



The Correlation among Personality Traits, Reading Motivation, and Reading Achievement at Higher Education

Slamet Muhanif*, Sabarun, Abdul Syahid

State Islamic Institute of Palangka Raya, Indonesia

*Corresponding Author. E-mail: slamet.muhanif05@gmail.com

Received: 4 July 2024

Revised: 26 August 2024

Accepted: 8 September 2024

Abstrak

Membaca merupakan sebuah kemampuan dasar penting yang diperlukan dalam berbagai aspek, terutama dalam pendidikan. Kemampuan membaca dapat diukur melalui prestasi membaca dan studi-studi menunjukkan bahwa bermacam-macam faktor dan mempengaruhinya. Akan tetapi, hanya sedikit studi yang menginvestigasi hubungan antara ciri-ciri kepribadian, motivasi membaca dan prestasi membaca dalam satu penelitian, terutama di Kalimantan Tengah. Penelitian ini bertujuan untuk mengecek apakah ada hubungan antara antara ciri-ciri kepribadian, motivasi membaca dan prestasi membaca. Empat puluh Sembilan mahasiswa semester enam jurusan bahasa Inggris Institut Agama Islam Negeri Palangka Raya berpartisipasi dalam penelitian ini. Partisipan dipilih menggunakan teknik sampling acak berstrata. Penelitian ini menggunakan metode kuantitatif dengan desain regresi berganda. Peneliti mendapatkan data dengan angket dan tes. Angket yang digunakan adalah Motivation for reading questionnaire (MRQ) yang diadaptasi dari Huang & Reynolds (2022) dan Big Five Inventory 2 (BFI2) yang diadaptasi dari Soto & John (2017b), dan tes diadopsi dari TOEFL IBT Barron (2016). Data yang dikumpulkan dianalisis menggunakan regresi linear berganda pada perangkat lunak JASP. Hasil dari analisis memaparkan bahwa ciri-ciri kepribadian kenegatifan emosi dan motivasi intrinsik berkorelasi secara negative dan signifikan dengan prestasi membaca. Baik kenegatifan emosi dan motivasi intrinsik secara bersama-sama berkontribusi 15 persen terhadap varian prestasi membaca. Secara terpisah, Kenegatifan emosi merupakan prediktor yang signifikan pada prestasi membaca sedangkan motivasi intrinsik merupakan prediktor yang tidak signifikan terhadap prestasi membaca.

Kata Kunci: Korelasi, ciri-ciri kepribadian, motivasi membaca, prestasi membaca

Abstract

Reading is an essential basic skill needed in various aspects, especially in education. The reading skill can be measured using reading achievement, and studies show that numerous factors can influence it. However, only a few studies have investigated the relationship between reading and personality traits toward achievement in a single study, especially in Central Kalimantan. This study aimed to check whether there is a relationship among personality traits, reading motivation, and reading achievement. Forty-nine students in the sixth semester of the English Department of the State Islamic Institute of Palangka Raya participated in this study. The participants are taken using a stratified random sampling technique. This study used a quantitative method with a multiple regression design. The researcher obtained the data through questionnaires and a test. The questionnaires are the motivation for the reading questionnaire (MRQ) adapted from Huang & Reynolds (2022) and the Big Five Inventory 2 (BFI-2) adapted from Soto & John (2017b), and the test adopted from Barons TOEFL IBT (2016). The data was analyzed using multiple linear regression on the software JASP. The analysis revealed that negative emotionality and intrinsic motivation correlated negatively and significantly with reading achievement. Both negative emotionality and intrinsic motivation contribute 15 percent to the variance of reading achievement simultaneously. Partially, negative emotionality was a significant predictor of reading achievement even intrinsic motivation was not a significant predictor for reading achievement

Keywords: *Correlation, personality traits, reading motivation, reading achievement.*

How to cite: Muhanif, S., Sabarun, Syahid, A. (2024). Hubungan antara ciri-ciri Kepribadian, Motifasi Membaca, dan Prestasi Membaca pada Perguruan Tinggi. *Journal of Nusantara Education*, 4(1), 14-21.

