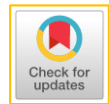


# The effect of emotional intelligence on the learning independence of students on distance learning



Desi Nori Sahputri <sup>a,1,\*</sup>, Rian Vebrianto <sup>a,2</sup>, Yovita <sup>b,2</sup>

<sup>a</sup> Universitas Islam Negeri Sultan Syarif Kasim Riau, Indonesia

<sup>b</sup> Universitas Terbuka Palangka Raya, Indonesia

<sup>1</sup> [desinorisahputri96@gmail.com](mailto:desinorisahputri96@gmail.com); <sup>2</sup> [rian.vebrianto@uin-suska.ac.id](mailto:rian.vebrianto@uin-suska.ac.id); <sup>3</sup> [yovita@ecampus.ut.ac.id](mailto:yovita@ecampus.ut.ac.id)

\* corresponding author

## ARTICLE INFO

Received 2022-01-05  
Revised 2022-06-23  
Accepted 2022-10-12

### Keywords

Independent learning  
Emotional intelligence  
Distance learning

## ABSTRACT

This research was conducted to see the effect of limited face-to-face learning on independent learning on the emotional intelligence of MIN 3 Pekanbaru students at the Pekanbaru Private Islamic Elementary School. This research was an ex post facto study with a quantitative (associative) approach. The sample used was 66 students of MIN 3 Pekanbaru and was selected by purposive sampling, then the conclusion is that the significance value of the data is  $0.200 > 0.05$  so the data is said to be normal. Furthermore, by doing a linearity test using the ANOVA table, it is known that limited face-to-face learning affects student learning independence because the significance value is  $0.000 < 0.05$ . Furthermore, by conducting a correlation test, it is known that limited face-to-face learning has a positive effect on student learning independence. With a large influence of 24.5%”

This is an open access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



## 1. Introduction

Education has a very close relationship with the learning process and learning atmosphere where students actively build and develop their skills or abilities to achieve educational goals (Aswat et al., 2021). Achieving educational goals requires a series of preparations for very effective learning and learning process. Onde, said that "teaching and learning activities are largely determined by the collaboration between teachers and students". The relationship between teacher and student requires basic emotions for a good relationship to be established. Children who have good emotional intelligence are children who can manage their emotions wisely. He can solve his problems well, is careful in making decisions, and can control his emotions to be directed to positive activities (Susilowati, 2021). Salovey & Mayer as is quoted Guntersdorfer & Golubeva, wrote the definition of emotional intelligence as, "the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions." This indicates that emotional intelligence is a regulator and supervisor in guiding thoughts and behavior in the five basic abilities, namely self-esteem, self-regulation, motivation, empathy, and social skills. Thus, emotional intelligence is always related to one's thoughts and behavior towards others (Guntersdorfer & Golubeva, 2018). During the implementation of the distance learning system during this pandemic, many obstacles arose during its implementation, such as, students became less focused on learning because there were disturbances in other activities carried out by the people around them, limited time for teacher and student meetings, there were subjects that cannot be done online such as sports lessons, dance, music, theater, etc., network limitations where the connection is not always stable so that it can hinder online learning, limited supporting technology facilities such as cellphones or laptops which not all students have it, and it is difficult to manage independent study time and self-discipline due to unusual learning conditions.

Based on the results of a preliminary study conducted in March 2019 on S-1 students of the 2018 Mathematics Study Program, FMIPA UNPAD, it showed that student learning independence was still low. This is indicated by the fact that there are still some indicators of learning independence that some students do not yet have. Based on observations made by researchers, it appears that some students still depend on the instructions of the lecturer in learning, in determining what material needs to be studied, still focused on obtaining grades and not on the abilities they must master and develop, and easily give up when faced with problems. the hard one. This condition cannot be ignored because it will affect student learning outcomes (Kusuma, 2020). Case studies that have been carried out based on the results of visual observations show that several learning processes by 3 randomly selected schools provide learning outcomes that are not in accordance with the lesson plan. This can not be seen by the emotional modalities of students and independent study habits that have not been emphasized as a measure of structured learning control.

