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Thirteen Years of Continuous Compulsory Education to Achieve SDG 4 and Welcome Golden Indonesia 2045

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ABSTRACT

Objective: The study aims to identify and synthesize the major factors contributing to Out-of-School Children (OSC) in Indonesia as evidence for supporting the implementation of the 13-year compulsory education policy mandated by Law of the Republic of Indonesia Number 59 of 2024 concerning the National Long-Term Development Plan (2025–2045), which supports the realization of Golden Indonesia 2045. **Method:** The study employed a literature review with a meta-analysis approach. A total of 66 relevant research articles conducted across 34 provinces in Indonesia were analyzed, representing 854 out-of-school respondents. Data in the reviewed studies were collected through interviews and questionnaire surveys. The identified factors were synthesized and ranked based on their frequency of occurrence across the studies. **Results:** The analysis identified 25 factors influencing children to drop out of school or not continue their education. The six dominant factors were parents' economic constraints (81.8%), children's low interest and motivation to attend school (74.2%), unfavorable peer environment and unemployment (68.2%), limited parental attention to education (62.1%), parents' educational background (34.8%), and long distance between home and school (33.3%). The remaining 19 factors each contributed less than 30%. These findings indicate that economic, family, individual, and environmental factors simultaneously influence school participation. **Novelty:** The study provides a comprehensive synthesis of evidence from studies covering all 34 provinces in Indonesia and offers a national-level prioritization of the determinants of out-of-school children. The findings serve as an evidence-based reference for designing targeted interventions and educational policies to support the successful implementation of the 13-year compulsory education program through both formal and non-formal education pathways.

INTRODUCTION

Education is an effort to transform oneself into a better version (Cook-Sather, 2006; Magolda, 2023; Shor, 2012). Law No. 20 of 2003 states that education is a conscious and planned effort to create a learning atmosphere and learning process so that students become more active in developing their potential, thereby possessing religious spiritual strength, self-control, personality, intelligence, noble character, and skills (Chusnia & Fathani, 2023; Dirsia et al., 2022). Good and quality education is essential to improve the quality of individuals worldwide (Miller et al., 2022; Saini et al., 2023). To achieve that condition, each country is competing to plan the highest possible education for every citizen. Through quality education, a country will produce high-quality Human Resources (HR). In the preamble of the 1945 Constitution of the Unitary State of the Republic of Indonesia, it is explicitly stated that one of the objectives of the state is to educate the nation's life, which can be achieved through education. In Article 31 Paragraph (3) of the 1945 Constitution of the Republic of Indonesia, it is stated that "Every Indonesian citizen has the right to obtain proper education," so it can be understood that there needs to be efforts and the role of the government in improving education in Indonesia (Iman et al., 2025).

Education is an important aspect in the development of a nation, including Indonesia, which is still a developing country aspiring to continue advancing (Isbah et al., 2026; Sain et al., 2024; Samala et al., 2024). It is well understood that to build a nation, high-quality human resources with the ability to improve the country are needed. Education is one of the ways to produce high-quality human resources (Kumar et al., 2023; Tri & Van Thanh, 2022). The government is striving for human development through various types and levels of educational programs, including inclusive education for all Indonesian people so that school-age children can continue their education at higher levels. It is known that every citizen has the right to education, which must be upheld and accepted equally by all members of society (Brankovic, 2025; Idris et al., 2022; Yildirim, 2024). The importance of the role of education shows that development in the education sector must be a top priority in human resource development. The 1945 Constitution Article 31 Paragraph 1 emphasizes that "every citizen has the right to education" (Arsil & Ayuni, 2022). In line with this right, every citizen is also obligated to pursue education, and the government is obliged to fulfill its duty to finance that education. Based on the law, the government is obligated to provide educational funding that can offer the widest possible access to the community, so that every citizen has the same opportunity to receive quality education (Bulathwela et al., 2024; Nafian, 2024; Zickafoose et al., 2024).

