

COMPARATIVE ANALYSIS ON SOUTH KOREA AND INDONESIA'S OUTCOME-BASED EDUCATION (OBE) RESILIENCE AMIDST THE COVID-19 PANDEMIC

Darynaufal Mulyaman^{1*}; Catherine Salim²

¹International Relations Study Program, Faculty of Social and Political Science, Universitas Kristen Indonesia
Jl. Mayjend Soetoyo No. 2, Cawang, Jakarta Timur 13630, Indonesia

²Indonesian Institute of Advanced International Studies (INADIS)
Menara Sentraya Lantai 18, Unit B-2, Jl. Iskandarsyah Raya No. 1A, Melawai, Kebayoran Baru,
Jakarta Selatan 12160, Indonesia

¹darynaufal.mulyaman@uki.ac.id; ²catherine.esc.salim@gmail.com

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ABSTRACT

The research argued that resilience in human development was maintained by an eminent education system rather than a mere economic performances. It was a comparative analysis of South Korea and Indonesia's Outcome-Based Education (OBE) resilience amidst the COVID-19 pandemic. The COVID-19 pandemic presented an unprecedented shock to human development. However, some countries handled COVID-19 impacts on their human development progress better than other countries sharing similar economic characteristics. This gap was evident between the G20 and MIKTA middle powers with sizable economic capabilities, South Korea and Indonesia. South Korea remained steady in maintaining its human development index, while Indonesia lagged. Through a qualitative approach, it was used Spady's Outcome-Based Education theoretical model and gathered secondary data to compare Indonesia and South Korea's education performances. The findings suggest that maintaining an effective OBE program through addressing physical and nonphysical barriers to education contributes towards resilient human development progress in South Korea, while the opposite is true for Indonesia.

Keywords: Outcome-Based Education, human development, Indonesia, South Korea, COVID-19

INTRODUCTION

The COVID-19 pandemic is changing how nations perceive human development around the globe. Until March 2020, nations worldwide see satisfying progress in human development, with most governments acknowledging the importance of investing in knowledge, skills, and health. However, shortly after, these gains become tremendously challenged. The COVID-19 pandemic presents an unprecedented shock to human development, or what the United Nations Development Program (UNDP) cites as a human development crisis. It marks 2020 as the first year since three decades ago when Human Development Index (HDI) is simulated to shrink

globally (UNDP, 2020a). COVID-19 has disrupted various aspects of human development across the globe and hampered the global population from optimizing their productivity and potential. Governments redirect their resources to mitigate the impacts of a pandemic on health institutions and the economy, potentially deprioritizing or neglecting aspects of human development in the process. As a result, the World Bank (2020) has stated that the ongoing global health crisis may diminish ten-year-worth of progress in human capital development.

While almost all sectors within the social structure are negatively affected by the global health crisis, several institutions, including the educational institution as one of the pillars of human development,

are disproportionately devastated. The World Bank (2020) has stated that before the pandemic, education worldwide sees an all-time peak in attendance, more girls accessing education, and increasing enrollment rates in early childhood education. However, as a consequence of the pandemic along with inequality in internet access, the effective out-of-school rate rises substantially for all human development groups, with up to 1,6 billion students out of school at one point (UNDP, 2020b). This figure means that around 20% of the world's population in 2021, with demographic characteristics centered among the young population, will be deprived of quality education, which would cost a portion of the potential from a generation's workforce. Some students are affected worse, such as those from vulnerable households with limited access to enabling facilities and supportive environments. Gender disparity in education could widen as about 20 million secondary-aged girls worldwide are at risk of dropping out of school due to the pandemic (UNICEF, 2020), with over 11 million girls would be less likely to go back to school once they reopen (UNESCO, 2021).

This situation forces governments to close schools and adapt their pre-primary to tertiary education institutions according to health protocols, such as moving classes to online platforms, revising curriculums, and making adjustments to learning assessments. Even so, such changes are not free from challenges. Many schools, especially those residing in underdeveloped areas, are far from unprepared to shift to remote learning due to a lack of access to electricity, the internet, and other facilitating infrastructures, technical expertise in navigating through digital learning platforms, difficulties in evaluating and fulfilling expected learning outcomes, additional pressure on working parents, unideal learning environment, as well as deteriorating mental health and demotivation of teachers and students due to continuous isolation and uncertain duration of school closures.