## 2. Method

The type of research used is associative and the subjects are elementary and MI students in Pekanbaru City which consists of 66 students from MIN 3 Pekanbaru who were selected for *side purposes* which are to consider certain things. The researcher's consideration is to look at the mother's profession in each student with a different mother's profession. Data were obtained from a questionnaire. This questionnaire is used to see the emotional intelligence of students at MIN 3 Pekanbaru which consists of 12 statements that have been declared valid with a Sig value. (2-tailed)  $< 0.05$ . Furthermore, the value *Cronbach Alpha* from the questionnaire is 0.727. So that it can be called reliable, Morris stated that the value of Cronbach's Alpha can only be accepted if it is above or equal to 0.60 (Sulthoni, 2017). Furthermore, the data were analyzed by simple regression analysis assisted by SPSS Version 23.00. Regression analysis is useful to see the effect between the variables x (free) and y (bound).

## 3. Results and Discussion

### 3.1. Simple Regression Analysis

#### 1) Normality Test

As the name suggests normality, this test can be done to see whether the data is normal or not (Ghozali, 2016). The normality test used is Kolmogorov Smirnov. Table 2 will inform the results of the normality test. Explanation: (a) Test distribution is Normal, (b) Calculated from data; (c) Lilliefors Significance Correction; (d) This is a lower bound of the true significance. Table 1 informs that the level of Sig. (2-tailed) is 0.194. According to Singgih Santoso (2017) the data is normal if the significance value is greater than 0.05. So that the data obtained can be said to be normally distributed because  $0.200 > 0.05$ .

Table 1. Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
	N	66
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	5.97115899
Most Extreme Differences	Absolute	.059
	Positive	.048
	Negative	-.059
	Test Statistic	.059
	Asymp. Sig. (2-tailed)	.200 <sup>c,d</sup>

#### 2) Linearity Test (Regression equation)

To see an influence or relationship between the x (free) and y (bound) variables, a linearity test can be performed (R. Gunawan Sudarmanto, 2005). Linearity test using Anova Table. Table 2 will inform the results of the regression equation. Based on the Anova table it is known that the sig value is 0.000, the variable will have an effect if the significance value is less than 0.05. So the Anova table informs that emotional intelligence affects student learning independence because  $0.000 < 0.05$ . Explanation: (a) Dependent Variable: Independent Learning; (b) Predictors: (Constant), Emotional Intelligence.

**Table 2.** Regression Equation

		ANOVA <sup>a</sup>				
	<i>Model</i>	<i>Sum of Squares</i>	<i>Df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
1	Regression	752.927	1	752.927	20.792	.000b
	Residual	2317.558	64	36.212		
	Total	3070.485	65			

### 3.2. Correlation Test and Coefficient of Determination (Test of Correlation & Coefficient of Determination)

From the Anova table, it is obtained that limited face-to-face learning information affects student learning independence. However, to see how the influence or relationship of the variables x and y have a positive or negative influence, a correlation test can be carried out (Febaliza & Afdal, 2015). Tabel 3 informs the results of the correlation test.

**Table 3.** Correlation Test

Correlations		
	<i>Emotional Intelligence</i>	<i>Independent Learning</i>
Emotional Intelligence	Pearson Correlation	1
	Sig. (2-tailed)	.495**
	N	66
Independent Learning	Pearson Correlation	.495**
	Sig. (2-tailed)	.000
	N	66

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table informs that the value is Pearson correlation 0.495 with sig, (2-tailed) 0.000 which means that the two variables have a positive relationship because  $0.000 < 0.05$ . Furthermore, to see how much influence emotional intelligence has on learning independence, it can be seen in the results of the coefficient of determination in Table 4. Explanation: (a) Dependent Variable: Independent Learning; (b) Predictors: (Constant), Emotional Intelligence. To see the effect given, you can see the R square table. The value of the R square in the table is 0.245. This means that the influence given by emotional intelligence and learning independence has a percentage of 24.5%.

