Influencing Factors of Inclusive Education for Students with Hearing Impairment

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ABSTRACT

The realization of equitable and quality education has long been the central challenge in education development. The presence of inclusive education is expected to enhance those two aspects of education. Further, it is also hoped to bring an equal education for all children, including children with special needs. In developed nations, inclusive education has been implemented widely, enabling children with special needs to have greater opportunities to enroll in local schools. This study aims to explore the influencing factors of inclusive education implementation for children with hearing impairment at the preschool level, as well as the implementation of inclusive education in general. This literature review gathered data from recently published scientific articles in peer-reviewed journals. Our results show that, aside from great inclusive education implementation and policies, the success of inclusive education relies heavily on the presence of inclusive culture. Moreover, this article describes the supporting theories, development of inclusive education, opportunities and challenges for inclusive education, and inclusive education for children with hearing impairment. Furthermore, the inclusive education system in Indonesia at the kindergarten level and for children with a hearing impairment needs to be studied.

INTRODUCTION

Education is one of the crucial elements in shaping excellent quality human resources (Idris et al., 2012; Indrawati et al., 2021). Meanwhile, the realization of good quality education remains a challenge frequently discussed by the people. The central challenge in education development is quality and equitable education (McLaughlin et al., 2016; Sayed & Motala, 2012; Valiandes, 2015). Through inclusive education, these two issues are forecasted to be resolved. Inclusive education is also expected to bring equal education for all children, including children with special needs. A study has identified that inclusive education increases recognition and appreciation of diversity (Block et al., 2015; Evmenova, 2018). In inclusive education, each student's differences no longer become a problem, but they can be promising potential.

In developed countries, inclusive education has been implemented massively, allowing children with special needs to have better opportunities to attend local schools (Armstrong et al., 2011; Forlin, 2013; Kozleski et al., 2015; Rofiah et al., 2020). The placement of special needs students in the general school requires thorough consideration. However, a study suggests that, in an inclusive school, the students with special needs have better learning results than in a special school (Bačáková & Cimpairment, 2013; Gül & Vuran, 2015). Thus, inclusive education offers positive effects for students with special needs.

However, the implementation of inclusive education, primarily at the preschool level, still faces numerous challenges (Rochmansjah, 2020; Siron & Mulyono, 2018). The absence of parents' involvement at the preschool level results in the non-optimum implementation of inclusive education. According to the global inclusive education development, Indonesia has developed inclusive education since 2000. In 2002, the Indonesian government officially started a pilot project for inclusive education, resulting in around 1,500 children attending the regular school up to recently.

Inclusive education aims to provide the widest possible access to education for all children, with no exception. As a country that has committed to respecting, saving, and fulfilling the needs of people with disabilities, Indonesia is expected to implement inclusive education. The implementation of inclusive education in Indonesia is regulated in the Law No. 20 the Year 2003 concerning the national education system (chapter 5, paragraph 1), Government Regulation No 17 the Year 2010 on the management and implementation of education (chapter 130, paragraph 2), and Regulation of Minister of Education No 70 the Year 2009. The implementation of inclusive education is linear with the UNESCO & INDONESIA PLAN, stating that, in 21st-century education, the educational policies should vary and be designed in such a way to avoid social disparities.

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https://orcid.org/0000-0001-8712-7810
Source of support: Nil
Conflict of interest: None.
DOI: 10.47750/pegegog.13.02.15
Received: 22.08.2022
Accepted: 16.10.2022
Published: 01.03.2023
Keywords: Inclusive education, special education, equal education, hearing impairment, preschool level
In other words, inclusive education is a strategy to achieve education for all, including children with special needs.

According to data gathered in 2019, there are 1.6 million students with disabilities in Indonesia, with only 18% of them receiving inclusive education (Saleh, 2019). This phenomenon is caused by different factors such as the limited school infrastructure, low number of teachers with adequate skills in the special education field, society’s negative stigma of children with disabilities, and parents’ minimum understanding of inclusivity (Yaqien et al., 2018).

**Purpose of Research**

This study aims to explore the influencing factors of inclusive education implementation, especially for preschool students with hearing impairment, as well as the general implementation of inclusive education.

**Method**

This research is qualitative research with the literature review type. To attain an accurate illustration, this literature review selected recently published scientific articles from peer-review journals. The research was carried out in some stages, consisting of a selection of an area, analysis, and categorization. The relevant case studies that focus on the influencing factors of inclusive education implementation were selected.

**Selection of Research Articles**

In the initial stage, we selected the per-review journals in the Google Scholar database. We used the keywords of ‘inclusive education’ and ‘inclusive education for children with hearing impairment.’ A number of research articles were selected to identify the influencing factors of inclusive education for children with hearing impairment. At this stage, 44 articles have been selected that match the criteria.