In South Korea, the human development sector appears to be well maintained even during the pandemic. The Program for International Student Assessment (PISA) developed by the Organization for Economic Cooperation and Development (OECD) shows South Korea is in the upper position or high ranking among Asian countries. South Korea, Singapore, and China are topping the top position for this PISA score across other Asian countries. This means, in general, the pandemic is not a disruptor for these countries' human development process progress. Students from South Korea remain unchanged in terms of student performance. Furthermore, the South Korean education system remains resilient in the most challenging time, like the COVID-19 pandemic.

In addition, South Korea has a strategy that enables a safe environment being established by the South Korean government to move rapidly and efficiently to screen and contain COVID-19 patients, which come from around the world in South Korea.

Furthermore, the South Korean behavior during the COVID-19 pandemic is a result of the inability to handle the Middle East Respiratory Syndrome or MERS outbreak in 2015. Not only thinking about South Korean students, but South Korea is also one step ahead of fulfilling educational support to global citizens for North Korean defectors to South Korea, including students (Kim & Yoo, 2018). This means South Korea indeed provides high-quality and well-maintained curricula for its people. Moreover, based on more literature reviews conducted on this theme, Korean education, in general, seems to be pushed or encouraged that positively challenged by domestic stakeholders or even foreign factors in order to be competitive at the global level (Eunhye, Lee, & Jun, 2013; Hahn & Kim, 2010; Kim, 2021; Kim, 2005; Lee, 2020; Shin et al., 2021; Park, 2021; Lee & Shouse, 2011; Youm, 2013; Mo, 2017; Jung, 2018; Lee, Jahng, & Kim, 2020; Song, 2008). The Korean government, in general, also takes serious concern about its education development for its human development even through comparison with other countries' policies (Kim, 2019; Seo et al., 1991; Sung, Kim, & Kang, 2014; Beecher, Streitwieser, & Zhou, 2019; Kim & Kim, 2019; He, 2015; You, 2014; Kim & Choi, 2017; Kim, 2017; Kim, 2008).

While South Korea has proved its education sector to be resilient, the contrary is apparent in another member of G20 and MIKTA countries, Indonesia. In Indonesia, despite being the biggest economy in South East Asia, over 68 million students have been affected by school closures (Gupta & Khairina, 2020; Rulandari, 2020). Many learners in the country still face varying forms and levels of physical and non-physical barriers to education. The pandemic would further exacerbate Indonesia's learning loss, the gap in education between rural and urban areas, and overall human development. The World Bank also estimates that Indonesian children have lost 11 points on the PISA scale by the end of July 2020. This specter will haunt the young Indonesian generation in seizing opportunities from its demographic bonus and embracing the fourth industrial revolution.

As explained, South Korea carries on the progress of the human development process well. South Korea's move is like an ongoing example of how to effectively and efficiently contain a pandemic without offering business and education sectors. Therefore, no wonder South Korea could stand with high standards in many aspects, including the human development process. In comparison to Indonesia, for example, as a country that joins the same organization, such as G20 and MIKTA, Indonesia is capable of nothing compared to South Korea. Therefore, the research proposes the research question: "What and how are the factors that contribute to South Korea and Indonesia's difference in education system resilience during the COVID-19 pandemic?" By utilizing the Outcome-Based Education (OBE) theoretical model, the researchers seek an explanation of South Korea's emphasis on education to promote human

development and recommend the lessons learned from Indonesia's case. The research is divided into four parts. First, the research reviews the existing body of literature that attempts to explain the ongoing problems in Indonesia's education sector, particularly those highlighting learning outcomes and COVID-19 impacts on education. Second, the research describes Spady's (1994) outcome-based education (OBE) model that assists analyzing the important aspects to support the OBE process. Third, it discusses the relevance of OBE in supporting the human development process and operationalizes the model to analyze South Korea and Indonesia's implementation of OBE and evaluate whether they fulfill the parameters of a resilient OBE program. Finally, it concludes the research with recommendations on how Indonesia can improve its education sector's resilience to shocks by following South Korea's lead.

