

Measuring the Development of Islamic Education in Indonesia

Budhi Fatanza Wiratama, Zasya Safitri

Badan Pusat Statistik (BPS) Kabupaten Barito Kuala, Indonesia

Badan Pusat Statistik (BPS) Kota Tomohon, Indonesia

Corresponding E-mail: fatanzawiratama@gmail.com

Abstract

Islam holds an important position in various human development processes in Indonesia, one of them is in the education sector. The Indonesian government through the Ministry of Religious Affairs established madrasas and Islamic Higher Education as an Islamic-based formal educational institution. Through logic and science, education is the way for humans to develop equally regardless of their gender. Herein lies the role of Islamic-based education to uphold this anti-discrimination principle. This research aims to conduct a composite index, namely the Islamic Education Development Index (IEDI) to describe the condition of Islamic education development at the provincial level in Indonesia. In addition, statistical modeling is carried out to see the influence of Islamic education on the Gender Development Index (GDI). The IEDI is a composite index consisting of five indicators including infrastructure accessibility, teaching competence, institutional ranking, outcomes, and quality of the learning process. Based on the research results, the average IEDI score of provinces in Indonesia is 45.13 for the period 2019. The best IEDI score by province is Yogyakarta, reaching a score of 55.00, and the lowest is North Kalimantan, which is only 35.90. Based on modeling results, it was also found that the IEDI has a significant effect on increasing the GDI at the confidence interval (CI) up to 95 percent. Governments can begin to pay more attention to Islamic-based education to optimize this influence.

Keywords: *Islamic education, IEDI, gender*

Introduction

Indonesia is the country with the largest Muslim population in the world. In 2009, at least 12.9 percent of the world's Muslim population came from Indonesia. (Pew Research Center, 2009). According to Indonesia's 2010 Population Census, the number reached more than 207 million people or 87.18 percent of the total population of Indonesia at that time (Na'im & Syaputra, 2011). This large number means Islam holds an important position in various human development processes in Indonesia, one of them is in the education sector.

The Indonesian government through the Ministry of Religious Affairs established the Madrasa (Madrasah; مدرسة) as an Islamic-based formal educational institution. Based on the regulation of the minister, Peraturan Menteri Agama Republik Indonesia No. 90 Tahun 2013, about the Implementation of Madrasa Education, the level of this educational institution consists of: *Raudhatul Athfal* (early age equivalent to kindergarten), *Madrasah Ibtidaiyah* (basic education equivalent to Elementary School), *Madrasah Tsanawiyah* (secondary education equivalent to junior high school), and *Madrasah Aliyah* (senior high school equivalent of secondary education). Although Islamic-based, the curriculum used by madrasas includes general science that is integrated with the national education system. This gives a greater opportunity for madrasas to be the right choice as, according to Manshruddin et al. (2019), character-based education is very relevant amid the moral crisis facing Indonesia. At the level of higher education, Islamic Higher Education should also implement the integration of science and religion (Ali, 2020).

Strategies to consider for the Islamic education system in the face of globalization include: establishing a true Islamic education paradigm; a form of spiritual education; and improving the quality of teaching staff (Hisbullah, 2020). Islamic education places great emphasis on reflection (Hamidi et al., 2010). People will give more meaning to every action, and understand the consequences that will be accepted in the future, to produce good deeds and build the people. Islamic education is also a process of total human formation without distinguishing gender (Nur, 2019). This is explicitly explained in the Quran (An-Nahl: 97), that human capacity is not differentiated between men and women, for each will receive an award from God according to their level of devotion. This should be more concretely taught in Islamic education based on the Quran. It is important to pay attention to gender equality because it empirically has been proven to improve social welfare in Asia and Africa, as a region with many Muslim-majority countries (Girón & Kazemikhasragh, 2021)

Education in general is the main key to the realization of gender equality in society because it is not only transforming the norms of society into knowledge, but is also a tool to study and convey new ideas and values in society like gender equality (Solichin, 2006). Through logic and science, education is the way for humans to develop equally regardless of their gender. Some studies show education has an influence on the situation of gender equality. According to research conducted by Okenwa-Emgwa and von Strauss (2018), higher education in Sweden positively contributes to the gender equality discourse. Herein lies the role of Islamic-based education to uphold this anti-discrimination principle. Contrary to popular belief, Islamic schools in Sub-Saharan Africa educate many girls and sometimes have better gender parity than other formal institutions (d'Aiglepiepierre & Bauer, 2018).

