

Research Paper

Spiritual Values and Social Capital Based Individual Empowerment in the Implementation of Disaster-Resilient Schools

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Abstract

Schools are highly vulnerable to disaster risks, making the strengthening of the Disaster Safe School Program (SPAB) essential for developing resilient human resources. However, its implementation remains largely emphasized by technical and structural measures, with limited attention to individuals as active subjects of safety. This study examines how individual empowerment is developed through spiritual values and social capital in a pesantren-based school context using a qualitative case study approach, combining focus group discussions and participatory observation. The findings reveal that empowerment emerges progressively through the internalization of spiritual values, active engagement in disaster-related practices, and the reinforcement of social relationships within the school community. Spiritual values foster a sense of security and moral agency, while social capital sustains participation and collective preparedness. This study contributes to policy by proposing the integration of value-based empowerment indicators and participatory learning mechanisms into SPAB frameworks. These findings provide actionable insights for policymakers to shift from compliance-based evaluation toward human-centered disaster education approaches.

Keywords: Disaster-Resilient Education Unit Program; Individual Empowerment; Spiritual Values; Social Capital; School Resilience.

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1. Introduction

Disaster risk reduction (DRR) in the education sector has increasingly become a strategic priority in disaster-prone countries such as Indonesia (Adiyoso, 2018). Programs like *Satuan Pendidikan Aman Bencana* (SPAB) are designed to institutionalize preparedness through policy frameworks, infrastructure standards, and emergency procedures. However, despite its comprehensive regulatory design, SPAB implementation has largely emphasized structural compliance and administrative checklists, often overlooking the role of individuals, particularly students, as active agents of risk awareness and preparedness (Aula et al., 2022; Mertha et al., 2022).

Existing studies on school-based DRR tend to frame safety as a technical and organizational issue, positioning students as passive recipients of protection rather than as subjects capable of meaning-making, agency, and collective action (Amri et al., 2022; Mertha et al., 2022). This technocratic orientation risks reproducing hierarchical relations of knowledge and authority, where disaster preparedness is reduced to procedural obedience rather than lived competence. As a result, critical dimensions such as psychosocial resilience, ethical responsibility, and everyday risk awareness remain underdeveloped within formal education settings (Ariani, 2021; Rahmat et al., 2024; Septaria et al., 2024; Tae et al., 2024).

In response to this gap, recent scholarship has called for a shift toward empowerment-oriented approaches that recognize individuals as central actors in disaster governance. Within this perspective, capacity building is not merely a matter of skill acquisition, but a catalytic process through which individuals develop confidence, critical awareness, and the ability to act autonomously in uncertain conditions. This approach resonates with the Figueroa-Kincaid framework, which conceptualizes individual empowerment as a multi-level process linking individual capacity, social interaction, and institutional change (Kincaid & Figueroa, 2009; Llorente-Alonso et al., 2024; Sandaran & Selvaraj, 2021).

At the same time, critical political theory offers a complementary lens to interrogate how empowerment is recognized or constrained within policy regimes. Drawing on Jacques Rancière's notion of emancipation, this study understands individual empowerment as the moment when those traditionally positioned as objects of governance assert themselves as speaking and acting subjects. From this perspective, disaster education becomes a site of dissensus, where dominant assumptions about authority, expertise, and vulnerability can be disrupted (Rancière, 1999, 2009).

Bridging these perspectives, this study argues that disaster preparedness in schools should be understood not only as a policy outcome but as an emancipatory process. The Figueroa–Kincaid model provides an analytical framework to trace how individual competencies evolve into collective capacities, while Rancière's thought clarifies the political significance of these transformations namely, the reconfiguration of who is entitled to knowledge, voice, and action in disaster contexts.

Empirically, this research examines the implementation of SPAB in selected Indonesian educational settings to explore how individual empowerment emerges within, alongside, or despite formal policy structures. By focusing on students' experiences, practices, and narratives, the study seeks to illuminate the conditions under which disaster education moves beyond procedural compliance toward meaningful preparedness.

This article contributes to disaster communication and education scholarship in three ways. First, it foregrounds individual empowerment as a critical yet under-theorized dimension of school-based DRR. Second, it offers a conceptual bridge between the Figueroa–Kincaid framework and Rancière's theory of emancipation, enriching both policy analysis and critical theory. Third, it provides policy-relevant insights for planners and educators seeking to align SPAB with participatory, sustainable, and socially grounded approaches to disaster risk reduction (Kincaid & Figueroa, 2009; Rancière, 2009).

The safety of educational institutions is also at high risk, because they accommodate large numbers of young and middle-aged people whose disaster mitigation capacity is often restricted (Aula et al., 2022; Mertha et al., 2022). We mention further the SPAB project for Strengthening a Disaster-Safe Education Unit as part of this plan to build resilient and sustainable human resources (Amri et al., 2022). The Indonesian government's policy for SPAB, outlined in Permendikbud RI No. 33 Tahun 2019, aims to prevent and mitigate disaster impacts within educational settings, encompassing pre-disaster measures, emergency education, and post-disaster recovery (Wardhani et al., 2024). This framework, also known globally as the Comprehensive School Safety Framework (CSSF), seeks to enhance the resilience of school communities (Nisa & Maharani, 2025). However, an analysis of the SPAB policy and broader educational