However, behind the noble aspirations for all layers of the nation, data from the Pusdatin Kemdikbud Ristek Dashboard in October 2024 shows that there are 4,189,661 children aged up to 18 years in Indonesia who are not in school. The figure consists of 2,181,090 children who have never attended school (BPB), 914,156 children who dropped out of elementary and middle school (DO), and 1,094,415 children who graduated from elementary and middle school but did not continue (LTM) to higher education (Smeets et al., 2025). These unfortunate children and teenagers do not have access to educational services, including children in remote, outermost, and underdeveloped areas (3T), working children, children with disabilities, street children, abandoned children, children in conflict with the law, children from early marriages, and other groups of children. Every new school year, this situation changes and hundreds of thousands of children lose the opportunity to receive an education or attend school as they should.

Seeing this, the Indonesian government has, is currently, and will continue to make efforts to improve quality education so that the quality of the nation or Indonesian human resources is more competitive with other nations in the Asian and global contexts, by issuing various educational policies related to access and quality in accordance with the demands of the times. One of the policies related to access to education implemented by the government is the introduction of the six-year compulsory education program and the nine-year compulsory education program and universal secondary education for 12 years (Iman et al., 2025; Wang, 2023). Government Regulation No. 47 of 2008 on the 9-Year Compulsory Education Program is the implementation of the National Education System Law No. 20 of 2003 (Darmawan et al., 2024; Simanjuntak & Waluyo, 2025). In 2013, the central government launched the Universal Secondary Education Program, which is a reaffirmation of the 12-year compulsory education as a continuation of the 9-year compulsory education program that has been deemed successful in completing compulsory education up to the ages of 13-15 (Tri & Van Thanh, 2022). In the year 2024, with the enactment of Law No. 59 of 2024 regarding to Rencana Pembangunan Jangka Panjang Nasional (RPJPN), The Indonesian government continues the compulsory education program to 13 years, which includes 1 year for Early Childhood Education (PAUD), and 12 years for elementary school, junior high school, and senior high school. The extension of 1 year at the beginning is intended to strengthen the foundation or basics

of education before children enter elementary school, as research results also show that children who enter elementary school education preceded by PAUD are considered more prepared to receive education compared to those who have not experienced education in PAUD. In addition, this reason also reinforces the need to maintain the success and continuity of previous programs while preparing the golden generation in Indonesia by 2045, as explicitly stated in Law No. 59 of 2024 regarding Rencana Pembangunan Jangka Panjang Nasional (RPJPN).

Seeing the reality that there are still many children who have never learned, children who drop out of school, and children who graduate but do not continue as mentioned above, this proves that education in Indonesia is still not equitable and the compulsory education completion programs at the early childhood education level, basic education level, and upper secondary education level need to be continued. Those children who are not in school need to receive more serious attention, be handled specifically so that their numbers decrease, or efforts should be made to ensure that the number of children in school is proportionate to the number of children of the same age in the population.

Several studies on compulsory education or studies on the factors affecting out-of-school children have been conducted by many researchers in Indonesia, including students, education practitioners, and educational institutions inui 2025, rifai 2023. However, the number of studies is still relatively small compared to similar studies on an international scale. These studies, in addition to examining the factors causing children not to attend school, also conduct research on efforts that can be made to reduce the number of children not attending school. An overview of the quantity and its connections with other studies conducted both in Indonesia and outside Indonesia, as depicted in the following VOS viewer image.