Religious life is increasingly vibrant and practiced through Islamic-based education, playing a strategic role in the improvement of human resources (Alawiyah, 2014). The large proportion of Muslims in Indonesia should make Islamic education get more attention by the government. This research has the aim of conducting a composite index, namely the Islamic Education Development Index (IEDI), to describe the condition of Islamic education development at the provincial level in Indonesia. In addition, statistical modeling is carried out to see the influence of Islamic education on gender equality. The gender equality indicator used in this study is the Gender Development Index (GDI) because it describes the comparison of development between men and women in general. Research on the role of Islamic education in gender development is still limited, so this research will bring novelty in looking at gender development from the point of view of the developmental role of Islamic education especially in developing countries context.

Methodology

The Scope of Research

This study conducted to compute the Islamic Education Development Index for 34 provinces in Indonesia. The calculation of this index is limited to the period of 2019, considering normal conditions were more stable before the COVID-19 pandemic. All indicators and variables used in this index are Islamic education data in the 2019 period. All the used data are official statistics that are available in the Planning Statistics Book by the Planning Bureau of the Secretariat General of the Ministry of Religion (2019) and Ministry of Education and Culture. In further modeling, the study used the Gender Development Index (GDI) data that describe the equality of the Human Development Index (HDI) in men and women, published by the BPS-Statistics (Ministry of Women's Empowerment and Child Protection, 2020).

Composite Index

The Islamic Education Development Index (IEDI) is a composite index used to describe the development of Islamic education in the formal realm in Indonesia. This index consists of five indicators including infrastructure accessibility, teaching competence, institutional ranking, outcomes, and quality of the learning process. Each indicator consists of variables representing various levels of Islamic-based formal education such as *Raudhatul Falah* (RA), *Madrasah Ibtidaiyah* (MI), *Madrasah Tsanawiyah* (MTs), *Madrasah Aliyah* (MA), *Perguruan Tinggi Keagamaan Islam* (PTKI) as Islamic Higher Education, and also *Pendidikan Agama Islam* (PAI) as Islamic religious education learning in general schools. Here are the details of variables and indicators sourced from the Ministry of Religious Affairs and Ministry of Education and Culture (National Exam score) in 2019.

Table 1. Variables and Indicators of the Islamic Education Development Index

Indicators	Variables	References
Infrastructure Accessibility	RA ratio per 100 thousand Muslim population	(Hisbullah, 2020; Mehta & Siddiqi, 2009)
	MI ratio per 100 thousand Muslim population	
	MTs ratio per 100 thousand Muslim population	
	MA ratio per 100 thousand Muslim population	
	PTKI ratio per 100 thousand Muslim population	
Teacher Competence	Proportion of certified teachers in RA	(Hisbullah, 2020)
	Proportion of certified teachers in MI	
	Proportion of certified teachers in MTs	
	Proportion of certified teachers in MA	
	Proportion of certified lecturer in PTKI	
Institutional Ranking	Proportion of certified PAI teachers	(Planning Bureau of the Secretariat General of the Ministry of Religion, 2019)
	Proportion of accredited RA at least B	
	Proportion of accredited MI at least B	
	Proportion of accredited MTs at least B	
	Proportion of accredited MA at least B	
Outcomes	Proportion of accredited PTKI at least B	(Mehta & Siddiqi, 2009)
	Average National Exam scores of MTs students	
Learning Process Quality	Average National Exam scores of MA students	(Mehta & Siddiqi, 2009)
	Ratio of teachers to students in RA	
	Ratio of teachers to students in MI	

Ratio of teachers to students in MTs	(Hisbullah, 2020;
Ratio of teachers to students in MA	Mehta & Siddiqi,
Ratio of lecturers to students in PTKI	2009)
Ratio of PAI teachers to Muslim students in general school	

The process of compiling the index includes normalization, weighting, aggregation, and uncertainty and sensitivity testing. The main purpose of normalization is to render the variables comparable (OECD, 2008). In this research, the methodology used in normalization is customized max-min. The minimum value used is 0 as the absolute minimum value, while the maximum value is determined based on several methodologies. Indicators of *Teaching Competence*, *Institutional Ranking*, and *Outcomes*, use a maximum value threshold (100). Then the data drive method is used on the Infrastructure Accessibility indicator, specified by counting maximum value on the data plus twice of the standard deviation value. The *Learning Process Quality* indicator uses the maximum value in the form of an ideal target teacher-student ratio decided by the government in several policies: Government Regulation (PP) No. 74 of 2008; Regulation of the Minister of Education and Culture (Permendikbud) No. 137 of 2014; and the National Accreditation of Higher Education (BAN-PT) Institution Accreditation Instrument. The normalization process can be described in this following equation:

$$X_{qij} = \frac{x_{qij} - \min_{ij}}{\max_{ij} - \min_{ij}} * 100 \quad (1)$$

Where x_{qi} is the original value of the province q on the variable i and indicator j . Where \min_{ij} and \max_{ij} are the customized maximum and minimum for variables i and indicators j . Based on this normalization, the IEDI score will be in the range of 0 for the worst condition to 100 for the best condition.