policies in Indonesia reveals a tendency to position students as objects or targets of policy rather than active psychosocial subjects with agency and critical participation capacity. This approach aligns with critiques that highlight a gap between participatory principles and actual implementation practices in education (Aminah & Mukarromah, 2023). Within a development framework, these weaknesses are important to consider because disaster resilience is determined not only by systems and structures, but also by the individual's ability to understand risks, make decisions, and act reflectively in crisis situations (Ariani, 2021; Septaria et al., 2024; Tae et al., 2024). Individual empowerment is a key element often overlooked in disaster education policies, even though individuals are the starting point for building collective resilience (Bulkeley et al., 2014; Christantyawati et al., 2025; Dushkova & Ivlieva, 2024; Herman, 1996; Kirk et al., 2016; Mezirow, 2007; Rosenman, 1980; Sandaran & Selvaraj, 2021).

On the other hand, many schools in Indonesia thrive in a strong socio-cultural context, including long-established spiritual values, community ties, and social capital (Natuna & Irawan, 2025; Sayuti et al., 2024; Ulum, 2025). These values often serve as the foundation for behavior, discipline, and solidarity within the school community, but have not been systematically integrated into the SPAB implementation framework. As a result, the potential of local values and social capital as non-material resources to strengthen school resilience is often marginalized in the formulation of disaster education policies.

Furthermore, individual empowerment in the school context cannot be separated from the age structure, authority, and hierarchical relations inherent in the education system. Students, especially at the junior high school level, legally and socially do not yet have full authority in decision-making (Kirk et al., 2016). This condition demands a more contextual understanding of individual empowerment, not merely as deliberative independence, but as the capacity to act, preparedness, and collective compliance built through the process of education and habituation (Edwards et al., 2002; Herman, 1996; Kirk et al., 2016; Rosenman, 1980).

Based on these conditions, this study considers that strengthening SPAB needs to be placed within a framework of individual empowerment rooted in spiritual values and social capital (Amrullah & Lutfi Mustofa, 2025; Dhewanto et al., 2023; Nalikan et al., 2025; Sutomo et al., 2024). This approach allows SPAB to be understood not merely as a set of technical policies, but as a social process that shapes awareness, safety ethics, and readiness to act among school residents. Within this framework, Jacques Rancière's emancipatory perspective is implicitly used to interpret how equality of individual capacity can be realized through practice and action, even within a hierarchical educational structure (Chambers, 1994; Rancière, 2021).

This study positions the Figueroa–Kincaid integrated model as an analytical framework to examine the process and outcomes of communication for social change, particularly in the context of Disaster Safe School implementation. The model provides a structured lens to trace how dialogue, participation, and collective action evolve through successive stages, enabling an empirical assessment of empowerment processes. However, while the Figueroa–Kincaid framework is effective in mapping communication dynamics and outcomes, it does not explicitly problematize the political dimension of participation or the emergence of individuals as subjects of action.

To address this limitation, the study draws on Jacques Rancière's notion of emancipation, particularly his critique of hierarchical pedagogies and his emphasis on the emergence of subjects through dissensus and equality of intelligence. Rancière's perspective complements the Figueroa–Kincaid model by providing a critical lens to interpret when participation moves beyond procedural inclusion toward genuine subjectivation. In this sense, the catalytic processes identified through the Figueroa–Kincaid frameworks are read not merely as stages of communication, but as moments where individuals begin to recognize themselves as capable actors in disaster safety (Rancière, 2021). This theoretical linkage allows the study to bridge empirical process analysis with a critical understanding of empowerment as an emancipatory practice rather than a technocratic outcome.

Moreover, the study also focuses on how individual empowerment is shaped in the implementation of SPAB, emphasizing the contribution of spiritual values and social capital within *pesantren*-based school environments. It addresses three key questions: how spiritual values and social capital shape individual preparedness, how individual empowerment is interpreted and practiced within hierarchical school structures, and what the implications are for strengthening SPAB policies in Indonesia. Based on these three issues, this study formulated to be policy implementable. Firstly, how is the individual empowerment process built in the implementation of the SPAB Program at the school level, particularly

through the internalization of spiritual values and strengthening of social capital? Secondly, what factors play a role in shaping students' individual capacities as disaster safety subjects, and what is the relationship between spiritual values, disaster practices, and school social networks in this process? Eventually, how can these findings regarding individual empowerment be formulated as policy recommendations to strengthen a more contextual and sustainable SPAB approach? Departing from the recognition that disaster resilience is determined not only by institutional systems but also by individuals' capacities to understand risk, make decisions, and act reflectively in crisis situations, this article positions individual empowerment as a critical yet often overlooked dimension of disaster education policy. By doing so, it seeks to contribute empirically and conceptually to the development of a more contextual, inclusive, and sustainable SPAB approach, with relevance for policymakers, education managers, and disaster stakeholders concerned with strengthening social resilience from an early age.