**Data Analysis**

The literature review was carried out using the best evidence approach. The articles were selected based on their conformity with the research question. Then, they were analyzed and verified. Each article that fits the article is reviewed under: supporting theories; development of inclusive education; opportunities and challenges for inclusive education; and inclusive education for children with hearing impairment. So from 40 articles in the Selection of Research Articles stage, it was reduced to 26 and used in the next step.

**Categorization of Research Articles**

Each selected article was reviewed following the recent research questions. We also ensured that all selected papers potentially had more than one finding. For instance, they had to present some influencing factors of inclusive education. Based on the categorization of terms that have been determined, five articles are used to explain the supporting theories, three articles are used to development of inclusive education in Indonesia, fifteen articles are used to describe opportunities and challenges for inclusive education, and three papers for inclusive education for children with hearing impairment.

**Results**

**Supporting Theories**

This study used some theories, namely the ecological theory (Bronfenbrenner 1979), cognitive development theory (Piaget 1971), and constructivist learning theory (Bruner 1961). These interrelated theories become fundamental to the cultural factors, implementation, and relevant regulations that affect the performance of inclusive education. Figure 1 illustrates the conceptual framework of education theories that influences the cultural aspects and implementation of inclusive education. (Figure 1)

According to the ecological theory from Bronfenbrenner, human development is highly affected by their environment. The reciprocal relationship between individuals and the environment shapes an individual’s behavior. Meanwhile, the cognitive development theory defines someone’s cognitive skills based on their age. Piaget classifies children’s cognitive development into four stages, following their biological maturity and ages. In the constructivist learning theory, Bruner states that this theory illustrates the children’s cognitive process in establishing new knowledge, along with

**The Three Dimensions Of The Index (Tony Booth & Mel Ainscow, 2002)**

Ecological Theory (Bronfenbrenner, 1979)

Constructivist Learning Theory (Bruner 1961)

**Fig. 1: Conceptual Framework Focuses on the Educational Theories Affecting the Cultural Factors and Realization of Inclusive Education**
the integration, adaptation, and organization of acquired and existing knowledge or experience.

**Development of Inclusive Education in Indonesia**

Based on the Indonesian road map of inclusive education program 2017-2021, the realization of Indonesia Law o No 8 the Year 2016 concerning the people with disabilities, the inclusive education was implemented in four stages, consisting of socialization (2017-2018) to uniform perception, pioneer (2019) to transform the society and educational characteristics, reinforcement (2020) to widen and improve the service quality and implementation, and implementation (2021) with regional (regency and city level) and national target of implementation. However, recently, Indonesia only has 29,317 inclusive schools at the level of elementary, junior high, senior high, and vocational high school (Kemendikbud, 2019), exhibiting only 11% of schools in Indonesia that implement inclusive education.

Data obtained in 2019 showed that there were 1.6 million children with disabilities in Indonesia, with only 18% of them receiving inclusive education services. Of that percentage, 115 thousand children with disabilities are in special schools, while 229 thousand of them are in inclusive schools (Kemendikbud, 2019). This data signifies that many children with disabilities have not obtained their right to attend special or inclusive schools. This situation is induced by several factors, such as the limited school facility and infrastructure, minimum teachers with great skills in the special education field, society’s negative stigma on children with disabilities, parents’ limited knowledge of inclusivity, and even some parents who are ashamed of having children with special needs.

Some areas of Indonesia present excellent support for the implementation of inclusive education. For instance, in East Java, the governor has issued a government regulation that ensures support the inclusive education implementation for children and broader access to education (Pergub Jatim, 2011). There were 93 schools in 15 regencies of East Java Province which have implemented inclusive education in 2011 (Kominfo Provinci Jawa Timur, 2011). The number increased to 1,308 schools in 2014, then 1,892 schools in 2019. Linearly, the number of children with special needs in East Java also increased, from 7,462 children in 2014 to 8,106 people in 2019. However, only a low number of children attend inclusive schools.

**Opportunities and Challenges for Inclusive Education**

Juherna et al. (2020) describe that inclusive education prioritizes equality and fairness in attaining education. This concept can be applied from an early age until the college level. Wijayanti et al. (2019) add that inclusive education gives positive encouragement since it carries stimulation following children's development level, producing significant results.

The procedures of inclusive education implementation at the preschool level should be started by accommodating children’s needs, identifying children's special needs, as well as mapping their recent and future potentials and obstacles. Inclusive education carries the potential to identify and examine similar curricula. Additionally, previous studies have discovered that children with special needs in inclusive preschool institutions have better social skills than those in special education institutions (Juherna et al., 2020; Purnama et al., 2017; Satyani et al., 2018).