The next step, which is also an important stage, is the weighting. But there is no standard provision in choosing a weighting method for indexing and it can be tailored to the judgment and research objectives (Sahminan et al., 2018). In this research, the weighting process is carried out in two stages: indicator weighting and variable weighting. In the variable weighting in each indicator, equal weighting is applied because all levels of education have an equally important role in supporting the implementation of Islamic education. In any case, equal weighting does not mean no weights, but implicitly implies that the weights are equal (OECD, 2008).

The indicator weighting stage uses the Principal Component Analysis (PCA) method. This method calculates weight based on the results of the main

components that represent the biggest variability of the data (Senna et al., 2019). The use of data driven PCA is acceptable for its application to social variables to form an indicator with a simple weighted average (Abeyasekera, 2005). The use of PCA in this study aims to provide an appropriate portion of indicators based on correlation and their contribution in providing variations in data. Thus, as the aggregation, the IEDI score can be annotated as follows:

$$IEDI_q = \sum_1^5 w_j \frac{\sum_1^I X_{qij}}{I} \quad (2)$$

After obtaining the final index score, sensitivity and uncertainty analysis needs to be done to assess the strength of the indicators and components used in conducting the index (OECD, 2008). This analysis is done by forming other methodological scenarios for index preparation, such as eliminating certain indicators, or using different normalization, weighting and aggregation methods. Furthermore, the results of the index calculation using these scenarios then can be visualized in a diagram to capture the patterns that occur (Wiratama & Nasida, 2021).

Research Design

This study used a quantitative approach with secondary data, it utilized descriptive analysis and statistical inference analysis to answer the objectives. After compiling the Islamic Education Development Index (IEDI), modeling is carried out using simple linear regression to determine the relationship of Islamic education on gender equality in Indonesia. The use of the linear regression model aims to determine the association between the variables (Bangdiwala, 2018). The models used in this study are as follows:

$$GDI_i = \beta_0 + \beta_1 IEDI_i + e_i \quad (3)$$

Where GDI_i is the gender development index for the province i , and $IEDI_i$ is the Islamic Education Development Index conducted in part of this study before with e_i as errors. The greater value of β_1 from the resulting model will give an indication that the association between IEDI and GDI is stronger (Bangdiwala, 2018). To produce a valid and optimal linear regression model, it is necessary to test the fundamental assumptions that must be fulfilled: linearity, homoskedasticity, residual normality, and independence between variables for multiple linear regression with more than one independent variable (Marill, 2008). The study

conducted a formal and informal testing of classical assumptions of regression. Informal testing is done using graphs, while formal tests are conducted through statistical testing that is explained in the next section.

Results and Discussion

Islamic Education Development Index

Based on the calculation of the IEDI that has been done, the average score of provinces in Indonesia is 45.13 for the period 2019. This score is the result of aggregation of the scores in each index using weighting that was obtained through the PCA method in R Studio. Using one principal component capable of explaining up to 50 percent of data variations, the weighting of indicators in the IEDI is shown in Table 2 below. The results of this weighting show the size of the contribution of each indicator to the IEDI that is calculated based on the data pattern itself.

Table 2. *Indicator Weighting of IEDI*

No.	Indicators	Weights
1	Infrastructure Accessibility	0.20
2	Teacher Competence	0.22
3	Institutional Ranking	0.25
4	Outcomes	0.22
5	Learning Process Quality	0.11

The average provincial score on each indicator is shown in Figure 1. The highest score is in the Learning Process Quality indicator which reached 86.67. This shows that the quality of the learning process in Islamic education classes is quite good on average. For further analysis, calculation of the ratio of students and teachers in madrasas is carried out for the national level in general, and indeed showed good enough results, which were 1:13 for RA, 1:15 for MI, 1:13 for MTS, and 1:12 for MA. For example, at the MI as a basic education level, this figure is far below the ideal limit of one person's ratio to teach a maximum of 32 students in one class according to the Ministry of Education and Culture (2013). On the overall data of PTKI as the higher education level, a lecturer covers as many as 38 students. Although it has not met the ideal target of 20–30 students as stated by the BAN-PT Institution Accreditation Instrument, this is also far enough from the maximum limit of 60 students.