In additions for basic assumptions, individual empowerment in SPAB cannot be separated from local values embedded in everyday school life. In *pesantren*-based schools, spiritual values function not only as ethical foundations but also as sources of moral legitimacy, psychological security, and motivation to act collectively in disaster contexts. At the same time, social capital manifested through trust, social networks, and shared norms among students, teachers, school leaders, and surrounding communities supports sustained participation and transforms SPAB from a formal program into an internalized school culture. Using a qualitative approach through focus group discussions and participant observation, this study examines how the internalization of spiritual values and the strengthening of social capital foster individual empowerment in SPAB implementation. The findings are expected to inform policy by demonstrating how disaster education can be more closely aligned with national development priorities, particularly the National Medium-Term Development Plan (RPJMN) agenda on human resource development, by linking disaster resilience with character formation, student agency, and participatory learning practices at the school level.

As an initiative action, the study offers an alternative perspective on strengthening sustainable SPAB, which have been dominated by structural and administrative approaches. By placing individual empowerment as the focus of analysis, it strongly provides an empirical basis for formulating disaster education policies that are more oriented toward human capacity development. The integration of spiritual values and social capital as policy resources expands the SPAB framework beyond mere procedural compliance to the development of empowered and actively participating risk-aware actors. The policy contribution of this research lies in the provision of a conceptual model and field findings that can be used to refine SPAB policies, particularly in the context of community-based education units. These findings can serve as a reference for policy designers in developing non-structural indicators for SPAB evaluation and encourage a more adaptive approach to local values in building disaster resilience in the education sector.

2. Methods

To answer these research questions and generate findings relevant to policy formulation, this study employed a qualitative approach with a case study design (Creswell, 2009; Denzin & Lincoln, 2006). This approach was chosen because it allows for in-depth exploration of individual empowerment processes that cannot be reduced to purely quantitative indicators, specifically how spiritual values and social capital play a role in shaping individual preparedness and actions within the school environment. The research focused on the dynamics of interactions, meanings, and practices that shape individual capacity in the context of SPAB implementation. Case studies were used because they allow for a contextual analysis of SPAB practices as they develop specifically within the school's social, cultural, and institutional structures.

Data collection was conducted through focus group discussions and participant observation in a *pesantren*-based junior high school, namely Yayasan Pendidikan Bina Bangsa and *Pesantren Sholahudin* located in a heavily populated district in Surabaya that is prone to fire hazard. These techniques enabled researchers to capture the experiences, perceptions, and concrete practices of school actors in implementing SPAB, while simultaneously identifying implicit values and social capital. Data analysis was conducted thematically, linking empirical findings to the individual empowerment framework and its implications for public policy. The results not only explain the phenomenon but also generate applicable recommendations for strengthening disaster-safe education policies. This school was purposively selected because it had implemented several components of SPAB as Learning Outcomes despite not officially

mentioning SPAB and not following SPAB policies, including internal policies, disaster training, and strengthening social and spiritual values.

The study subjects included: 7 students from the Student Council (OSIS) and Scouts (Pramuka) as representatives of active student groups, 4 teachers (3 male and 1 female), and the principal and the administrators of the foundation pesantren-based school as the school's internal policy makers. The subject selection was carried out to capture the varying perspectives among administrators, educators, and students on SPAB implementation. Those numbers of students and group of teachers were selected as highly motivated and very active in many disaster practices. The group of students consists both female and male, while the group of teachers was mostly male and only one female teacher who in charge of the female students' well-being.

Data were collected through three main techniques. First, we conducted Focus Group Discussions (FGDs). FGDs were conducted involving students, teachers, and school administrators to explore perceptions, experiences, and practices related to SPAB implementation, student participation, and the role of spiritual values and social capital. FGDs were chosen to identify collective dynamics, communication patterns, and decision-making mechanisms at the school level. Second, Participatory Observation was conducted to record daily school practices, interaction patterns between students and teachers, and the actual implementation of disaster policies and activities (e.g., training, use of mitigation tools, and evacuation routes). Observations were also used to identify gaps between formal policies and field practices. Third, Researcher Reflection Notes were used as an instrument to document the dynamics of dialogue, collective awareness, and the learning and feedback processes that emerged during the research activities. This instrument helped contextualize the FGD and observation data within the framework of individual empowerment and SPAB policies.

The selection of research participants was conducted using a purposive sampling strategy, aimed at capturing diverse perspectives within the school's social structure. Participants were selected based on their level of involvement in school activities, roles in decision-making, and well-trained to disaster-related practices. Students were chosen from active organizational groups (OSIS and Scouts) to represent those engaged in extracurricular and leadership activities, while teachers and school administrators were selected due to their roles in policy implementation and institutional management.

This approach ensures that the data reflects multi-level interactions (students–teachers–administrators) within the SPAB implementation process, rather than aiming for statistical generalization. Instead, the study prioritizes analytical generalization, where findings contribute to theoretical and policy insights applicable to similar socio-cultural educational contexts.

Data Analysis Techniques

Data analysis was conducted thematically and interpretively through the following stages: First step is data reduction, by grouping findings into main themes: risk awareness, individual participation, spiritual values, social capital, and SPAB practices. The second step is thematic categorization, to identify patterns of relationships between values, practices, and individual capacities in the disaster context. The third step is policy interpretation, by linking empirical findings to the individual empowerment framework and its implications for strengthening SPAB. To strengthen the analytical dimension, this study implicitly utilizes Jacques Rancière's emancipatory perspective, particularly in understanding how individual capacity equality is realized through practice and preparedness, not solely through formal positions in decision-making. Furthermore, the framework of Figueroa-Kincaid was also implemented to strengthen the elaboration analysis (Rancière, 2009).