Introduction

English has spread throughout the world both as a second and foreign language. Similarly, Getie (2020) stated that English has become a common language worldwide when contacting each other. It is something essential and helpful in many aspects of people's lives. Duran and Garcia (2021) then stated that English became the language used in professional, academic, social, and economic settings. It enables people from all over the world to communicate, conduct an interaction, and make a relation.

Reading is a skill that affects the development of other language skills (Sadeghi & Izadpanah, 2018). In addition, reading is an essential skill in the foreign language learning process in higher education, where students need to read more independently and critically (Rianto, 2021). Furthermore, Par (2020) found that reading is the most valued skill among other language skills in EFL settings. It is a necessary skill to master the English learning process and make it easier for activities such as gaining information from articles, newspapers, books, and content on the Internet. Due to this importance, Aprilia et al. (2020) emphasize increasing reading frequency as much as possible.

Many students cannot understand what they read (Sadeghi & Izadpanah, 2018). It was found to be similar to some announcements delivered by institutions. First, The Ministry of Education and Culture (2019) released the literacy index for 34 provinces, showing that the literacy rate across Indonesia is 37.5. It has a low rating. The index value results show that most countries have lower literacy index values. Then, the Central Kalimantan literacy index is 33.86, ranking 22nd among 34 countries in Indonesia (Kemdikbud, 2019). Second, similar results released by PISA in 2018 showed that Indonesia ranked 74th out of 79 countries in reading proficiency, with an average score of 371 (OECD, 2019). It can be seen that reading achievement is a phenomenon that needs to pay attention seriously.

Some studies claim that motivation helps people learn foreign languages (Maghsoudi et al., 2021). In the context of reading activities, Aprilia

et al. (2020) stated that students need motivation to read and analyze long texts. Furthermore, Huang and Reynolds (2022) said that motivation can predict students reading and academic performance. Several researchers have examined learner motivation. Roman Jr. and Nunez (2020) confirmed that, among English learners, instrumental motivation is more dominant than integrative motivation. Then, Huang and Reynolds (2022) found that students reading motivation (intrinsic, extrinsic, and social motivation) is significantly affected by numerous factors such as gender, age, classification, grade, ethnicity, and primary language. So, it is essential to develop reading motivation so that students can follow the reading courses well and achieve higher values.

Over the last century and in contemporary times, the literature on the importance of personality traits has increased in understanding the evolution of individual lives (Mateus et al., 2021). In addition, De la Iglesia and Solano (2019) stated that motivation and personality traits are non-intellectual variables that predict academic performance in higher education. Some experts have studied students' personality traits. Mammadov et al. (2021) revealed that all Big Five personality traits have a significant impact on performance. Meyer et al. (2019) claimed that conscientiousness was a strong predictor of GPA, grades, math test scores, and math and English final exams, while openness was related to English test scores.

Although personality traits and reading motivation influence academic performance, no research has examined the relationship between reading and personality traits and performance in one study, particularly in Central Kalimantan. Previous studies (e.g., (Hebbecker et al., 2019); (Andersen et al., 2020); (Verbree et al., 2021); (Kanonire et al., 2022) only examined the relationship between one of these factors toward reading achievement separately. The above explanation has aroused researchers' interest in analyzing the relationship between personality traits, reading motivation, and reading achievement. Research questions for the study were: RQ 1: Does the higher the personality traits students have, the better they achieve in EFL

reading? RQ 2: Does the higher the motivation students have, the better they achieve in EFL reading? RQ 3: Do the higher the personality traits and the reading motivation students have, the better they achieve in EFL reading?

Method

This study examines whether personality traits and reading motivation influence reading achievement. To obtain the aim quantitative method and multiple regression design were applied in this study.

Forty-nine students in the sixth semester of 2020 generation from the English Department of the State Islamic Institute of Palangka Raya participated in this study. The participants were taken by proportional stratified random sampling technique. The sample size is determined using the software G*Power.