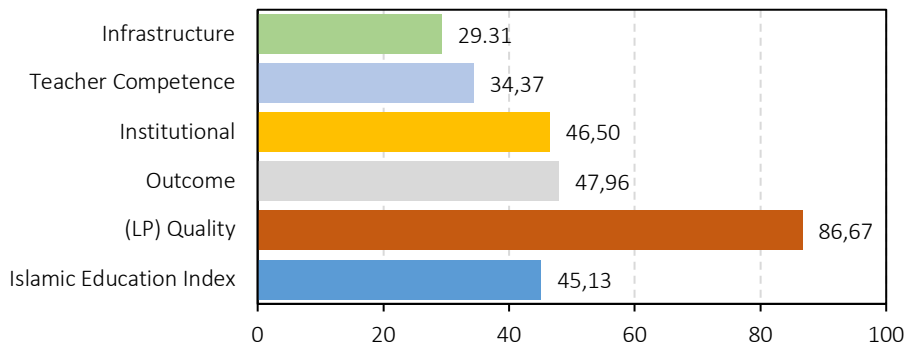


Figure 1. Provincial Average IEDI Score in Indonesia

The only variable that is still quite lacking in this indicator is the presence of PAI teachers, with a national ratio of 1:670. This is in line with the Ministry of Religious Affairs' estimate that Indonesia still lacks about 74 thousand PAI teachers (Mujib, 2018). Meanwhile, the Infrastructure Accessibility indicator got the lowest score, reaching only 29.31. The score on the indicators seen based on the ratio of madrasas and PTKI to the Muslim population is indeed not too high because most of the Muslim population is more likely to attend public schools. Research conducted by Sofanudin (2012) in Central Java shows that there is a perception that public schools are more promising for better achievement. Madrasas are considered inferior in quality when compared to public schools.

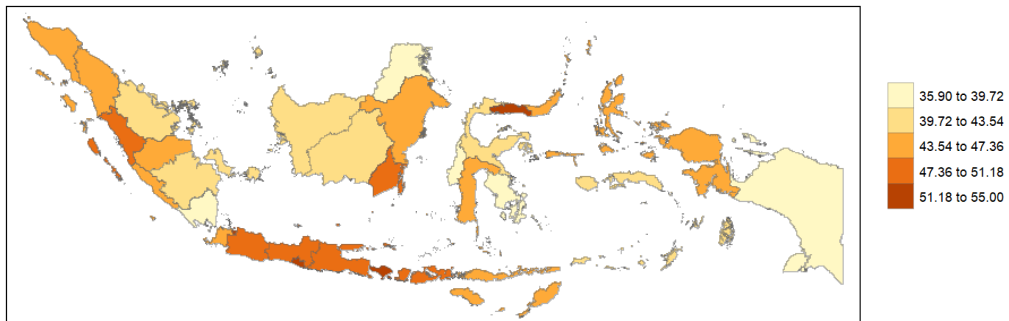


Figure 2. Provincial Average IEDI Score in Indonesia

The best IEDI score by province in 2019 is the Special Region (DI) of Yogyakarta, reaching a score of 55.00. With a proportion of Muslims of 92.74 percent, Yogyakarta outperformed provinces with more dominant Muslims such as Aceh (99.03 percent), Gorontalo (97.08) or West Sumatra (97.65). This cannot be separated from the good education development in Yogyakarta. As an area known

as the *Kota Pelajar* (City of Students), Yogyakarta has the highest expected years of schooling in Indonesia, reaching 15.58 years or up to diploma-3 level (Badan Pusat Statistik, 2020). At the second and third highest IEDI rankings were Bali province and DKI Jakarta. Apparently, the small proportion of the Muslim population in Bali actually makes the quality of learning process run well, which can be reviewed with a sufficient student-teacher ratio in madrasas and PTKI in Bali province. Infrastructure accessibility is also quite good with the existence of several madrasas that are sufficient for the Muslim population that is not high in Bali. One of the provinces with the largest Islamic dominance, Gorontalo, obtained an IEDI score of 51.22 and is ranked fourth. In general, based on Figure 3, it is seen that there is no pattern to show that the IEDI scores tend to be better in areas with a dominant proportion of the Muslim population.