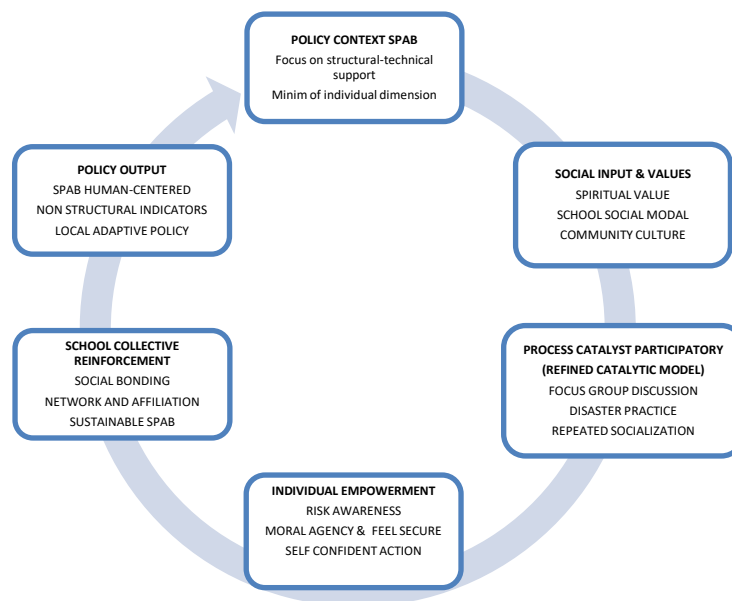


Figure 1. Refined Catalytic Model of Individual Empowerment in Disaster Safe School Implementation, formulated by the authors, Priyanto et.al

This figure illustrates the process through which individual empowerment is formed in the implementation of the Disaster Safe School Program (SPAB). The model shows how spiritual values and social capital function as catalytic inputs that activate participatory processes, leading to the development of individual agency and collective school resilience. The refined catalytic model emphasizes empowerment as a gradual and context-dependent process, providing a basis for policy recommendations that integrate human-centered and value-based approaches into disaster-safe education. Based on this, the research results are presented in the form of a refined catalytic model of individual empowerment that summarizes the process stages, the actors involved, and its policy implications.

3. Results and Discussions

The empirical findings are interpreted through a dual analytical lens combining the Figueroa–Kincaid communication for social change model and Rancière’s notion of emancipation. The Figueroa–Kincaid framework is used to map how communication processes, such as dialogue, participation, and collective practices, function as catalytic stages in shaping individual capacity. Meanwhile, Rancière’s perspective provides a critical interpretation of when these processes move beyond procedural participation toward the emergence of students as subjects of safety, capable of recognizing and enacting their own agency. Through this integration, the observed practices such as guided participation, disaster simulations, and value internalization are not only understood as stages of communication but also as moments of subjectivation, where empowerment is realized through action rather than formal authority.

The findings of this study indicate that the implementation of the Disaster Safe Education Unit (SPAB) Program at the school level does not occur as a purely technocratic, linear process, but rather as a series of social practices grounded in collective values, relationships, and experiences. Data from focus group discussions and participant observation demonstrate that the strengthening of individual student capacity develops gradually through interactions mediated by spiritual values, school culture, and ingrained social capital. Using the Figueroa–Kincaid framework, these findings are analyzed as a catalytic process linking communication, participation, and changes in individual capacity. Meanwhile, Jacques Rancière’s thinking is used as an interpretive lens to understand how this process enables individuals, particularly students, to shift from being policy recipients to becoming safety subjects who begin to realize their capacity to act.

The research results show that disaster awareness in schools has not been formed directly from empirical experience in dealing with natural disasters, but rather is mediated by spiritual and social values instilled by schools and Islamic boarding school administrators. Students generally have not had direct experience with disasters, and their understanding of disaster risk is still limited. However, schools

consistently embed spiritual values as the main foundation for understanding safety, assistance, and risk, emphasizing belief in God's help and the obligation to protect oneself and others. In this context, disaster mitigation is not fully understood as technical knowledge, but as part of life's ethics and moral responsibility. However, limited verbal participation does not mean the absence of individual empowerment processes. Research has found that individual empowerment is actually built through collective practice and experience. Student involvement in Scouting activities, emergency response training, fire drills, and other disciplinary activities is the primary means of fostering preparedness. Individual empowerment is defined as a readiness to act, adherence to safety procedures, and the ability to recognize potential risks in the school environment, rather than the ability to make independent decisions in formal forums.

Observation and focus group discussions (FGDs) findings also revealed that student participation in disaster discourse remains passive and conformist. The Islamic boarding school culture, which positions teachers and caregivers as authority figures, tends to keep students quiet and discourage them from openly expressing their ideas in forums. This hierarchical relationship is also influenced by a patriarchal culture that subtly shapes communication patterns, including among female teachers who demonstrate caution in expressing opinions in public spaces. Under these conditions, students' voices have not fully emerged as deliberative subjects, but rather as participants following school directives and policies.

Local values and social capital play a crucial role in shaping collective disaster awareness. Schools are positioned as institutions with a strong history and social legitimacy in the eyes of the surrounding community, founded by village leaders and local elders. The value of collective pride that, despite coming from economically disadvantaged backgrounds, school members are still able to achieve and share, serves as a source of self-pride and solidarity. This social capital is strengthened through alumni networks, relationships with community leaders, political affiliations, and relationships with external institutions, which indirectly support the sustainability of the Disaster Safe School Program.