**Table 4.** Coefficient of Determination

Model Summary <sup>b</sup>				
<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>
1	.495 <sup>a</sup>	.245	.233	6.018

Weaknesses in the use of online learning media are still found in some schools, as stated by (Nurdin & Anhusadar, 2020) that teachers have not been able to use online learning applications by reason of the ineffectiveness of online teaching media as a result of parents of students not having laptop and smartphone devices. Even though online learning can make learning more effective and efficient without requiring space and time at the same time (Marbun, 2021). The advantages of online learning have been found by several researchers including: (Riyana, 2015) with media learning as a source of information and without a physical role, (Firman & Rahayu, 2020; Handayani, 2020) more flexible, (Darmalaksana et al., 2020; Monica & Fitriawati, 2020) more active and effective, (Munandar et al., 2020) facilitate the use of other media as well as (Anggrawan, 2019) have advantages in the modality of learners. However, online learning has an effect on the emotional intelligence of students (Aswat et al., 2021) it is necessary to increase the emotional intelligence of students. It takes several steps and techniques of learning process activities in order to increase emotional intelligence in various ways as described by (Wuwung, 2020) that strategies to stimulate emotional intelligence are needed. These efforts include (Anisah & Suntara, 2020) Debate learning method with constructivism assumption and Piaget's cognitive theory, (Syaparuddin & Elihami, 2020) using a spiritual approach and playing the role of stakeholders, parents and guardians of students, and carrying out some intrapersonal elements. Intrapersonal elements according to (Maitrianti, 2021) consists of self-awareness, self-regulation, motivation, empathy and social. Emotional Intelligence can improve students' independent learning abilities because the more creative the teacher conveys learning, the more students understand in multi-cognitive. (Diana et al., 2020; Steinmayr et al., 2021; Vandenplas et al., 2021) explained that combining online and offline learning can support students' abilities and be more interactive. Besides that, (Li, 2021) revealed that learning that utilizes a computer-based platform is able to increase interest in learning, is easy to actualize, the achievement of learning objectives and the education cycle

in the education unit. Digital-based integrated independence can increase learning independence such as: (Hadad et al., 2021) collaborative ability, and conceptual management independently, (Zhao & Guo, 2022) more communicative, (Wang, 2022) easy to do learning reflection, (Clark et al., 2022; Khulaifayah et al., 2021; Kohnke, 2022; Liu & Ren, 2022; Ningtiyas & Surjanti, 2021; Nuritha & Tsurayya, 2021; Patimah & Sumartini, 2022) more motivated to learn independently until (Liu & Ren, 2022) It is hoped that more efficient learning can be created by utilizing artificial intelligence technology.

#### 4. Conclusion

Analysis of the data obtained and has been described in the discussion, it is concluded that the significance value of the data is  $0.200 > 0.05$  so that the data is said to be normal. Furthermore, by doing a linearity test using the ANOVA table, it is known that limited face-to-face learning affects student learning independence because the significance value is  $0.000 < 0.05$ . Furthermore, by conducting a correlation test, it is known that limited face-to-face learning has a positive effect on student learning independence. With a large influence of 24.5%.