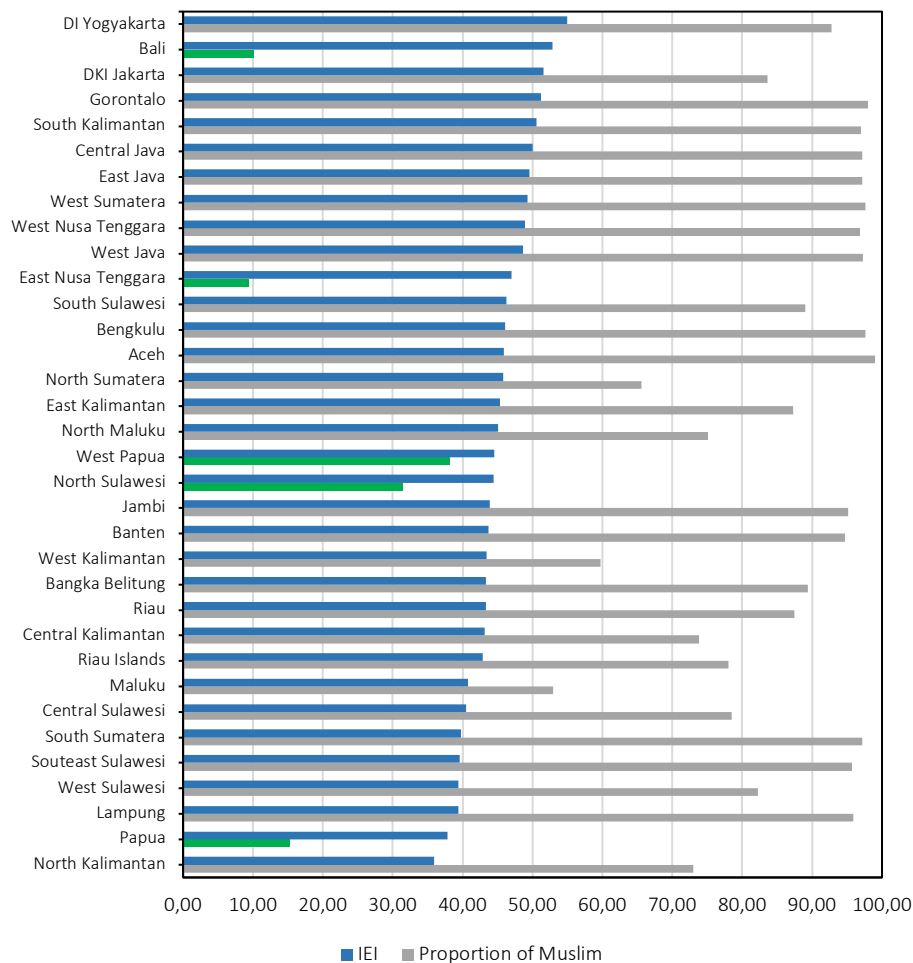


Figure 3. IEDI Score and Proportion of Muslims by Province

The province with the lowest IEDI score is North Kalimantan, with only 35.90. In fact, the proportion of the Muslim population in North Kalimantan reached more than 73 percent. One of the indicators with a low score here is the competence of teachers. The problem of having few certified teachers is indeed a polemic in North Kalimantan. Even in Bulungan Regency, where the provincial capital is located, according to the local PAI Teachers Association, there are many madrasa teachers who have been civil servants and served for decades who have not obtained certification (Agung Riyanto, 2020).