In terms of policy and structure, the study found a stronger awareness of disaster mitigation among school administrators and teachers, particularly those with technical education backgrounds. This is reflected in the development of internal policies such as the formation of disaster safety teams, the installation of fire extinguishers, the marking of evacuation routes, and coordination efforts with external parties such as fire departments and higher education institutions. However, this awareness has not yet been fully translated into a systematic and participatory disaster learning process for students.

Overall, the research findings indicate that the strengthening of Disaster-Safe Schools in the research locations occurs through unique social and cultural mechanisms. Disasters are more often interpreted as social rather than natural disasters, and collective consciousness is built more through spiritual values, social bonds, and the exemplary behavior of school authorities. From an emancipatory perspective, this situation demonstrates that equality does not always come in the form of freedom of speech, but can manifest itself in an individual's capacity to act effectively when faced with situations of risk and danger. To enhance analytical clarity, the findings are synthesized into a refined catalytic model (Figure 1) and policy linkage table (Table 1), which visualize the relationship between individual empowerment processes and policy outputs.

Table 1: Summary results of elaboration model Figueroa-Kincaid Vs Ranciere

Stage of research	Analysis Focus	Method & data source	Key Finding	Policy Output
Identification policy matters	The gap in SPAB implementation between structural aspects and individual empowerment	SPAB policy document study, initial observations	SPAB is still technically oriented; individuals are not yet positioned as safety subjects.	Policy issues: the need to strengthen non-structural and human-centered dimensions
Exploring the Individual Empowerment Process	Internalization of spiritual values and social capital in SPAB practices	FGD of students, teachers, and school administrators	Individual empowerment grows gradually through spiritual values, practices, disasters, and social bonding	An empirical basis for a local value-based SPAB approach

Stage of research	Analysis Focus	Method & data source	Key Finding	Policy Output
Analysis of Actor Dynamics and Social Relations	Power relations, participation, and the role of school actors	Participatory observation, researcher reflection	Decisions are still predominantly top-down; students participate in a guided manner.	Policy recommendation: facilitate safe participation spaces for students
The Meaning of Individual Empowerment	Individuals as subjects of safety (not objects of protection)	Thematic analysis based on the Figueroa–Kincaid framework	Empowerment is formed through experience, not formal instruction.	Development of individual empowerment indicators in SPAB evaluation
Formulation of Policy Recommendations	Integration of spiritual values and social capital in SPAB	Synthesis of findings & policy reflection	Community-based approaches are more sustainable	Policy options: Adaptive SPAB based on socio-cultural context

Source: Prepared by the authors, Priyanto et.al

This table demonstrates that the research goes beyond describing phenomena and systematically links methodological processes with policy outcomes. Therefore, the research findings can be used as considerations in refining SPAB policies, particularly regarding individual empowerment and strengthening social capital as part of building disaster resilience in the education sector. In this study, the Figueroa–Kincaid framework is employed to trace the communicative processes of empowerment, while Rancière’s notion of emancipation is used to interpret when these processes enable individuals to emerge as subjects of safety rather than mere objects of policy. To comprehend the whole point, there are some insights to be pinpointed consecutively.

Policy Problem

The implementation of the SPAB Program is still dominated by structural and administrative approaches, such as infrastructure provision, team formation, and technical procedures. This approach does not adequately address the individual capacities of students as safety subjects, resulting in instructive, limited, and less sustainable participation and preparedness. This is evidenced by the fact that schools, as SPAB units, have not been able to implement them due to various obstacles, such as the characteristics and unique characteristics of the disasters that threaten the area. Furthermore, operational funds for SPAB implementation are not yet fully optimized, uneven collaboration and mentoring from the regional BPBD (Regional Disaster Management Agency) and long bureaucratic queues to propose SPAB programs (Mulyadi et al., 2023; Nisa & Maharani, 2025). This creates problems for the SPAB policy itself to be implemented evenly.

Despite policy support, the implementation of SPAB faces several structural and contextual challenges. First, institutional limitations such as uneven access to training, limited funding, and weak coordination with external agencies constrain program sustainability. Second, bureaucratic rigidity often slows down program adoption, particularly in schools that are not formally registered as SPAB units. Third, socio-cultural constraints, including hierarchical communication patterns and deference to authority, limit student participation in deliberative processes.

These challenges explain why SPAB implementation often remains procedural rather than transformative. The proposed participatory catalytic model addresses these gaps by embedding empowerment within existing social practices, allowing schools to operationalize disaster preparedness in ways that are context-sensitive, low-cost, and socially sustainable.

Underlying Issues

The implementation of school safety policies, such as SPAB, often follows a top-down administrative approach. This can result in students being seen primarily as beneficiaries of safety measures, rather than active participants in developing and implementing these measures (Wardhani et

al., 2024). While the goal of enhancing school resilience is critical, current implementation approaches have not always shown satisfactory results, suggesting a potential disconnect in engaging the entire school community, including students, in a meaningful way (Mulyadi et al., 2023). Local values, spirituality, and school social capital have not been systematically integrated into policy design. Effective policy requires understanding behaviour at multiple levels individual, interpersonal, organizational, community, and policy and current frameworks emphasize the need for multi-level interventions that modify environments to make healthy choices easier for entire populations. This implies that students should be viewed as integral to the design and implementation of safety protocols, not merely as recipients.