#### References

- Anggrawan, A. (2019). Analisis Deskriptif Hasil Belajar Pembelajaran Tatap Muka dan Pembelajaran Online Menurut Gaya Belajar Mahasiswa. *MATRIK : Jurnal Manajemen, Teknik Informatika Dan Rekayasa Komputer*, 18(2), 339–346. <https://doi.org/10.30812/matrik.v18i2.411>
- Anisah, A. S., & Suntara, H. (2020). Penerapan Metode Pembelajaran Debate Untuk Meningkatkan Kecerdasan Emosional Siswa. *Jurnal Pendidikan Universitas Garut*, 14(1), 138–147.
- Aswat, H., Sari, E. R., Aprilia, R., Fadli, A., & Milda, M. (2021). Implikasi Distance Learning di Masa Pandemi COVID 19 terhadap Kecerdasan Emosional Anak di Sekolah Dasar. *Jurnal Basicedu*, 5(2), 761–771. <https://doi.org/10.31004/basicedu.v5i2.803>
- Clark, R. M., Kaw, A. K., & Braga Gomes, R. (2022). Adaptive learning: Helpful to the flipped classroom in the online environment of COVID? *Computer Applications in Engineering Education*, 30(2), 517–531. <https://doi.org/10.1002/cae.22470>
- Darmalaksana, W., Hambali, R. Y. A., Masrur, A., & Muhlas. (2020). Analisis Pembelajaran Online Masa WFH Pandemic Covid-19 sebagai Tantangan Pemimpin Digital Abad 21. *Karya Tulis Ilmiah (KTI) Masa Work From Home (WFH) Covid-19 UIN Sunan Gunung Djati Bandung*, 1(1), 1–12.
- Diana, P. Z., Wirawati, D., & Rosalia, S. (2020). Blended Learning dalam Pembentukan Kemandirian Belajar. *Alinea: Jurnal Bahasa, Sastra, Dan Pengajaran*, 9(1), 16. <https://doi.org/10.35194/alinea.v9i1.763>
- Febliza, A., & Afdal, Z. (2015). *Media Pembelajaran dan Teknologi Informasi Komunikasi*. Adefa Grafika.
- Firman, F., & Rahayu, S. (2020). Pembelajaran online di tengah pandemi covid-19. *Indonesian Journal of Educational Science (IJES)*, 2(2), 81–89.
- Ghozali. (2016). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 23*. Universitas Diponegoro.
- Guntersdorfer, I., & Golubeva, I. (2018). *Emotional Intelligence and Intercultural Competence : Theoretical Questions and Pedagogical Possibilities*. September. <https://doi.org/10.29140/ice.v1n2.60>
- Hadad, S., Shamir-Inbal, T., Blau, I., & Leykin, E. (2021). Professional Development of Code and Robotics Teachers Through Small Private Online Course (SPOC): Teacher Centrality and Pedagogical Strategies for Developing Computational Thinking of Students. *Journal of Educational Computing Research*, 59(4), 763–791. <https://doi.org/10.1177/0735633120973432>
- Handayani, L. (2020). Keuntungan , Kendala, dan Solusi Pembelajaran Online Selama Pandemi Covid-19: Studi Eksploratif di SMPN 3 Bae Kudus. *Journal Industrial Engineering & Management Research (JIEMAR)*, 1(2), 15–23.
- Khulaifayah, Widiati, U., Anugerahwati, M., & Suryati, N. (2021). Autonomous Learning Activities: The Perceptions of English Language Students in Indonesia. *Pegem Egitim ve Ogretim Dergisi*, 11(3), 34–49.
- Kohnke, L. (2022). A Pedagogical Chatbot: A Supplemental Language Learning Tool. *RELC Journal*. <https://doi.org/10.1177/00336882211067054>