Studies carried out by (Anggita Sakti, 2020; Windarsh et al., 2017) discover three primary constraints of inclusive education implementation, consisting of the availability of professional teachers in the inclusivity field, the inability of teachers and parents to accept and welcome children with special needs, and non-fully comprehensive, inclusive education. In relation to that, another study also discovers that most teachers and parents want to enroll children with special needs in a special school (Jesslin & Kurniawati, 2020). Meanwhile, Angga Reini et al. (2019) report that at the preschool level, the inclusive schools are not really inclusive as they still segregate the students with special needs from other students. Further, Purnama et al. (2017) explain that many teachers still have no qualification or certification for teaching students with special needs. Therefore, the future education system should clearly regulate the capabilities and needs of teachers in an inclusive school.

The implementation of inclusive education at the preschool level still faces a number of issues. Remarkably, the problems revolve around the availability of teachers, supporting infrastructure, and an inclusive curriculum at the preschool education level (Anggita Sakti, 2020; Huda & Iman, 2017). Besides, inclusive education in Indonesia should involve teachers, parents, and the environment and socialize the same perception of inclusive education, but the positive perception is only demonstrated by parents (Rasmitadila et al., 2019).

Inclusive education can be implemented from an early age in the preschool educational institution. Besides, inclusive education requires sufficient infrastructure and facility, teachers with skills in teaching students with special needs, reserved teachers, adequate learning infrastructure, great planning, and freedom to implement inclusive education (Alfaaroqi & Khoiruddin, 2020). Additionally, in implementing inclusive education, each region face almost similar challenges, the challenges reported by previous studies are summarized in Table 1.

**Inclusive Education for Children with Hearing Impairment**

Winarsih (2018) describes that children with slight hearing impairment have a better hearing ability as they stand between people with normal hearing and those with slight hearing im-
The academic achievement of children with hearing impairment relies heavily on their individual characteristics, as well as the support from their parents, teachers, and school program. Notably, their academic achievement is massively influenced by their personal characteristics. Besides, most children have specific learning difficulties, particularly in their reading and writing skills (Iskandar & Supena, 2021). However, studies have confirmed that children with hearing impairment present better academic accomplishment in the regular classroom than those who are placed in a separate class (Iskandar & Supena, 2021; Shaver et al., 2011).

**Discussion**

The results of our review that was carried out based on cognitive development theory (Piaget 1971) and constructivist learning theory (Bruner 1961) showed a number of findings. The interrelated theories become the fundamental of the cultural factors and policies that influence the implementation of inclusive education, as suggested by previous studies (Novachevska et al., 2011; Onaga & Martoccio, 2008; Walker & Musti-Rao, 2016; Zabeli & Gjelaj, 2020). Besides, the recent studies also highlight similar issues faced in the inclusive education implementation in some regions, which consist of the inclusive culture, inclusive education implementation, and relevant policies supporting inclusive education.

Aside from those three primary influencing factors of inclusive education, some studies also report different influencing factors. A study from (Sulistiyadi, 2014) accentuates the barrier factors of inclusive education implementation are the comprehension of inclusive education, new teachers with minimum relevant experiences, issues of funding, provision of infrastructure, and teachers’ minimum incentive. Another study from (Barua, 2018; Mezzanotte, 2022) also describes that the society’s socio-economy factor also affects the implementation of inclusive education. Contrastingly, another research report that the academic achievement of students with hearing impairment is not always influenced by their socio-economy status and the educational background of their parents, even if those factors are usually correlated with the implementation of inclusive education (Davis-Kean, 2005; Marschark et al., 2015).

Some studies also report society’s perception that children have to adapt to the school system while seeing inclusive education as equal to integration. Therefore, in the implementation of inclusive education, many teachers are not friendly and actively helpful to their students (Adiarti, 2014; Anggita Sakti, 2020; Juherna et al., 2020; Sari, 2012). Additionally, the classroom teachers also present minimum responsibility for students learning progress due to the minimum policies that support their learning process (Anggita Sakti, 2020; Lestariningrum, 2017; Mursita, 2015; Purnama et al., 2017). Therefore, many recent studies focus on examining the effects of teachers’ behavior on inclusive education (Ediyanto et al., 2020; Navarro-Mateu et al., 2020; Supriyanto, 2019).

**Conclusion**

Aside from great supporting policies and practices of inclusive education, the success of inclusive education also relies...
on the implementation of an inclusive culture. Linearly, the stakeholders who formulate learning policies and procedures in preschool education should consistently conceptualize the inclusive education implementation through discussion with parents to generate traceable and disclosable mechanisms of inclusive education. Meanwhile, at the kindergarten level, the inclusive education system in Indonesia has not explicitly been regulated, nor specifically for children with hearing impairment. Thus, it is necessary to conduct further studies in the future regarding the results of this study.

REFERENCES


UNDANG-Undang Republik Indonesia Nomor 8 Tahun 2016 Tentang Penyandang Disabilitas. (2016).


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