Student participation is still positioned as a recipient of direction, rather than as an actor in the learning process. The limited involvement of students in target-setting processes further illustrates this objectification. Research indicates that when students are involved in setting their own targets, they are more likely to achieve them, compared to teacher-set targets where their input is minimal. This suggests that fostering student agency in educational processes, including policy implementation, can lead to more effective outcomes and a greater sense of ownership. Engaging students as partners in pedagogical relationships is an approach gaining momentum globally, but its successful implementation requires moving beyond neoliberal discourses that often constrain student participation to mere quality assurance activities (Ismawati et al., 2025).

Policy Intervention

From a policy perspective, this study highlights that strengthening disaster-resilient education requires shifting evaluation metrics from infrastructure compliance to human capacity development. Integrating individual empowerment indicators, such as risk awareness, confidence to act, and participatory engagement into SPAB evaluation systems can improve policy effectiveness. Moreover, leveraging spiritual values and social capital allows policymakers to design low-resource, culturally embedded interventions that are more scalable across diverse educational settings in Indonesia.

The integration of individual empowerment based on spiritual values and social capital into the implementation of SPAB through a participatory catalyst process, incorporating guided dialogue, disaster practice, and repeated socialization within the school environment, represents a comprehensive approach to fostering resilience and active psychosocial subjecthood among students and the broader school community. While existing SPAB policies aim to enhance school community resilience, their implementation has not consistently shown satisfactory results, often due to a top-down administrative approach that tends to view students as beneficiaries rather than active participants (Setiawan et al., 2026). A more effective strategy would address this limitation by actively engaging all stakeholders, particularly students, in the design, implementation, and evaluation of safety measures (Triyono et al., 2025).

The integration of these elements within the school environment necessitates a fundamental shift in how educational policies, including SPAB, are implemented. Instead of viewing students as passive recipients of safety measures, they must be recognized as integral to the design and implementation of these protocols (Setiawan et al., 2026). This approach aligns with the understanding that effective interventions require understanding behaviour at multiple levels individual, interpersonal, organizational, community, and policy, and that modifying environments to make healthy choices easier for entire populations is more powerful than solely focusing on individual choices (Triyono et al., 2025). Ultimately, for SPAB to be truly effective in fostering psychosocial subjectivity, the policy implementation must actively incorporate student voices in its design, implementation, and evaluation (Mulyadi et al., 2023). This will cultivate critical thinking, agency, and meaningful participation, contributing to a more resilient and empowered school community (Ismawati et al., 2025).

Theory of Change

The integration of a participatory catalyst approach, leveraging spiritual values and social capital, into SPAB is a robust strategy for fostering resilience, self-confidence, and proactive behaviour in disaster situations within the school environment. This approach views individuals not merely as beneficiaries of safety measures but as active psychosocial subjects capable of contributing to their own safety and that of their community (Triyono et al., 2025). While existing SPAB frameworks, such as those outlined in Permendikbud RI No. 33 Tahun 2019, focus on comprehensive disaster preparedness and mitigation (Noviani et al., 2023), their implementation has often been hampered by a top-down administrative style that limits active student participation (Aminah & Mukarromah, 2023; Nisa & Maharani, 2025).

Spiritual values, deeply embedded in many cultures, can serve as a significant wellspring of moral legitimacy and a profound sense of security during times of crisis. These values often promote virtues such as compassion, mutual aid, perseverance, and a belief in a higher purpose, which can collectively enhance an individual's psychological resilience and willingness to engage in community support efforts during and after disasters (Mulyadi et al., 2023; Setiawan et al., 2026). Integrating these values within SPAB initiatives can provide a foundational ethical framework, encouraging students to act not just out of compliance, but out of a genuine sense of responsibility and care for others (Mulyadi et al., 2023). This aligns with the broader educational goal of improving human resources by fostering holistic development (Aminah & Mukarromah, 2023). For instance, initiatives like the Strengthening of the Pancasila Student Profile Project (P5), when interpreted through a School-Based Management (SBM) lens, can genuinely foster active student engagement and critical thinking by incorporating such intrinsic values (Izzah, 2024).

Social capital, defined by the networks of relationships and trust among individuals within a community, is equally crucial for sustaining participation and collective action in disaster preparedness (Nisa & Maharani, 2025). In the school context, strong social capital translates to robust relationships among students, teachers, parents, and the wider community, facilitating effective communication, resource mobilization, and coordinated response efforts during emergencies (Wardhani et al., 2024). A participatory catalyst approach actively cultivates this social capital through direct experience and social interaction. By engaging in collaborative activities, students and other stakeholders build trust and develop a shared understanding of risks and responsibilities. This collective strength ensures that disaster preparedness is not an isolated task but a shared community endeavour, reinforcing the sustainability of participation (Matthews & Thorsen, 2022).

Through direct experience, such as participation in guided dialogues and disaster practices, individuals develop a profound awareness of risks. Guided dialogue, for example, moves beyond mere information dissemination to foster critical thinking and collective problem-solving regarding disaster scenarios (Nisa & Maharani, 2025; Noviani et al., 2023). These structured conversations allow individuals to share experiences, discuss potential threats, and collaboratively devise effective safety plans, thereby enhancing their risk perception and sense of ownership over safety protocols (Ismawati et al., 2025).