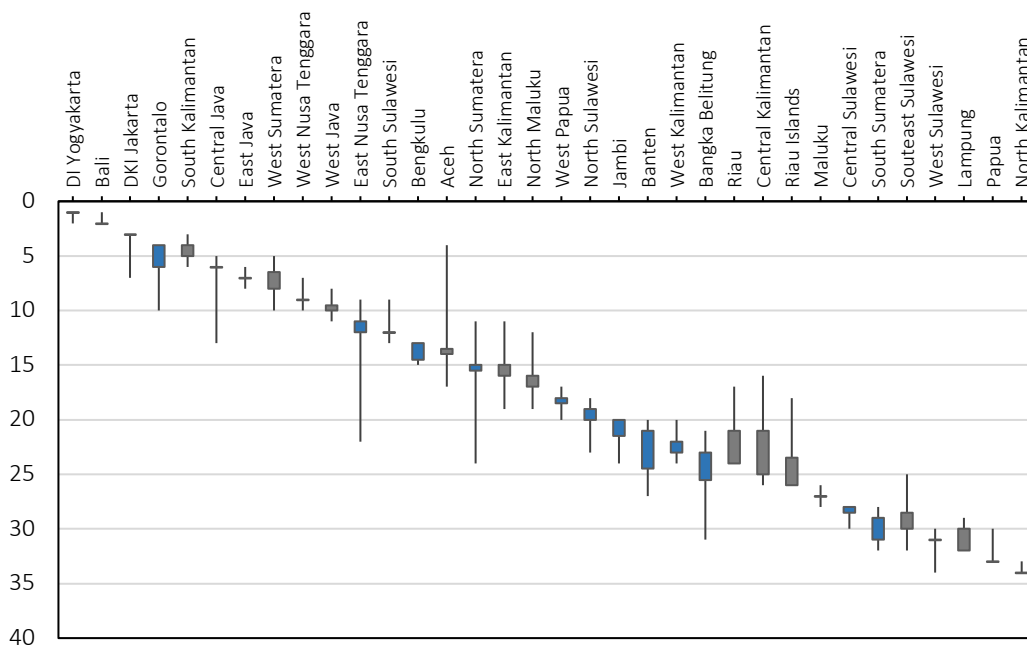


Figure 4. Ranking Distribution of IEDI Scores Using Synthetic Scenarios

On the index that has been created, uncertainty and sensitivity analysis is carried out using charts to check the robustness of this new index. Synthetic scenarios examined up to five methodologically arranged changes, including: (1) Excluding indicator with the lowest balance, namely the Quality of the Learning Process; (2) Change of normalization methodology to min-max; (3) Change of normalization methodology to standardization (Z); (4) Change of weighting methodology to Equal Weighting, as well as; (5) Change of the aggregation methodology to Geometrical Aggregation. In general, the pattern of changes in provincial rankings based on the various scenarios used can be shown in Figure 4. which is sorted based on the original ranking of the IEDI in 2019 starting from Yogyakarta to North Kalimantan. At least the original ranking and median ranking of the five new scenarios were unchanged in eleven provinces, including Yogyakarta and North Kalimantan.

Gender Development Modelling

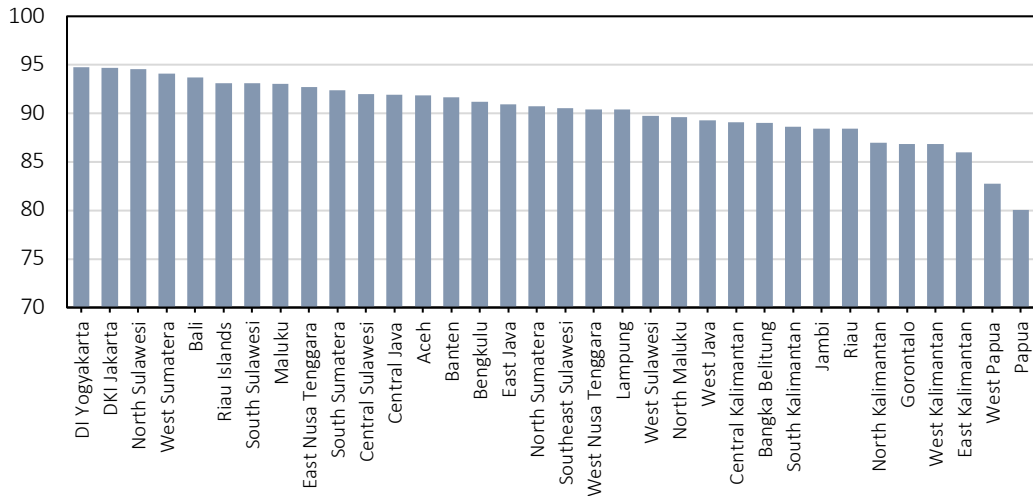


Figure 5. Gender Development Index Scores of Provinces

As stated in the previous section, this study also builds a statistical model to determine the influence of the IEDI on gender equality. Gender equality discussed in this study is reflected through the achievement of the Gender Development Index (GDI). Yogyakarta, which is the province with the highest IEDI, also has the highest GDI score in Indonesia reaching 94.77. On the other hand Papua which has the lowest GDI with a score of 80.05 is the second lowest IEDI after North Kalimantan. Descriptively, this shows the consistency of conditions between the GDI and IEDI, which supports further modeling. The estimated results of a simple linear regression model using ordinary least square are shown in Table 3.

