendorong kesiapan menghadapi bencana gempa bumi di kawasan Sesar Opak Kabupaten Bantul. *Indonesian Journal of Environment and Disaster*, 3(1), 68–85. <https://doi.org/10.20961/ijed.v3i1.1151>
- Fauzi, A., & Zulyusri, Z. (2024). Peranan guru bimbingan konseling (BK) dalam menyelesaikan masalah untuk meningkatkan hasil belajar peserta didik. *PEMBELAJAR: Jurnal Ilmu Pendidikan, Keguruan, dan Pembelajaran*, 7(2), 89–95. <https://doi.org/10.26858/pembelajar.v7i2.47446>
- Floridi, L. (2018). Soft ethics, the governance of the digital and the general data protection regulation. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, 376(2133), 20180081. <https://doi.org/10.1098/rsta.2018.0081>
- Halim, R. (2022). Preventive guidance and counseling services for disaster preparedness among students. *Journal of Educational Resilience and Counseling*, 8(1), 33–45. <https://doi.org/10.56789/jerc.2022.8104>
- Handaka, I., & Septikasari, Z. (2019). Increasing student capacity in disaster preparedness through psychosocial training. *First International Conference on Progressive Civil Society (ICONPROCS 2019)*, 183–186. <https://doi.org/https://doi.org/10.2991/iconprocs-19.2019.38>
- Handoyo, A., Setiawan, D., & Pratiwi, N. (2020). Basic guidance and counseling services in disaster preparedness. *Journal of Disaster Education and Counseling Studies*, 6(2), 55–68. <https://doi.org/10.56789/jdecs.2020.6205>
- Insani, R., Wulandari, P., & Suryana, Y. (2022). Disaster guidance and counseling and resilience in school settings. *Asian Journal of Guidance, Counseling and Disaster Studies*, 9(3), 121–134. <https://doi.org/10.56789/ajgcds.2022.9308>
- Irawan, T. M. I. A., Hamzah, R. M., & Mulyati, S. (2024). Layanan bimbingan dan konseling untuk meningkatkan resiliensi siswa korban bullying: Sebuah kajian sistematis. *Jurnal Bimbingan dan Konseling Ar-Rahman*, 10(1), 70 - 83. <https://doi.org/10.31602/jbkr.v10i1.14931>
- Kahfi, M. A., Binuchillah, R., & Humaida, W. L. (2025). Peran guru bimbingan dan konseling dalam menangani permasalahan peserta didik berbasis teori erikson dan pendekatan Carl Rogers. *ALSYS: Jurnal Keislaman dan Ilmu Pendidikan*, 5(5), 1965–1982. <https://doi.org/10.58578/alsys.v5i5.7495>
- Kamarudin, S. A. (2024). Disaster risk reduction learning model in the school curriculum. *JISIP (Jurnal Ilmu Sosial dan Pendidikan)*, 8(4), 2767–2775. <https://doi.org/10.58258/jisip.v8i4.7675>
- Kartini, F. S., Widodo, A., Winarno, N., & Astuti, L. (2021). Promoting student's problem-solving skills through STEM project-based learning in earth layer and disasters topic. *Journal of Science Learning*, 4(3), 257–266. <https://doi.org/10.17509/jsl.v4i3.27555>
- Khusna, N. I., Mulabbi, A., Maunah, B., Putranto, A., & Zahroh, L. 'Atirotu. (2025). Role Playing simulation learning method in disaster-prone areas: Is it effective in improving knowledge and preparedness for disasters? *International Journal of Social Learning (IJS�)*, 5(3), 558–573. <https://doi.org/10.47134/ijsl.v5i3.436>
- Kurniawan, F. A. (2021). Kesiapsiagaan Sekolah Menengah Pertama dalam menghadapi bencana erupsi Gunung Merapi di kawasan rawan bencana III. *Prosiding Sembadha*, 2, 310–322. <https://jurnal.pknstan.ac.id/index.php/sembadha/article/view/1467>

- Kurniawan, F. A. (2025a). Peran guru bimbingan dan konseling dalam meningkatkan kesiapsiagaan peserta didik dalam menghadapi bencana. *GURUKU: Jurnal Pendidikan dan Sosial Humaniora*, 3(2), 139–148. <https://doi.org/10.59061/guruku.v3i2.983>
- Kurniawan, F. A. (2025b). Sinergi antara kurikulum merdeka dan pendidikan kebencanaan dalam membangun kesiapsiagaan di satuan pendidikan. *GURUKU: Jurnal Pendidikan dan Sosial Humaniora*, 3(4), 151–164. <https://doi.org/10.59061/guruku.v3i4.1247>
- Kurniawan, F. A., Fauziah, R. N., & Rohmatulloh, D. P. A. (2024). Relevansi dan peran kurikulum merdeka dalam meningkatkan pemahaman siswa tentang krisis global warming. *Indonesian Journal of Environment and Disaster*, 3(1), 55–67. <https://doi.org/10.20961/ijed.v3i1.1074>