The research reviews previous studies on Indonesia's education sector, particularly concerning how COVID-19 impacts the learning process and learning outcomes. In doing so, it first discusses to what extent public spending affects school performances and learning outcomes as a whole. Corruption in the public budget is often affiliated with less effective educational institutions. Suryadarma (2012) has conducted a statistical analysis to identify how corruption in public spending relates to learning outcomes, measured with school enrolment rates and performance in national examinations. While the findings suggest increasing public spending for education, though it requires complementary efforts to eradicate corruption in the education sector, may contribute to improving school enrolments, no statistically significant relations exist between public spending and school quality. Instead of focusing on funding allocation alone, Suryadarma (2012) has also recommended looking into other factors, such as the curriculum and quality of teachers. Though Suryadarma's contribution acknowledges, there is no direct causality between the variables. The researchers contend this in the latter part of this research by connecting how public spending, particularly in regards to teacher welfare, could serve as incentives in improving teachers' quality, especially knowing that over 50% of teachers in Indonesia are civil servants.

Aji (2020) has argued that four problems have contributed to hindering Indonesia from implementing an effective online learning process: limited abilities of students and teachers in utilizing information technology, inadequate education technology, limited internet access, and minimum budget allocation for the education sector. He further notes that school closures produced difficulties in evaluating learning outcomes. School examinations postponed or canceled result in the inability to measure whether students have successfully fulfilled the expected learning outcomes. While the analysis is generally intuitive and has remained relevant up to recent development, Aji (2020) does not specify the methodological framework used to acquire his findings to support his arguments. In

addition, he neither positions the learning setbacks in a broader, systemic context nor analyzes the learning outcomes in a disaggregated manner to dissect varying units that make up Indonesia's education inequality.

To fill previous research gaps, Alifia et al. (2020) have researched the implementation of a learning-from-home policy across Indonesia at the primary or elementary level in April-June 2020. They argue that students would be unable to seize the learning opportunities present in a pre-pandemic learning environment if their remote learning process is characterized by limited internet access, teachers with less adaptability, and a lack of parents' participation or support. The research captures a nuanced explanation of how students encounter varying degrees of challenges during remote learning. They note that students with a disadvantageous learning environment, such as those characterized with lower academic capabilities, less fortunate socioeconomic situations, lack of parental support, enrolled in public schools, and located in rural areas, are expected to perform poorly and experience learning loss.

The research gaps are identified in this theme by basing the researchers' study on the existing literature body. The research aims to bring novelty to the current knowledge by positioning human development and education system within the context of a global health crisis. Rather than pointing to the economic system, which argued does not adequately explain the disparity of human development resilience between the two middle powers, the researchers compares the implementation of OBE and discuss the urgency of a systemic change to improve quality education during remote learning.

METHODS

To analyse, the research uses the perspective of Spady in Rao (2020). William G. Spady is an academician and sociologist who promulgated the OBE system to be enacted in the education sector since the 1990s. Spady (1994) has explained that Outcome-Based Education is an accountability instrument for teaching outcomes. According to Spady in Rao (2020), an OBE program involves beginning with a simple vision of what the students will be able to do after the learning process, followed by arranging the curriculum, teaching, and testing to ensure that such knowledge is acquired.

The program can be divided into four contributing factors. The first factor is clarity of focus, which emphasizes that teachers must concentrate on assisting students in cultivating the awareness, abilities, and attitudes that will allow them to achieve the clear learning desired outcomes. The second component, designing down, means the curriculum planning process must begin with a detailed description of the desired results for students by the end of the course. Thirdly, high expectations encourage teachers to set high, stimulating success expectations in order to

motivate students to participate fully in what they are studying. High expectations are inextricably tied to the notion that good learning encourages more effective outcomes. Lastly, the fourth component, expanded opportunities, emphasizes that teachers must work hard to create more opportunities for all students. This philosophy is founded on the notion that not all students will do the same stuff in the very same manner and or at the same time. Many students, though, may meet high expectations if granted sufficient opportunities.