Figure 1. VOS viewer study on compulsory education in Indonesia

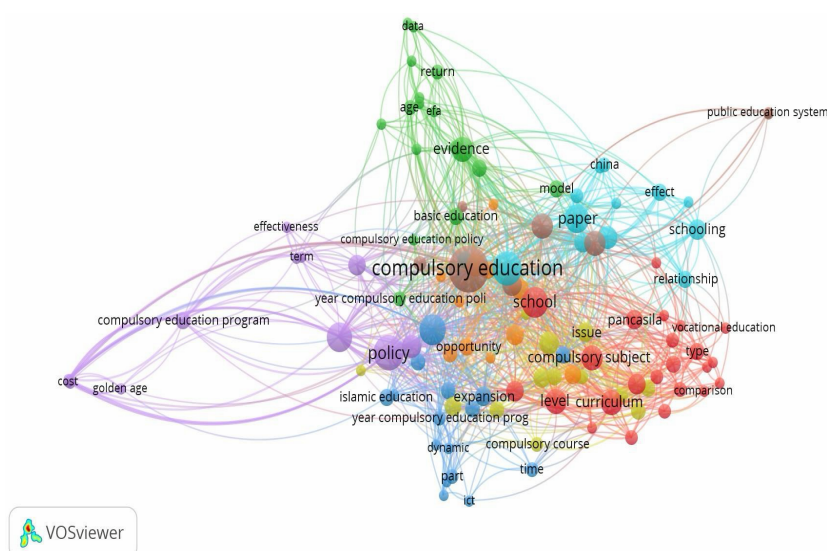


Figure 2. VOS viewer study on compulsory education in Indonesia and outside Indonesia

Based on the above conditions and reasons, this research is conducted with the aim of demonstrating and conducting a more in-depth analysis of the number of out-of-school children as a result of the lack of motivation from parents and the lack of awareness of both parents and children towards education. Not attending or dropping out of school will lead to a long chain of unfavorable conditions for the nation, such as low levels of knowledge, high unemployment and crime rates, and low quality of human resources in Indonesia. Therefore, this research analyzes the factors affecting children who do not attend school or do not continue their education, examines the efforts made towards dropouts, and designs efforts to address out-of-school children in the future.

RESEARCH METHOD

This research is a library study or literature study, where the researcher relies on various literatures to obtain research data. The literature study in this research involves a series of activities related to data collection from library materials, reading and note-taking, as well as managing research data objectively and systematically about the factors influencing and efforts made towards school dropouts in Indonesia. Next, the data from this research was analyzed using content analysis techniques. (content analysis). Data analysis begins with selecting the most relevant, pertinent, and sufficiently relevant studies. In addition, the research is also sorted according to the time of its implementation, starting from the most recent and gradually going back to the earlier years. The researcher then reads the abstract of each previous study to assess whether the issues discussed align with the problems to be solved in the research, subsequently reading and noting important and relevant sections related to the research problem, answers, or efforts to address the issues. In this study, the researchers conducted a literature review by reviewing 90 articles and analyzing 66 of the most relevant articles from 2011-2024, which were carried out across 34 provinces in Indonesia with 62 regencies. The respondents involved in those studies were 854 people, consisting of out-of-school children, parents of out-of-school children, teachers, school principals, village officials, and the surrounding community, as well as other relevant parties. Data and information from respondents were obtained by conducting interviews and distributing research questionnaires. Research data, whether in narrative form, is quantified with percentages and visualized in the form of graphs.

RESULTS AND DISCUSSION

Results

From the research conducted by the researchers, 25 main reasons for children not attending or continuing school were identified, which can be seen in the Figure 3.