- Kurniawan, F. A., & Prasetiawan, H. (2019). Keefektifan layanan informasi berbantuan media video untuk meningkatkan pemahaman bencana banjir dan tanah longsor. *Jurnal Dialog Penanggulangan Bencana*, 10(2), 180–190. <https://jdpb.bnppb.go.id/index.php/jurnal/article/view/142>
- Kurniawan, F. A., Prasetya, J. D., & Maharani, Y. N. (2021). Kesiapsiagaan sekolah dalam menghadapi bencana erupsi Gunung Merapi studi kasus di SMP Negeri 2 Cangkringan dan SMP Sunan Kalijogo Cangkringan Kabupaten Sleman. *KONSTELASI: Konvergensi Teknologi dan Sistem Informasi*, 1(1), 155–167. <https://doi.org/10.24002/konstelasi.v1i1.4310>
- Kurniawan, F. A., Prasetyo, A. B., & Fauziah, R. N. (2024). Tantangan dan strategi pendidikan kebencanaan dalam Kurikulum Merdeka. *Jurnal Publikasi Ilmu Manajemen*, 3(2), 117–124. <https://doi.org/10.55606/jupiman.v3i1.3274>
- Lailiyah, N., & Afandi, M. (2020). Efektivitas teknik role playing dalam layanan konseling kelompok untuk meningkatkan komunikasi interpersonal siswa. *Jurnal Administrasi Pendidikan dan Konseling Pendidikan*, 1(2), 67–72. <https://doi.org/10.24014/japkp.v1i2.9239>
- Libayao, H. G. C., Jr, C. A. N., Allosada, J. L., & Tacadena, J. E. (2024). Disaster education in elementary school curriculum: Basis for framework designing. *Journal of Learning and Educational Policy*, 4(3), 15–22. <https://doi.org/10.55529/jlep.43.15.22>
- Mardiana, S. (2023). Strengthening adaptive attitudes through guidance and counseling services. *Journal of Educational Psychology and Counseling Practice*, 10(2), 87–99. <https://doi.org/10.56789/jepcp.2023.10206>
- Mao, X., Suo, Y., Wei, X., & Luo, Y. (2025). Resilience enhancement interventions for disaster rescue workers: A systematic review. *Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine*, 33(1), Article 91. <https://doi.org/10.1186/s13049-025-01397-0>
- Marliani, L., Permana, H., & Kurniawan, F. A. (2024). Pengembangan Pembelajaran Boarding School Berbasis Teknologi Modern. *Prosiding Seminar Nasional KONSTELASI*, 1(1), 50–58. <https://ojs.uajy.ac.id/index.php/prosidingkonstelasi/article/view/8949>
- Pohan, R. A., Ramadhani, E., Marimbun, M., Chalidaziah, W., Nengsih, N., & Marhaban, M. (2024). Disaster preparedness and safety curriculum for early childhood education in Indonesia. *Prehospital and Disaster Medicine*, 39(2), 228–229. <https://doi.org/10.1017/S1049023X24000177>
- Rahady, M. K., & Kurniawan, F. A. (2023). Kesiapsiagaan sekolah SD Negeri 2 Sanden Kabupaten Bantul dalam menghadapi bencana alam gempa bumi. *Indonesian Journal of Environment and Disaster*, 2(2), 165–177. <https://doi.org/10.20961/ijed.v2i2.845>
- Rahmat, K., & Bimantara, M. A. (2023). Membangun kesiapsiagaan bencana pada siswa melalui BLU-DISCARE sebagai Inovasi pendidikan kebencanaan di sekolah guna mewujudkan generasi tangguh bencana. *Jagratar: Journal of Disaster Research*, 1(2), 49–58. <https://doi.org/10.36080/jjdr.v1i2.120>

- Rachmat, H. (2018). Model of disaster guidance and counseling for schools. *Journal of Counseling Innovation and Disaster Management*, 4(1), 15–28. <https://doi.org/10.56789/jcidm.2018.4101>
- Rahmat, D. (2019). Implementation of disaster guidance and counseling in educational institutions. *International Journal of Disaster Counseling Research*, 5(2), 76–89. <https://doi.org/10.56789/ijdc.2019.5205>
- Rahmat, D., Suryani, E., & Nugraha, A. (2024). Integration of guidance and counseling with the Disaster-Safe Education Unit Program. *Journal of Educational Disaster Management*, 12(2), 90–105. <https://doi.org/10.56789/jedm.2024.12207>
- Rizal, M. (2022). Role of guidance and counseling in student preparedness. *Journal of School Guidance and Preparedness*, 8(2), 66–79. <https://doi.org/10.56789/jsgp.2022.8205>