Table 3. Linear Regression Modelling Result

Y = GDI	Estimate	Std Error	t Value	Prob (> t)	
(Intercept)	78.1055	5.3787	14.521	1.23e-15	***
IEDI	0.2696	0.1186	2.274	0.0298	*
Significance: '***' 0.001; '**' 0.01; '*' 0.05; '.' 0.1; ' ' 1					
F-statistic				5.17 on 1 and 32 DF	
p-value				0.02983	
Multiple R-squared				0.1391	
Adjusted R-squared				0.1122	

Based on modeling results, it was found that the IEDI has a significant value on increasing GDI at the confidence interval (CI) up to 95 percent. For every 1-point increase in IEDI, it is estimated that there will be an increase of 0.269 GDI points. This indicates that the development of Islamic education can help improve gender equality by minimizing development inequality between males and females. Islamic education is a system that provides equal space between men and women, so both are expected to contribute actively and equally in various areas of life, both at the private and public levels (Mujib, 2010). That way, the quality of life for men and women can be awakened.

The model in the study has a small coefficient of determination (adjusted R-Square) which is only 0.1122. That is, the independent variable used in this study was only able to explain 11.12 percent of the variation in GDI values. The use of a single independent variable in a simple linear regression model can lead to a small determinacy coefficient value, because basically, gender equality is also influenced by various factors that have not been covered in this study. One of them was shown in the study by Beer (2009), where the results of the study showed that countries with greater stocks of democracy and longer experience of women's suffrage had better conditions of gender equality in several areas including economics and health.

Conclusion

This study managed to calculate the Islamic Education Development Index for all provinces in Indonesia with an average of 45.13 in 2019. The highest score is in the Learning Process Quality indicator which reached 86.67. Meanwhile, the Infrastructure Accessibility indicator got the lowest score, reaching only 29.31. The best IEDI score by province in 2019 is Yogyakarta, reaching a score of 55.00, and the lowest one is North Kalimantan, which is only 35.90. IEDI scores of the provinces vary widely, which shows that the development of Islamic education has not been evenly distributed even in Indonesia as a Muslim-majority country. On the index that has been created, uncertainty and sensitivity analysis is carried out using charts to check the robustness of this new index. At least the original ranking and median ranking of the five new scenarios were unchanged in 11 provinces, including Yogyakarta and North Kalimantan. Furthermore, this study found that the IEDI had a significant effect on increasing the GDI at the confident interval by 95 percent. This indicates that the quality of Islamic education can help improve gender equality by minimizing inequality in human development by gender. Governments can begin to pay more attention to Islamic-based education to optimize this influence. The policies and treatment provided can be done by reviewing Muslim-

majority areas with low IEDI achievements. It can also be a way to promote madrasas and PTKI as formal Islamic-based education. For researchers, the results of this study are very interesting and can be further developed, especially to see the association of Islamic education development with the development of gender equality. It is also possible to develop another scenario in forming this index by adding more indicators or perfect the methodology.

References

- Abeyasekera, S. (2005). *Multivariate methods for index construction*. In *Household Surveys in Developing and Transition Countries: Design, Implementation and Analysis: Vol. Series F No. 96* (pp. 367–387). United Nations.
- Agung Riyanto. (2020, September 17). Sertifikasi guru madrasah masih minim. <https://korankaltara.com/sertifikasi-guru-madrasah-masih-minim/>
- Alawiyah, F. (2014). Islamic School Education in Indonesia. *Aspirasi: Jurnal Masalah-Masalah Sosial*, 5(1), 51–58. <https://doi.org/https://doi.org/10.46807/aspirasi.v5i1.449>
- Ali, N. (2020). Integrating science and religion in the curriculum of Indonesian Islamic Higher Education: A case study of UIN Malang. *International Journal of Innovation, Creativity and Change*, 13(9), 948–960.
- Badan Pusat Statistik. (2020). Indeks Pembangunan Manusia 2019. <https://www.bps.go.id/publication/download.html?nrbfvefe=YTE4MGZiZjk2OGVjZjZmYzlmZGUxZDZh&xzmn=aHR0cHM6Ly93d3cuYnBzLmdvLmlkL3B1YmxpY2F0aW9uLzlwMjAvMDgvMjgvYTE4MGZiZjk2OGVjZjZmYzlmZGUxZDZhL2luZGVrcy1wZW1iYW5ndW5hbi1tYW51c2lhLTlwMTkuaHRtbA%3D%3D&twoadfnoarfeauf=MjAyMiOwNCOxMCAxNDoxMDowNw%3D%3D>
- Bangdiwala, S. I. (2018). Regression: Simple linear. *International Journal of Injury Control and Safety Promotion*, 25(1), 113–115. <https://doi.org/10.1080/17457300.2018.1426702>
- Beer, C. (2009). Democracy and gender equality. *Studies in Comparative International Development*, 44(3), 212–227. <https://doi.org/10.1007/s12116-009-9043-2>
- Planning Bureau of the Secretariat General of the Ministry of Religion. (2019). *Statistik perencanaan kementerian agama tahun 2019*.
- d'Aiglepierre, R., & Bauer, A. (2018). The choice of Arab-Islamic education in sub-Saharan Africa: Findings from a comparative study. *International Journal of Educational Development*, 62, 47–61. <https://doi.org/10.1016/j.ijedudev.2018.01.004>