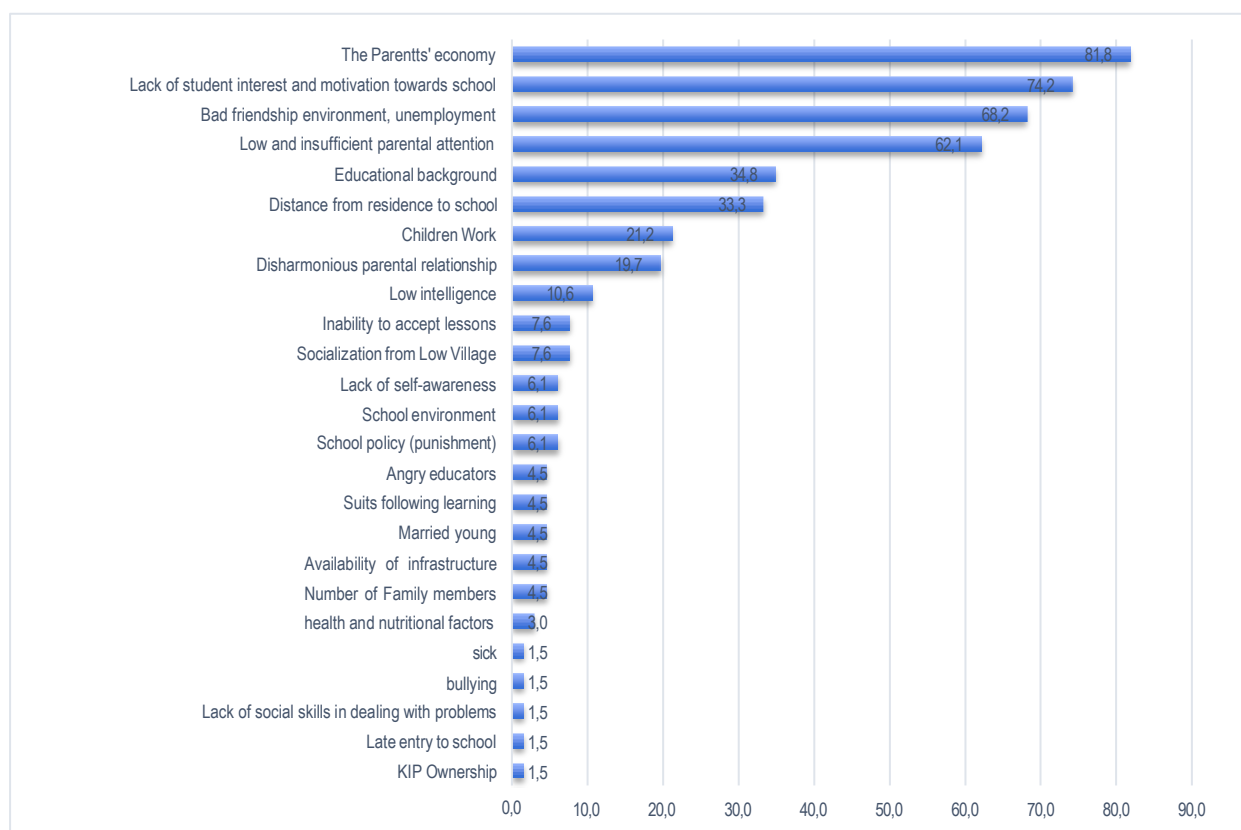


Figure 3. Study results on factors causing school dropouts/not continuing school

Based on the graph above, it is known that the six highest-ranked causes of children not attending school are: 1) parents' economic factors (81.8%), 2) lack of interest and motivation among students towards school (74.2%), 3) poor peer environment and unemployment (68.2%), 4) low parental attention to education (62.1%), 5) parents' educational background (34.8%), and the distance from home to school (33.3%). Meanwhile, the other 19 reasons fall below 30%, which include: children working, disharmony in parental relationships, low intelligence, inability to absorb lessons, low educational socialization from the village, lack of self-awareness, school environment, school policies (punishments), angry educators, difficulty following lessons, early marriage, limited infrastructure availability, number of family members, health and nutrition factors, illness, bullying, lack of social skills in problem-solving, late school entry, and ownership of KIP (Smart Indonesian Card).