Thus, an OBE model education is a system of education that incorporates a method that ends in an outcome on what a pupil would achieve as a result of a learning experience. Therefore, the research will analyze and compare the education system of South Korea and Indonesia to look at the OBE perspectives in order to gain a holistic and elaborative analysis of how a country thrive human development process progress, even during the time of pandemic of COVID-19.

The OBE model contributes a lot to the human development process, especially for students who eventually become a workforce for a country. As stated by Kennedy and Birch (2020), OBE is a progressive teaching approach that increases instructional content and, as a result, clinical practice. Kennedy and Birch (2020) have further explored the effectiveness of OBE as a model for higher education training, with an emphasis on a degree such as Policy Study. They together further emphasize that OBE as an idea has seemingly washed through most educational institutions in a transformative surge. Even though the OBE method gets its comprehensive review for its professionalized educational model, the OBE perspective also taps into question whether it is genuinely revolutionary or simply reactionary discourse.

RESULTS AND DISCUSSIONS

In general, quality education contributes to the human development process. Education improves the knowledge and skills of people in a country, which proportionally affects individual earnings, distribution of income, and economic growth. In the long term, education output is essential in promoting overall economic development among the population.

Major world economies such as members of G20 or MIKTA (group of middle power countries of Mexico, Indonesia, Korea, Turkey, and Australia) attempt to revitalize their education system for a better human development process in their respective countries. However, there is an interesting disparity of HDI among the world economies. Some countries in the same group achieve a high-level ranking in human development, while some of their counterparts rank unsatisfyingly in the HDI ranking. This variation becomes this research basis for comparing how some countries could achieve high-level ranking while others not even when they are economic grouping.

South Korea and Indonesia are used in this

research to portray the possible contrasting level of human development in the same economic groupings. Indonesia is the largest economy in South East Asia and is known as an emerging economy in G20 and MIKTA, but Indonesia is still way behind South Korea, one of the excelling countries in G20 and MIKTA. South Korea scores relatively high in the HDI ranking along with several other East Asian countries (UNDP, 2020b). Meanwhile, Indonesia is stumbling in leading the human development process in Southeast Asia even though its economic growth and size are very promising. Compared to Malaysia and Singapore as peer countries of Indonesia, Indonesia also lags behind in terms of human development (UNDP, 2020b).

While an economic overview does not provide a sufficient explanation for the disparity in human development, educational outcomes may serve as a probable answer. Individual earnings have been shown to be consistently linked to cognitive abilities. The distribution of talent in the population affects the level of wages, and perhaps most importantly, the skills of labor have a significant impact on economic development. Furthermore, school inclusiveness has been the foundation for student performance and achievement. In general, the education system should be improved if policymakers aim to jolt education outcomes. However, modern education policies are still subject to unsustainable management, which serves as a serious challenge in promoting desirable educational outputs. To prove this point, a deeper analysis of OBE programs in South Korea and Indonesia would be valuable in drawing a comparison.

As explained in the previous section, an OBE process consists of clarity of focus, designing down, high expectations, and expanded opportunities. In this section, the research explains the OBE processes in South Korea and Indonesia, respectively, and how it relates to human development. First, in the clarity of focus, teacher performance rating, teacher performance-based pay, and teacher evaluation encourage South Korean teachers to pursue career progression. Teaching is a high-level job and a well-paid occupation in South Korea. Teachers are recruited in a highly competitive and targeted manner. Furthermore, in order to ensure consistency across the sector, the South Korean government has established an accreditation system for teacher training programs. As part of this scheme, all programs are expected to adhere to national curriculum guidelines, and program assessments are conducted on a regular basis and are related to program support. As a result, being a teacher in South Korea is a very focused and rewarding career because it is an education-obsessed country. South Korean secondary teachers' yearly salary, on average, amounts to \$56,000, which is higher than the US and OECD averages. Furthermore, as explained by Choi (2018), tapping into high-education life does have an impact on Korean society in general.