- Girón, A., & Kazemikhasragh, A. (2021). Gender equality and economic growth in Asia and Africa: Empirical analysis of developing and least developed countries. *Journal of the Knowledge Economy*. <https://doi.org/10.1007/s13132-021-00782-1>
- Hamidi, F., Bagherzadeh, Z., & Gafarzadeh, S. (2010). *The role of Islamic education in mental health*. *Procedia - Social and Behavioral Sciences*, 5, 1991–1996. <https://doi.org/10.1016/j.sbspro.2010.07.402>
- Hisbullah. (2020). Problem and crisis of Islamic education today and in the future. *International Journal of Asian Education*, 1(1), 21–28.
- Manshruddin, Rozana, S., & Abrianto, D. (2019). Character education in modern Islamic boarding schools: A model from Indonesia. *European Journal of Social Science Studies*, 4(4), 174–183. <https://doi.org/http://dx.doi.org/10.5281/zenodo.3382110>
- Marill, K. A. (2008). Advanced statistics: Linear regression, Part I: Simple linear regression. *Academic Emergency Medicine*, 11(1), 87–93. <https://doi.org/10.1197/j.aem.2003.09.005>
- Mehta, A. C., & Siddiqi, S. A. (2009). *Educational Development Index (EDI) (Version 2)*.
- Ministry of Education and Culture. (2013). Peraturan menteri pendidikan dan kebudayaan tentang perubahan atas peraturan menteri pendidikan nasional Nomor 15 Tahun 2010 Tentang standar pelayanan minimal pendidikan dasar di Kabupaten/Kota, Pub. L. No. No. 23 of 2013.
- Ministry of Women's Empowerment and Child Protection. (2020). *Pembangunan manusia berbasis gender 2020*.
- Mujib. (2018, March 15). *Indonesia kekurangan 74 ribu guru agama*. Kementerian Agama. <https://kemenag.go.id/read/indonesia-kekurangan-74-ribu-guru-agama-worxz>
- Mujib, S. M. (2010). Islam education and gender equality. *Muwazah*, 2(1), 173–180.
- Na'im, A., & Syaputra, H. (2011). *Kewarganegaraan, suku bangsa, agama, dan bahasa sehari-hari penduduk Indonesia*.
- Nur, I. (2019). Urgency of Islamic education based on gender equality in restoring the patriarchy culture in the woman Kokoda environment of West Papua Indonesia. *Proceedings of the 6th International Conference on Community Development (ICCD 2019)*, 258–260. <https://doi.org/10.2991/iccd-19.2019.69>
- OECD. (2008). *Handbook on constructing composite indicators (Methodology and User Guide)*. OECD Publishing.
- Okenwa-Emgwa, L., & von Strauss, E. (2018). Higher education as a platform for capacity building to address violence against women and promote gender

- equality: the Swedish example. *Public Health Reviews*, 39(1), 31. <https://doi.org/10.1186/s40985-018-0108-5>
- Peraturan Menteri Agama Republik Indonesia No. 90 Tahun 2013, Pub. L. No. 90 (2013).
- Pew Research Center. (2009). *Mapping the global Muslim population*.
- Sahminan, S., Hermansyah, O., & Rakhman, R. N. (2018). Construction of infrastructure index for Indonesia. *Studies in Economics and Finance*, 38(2), 173–188. <https://doi.org/10.1108/SEF-09-2018-0299>
- Senna, L. D. de, Maia, A. G., & Medeiros, J. D. F. de. (2019). The use of principal component analysis for the construction of the Water Poverty Index. *RBRH*, 24. <https://doi.org/10.1590/2318-0331.241920180084>
- Sofanudin, A. (2012). Model peningkatan minat masyarakat terhadap Madrasah Ibtidiyah di Jawa Tengah. *Jurnal Nadwa*, 6(1), 91–113.
- Solichin, M. M. (2006). Pendidikan agama Islam berbasis kesetaraan gender. *Tadrîs*, 1(1), 51–60.
- Wiratama, B. F., & Nasida, F. K. (2021). Kajian kerentanan ekonomi Indonesia terhadap pandemi COVID-19. *Kajian Ekonomi Dan Keuangan*, 5(2), 103–117. <https://doi.org/10.31685/kek.v5i2.679>