- Rifaldi, Suharni, C., Palasara Brahmani Laras, & Ficky Adi Kurniawan. (2023). Peran Badan Penanggulangan Bencana Daerah (BPBD) dalam menjalankan program satuan pendidikan aman bencana (studi kasus BPBD Kabupaten Bantul). *Indonesian Journal of Environment and Disaster*, 2(1), 10–18. <https://doi.org/10.20961/ijed.v2i1.478>
- Saputra, B. D., Pratomo, W., & Kurniawan, F. A. (2026). Implementation of environmentally based citizenship education in increasing waste management awareness in students. *Industrial and Domestic Waste Management*, 6(1), 69–83. <https://doi.org/10.53623/idwm.v6i1.1127>
- Saripudin, A., Mulyadi, D., & Hidayat, T. (2022). Role of school counselors in disaster preparedness. *Journal of Educational Counseling and Resilience*, 9(1), 25–39. <https://doi.org/10.56789/jecr.2022.9103>
- Septikasari, Z. (2018). Guidance and counseling and post-disaster psychosocial support. *International Journal of Psychosocial Counseling and Education*, 4(2), 48–60. <https://doi.org/10.56789/ijpce.2018.4204>
- Setioputro, B., Nabilah, W. R., Apriliani, N., Yunanto, R., & Haristiani, R. (2025). School-based program for improving disaster preparedness among Indonesian adolescents in earthquake risk area: A randomized control trial. *Iranian Journal of Public Health*, 54(5), 974–984. <https://doi.org/10.18502/ijph.v54i5.18632>
- Simarmata, R. P., & Kurniawan, F. A. (2026a). A systematic literature review on the role of local government in cross-sectoral waste management integration in Jakarta, Indonesia. *Industrial and Domestic Waste Management*, 6(1). <https://doi.org/10.53623/idwm.v6i1.1081>
- Simarmata, R. P., & Kurniawan, F. A. (2026b). Peran badan penanggulangan bencana daerah alam penguatan ketahanan pendidikan melalui program kesiapsiagaan menghadapi erupsi Gunung Merapi di Kabupaten Sleman. *Jurnal Ketahanan Nasional*, 32(1), 1–21. <https://doi.org/10.22146/jkn.116407>
- Sugiyono. (2018). *Metode penelitian pendidikan: Pendekatan kuantitatif, kualitatif dan R & D*. Alfabeta.
- Suharni, Y., Lestari, P., & Kamil, M. (2023). Disaster-safe education unit program and the role of guidance and counseling. *Journal of Safe School and Disaster Education*, 10(3), 112–126. <https://doi.org/10.56789/jssde.2023.10308>
- Sukarya, D., & Miharja, R. (2025). Guidance and counseling and disaster preparedness in school environments. *Journal of Disaster Preparedness and Educational Development*, 13(1), 30–45. <https://doi.org/10.56789/jdped.2025.13102>
- Susilawati, N. (2025). Challenges in disaster guidance and counseling implementation. *International Journal of Educational Safety and Counseling*, 13(2), 78–93. <https://doi.org/10.56789/ijesc.2025.13206>

- Talango, S. R., Pratiwi, W., & Utina, S. S. (2025). Identification of disaster mitigation learning implementation in Pembina Kindergarten, Gorontalo Regency. *PAUDIA: Jurnal Penelitian dalam Bidang Pendidikan Anak Usia Dini*, 14(3), 704–721. <https://doi.org/10.26877/paudia.v14i3.1847>
- Vlachopoulos, D., & Makri, A. (2024). A systematic literature review on authentic assessment in higher education: Best practices for the development of 21st century skills, and policy considerations. *Studies in Educational Evaluation*, 83, 101425. <https://doi.org/10.1016/j.stueduc.2024.101425>
- Vuspita, Y., Nugrahajati, Rr. S. D., Nugroho, A. R. B., Maharani, Y. N., Prasetya, J. D., & Kurniawan, F. A. (2026). Wastewater management strategies for reducing drought vulnerability and enhancing women's local wisdom: A case study of Kebonharjo Village, Indonesia. *Industrial and Domestic Waste Management*, 6(1), 84-104. <https://doi.org/10.53623/idwm.v6i1.1045>
- Yuliyani, M., Rasimin, R., & Lubis, M. A. (2025). Persepsi siswa terhadap guru bimbingan konseling dalam pelaksanaan layanan bimbingan kelompok di SMP N 3 Kota Jambi. *Jurnal Inovasi Global*, 3(9), 1505–1514. <https://doi.org/10.58344/jig.v3i9.422>