Data on personality traits, reading motivation, and reading achievement were collected through questionnaires and a test. The questionnaires are the motivation for the reading questionnaire (MRQ) developed by Huang & Reynolds (2022) and the Big Five Inventory 2 (BFI-2) developed by Soto & John (2017a). The test is the reading section on Barron TOEFL IBT (2016). The researcher adapts the questionnaires and the tests to make them appropriate for the present study.

The validity of the MRQ was conducted by giving a trial test for 76 students (Huang & Reynolds, 2022). The reliability of the MRQ had a satisfying score as strong internal consistency indicated by Cronbach coefficient alpha that shows values of .86 and .75 for Intrinsic Motivation and Extrinsic Motivation, respectively (Huang & Reynolds, 2022).

BFI 2 had a strong convergent validity indicated by the correlation with the other Big Five inventories (Soto & John, 2017b). The reliabilities of BFI-2 for the 12-item domain scales averaged .87, with a total range of .83–.90 across samples. Alpha reliabilities of the 4-item facet scales averaged .76 and .77 in two validation samples, with a total range of .66–.85 across samples.

Barron TOEFL IBT is one of the tools used for measuring students' reading achievement. The researcher only used the reading section of the test to measure the level of Reading proficiency of the English students at IAIN Palangka Raya.

Data collection was carried out in a room consisting of two classes of English students, A and B. Participants had 20 minutes to complete the questionnaires, 10 minutes to answer each, and 60 minutes to work on the reading test.

This study aimed to check whether there is any relationship between the three variables. Multiple linear regression was used to analyze the data collected. The analysis was conducted through the software JASP 0.13.0.0 version. However, there are several tests that need to be conducted before using the multiple regression analysis namely assumption tests that consist of the normality, homogeneity, linearity, multicollinearity, and autocorrelation test.

The data are normally distributed when statistically a p-value of Saphiro-Wilk was higher than .05. The scores for open-mindedness, conscientiousness, extroversion, agreeableness, and negative emotionality, as the dimension of personality traits were 0.696, 0.370, 0.358, 0.069, and 0.268 respectively. The reading motivations with the intrinsic and extrinsic motivation as the dimension have the p-values 0.122 and 0.139. The reading achievement score also shows a higher than 0.05, 0.171.

The value of the test of equality of variances (Levene's) confirms the linearity and homogeneity of the data. Open Mindedness, Conscientiousness, Extroversion, Agreeableness, Negative Emotionality, intrinsic and extrinsic motivation, and Reading Achievement have p-values 0.760, 0.091, 0.323, 0.258, 0.638, 0.708, 0.700, 0.440 respectively. The linearity and homogeneity were met when the score of the p-value of the test of equality of variances (Levene's) was higher than 0.05. It could be concluded that all variables have a linear correlation, and the data was taken from the same participant.

Multicollinearity among variables happens when the VIF value is higher than 10, and the tolerance value is less than 0,1. The VIF-value was 1, where it is fewer than 10. The tolerance value was 1, where it is higher than 1. So, it could be concluded that multicollinearity was not violated.

According to autocorrelation, a good value of Durbin-Watson ranges from 1 to 3 for escaping the autocorrelation among variables. The value of Durbin-Watson was 1.715, which could be interpreted as the autocorrelation was not violated.

Results and Discussion

The first research question is does the higher the personality traits students have, the better they achieve in EFL reading? The result of analysis shows that negative emotionality has a significant negative correlation with the reading achievement. Meanwhile, the other personality traits have positive correlation with the reading achievement. However, the correlation is not significant. It is seen in the following table:

Table 1. Correlation between personality traits and reading achievement

| Pearson's Correlations | | Reading Achievement | |
|--------------------------|-------------|---------------------|---|
| Variable | | | t |
| 1. Reading Achievement | Pearson's r | — | — |
| | p-value | — | — |
| 2. Open Mindedness | Pearson's r | 0.169 | |
| | p-value | 0.245 | |
| 3. Conscientiousness | Pearson's r | 0.189 | |
| | p-value | 0.195 | |
| 4. Extroversion | Pearson's r | 0.161 | |
| | p-value | 0.269 | |
| 5. Agreeableness | Pearson's r | 0.214 | |
| | p-value | 0.140 | |
| 6. Negative Emotionality | Pearson's r | -0.298* | |
| | p-value | 0.037 | |

* p < .05, ** p < .01, *** p < .001

The result of Table 1 shows that personality traits open-mindedness, conscientiousness, extroversion, and agreeableness have Pearson's r in range from 0.161 to 0.219 and p-values in range from 0.140 to 0.269, which were higher than 0.05. It could be concluded that open-mindedness, conscientiousness, extroversion, and agreeableness have no significant correlation with Reading Achievement. On the other side, the negative emotionality correlated negatively with reading achievement indicated by the Pearson's r which was -0.298 and p-values which was 0.037. It means that when the value of Negative Emotionality increases, the value of Reading Achievement decreases. It could be concluded that in the present study, the higher the

personality traits students have, they do not achieve better at EFL reading.

The second research question is does the higher the motivation students have, the better they achieve in EFL reading? Result of analysis reveals that intrinsic motivation and extrinsic motivation have negative correlation with reading achievement. However, intrinsic motivation is the only one that has a significant correlation. It is seen in the following table:

Table 2. Correlation between reading motivation and reading achievement

| Pearson's Correlations | | Reading Achievement | |
|-------------------------|-------------|---------------------|---|
| Variable | | | |
| 1. Reading Achievement | Pearson's r | — | — |
| | p-value | — | — |
| 1. Intrinsic Motivation | Pearson's r | -0.369** | |
| | p-value | 0.009 | |
| 2. Extrinsic Motivation | Pearson's r | -0.195 | |
| | p-value | 0.180 | |

* p < .05, ** p < .01, *** p < .001

Table 2 reveals that intrinsic motivation and extrinsic motivation have Pearson's r values -0.369 and -0.195 respectively. It means that both intrinsic motivation and extrinsic motivation negatively correlated with reading achievement. Then, the p-values were 0.009 for intrinsic motivation and 0.180 for the extrinsic motivation. Statistically, only the intrinsic motivation that has significant correlation with reading achievement, signed by p-value 0.009<0.05. It means that when the score of intrinsic motivation is getting higher, the reading achievement will get lower. It could be concluded that in the present study, the higher the reading motivation students have, they do not achieve better at EFL reading.

The third research question of is do the higher the personality traits and the reading motivation students have, the better they achieve in EFL reading? The appropriate analysis, according to the question, is multiple linear regressions. Result of analysis shows that the correlation among personality traits, reading motivation, and reading achievement was .430, as mentioned in the following table:

Table 3 Model of Summary

Model Summary - Reading Achievement

| Model | R | R ² | Adjusted R ² | RMSE |
|----------------|-------|----------------|-------------------------|--------|
| H ₀ | 0.000 | 0.000 | 0.000 | 15.241 |
| H ₁ | 0.430 | 0.185 | 0.150 | 14.055 |

Table 3 explains R value that representing correlation among variables. The R value was .430 indicates a strong enough correlation among personality traits, intrinsic motivation, and reading achievement. The R value is in line with Pearson's r value, however, it always written in positive. Then, the value of adjusted R² shows how the negative emotionality as personality trait and intrinsic motivation as reading motivation simultaneously can predict the variance of the reading achievement. The value of the adjusted R² was .150, which means that personality traits and reading motivation can explain 15 percent of the variance of reading achievement and other variables for another 85 percent. Next, table 4 reveals that the value of the *F-statistic of ANOVA* was 7.415, and the p-value of .009 shows that the regression model was significant. It could be concluded that the higher the personality traits and the reading motivation students have, the better they achieve in EFL reading was not happens.