The main or highest factor causing children to drop out of school is the economic condition of their parents. This can be seen in several 66 studies that have been analyzed regarding the factors causing school dropouts in Indonesia. Where the results of the metadata analysis from 66 studies relevant to the factors causing school dropouts can be known that the main factor for school dropouts is economic difficulties or because parents are unable to provide funds for their children's education. However, it should be noted that education itself is quite important because it plays a key role in boosting economic growth and reducing poverty (Li et al., 2024; Virjan et al., 2023; Zhu et al., 2022). Another contributing factor that received the second highest percentage is the lack of

interest and motivation among students towards school, as seen in the Tomulabutao Selatan Village, Gorontalo. The lack of motivation in the child to go to school causes the child not to have a strong desire within themselves to pursue knowledge (Davidovitch & Dorot, 2023; Kwok et al., 2022). This is due to the lack of strong support and encouragement from the parents towards their child. Furthermore, environmental factors also have a significant impact on the causes of children dropping out of school. As seen in Lamanggau Village, Southeast Sulawesi, which is a coastal area, this has implications for the culture and social interactions of its community. The Bajo community, dominated by fishermen, has its social interactions diverted by these activities, so that school-aged children who should have the enthusiasm to go to school are instead influenced by the community's activities, which involve going to sea with the fishermen. After engaging in this activity, the child obviously earns an income and eventually feels happy to be involved in the activity and is reluctant to go to school. The lack of parental attention towards children is also one of the factors causing children to drop out of school, as this is due to parents being busy with work and causing children to seek attention elsewhere. This situation can make children dependent on others and get caught up in their social circles, leading them to choose to listen to others instead of their parents, because parents are unable to balance work time with providing affectionate attention to their children.

Besides attention, the educational background of parents is also a factor causing children to drop out of school. This can be seen in Talang Ginting Village, Bengkulu, where the formal education level of the parents in the area is mostly elementary school graduates. The low level of formal education among the parents of school dropouts fundamentally influences the factors causing children to drop out of school. because parents do not provide enough guidance to their children about the importance of education, and parents also do not support their children in the educational world, when their child decides not to continue school, parents only persuade and advise them minimally, so the child decides on their own. Another factor with the highest percentage is the distance from home to school. From the observations conducted in Jember, it was found that geographical factors are one of the reasons for school dropouts among people with disabilities. Inadequate accessibility and mobility reduce the motivation to continue to primary school. The steep and uneven road conditions, the many potholes, and the lack of mobility make people with disabilities reluctant to come to school. In such conditions, the role of the government is very important in providing conveniences or facilities for access to schools. If these access conveniences are provided, the motivation for children to continue their education at school will arise from within themselves.

In addition to analyzing the factors causing children to drop out of school (not continuing their education), the researchers also analyzed the efforts made to address school dropouts (not continuing their education), which can be seen in the Figure 4.