- Kusuma, D. A. (2020). *Dampak penerapan pembelajaran daring terhadap kemandirian belajar ( self-regulated learning ) mahasiswa pada mata kuliah geometri selama pembelajaran jarak jauh di masa pandemi covid-19*. 5(September), 169–175.
- Li, H. (2021). Improved fuzzy-assisted hierarchical neural network system for design of computer-aided English teaching system. *Computational Intelligence*, 37(3), 1199–1216. <https://doi.org/10.1111/coin.12362>
- Liu, Y., & Ren, L. (2022). The Influence of Artificial Intelligence Technology on Teaching under the Threshold of “internet+”: Based on the Application Example of an English Education Platform. *Wireless Communications and Mobile Computing*, 2022. <https://doi.org/10.1155/2022/5728569>
- Maitrianti, C. (2021). Hubungan Antara Kecerdasan Intrapersonal Dengan Kecerdasan Emosional. *Jurnal MUDARRISUNA: Media Kajian Pendidikan Agama Islam*, 11(2), 291–305.
- Marbun, P. (2021). Disain Pembelajaran Online Pada Era Dan Pasca Covid-19. *CSRID (Computer Science Research and Its Development Journal)*, 12(2), 129. <https://doi.org/10.22303/csr.12.2.2020.129-142>
- Monica, J., & Fitriawati, D. (2020). Efektivitas penggunaan aplikasi zoom sebagai media pembelajaran online pada mahasiswa saat pandemi covid-19. *Jurnal Communio: Jurnal Jurusan Ilmu ...*
- Munandar, A., Sulistiani, H., Adrian, Q. J., & Irawan, A. (2020). Penerapan Sistem Informasi Pembelajaran Online Di Smk Al-Huda Lampung Selatan. *Journal of Social Sciences and Technology for Community Service (JSSTCS)*, 1(1), 7. <https://doi.org/10.33365/jta.v1i1.668>
- Ningtiyas, P. W., & Surjanti, J. (2021). Pengaruh Motivasi Belajar dan Kemandirian Belajar Peserta Didik Terhadap Hasil Belajar Ekonomi Pada Pembelajaran Daring Dimasa Covid-19. *Edukatif: Jurnal Ilmu Pendidikan*, 3(4), 1660–1668. <https://doi.org/10.31004/edukatif.v3i4.630>
- Nurdin, N., & Anhusadar, L. (2020). Efektivitas Pembelajaran Online Pendidik PAUD di Tengah Pandemi Covid 19. In *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini* (Vol. 5, Issue 1, p. 686). scholar.archive.org. <https://doi.org/10.31004/obsesi.v5i1.699>
- Nuritha, C., & Tsurayya, A. (2021). Pengembangan Video Pembelajaran Berbantuan Geogebra untuk Meningkatkan Kemandirian Belajar Siswa. *Jurnal Cendekia: Jurnal Pendidikan Matematika*, 5(1), 48–64. <https://doi.org/10.31004/cendekia.v5i1.430>
- Patimah, E., & Sumartini, S. (2022). Kemandirian Belajar Peserta Didik Pada Pembelajaran Daring: Literature Review. *Edukatif: Jurnal Ilmu Pendidikan*, 4(1), 993–1005. <https://doi.org/10.31004/edukatif.v4i1.1970>
- R. Gunawan Sudarmanto. (2005). *Analisis Regresi Linear Berganda dengan SPSS*. Graha Ilmu.
- Riyana, C. (2015). Konsep Pembelajaran Online. In *Modul Pembelajaran Universitas Terbuka Tangerang Selatan* (pp. 1–43). pustaka.ut.ac.id.
- Singgih Santoso. (2017). *Mahir Statistik Parametrik*. PT. Elex Media Komputindo.
- Steinmayr, R., Lazarides, R., Weidinger, A. F., & Christiansen, H. (2021). Teaching and learning during the first COVID-19 school lockdown: Realization and associations with parent-perceived students' academic outcomes: A study and preliminary overview. In *Zeitschrift fur Padagogische Psychologie* (Vol. 35, Issues 2-3, pp. 85–106). <https://doi.org/10.1024/1010-0652/a000306>
- Sulthoni, I. (2017). Pengaruh Kemudahan dan Manfaat Intranet dengan Mempertimbangkan Gender terhadap Motivasi Penggunaannya di Bank BPD DIY. *Journal of Chemical Information and Modeling*, 8(9), 1–58.
- Susilowati, R. (2021). *Kecerdasan emosional anak usia dini*.
- Syaparuddin, S., & Elihami, E. (2020). Peningkatan Kecerdasan Emosional (EQ) dan Kecerdasan Spiritual (SQ) Siswa Sekolah Dasar SD Negeri 4 Bilokka sebagai Upaya Meningkatkan Kualitas Diri dalam Proses Pembelajaran PKn. In *Mahaguru: Jurnal Pendidikan Guru Sekolah Dasar* (Vol. 1, Issue 2, pp. 1–19). ummaspul.e-journal.id.
- Vandenplas, J. R., Herrington, D. G., Shrode, A. D., & Sweeder, R. D. (2021). Use of Simulations and Screencasts to Increase Student Understanding of Energy Concepts in Bonding. *Journal of Chemical Education*, 98(3), 730–744. <https://doi.org/10.1021/acs.jchemed.0c00470>

---

Wang, Z. (2022). Computer-assisted EFL writing and evaluations based on artificial intelligence: a case from a college reading and writing course. *Library Hi Tech*, 40(1), 80–97. <https://doi.org/10.1108/LHT-05-2020-0113>

Wuwung, O. C. (2020). Strategi Pembelajaran & Kecerdasan Emosional. In 2020. books.google.com.

Zhao, H., & Guo, L. (2022). Design of intelligent computer aided network teaching system based on web. *Computer-Aided Design and Applications*, 19(s1), 12–23. <https://doi.org/10.14733/CADAPS.2022.S1.12-23>