Then, in designing down, according to So and Kang (2014), Korean education has demonstrated excellent academic success, so much so that

many Western countries use Korea's outcomes as a benchmark, making it highly meritocratic and competitive. Moreover, South Korea is trying to design the curriculum with the consistency of changes in Korean society, including integrating technical and engineering factors into the curriculums. Furthermore, another reason why South Korean education has become a global benchmark is also a result of parents' willingness to make sacrifices for their children, teachers' sense of responsibility and dignity as nation builders, and student acceptance as a Confucian willingness to accept parents' and teachers' academic needs. This, as stated by Han et al. (2018), can also be found in the educational process in South Korea, as their educational tools use historical references a lot for moral lessons in the education program. Not only does history play a key role, but environmental education also plays a vital role in the South Korean curriculum. Seo, Ryu, and Hwang (2020) have explained that the South Korean curriculum with environmental education aspects nurtures 'critical-thinking ability', 'creativity', and 'problem-solving ability'; the personality-oriented domain includes 'autonomy', 'ability to reflect', and 'environmental sensitivity', and the relationship-oriented domain includes 'communication ability' and 'ability to manage conflicts'.

With these features, the South Korean curriculum undoubtedly helps its education grow well-maintained and competitive manpower. Further, education in South Korea also contributes to the growth of democracy in the country through the curriculum design that aiming Korea's vision through healthy, independent, creative, and an excellent moral possessed by a student (or person). It means the South Korean government is paying attention to social changes, innovation, and heritage in terms of designing the curriculum to help achieve the government's target of managing the country's human resources.

Moreover, the South Korean education sector is still thriving despite the COVID-19 pandemic. At the latest PISA (2018), South Korea successfully maintains a relatively high ranking compared to Indonesia and the rest of the OECD countries. In all aspects of reading, math, and science skills, South Korea scores above the OECD average. Even when entering the pandemic, South Korea's Minister of Education (MoE) actively innovates and pushes limits to ensure South Korea's human development processes remain intact. Some innovations for handling education during the pandemic based on South Korea's MoE (2020) are strict in-school infection control measures, the development of a low-density classroom model with all the digital support, and close monitoring of people with symptoms.

The MoE (2020) has also stated that they are innovating to prepare the South Korean national education model founded by an educational curriculum that emphasizes values like socio-culture and global village society, a green school model for sustaining education in the future, such as smart school and less

polluted school, technology and digital support in all schools, public accountability of school and education, such as scholarship, prevention plan, and inclusivity, a vocational skill that prepared children for lifelong skills, proportions of students to teacher, and student and teacher career path. All the innovations will be gradually conducted through a series of plans, such as the Fourth Lifelong Education Framework (2018-2022), consisting aforementioned values, which are compressed into People, Participation, Prosperity, and Partnership.

Therefore, the curriculum remains the center of the plan for post-COVID-19 pandemic South Korean national education. Further, despite the pandemic, South Korea's national education, as stated by the MoE (2020), is clearly visionary. The preschool curriculum was then altered in 2019 to stress "learning by playing," while the high school curriculum was modified in 2015 to educate future leaders with critical abilities needed to navigate modern life, notably humanistic imagination, scientific inventiveness, and practical skills. For instance, at the high school level, the Ministry of Education provides a flexible student-customized curriculum that includes a mix of optional and mandatory courses based on local settings and school-specific situations. In Indonesia, for example, as a comparison, the South Korean high-school curriculum recently started to be replicated in Indonesian tertiary education in 2021 with the jargon *Merdeka Belajar-Kampus Merdeka* (Independent Study-Independent Campus).

In high expectations, South Korean education is a highly demanding education system if compared to OECD and Asian countries. As mentioned before, the excessive-high expectations result in even high-ranking benchmarks of an Asian education system coming from South Korea. As a result of the program being as detailed as prescribed, the student becomes a high-achiever and ambitious; yet, this also results in student unhappiness and depression. This high expectation is a dual-sided phenomenon that generates competitiveness and a workforce with a quality work ethic from early life while also heightening the stress levels among South Korean students.