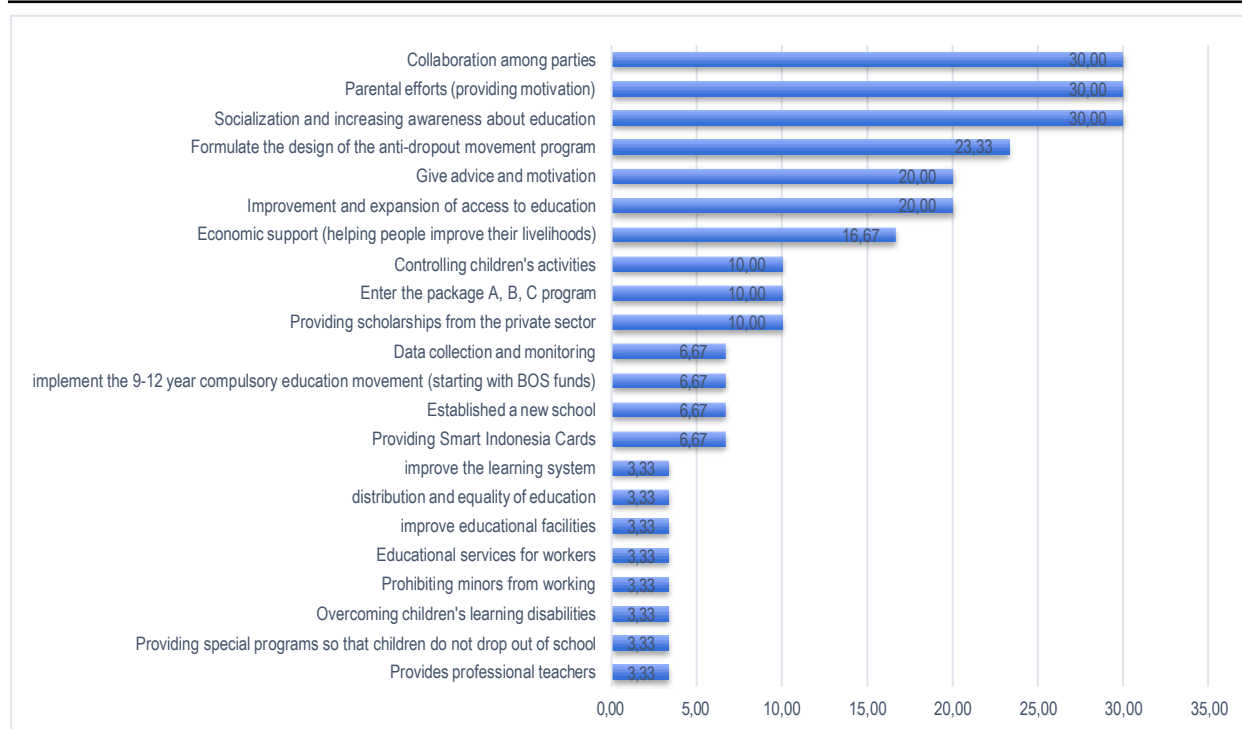


Figure 4. Study results on efforts to address school dropout/non-continuation

Based on the graphic above, it can be seen that the six highest-ranked efforts made to address school dropouts/not continuing education are: 1) collaboration between parties (30%), 2) parental efforts in providing motivation (30%), 3) socialization and raising awareness about education (30%), 4) formulating the design of an anti-dropout movement program (23.33%), 5) giving advice and motivation (20%), 6) improving and expanding access to education (20%). Meanwhile, the other 16 efforts are below 20%, which include: economic support (helping the community improve their livelihoods), monitoring children's activities, enrolling in package programs A, B, C, providing scholarships from private sources, data collection and monitoring, implementing the 9-12 year compulsory education movement (starting with BOS funds), establishing new schools, providing the Smart Indonesia Card, improving the learning system, enhancing educational facilities, spreading and equalizing education, providing education services for workers, prohibiting child labor, addressing children's learning disabilities, providing special programs to prevent school dropouts, and providing professional teachers.

The most common effort to address school dropouts is through collaboration between parties (Zulu et al., 2022). As seen in the research in Kampung Polak, NTB, efforts have begun by religious leaders who provide advice embedded in youth study sessions so that children are not only focused on the hereafter but also on worldly preparations such as pursuing education. The efforts made by the foundation's chairman include providing free school facilities specifically for the village children to address the issue of school dropouts in Kampung Polak. The efforts of the neighborhood chief and the youth leader collaborating to create positive activities so that children do not get caught up in bad company. Efforts from the department by supporting PKBM (Community Learning Center) as an effort to address school dropouts. The next most significant effort to address school dropouts is the parents' efforts in providing motivation, giving advice, and monitoring the children's activities. Learning motivation is one of the factors that determines the effectiveness of learning. Learning motivation is the internal and external drive in students who are studying to engage in behavior, generally with several supporting indicators or elements (Cayubit, 2022). Next, formulate the design of the Anti

School Dropout Movement program, which in its implementation needs to involve local governments, the education office, schools, and the community. The Ministry of Education and Culture becomes the main driver, while others fully support according to their respective capacities, while providing meaningful inputs. Therefore, the company contributes to the nation's education by providing intellectual input and commitment to the government and schools for the purpose of educating the nation.