Table 4 Analysis of variance

| ANOVA | | | | | | |
|----------------|---------|--------|------|--------|-----|-----|
| Mod | | Sum of | Mean | | F | p |
| el | | Square | df | Square | | |
| H ₁ | Regress | 1519.3 | 1 | 1519.3 | 7.4 | 0.0 |
| | ion | 31 | 1 | 31 | 15 | 09 |
| | Residua | 9630.2 | 47 | 204.89 | | |
| | l | 20 | 47 | 8 | | |
| | Total | 11149. | 48 | | | |
| | | 551 | | | | |

Note. The intercept model is omitted, as no meaningful information can be shown.

Table 5 shows that the t-value of intrinsic motivation was greater than the t-table (-2.329 > 1.679), and the p-value was 0.024, less than 0.050. It could be said that intrinsic motivation was a significant predictor of reading achievement scores. However, the t-value of negative emotionality was less than the t-table (-1.658 < 1.679). It could be concluded that negative

emotionality was not a significant predictor of reading achievement scores. The regression model put in only significant variables. So, the regression model was $Y = -144.226 - 1.931X$.

Table 5 Result of coefficients

| | | Coefficients | | | | |
|----------------|-----------------------|----------------|----------------|--------------|--------|-------|
| Model | | Unstandardized | Standard Error | Standardized | t | p |
| H ₀ | (Intercept) | 65.265 | 2.177 | | 29.976 | <.001 |
| H ₁ | (Intercept) | 144.226 | 25.462 | | 5.664 | <.001 |
| | Intrinsic Motivation | -1.931 | 0.829 | -0.318 | -2.329 | 0.024 |
| | Negative Emotionality | -1.464 | 0.883 | -0.227 | -1.658 | 0.104 |

The first result of this study revealed that intrinsic motivation significantly predicted students reading achievement negatively. It explains that intrinsic motivation had a negative correlation with reading achievement. It means the higher the intrinsic motivation, the smaller the reading achievement. This finding contrasts with a study conducted by Maghsoudi et al., (2021) that stated that intrinsic motivation was the variable that had the highest positive contributions to reading comprehension. Maghsoudi (2021) also found that extrinsic motivation contributed to reading comprehension, which was weaker than intrinsic motivation. Extrinsic motivation has neither correlation nor contribution to reading achievement.

Another different result comes from a previous study conducted by Chen (2019) that found that intrinsic motivation did not contribute to the multiple regression models, meaning that intrinsic motivation did not have significant influences on reading comprehension achievement even if it positively correlated with reading achievement. Another contradicting result, Chen(2019), found that extrinsic motivation was included in the regression model because it significantly influenced reading comprehension. The finding related to the condition in Taiwan, where the English proficiency Tests became a valid measure of students' language abilities, so the instructor engaged the students to ensure they got high scores (Chen, 2019).

This study also revealed that among personality trait dimensions (Open-mindedness, Conscientiousness, Extroversion, Agreeableness, and Negative emotionality), only negative emotionality has a significant negative correlation and influence on reading

achievement. It means the higher the negative emotionality, the less the reading achievement. The finding is in line with a study conducted by Cao & Meng (2020) that found neuroticism, the dimension of negative emotionality in other personality traits measurement, is one of the dimensions of personality traits that negatively correlated with English achievement. Cao & Meng (2020) also report that open-mindedness, conscientiousness, extroversion, and agreeableness correlate positively with English achievement.

The result was different from studies conducted by Meyer et al., (2019) and Cárdenas Moren et al.,(2020). Meyer found that negative emotionality has no significant correlation, neither positively or negatively on English tests, Exams, and Grades. In line, Moren said that neuroticism or negative emotionality was not a good predictor for academic performance.