Finally, expanded opportunities, as mentioned before, emphasize that teachers must work hard to create more opportunities for all students. As argued earlier, South Korean teachers accept themselves with a teacher's sense of responsibility and dignity as nation builders. However, at the same time, Lee et al. (2019) have stated that teachers are also traditionally highly institutionalized; thus, expanding teachers' innovation, skills, and careers for the benefit of their students might be a challenge for South Korea. Not only that, but another challenge for South Korean education is also in improving the quality of education among immigrant students. As echoed by Park and Cho (2021), emergency actions should be taken in order to help tackle this unspoken issue. Jin and Kim (2021) have explained that the South Korean government needs to be cautious since educational competitiveness

has changed gradually over time; factors like research productivity and journal publications are important yet cannot describe the whole truth of education big picture.

To portray the Indonesian education landscape, it is started by analyzing the clarity of focus in Indonesia's OBE process. In order to be able to properly assist students in their studies, Indonesia needs high-quality teachers. However, numerous concerning problems make the country's education sector suffer from a relatively lower quality of teachers compared to its neighboring counterparts. First, there is a lower threshold for becoming a teacher in Indonesia. In 2017, over 60% of the total 2,78 million teachers in Indonesia had not attained a four-year bachelor's degree qualification (Mukminin et al., 2017). This situation was caused by a lack of incentive for Indonesian teachers to pursue higher education, as the level of education does not necessarily increase a teacher's salary. This closely relates to the second point that Indonesian teachers are heavily underpaid. There are various reasons Indonesian teachers pursue their profession, but it is conceded that salary is not the main motive in pursuing a career as a teacher in the country. In 2021, the yearly salary for public school teachers in the lowest category only reached around \$1.289 to \$1.930 without bonuses. To put it in context, that is over 20 times lower than a teacher's salary in South Korea and many others in the same year. Meanwhile, honorary teachers are paid even lower than minimum wage. The lack of financial incentives to improve the quality of teachers in Indonesia can be attributed to ineffective public spending in the Indonesian education sector. Thus, insufficient funding for education serves as a stumbling block in encouraging teachers to provide quality learning experiences and hinders students from fulfilling the desired learning outcomes. This problem is further exacerbated in remote learning, where teachers get extra workloads as they are burdened with adapting to education technologies while they remain underpaid.

Secondly, in designing down, some Indonesian higher education institutions have started explicitly streamlining OBE as a foundation in guiding their curriculum planning and learning practices since 2018. The shift of framework is relatively new if compared with other countries. The Ministry of Research, Technology, and Higher Education (*Kemristekdikti*), which was established in 2014, spearheaded the socialization and training related to OBE, but the higher education affairs were reassigned back to the jurisdiction of the Ministry of Education and Culture (*Kemdikbud*), an institution equivalent to MoNE in 2019. In addition to these institutional reforms, the new Minister of Education and Culture (2020) has announced a new policy of "Independent Campus" (*Kampus Merdeka*) in 2020, in which elements focus less on learning outcomes but more on learning opportunities. This, too, are yet to be effectively implemented by most Indonesian tertiary education institutions due to the lack of detailed and

standardized guideline, much so as the pandemic presented challenges in organizing seminars and workshops. As a result, the trend towards planning a detailed curriculum to support the OBE program at the higher education level has diverged, as attention and resources are being reallocated to support the Independent Campus initiative. Institutional reform and policy shifts cause the curriculum planning process to be subpar from OBE's expectations in universities, much less in lower education levels where exploration of OBE principles is practically absent.