Disaster practice, including drills and simulations, offers invaluable direct experience. When these practices are designed with a participatory catalyst approach, they transform from routine exercises into dynamic learning opportunities (Nisa & Maharani, 2025). Students, by actively contributing to the planning, execution, and evaluation of these drills, perhaps by suggesting improvements to evacuation routes or communication protocols, develop self-confidence and enhance their capacity to act effectively in real disaster situations (Wardhani et al., 2024). This active involvement builds leadership skills, decision-making abilities, and a deeper sense of responsibility, moving them from passive recipients to active agents of safety (Aminah & Mukarromah, 2023; Matthews & Thorsen, 2022). The existing legal framework for PAB already supports such practices, covering pre-disaster organization, emergency education, and post-disaster recovery (Noviani et al., 2023).

Repeated socialization, facilitated through a participatory catalyst process, ensures that disaster preparedness becomes deeply embedded in the school culture. This involves continuous reinforcement through curriculum integration, school events, and community outreach, moving beyond one-off training sessions (Wardhani et al., 2024). When socialization is interactive and engaging, it not only conveys critical safety messages but also iteratively reinforces spiritual values related to resilience and strengthens social capital through collaborative learning and shared experiences (Wardhani et al., 2024). This continuous engagement transforms abstract knowledge into practical, internalized behaviors.

Ultimately, integrating an individual empowerment approach rooted in spiritual values and social capital within SPAB through participatory processes fundamentally redefines the role of students from objects to active psychosocial subjects. This paradigm shift, advocating for the active incorporation of student voices in policy design, implementation, and evaluation, fosters critical thinking, agency, and meaningful participation, thereby cultivating a more resilient and empowered school community (Setiawan et al., 2026). This multi-level approach, encompassing individual, interpersonal, organizational, community, and policy interventions, is crucial for creating environments where healthy choices and proactive safety measures are easier for the entire population (Nisa & Maharani, 2025; Wardhani et al., 2024).

Short-Term Outcomes

The objective of strengthening risk awareness, individual student preparedness, and the development of a sense of security, moral agency, and confidence to act can be effectively addressed through the integrated implementation of SPAB within an empowering framework. Although existing SPAB policies, such as those outlined in Permendikbud RI No. 33 Tahun 2019, already encompass pre-disaster organization, emergency education, and post-disaster recovery, their implementation has largely remained administrative and top-down, positioning students as passive beneficiaries rather than active psychosocial subjects (Noviani et al., 2023; Triyono et al., 2025; Wardhani et al., 2024). This limitation underscores the need for a participatory catalyst process that shifts SPAB from information delivery toward active engagement, enabling students to critically identify risks, analyze vulnerabilities, and co-construct preparedness strategies through guided dialogue involving teachers and the school community.

The development of moral agency and confidence to act is further strengthened through the integration of spiritual values and social capital within SPAB practices. Spiritual values provide psychological resilience and moral legitimacy for action, while social capital manifested through trust, social bonding, and school community networks supports collective preparedness and coordinated responses. When combined with experiential learning through disaster drills, simulations, and repeated socialization, this approach transforms routine preparedness activities into meaningful learning processes. Active student involvement in planning and evaluating disaster practices fosters leadership, responsibility, and sustained engagement, embedding preparedness within school culture. Ultimately, an empowerment-based SPAB framework grounded in spiritual values and social capital redefines students as active subjects of safety, contributing to a more resilient, reflective, and participatory school community (Aminah & Mukarromah, 2023; Mulyadi et al., 2023; Nisa & Maharani, 2025; Noviani et al., 2023; Setiawan et al., 2026; Triyono et al., 2025; Wardhani et al., 2024).

Outcome (Medium-Term Outcomes) and Policy Impact

Strengthening community-based school resilience, building social bonds and support networks across school actors, and implementing SPAB that are adaptive to local socio-cultural contexts are interdependent objectives that require an integrated, participatory approach. Although the SPAB framework under Permendikbud RI No. 33 Tahun 2019 already addresses pre-disaster organization, emergency education, and post-disaster recovery, its implementation often remains administrative and top-down, positioning students as passive beneficiaries rather than active psychosocial subjects. This limits the development of risk awareness, preparedness, and moral agency. A paradigm shift is therefore

needed, one that empowers all school stakeholders through participatory processes, enabling students, teachers, parents, and communities to actively identify risks, co-produce preparedness strategies, and internalize disaster readiness as a shared responsibility rather than an externally imposed obligation.

Building strong social bonds and support networks is central to this transformation. Social capital, manifested through trust, collaboration, and shared values among school actors, facilitates effective communication, coordinated responses, and sustained participation in disaster preparedness. A participatory catalyst approach strengthens this capital through guided dialogue, experiential learning, disaster practices, and repeated socialization, allowing stakeholders to collectively interpret risks and responsibilities within their local socio-cultural context. Decentralized mechanisms such as School-Based Management further enable schools to adapt SPAB to local needs, including the integration of spiritual values that foster psychological resilience, solidarity, and ethical responsibility. When students actively participate in setting goals, planning simulations, and evaluating preparedness efforts, their sense of ownership, confidence to act, and leadership capacity increase significantly. Ultimately, an empowerment-based SPAB framework grounded in social capital and cultural values redefines students as active agents of safety, cultivating a resilient, reflective, and context-sensitive school community.