The present study found that the value of adjusted R square 0.150, both intrinsic motivation and negative emotionality contribute 15 percent to reading achievement, and 85 percent to other factors. It was supported by a study conducted by Namaziandost et al., (2022) that mentioned that authentic material could increase motivation and reading achievement. Another factor that influenced reading achievement was reading strategy. Par (2020) said that problem-solving,

one of the reading strategy categories, is the most predictive variable on students' reading achievement. In the other study, Muhid et al., (2020) found that metacognitive strategies increased the reading comprehension score significantly

Conclusion

The present study shows that personality traits (negative emotionality) and reading motivation (Intrinsic motivation) were correlated with reading achievement. Both negative emotionality and intrinsic motivation contribute 15 percent to the variance of reading achievement simultaneously. Partially, negative emotionality was a significant predictor of reading achievement even intrinsic motivation was not a significant predictor for reading achievement. This result implied that to achieve better reading achievement, many factors need to become necessary things as targets. This study contributes essential information for increasing reading ability. The result of the research engages the researcher to suggest that future studies focus on factors that correlated and influenced reading achievements with many more participants needing to conduct as soon as possible.

References

- Andersen, S. C., Gensowski, M., Ludeke, S. G., & John, O. P. (2020). A stable relationship between personality and academic performance from childhood through adolescence. An original study and replication in hundred-thousand-person samples. *Journal of Personality*, 88(5), 925–939. <https://doi.org/10.1111/jopy.12538>
- Aprilia, F., Lustyantje, N., & Rafli, Z. (2020). The Effect of Reading Interest and Achievement Motivation on Students' Discourse Analysis Competence. *Journal of Education and E-Learning Research*, 7(4), 368–372. <https://doi.org/10.20448/journal.509.2020.74.368.372>
- Cao, C., & Meng, Q. (2020). Exploring personality traits as predictors of English achievement and global competence among Chinese university students: English learning motivation as the moderator. *Learning and Individual Differences*, 77, 101814. <https://doi.org/10.1016/j.lindif.2019.101814>
- Cárdenas Moren, C., Crawford Augant, K., Crawford Labrin, B., Soto De Giorgis, R., De La Fuente-Mella, H., Peña Fritz, Á., Valenzuela Saavedra, M., Hermosilla Monckton, P., & Álvarez Castelli, L. (2020). A quantitative analysis of the identification of personality traits in engineering students and their relation to academic performance. *Studies in Higher Education*, 45(7), 1323–1334. <https://doi.org/10.1080/03075079.2019.1572089>
- Chen, P.-H. (2019). The Joint Effects Of Reading Motivation And Reading Anxiety On English Reading Comprehension: A Case Of Taiwanese Efl University Learners. *Taiwan Journal of TESOL*, 16(2).