Thirdly, Indonesia's education sector hardly fulfills the high expectations parameter. Throughout 2020, *Kemdikbud* repealed the National Standardized School Examination (*Ujian Sekolah Berstandar Nasional*) and National Examination (*Ujian Nasional*), which initially intended to serve as means to measure learning outcomes in primary and secondary education. The decision was meant to relieve teachers from administrative tasks as well as to turn the learning environment to be less stressful. These changes are integrated with the "Independent Learning" (*Merdeka Belajar*) policy, an equivalent of Independent Campus at primary and secondary schools. This further serves as evidence that the new education policies are being promoted at the expense of outcome-oriented programs. Furthermore, the school closures trigger a more substantial curriculum shift with the introduction of an emergency curriculum to accommodate remote learning. *Kemdikbud* (2020) has published the emergency curriculum on August 2020, which consists of fewer demands for basic competency (*kompetensi dasar*) for each subject so teachers and students may focus on essential competency (*kompetensi esensial*) and pre-requirement competency (*kompetensi prasyarat*) in order for students to proceed to the next grade. This implies that learning expectations in Indonesia during the pandemic are even lower. Though reasonable, these low expectations may result in considerable learning loss among a vast number of affected students. Even so, the implementation of the "Independent Learning" principles and guidelines during COVID-19 remains far from optimal due to varying shortcomings (Ilmi, Darma, & Azis, 2020; Atmojo & Nugroho, 2020). The implementation of distance learning in Indonesia still requires adjustments in accordance with the abilities of teachers, students, and parents to minimize the potential challenges that may hinder students from experiencing the benefits of online learning (Lestari & Gunawan, 2020).

Lastly, in regard to expanded opportunities, there is still unequal access to education among Indonesian students. While academic institutions immediately shift to remote learning in an attempt to mitigate risks of learning loss, not all learners across the nation can access and reap benefits from it. In June 2020, the Ministry of Communication and Information Technology has highlighted that a concerning amount of non-Java regions are still deprived of adequate Internet access, noting that the 4G internet network

has yet to reach over 9.000 villages in Indonesia's 3T (Frontier, Outermost, and Remote) regions.

Within parts of those areas, such as in Maluku and Papua, people are charged extra, nearly two times as much, for the same internet package, thus making the digital infrastructure less accessible to many (Dube, 2020). Even though, on average, eight of ten Indonesian youths showcase the ability to utilize information and computer technologies. Data from Badan Pusat Statistik (2020) have suggested at worst, only three out of ten students from more underdeveloped regions in the country would possess similar competency. Though the government has begun to give some attention to preparing its virtual infrastructure, distance learning remains ineffectively implemented as students find difficulties to self-regulate their learning process. Teachers are not well-trained in utilizing education technology, while parents cannot always be present in supporting and assisting in carrying out the learning activities at home (Churiyah et al., 2020; Susilana, Hutagulung, & Sutisna, 2020; Robandi, 2020; Batubara, 2021; Hermanto, Rai, & Fahmi, 2021). These problems become an obstacle to the process of distance learning because learning at home requires effective communication and coordination between the students, parents, and educators (Rulandari, 2020; Pramana et al., 2021). Therefore, there is still no viable alternative to replace schooling during school closures in these rural areas (Dhawan, 2020). Meanwhile, students from more disadvantaged households and girls are highly susceptible to dropping out in order to support their households financially (Korlat et al., 2021).

Many young learners feel overwhelmed adapting to the sudden changes in their learning routine, resulting in mental health instabilities due to fear and anxiety (Indrawati, Prihadi, & Siantoro, 2020; Pajarianto et al., 2020; Susilowati & Azzasyofia, 2020; Arribathi et al., 2021). As a consequence, there are declining learning motivation and cognitive abilities among students, particularly those domiciled in rural areas (Lase, Zega, & Daeli, 2021). These physical and non-physical barriers to education, worsened by the ongoing crisis, illustrate a lack of equitable opportunities in Indonesia's education landscape, highlighting the benefits of quality education still inaccessible to many (Herliandry et al., 2020). Considering the unpredictability of the ongoing COVID-19 crisis, though there is a massive demand for face-to-face learning from both teachers and learners, the education stakeholders require continuous support from the government in order to maintain a satisfying quality of distance learning during the crisis (Murad et al., 2009; Putri et al., 2020; Simamora et al., 2020; Laili & Nashir, 2021). Yet, the government's actions remain lagging, putting generations of learners at risk of learning loss. Overall, this analysis has proven Indonesia's OBE process to lack resilience and hence vulnerable to shocks.