Discussion

Based on the research results obtained from interviews and questionnaire responses from 854 respondents, it is known that the factors causing children not to attend school stem from both internal and external factors of the students. Internal factors that cause students to drop out of school include: 1) Lack of interest and motivation among students towards school, 2) Many children prefer to work, 3) Low intelligence, inability to grasp lessons, 4) Lack of self-awareness among students about the importance of education, 5) Difficulty for students in following lessons, 6) Health and nutrition factors, 7) Diseases suffered by children, 8) Lack of social skills in facing problems, 9) Delays in children starting school.

Meanwhile, the external factors that cause students to drop out of school are: 1) Parents' economic conditions, 2) Poor peer environment (many are unemployed), 3) Low and insufficient parental attention, 4) Parents' educational background, 5) Distance from home to school, 6) Disharmonious parental relationships, 7) Lack of socialization about the importance of education from the village, 8) School environment, 9) School policies (punishments), 10) Angry educators, 11) Many peers who marry young, 12) Lack of infrastructure availability, 13) Number of family members, 14) Bullying, 15) Late school attendance, 16) KIP ownership.

From the internal and external factors that cause children to drop out of school, researchers also found efforts that have been made to address school dropouts (not continuing education), including: 1) collaboration between parties, 2) parental efforts in providing motivation, 3) socialization and raising awareness about education, 4) formulating the design of an anti-dropout movement program, 5) giving advice and motivation, 6) improving and expanding access to education, 7) economic support (helping the community improve their livelihoods), 8) monitoring children's activities, 9) enrolling in package programs A, B, C, 10) providing scholarships from private sources, 11) data collection and monitoring, 12) implementing the 9-12 year compulsory education movement (starting with BOS funds), 13) establishing new schools, 14) providing the Smart Indonesia Card, 15) improving the learning system, 16) enhancing educational facilities, 17) spreading and equalizing education, 18) educational services for workers, 19) prohibiting underage children from working, 20) addressing children's learning disabilities, 21) providing special programs to prevent school dropouts, 22) providing professional teachers.

Besides the efforts made by the government and related parties to address the factors causing children to drop out of school, researchers also found strategies for completing compulsory education. In reducing the number of out-of-school children and supporting education for all, it cannot be accomplished individually, so it requires collaboration among all related components or groups. Among those components, for example: the central government, the provincial government through the Provincial Education Office, the (Great) Education Quality Assurance Center, the District Education Office, the Population and Civil Registration Office (Dukcapil), other regional offices, and grassroots

(PKBM forums, parents, village government, sub-district government, and other relevant parties).

Concrete actions that UPT can take to increase student participation in completing compulsory education are:

1. Advocating good methods and strategies for increasing participation rates
2. Facilitating discussions on increasing participation with various stakeholders, including local government and development partners
3. Assisting in the release of ATS data and out-of-school children, monitoring implementation, and conducting evaluations
4. Other points that are the main tasks and functions of UPT, especially in ensuring that the Department/Local Government has the capacity to address participation issues.

Concrete actions that the Department can take to increase participation (in collaboration with supervisors and schools, and also tasked with the following:

1. Identifying current achievement issues and the factors faced
2. Reflecting on the most prioritized issues that need to be addressed
3. Planning, implementing, and monitoring & evaluating the policies carried out
4. Other points that are the main tasks and functions of the education department in resolving participation issues.

From the 5 focused root problems, each has detailed root problem characteristics and its own solution package related to suboptimal educational participation, including:

1. The difficulty of accessing schools often occurs in 3T areas, islands, and mountainous regions. So the improvement options can be done by creating non-formal schools and one-stop centers.
2. The lack of school fees, this issue generally occurs in families who are unable but do not receive KIP. So the improvement options that can be done are improving KIP data, making APBD appeals for the poorest, joint PPDB with private schools, and CSR assistance.
3. Ignorance of the reasons why children do not go to school, where the issue related to ignorance is usually not on the list of children not in school, but the reasons. So the improvement options can be done by updating dukcapil data, processing Podes data for village officials' estimates, and volunteers from social services and BKKBN.
4. Unawareness of the importance of education, where the issue of not going to school occurs because children tend to choose to work, feeling that education is not beneficial, many jobs do not require education, and some others choose to marry young. The improvement options that can be implemented include advocating the benefits of education, financial and character development, materials, and nudging.
5. Other issues such as administration, psychology, and regulations. These problems occur due to the lack of birth certificates, psychological effects from bullying, not being promoted to the next grade, dropping out, early marriage, and legal issues. So, the improvement options that can be implemented include accelerating administrative collaboration with the civil registry office and encouraging children to attend informal and non-formal schools, as well as conducting equivalency tests afterwards for those who are married, working, facing legal issues, children of sex workers, terrorists, and others.

CONCLUSION

Fundamental Finding: This study synthesized evidence from 66 research articles conducted across 34 provinces in Indonesia, involving 854 respondents and various stakeholders, including out-of-school children, parents, teachers, school principals,

village officials, and community members. The findings identified 25 factors contributing to children leaving school, which were classified into internal and external factors. The most dominant factor was parents' economic condition (81.8%), followed by low learning motivation, unfavorable social environment, limited parental attention, parental educational background, and school accessibility. The study also identified 22 intervention efforts, with multi-stakeholder collaboration, parental motivation, educational socialization, and awareness programs being the most frequently implemented. The findings emphasize that the causes of school dropout are multidimensional and require individualized rather than uniform solutions. **Implication:** The results provide evidence for policymakers and educational stakeholders to design targeted intervention strategies that address the specific needs of out-of-school children. Effective implementation of the 13-year compulsory education policy requires coordinated collaboration among national and local governments, schools, communities, and families. These findings also support the achievement of SDG 4 (Quality Education) by promoting equitable and inclusive access to education for all children. **Limitation:** This study was based on a literature review and meta-analysis of published research articles. Consequently, the findings depend on the quality, scope, and reporting of the included studies and do not include primary field data collected directly by the researchers. Variations in research methods and regional contexts may also influence the generalizability of the findings. **Future Research:** Future studies should validate these findings through large-scale empirical research involving broader demographic and regional coverage. In addition, future research should develop and evaluate evidence-based intervention models tailored to the specific causes of school dropout, enabling more effective strategies for returning out-of-school children to formal or non-formal education and supporting the successful implementation of the 13-year compulsory education program.

AUTHOR CONTRIBUTIONS

Hadiyanto contributed to the conceptualization of the study, research design, methodology development, data analysis, interpretation of findings, manuscript drafting, and project administration. **Abdul Hakim** contributed to data acquisition, validation of research findings, interpretation of national education data, and critical review of the manuscript. **Sari Febrianti** contributed to the literature review, data extraction, meta-analysis, visualization of results, manuscript writing, and editing. **Anggun Mawar Lestari** contributed to data management, quality assessment of the reviewed articles, formal analysis, manuscript review, and language editing. All authors have read, reviewed, and approved the final version of the manuscript and agree to be accountable for all aspects of the work.

CONFLICT OF INTEREST STATEMENT

The authors declare that they have no financial, professional, institutional, or personal conflicts of interest that could have influenced the design, implementation, analysis, interpretation, or reporting of this study. The development and evaluation of the biology practicum guidebook were conducted solely for academic and educational purposes.

ETHICAL COMPLIANCE STATEMENT

This manuscript complies with research and publication ethics. The authors affirm that the work is original, conducted with academic integrity, and free from any unethical practices, including plagiarism.

STATEMENT ON THE USE OF AI OR DIGITAL TOOLS IN WRITING

During the preparation of this manuscript, the authors used a generative artificial intelligence tool solely to assist with English-language refinement, grammar correction, and improvements in academic readability. The tool was not used to generate research data, perform statistical analysis, determine the research findings, or formulate conclusions. All AI-assisted outputs were critically reviewed, revised, and verified by the authors. The authors take full responsibility for the accuracy, originality, interpretation, and integrity of the final manuscript.

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