- [https://doi.org/10.30397/TJTESOL.201910_16\(2\).0001](https://doi.org/10.30397/TJTESOL.201910_16(2).0001)
- De la Iglesia, G., & Solano, A. C. (2019). Academic Achievement Of College Students: The Role Of The Positive Personality Model. *Problems of Education in the 21st Century*, 77(5), 572–583. <https://doi.org/10.33225/pec/19.77.572>
- Durán, E., & García, K. (2021). Exploring EFL Teaching and Learning Processes in Two Undergraduate Mandatory Courses. *Profile: Issues in Teachers' Professional Development*, 23(1), 145–160. <https://doi.org/10.15446/profile.v23n1.85931>
- Getie, A. S. (2020). Factors affecting the attitudes of students towards learning English as a foreign language. *Cogent Education*, 7(1), 1738184. <https://doi.org/10.1080/2331186X.2020.1738184>
- Hebbecke, K., Förster, N., & Souvignier, E. (2019). Reciprocal Effects between Reading Achievement and Intrinsic and Extrinsic Reading Motivation. *Scientific Studies of Reading*, 23(5), 419–436. <https://doi.org/10.1080/10888438.2019.1598413>
- Huang, S., & Reynolds, M. (2022). Facts that Influence College Students' Reading Motivation. *ATHENS JOURNAL OF EDUCATION*, 9(2), 187–210. <https://doi.org/10.30958/aje.9-2-1>
- Kanonire, T., Lubenko, J., & Kuzmina, Y. (2022). The Effects of Intrinsic and Extrinsic Reading Motivation on Reading Performance in Elementary School. *Journal of Research in Childhood Education*, 36(1), 1–13. <https://doi.org/10.1080/02568543.2020.1822961>
- Kemdikbud. (2019). Indeks Aktivitas Literasi Membaca 34 Provinsi. Pusat Penelitian Kebijakan Pendidikan dan Kebudayaan, Badan Penelitian dan Pengembangan, Kementerian Pendidikan dan Kebudayaan.
- Maghsoudi, M., Talebi, S. H., & Khodamoradi, A. (2021). The Effect of Iranian EFL Learners' Reading Motivation on Their Reading Comprehension Ability Regarding Their University Fields of Study. *Journal of College Reading and Learning*, 51(3), 203–224. <https://doi.org/10.1080/10790195.2020.1823911>
- Mammadov, S., Cross, T. L., & Olszewski-Kubilius, P. (2021). A Look Beyond Aptitude: The Relationship Between Personality Traits, Autonomous Motivation, and Academic Achievement in Gifted Students. *Roeper Review*, 43(3), 161–172. <https://doi.org/10.1080/02783193.2021.1923595>
- Mateus, C., Campis, R., Aguaded, I., Parody, A., & Ruiz, F. (2021). Analysis of personality traits and academic performance in higher education at a Colombian university. *Heliyon*, 7(5), e06998. <https://doi.org/10.1016/j.heliyon.2021.e06998>
- Meyer, J., Fleckenstein, J., Retelsdorf, J., & Köller, O. (2019). The relationship of personality traits and different measures of domain-specific achievement in upper secondary education. *Learning and Individual Differences*, 69, 45–59. <https://doi.org/10.1016/j.lindif.2018.11.005>
- Muhid, A., Amalia, E. R., Hilaliyah, H., Budiana, N., & Wajdi, M. B. N. (2020). The Effect of Metacognitive Strategies Implementation on Students' Reading Comprehension Achievement. *International Journal of Instruction*, 13(2), 847–862. <https://doi.org/10.29333/iji.2020.13257a>
- Namaziandost, E., Razmi, M. H., Ahmad Tilwani, S., & Pourhosein Gilakjani, A. (2022). The Impact of Authentic Materials on Reading Comprehension, Motivation, and Anxiety Among Iranian Male EFL Learners. *Reading & Writing Quarterly*, 38(1), 1–18. <https://doi.org/10.1080/10573569.2021.1892001>
- Oecd. (2019). Pisa 2018 Results Combined Executive Summaries Volume I, Ii & Iii.
- Par, L. (2020). The Relationship between Reading Strategies and Reading Achievement of the EFL Students. *International Journal of Instruction*, 13(2), 223–238. <https://doi.org/10.29333/iji.2020.13216a>
- Rianto, A. (2021). Examining gender differences in reading strategies, reading skills, and English proficiency of EFL University students. *Cogent Education*, 8(1), 1993531. <https://doi.org/10.1080/2331186X.2021.1993531>

- Roman Jr, R., & Nunez, A. M. (2020). Motivational Factors that Influence English as a Foreign Language Learners at Quality Leadership University, Panama City, Panama. *Journal of Language Teaching and Research*, 11(4), 543. <https://doi.org/10.17507/jltr.1104.03>
- Sadeghi, M., & Izadpanah, S. (2018). Barriers in Teaching Reading to ELLs and Ways of Overcoming Those Obstacles. *Journal of Language Teaching and Research*, 9(2), 295. <https://doi.org/10.17507/jltr.0902.10>
- Sharpe, P. J. (2016). *Barron's TOEFL iBT: Internet-based test (15th edition)*. Barron's Educational Series, Inc.
- Soto, C. J., & John, O. P. (2017a). Short and extra-short forms of the Big Five Inventory-2: The BFI-2-S and BFI-2-XS. *Journal of Research in Personality*, 68, 69–81.