CONCLUSIONS

The research discusses how the COVID-19 pandemic has impacted G20 and MIKTA country members, South Korea and Indonesia's human development progress and looks into the performances of their education sectors as one of the pillars to sustain human development. Indonesia, as the largest economy in South East Asia, and South Korea, as one of the developed countries in Asia, seem to have differences or gaps in terms of the human development process. By evaluating the clarity of focus, designing down, high expectations, and expanded opportunities of the aforementioned countries' education sectors, the researchers have conducted a comparative analysis between South Korea's and Indonesia's OBE processes.

The findings suggest that South Korea's OBE is resilient and has enabled the country to sustain its human development process, as proven by its high HDI in 2020. The keys to South Korea's vital education can be attributed to highly motivated and generously paid teachers, competitive students, and accompanied with a demanding curriculum oriented at higher expectations of learning outcomes. In contrast, Indonesia struggles to maintain a resilient human development process as its frail and inconsistent education sector has been hard hit by the pandemic. Indonesia's OBE process is lagging due to significantly underpaid teachers, inconsistent policy implementations at almost all levels of education resulting from institutional reform and lack of long-term policy, less motivated students due to lower expected learning outcomes, and limited access to learning opportunities due to a wider inequality problem among regions. These factors explain why Indonesia's education sector and overall human development progress struggle to sustain itself from external shocks. Though the such crisis is unprecedented and unpredictable, a resilient education sector may help to substantially mitigate the potential learning losses caused by school closures.

Finally, the research provides several policy recommendations to improve Indonesia's education sector quality and resilience in order to effectively build its human capital. First, the government needs to establish a long-term policy roadmap to guide education practices in general. This policy could be centered on the central government's capability to set up top-down like policy, such as a curriculum with later modification to suit every region in Indonesia. The curriculum should be consistently implemented regardless of internal changes in related government institutions, such as changes in the ministerial body. Second, it is imperative for the Indonesian government to improve its public spending for education facilities and supports effectively. One extreme solution that may be suitable for this part is to let the education industry set by the market shape it or the capitalization on the education industry sector. Thus, the government can limit itself to only handling guidelines for measurement, such as curriculum, aids, or laws related

to educational advancement.

Funding for national education must not be concentrated on holding training to prepare schools and teachers to adapt to new education policies once in every few years, but it also needs to serve as incentives to encourage teachers' competitiveness and teaching quality; this is the time to give back to all teachers in Indonesia. Demotivated teachers could end up playing passive roles in learning processes, causing students, especially those requiring additional attention, to study in unsupportive learning environments and experience learning losses. Even if they do not, a nation that glorifies teachers as 'unsung heroes' should do better in appreciating them monetarily.

Last but not least, the Indonesian government needs to address its long-standing wider problem of regional disparities. The research has identified many physical and nonphysical barriers to education that increased the risks of learning losses and dropouts among less advantaged students. It needs better management of education bureaucracy at all levels across Indonesia. While the recent Independent Study initiative aims to address the regional disparities through the promotion of interinstitutional student exchanges and activities, it is imperative for the government to commit to its long-term work plan for the policy to succeed instead of shifting focus every time a new Minister takes the seat. If these issues remain unattended, Indonesia's human development progress will continue to be in limbo for a long time, making it difficult to reap the benefits of its demographic bonus and catch up with South Korea and other middle powers.

The findings reinforce previous studies on the Indonesian education sector. The implication of the research suggests that policymakers can consider the lessons learned from other middle powers in effectively managing its education sector. However, it is conceded that some data analyzed in the research are derived from secondary sources. As the research is conducted and completed in parallel with the pandemic, initiating rigorous primary data collection with movement restrictions is presented to be challenging. It is hoped that the research can serve as a building block for more comprehensive future research on the theme as the crisis gradually recovers.

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