Strengthening school resilience requires a strategic focus on capacity building, social sustainability, and alignment with broader Disaster Risk Reduction (DRR) agendas. Ongoing capacity-building programs, such as workshops and disaster simulations should prioritize the development of practical competencies for educators and students across pre-, during-, and post-disaster phases by integrating Community-Based Disaster Risk Management (CBDRM) within human resource development in schools. To ensure social sustainability, SPAB implementation needs to embed culturally relevant and gender-inclusive approaches, including ecofeminist perspectives and local resilience narratives drawn from folklore, which help sustain community bonds, environmental stewardship, and inclusive recovery processes. At the policy level, SPAB should be institutionally linked to national and global DRR frameworks by mandating DRR integration within school curricula, systematically evaluating implementation through participatory mechanisms such as FGDs and mini-workshops, and securing multi-source funding beyond ministerial allocations. This integrated approach aligns SPAB with GADRRRES standards and strengthens the role of education systems in reducing disaster risks in hazard-prone areas (Nisa & Maharani, 2025; Noviani et al., 2023; Wardhani et al., 2024).

Table 2: pinpoints of crucial SPAB matters

Component	Substance
Policy Problem	SPAB is technically focused, individuals are not yet empowered
Intervention	Participatory catalyst based on spiritual value and social capital
Mechanism	Internalization of values → practice → individual agency
Outputs	Awareness, preparedness, sense of security
Outcomes	Community-based school resilience
Impact	Sustainable & human-centered SPAB

Source: Prepared by the authors, Priyanto et.al

Discussions

For development planners, the findings of this study are important because they demonstrate that the effectiveness of the Disaster-Safe Education Unit (SPAB) Program is determined not only by the availability of infrastructure and regulations, but also by the capacity of individuals as safety actors. An individual empowerment approach based on spiritual values and social capital provides a realistic framework for enhancing the program's sustainability, particularly in educational units with limited resources. By understanding how local values and social networks serve as catalysts for participation, planners can design SPAB policies that are more adaptive, contextual, and directly impact human resource development. This perspective helps ensure that policy interventions go beyond administrative

compliance and result in tangible behavioral changes and preparedness at the individual and school community levels.

Policy Recommendations

Integration of Individual Empowerment Indicators in SPAB Evaluation (Short Term)

SPAB policies need to incorporate non-structural indicators that measure individual student empowerment as part of the monitoring and evaluation system. These indicators could include levels of risk awareness, confidence to act in emergency situations, and student participation in disaster preparedness practices. Integrating these indicators allows SPAB evaluations to assess not only administrative compliance but also the policy's impact on human capacity within educational units.

Strengthening SPAB Approaches Based on Local Values and Social Capital (Medium Term)

SPAB implementation needs to be developed adaptively by accommodating spiritual values, local culture, and social capital within the school community. Central and regional governments can encourage educational units to map values and social networks as resources for disaster mitigation. This approach strengthens the program's sustainability because it is based on social practices that already have legitimacy and community support.

Developing a Participatory Catalyst Model in Disaster Education (Medium–Long Term).

It is recommended that the SPAB policy adopt a participatory catalyst model that emphasizes guided dialogue, experiential learning, and ongoing socialization. This model facilitates a shift in students' roles from recipients of instruction to subjects of safety learning. Developing national guidelines based on this model can strengthen the consistency of SPAB implementation across various school contexts.

Synergy of SPAB with Human Resource Development and Cross-Sectoral Networks (Long Term)

SPAB needs to be positioned as an integral part of the human resource development and disaster risk reduction agenda. Therefore, strengthening synergy between the education and disaster risk reduction sectors and local stakeholders, including universities and communities, is necessary. This synergy supports sustainable school capacity development and expands the impact of SPAB policies beyond the school environment.

Conclusion

This study confirms that the effectiveness of the Disaster Safe Education Unit (SPAB) Program is largely determined by strengthening individual capacity as safety subjects, not solely by fulfilling structural and administrative aspects. Individual student empowerment is formed gradually through internalization of spiritual values, involvement in disaster practices, and strengthening the school's social capital. Spiritual values provide a sense of security and moral legitimacy for action, while social capital ensures continued participation and preparedness. These findings suggest that a participatory, catalytic approach based on local values enables the implementation of SPAB that is more adaptive, sustainable, and relevant to the context of community-based schools, while strengthening SPAB's contribution to human resource development and disaster resilience in the education sector.

Ethical Considerations

This study adheres to ethical principles of social research, particularly because it involved students under the age of 17. Student participation was conducted with the consent of the school, and all data is presented anonymously to protect the identity of respondents.

Limitations

This study is limited to a single-case qualitative investigation in a pesantren-based school, which restricts the generalizability of the findings across diverse educational settings. The use of focus group discussions and participatory observation captures experiences at a specific time and does not assess the long-term sustainability of individual empowerment outcomes. In addition, the analysis focuses primarily on internal

school actors, while perspectives from external policy stakeholders are not explored in depth. Future research employing comparative and longitudinal designs could further refine the applicability of the proposed catalytic model for disaster education policy.

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