EXPLORING THE CORRELATION BETWEEN CULTURAL INTELLIGENCE AND WRITING PERFORMANCE AMONG EFL LEARNERS

By:

Mega Aulia Ardhi[1], Desi Surlitasari Dewi[2*], Adam[3]

Universitas Riau Kepulauan, Kepulauan Riau, Indonesia,[1,2,3]*

Megaauli001@gmail.com[1], desisurlitasari@gmail.com[2*], adammedumy@gmail.com[3]

Abstract: This study explores the relationship between Cultural Intelligence (CQ) and writing performance among EFL learners, motivated by the rising importance of intercultural competence in English education. Using a quantitative correlational design, data were collected from 26 first-semester students through the Cultural Intelligence Scale (CQS) and a writing performance test requiring an opinion paragraph. After confirming data normality, hypothesis testing with the Pearson Product-Moment correlation revealed a significance value of 0.830 ($p > 0.05$), indicating no significant correlation between CQ and writing performance. The findings suggest that writing proficiency is more strongly influenced by technical factors such as grammatical accuracy, vocabulary range, coherence, organization, and writing experience, rather than by cultural intelligence alone. These results challenge assumptions about the universal impact of CQ on language skills and highlight the necessity of targeted interventions focused on enhancing core writing competencies. Future studies are encouraged to examine moderating variables such as learner motivation, cultural exposure, and instructional methods to better understand the nuanced relationship between cultural intelligence and writing performance in EFL contexts.

Keywords: cultural intelligence, EFL learners, language education, writing performance

INTRODUCTION

The widespread use of English as a global lingua franca has significantly influenced education, professional fields, and culture domains worldwide. As stated by Mappiasse and Sihes (2014), the number of non-native English speakers now surpasses that of native

speakers, highlighting the language's expansion well beyond its origins (Mappiasse & Sihes, 2014, p. 133). This development underscores the essential role of English as a vehicle for global communication, commerce, and cultural interactions, thus increasing the importance of language skills in an interconnected world (Crystal, 2003, p. 6).

In Indonesia, English plays a crucial role in the national curriculum, illustrating its significance for students in terms of developing both language proficiency and intercultural competence (Lauder, 2008, p. 9; Kirkpatrick, 2020, p. 560). The Indonesian government emphasizes that mastering English is essential for students to compete in the global workforce and actively participate in international communication, especially amid the growing demands of globalization and digital transformation (Isadaud et al., 2022, p. 46; Zein et al., 2020, p.4). In response, English education is implemented across all levels of schooling, from primary to higher education, aiming to develop students' communicative abilities to function effectively in diverse and multilingual environments (Purnama & Pawiro, 2023, p. 2).

Language acquisition involves two interconnected processes, namely comprehension and production. Comprehension skills, including listening and reading, center on decoding and interpreting messages, enabling learners to understand input meaningfully (Almohawes, 2024; Ngabut, 2024). In contrast, production skills such as speaking and writing require learners to actively construct and express ideas

in coherent, contextually appropriate ways (Hidayah et al., 2023, p. 4). Among these, writing emerges as a pivotal productive skill. Bacha (2002) defines writing performance as the ability to convey ideas effectively in written form, involving content organization, appropriate vocabulary and grammar usage, and the creation of coherent and cohesive texts that engage readers (Bacha, 2002, p. 161). Brown (2018) identifies three key indicators for assessing writing performance: (1) the ability to express core ideas clearly, (2) the use of specific details to support arguments, and (3) the skill to derive underlying meanings within the text (Brown, 2018, p. 384). Furthermore, Brown (2014) outlines four categories of writing performance. Imitative writing focuses on basic mechanical skills like punctuation and spelling, while intensive writing emphasizes grammar, vocabulary use, and sentence accuracy. Responsive writing encourages learners to develop coherent paragraphs based on prompts, with a focus on message clarity. Extensive writing, in contrast, requires students to produce longer texts such as essays, demanding higher-level organization, critical thinking, and consideration of audience expectations (Brown, 2014, pp. 221-223).

Considering the complexity of writing, it is essential to incorporate Cultural Intelligence (CQ) into writing instruction, particularly for EFL students who often engage with culturally diverse audiences. Earley and Ang (2003) describe cultural intelligence (CQ) as the capability to adjust and thrive in multicultural environments, which involves not just

acknowledging cultural differences but also showing awareness, sensitivity, and adaptability when engaging with individuals from diverse cultural backgrounds (Earley & Ang, 2003, p. 59). Furthermore, Thomas and Inkson (2009) explain that CQ encompasses cognitive, emotional, and behavioral dimensions that assist individuals in navigating cultural subtleties (Thomas & Inkson, 2009). Ang and Dyne (2015) identify four primary dimensions of CQ. Metacognitive CQ refers to learners' ability to reflect on cultural assumptions and adjust their strategies during intercultural exchanges. Cognitive CQ relates to knowledge about the values, communication norms, and practices of different cultures. Motivational CQ emphasizes the learner's drive, confidence, and persistence in engaging with people from various backgrounds. Finally, behavioral CQ involves the ability to adapt verbal and non-verbal actions to align with culturally appropriate expressions, enabling smoother and more respectful interactions (Ang & Dyne, 2015).

While previous research has indicated that cultural intelligence (CQ) is vital for academic adjustment, its effect on writing performance has not been extensively explored. Findings from Lin et al. (2012, p. 543), Chen et al. (2014, pp. 271-272), and Setti et al. (2022, pp. 4293-4295) emphasize the significant role of CQ in the cross-cultural adaptation of international students. Lin et al. (2012, p. 543) highlight the crucial role of cognitive CQ in this adaptation, while Chen et al. (2014) identified a positive relationship

between CQ and the successful cultural integration of international students in China. Similarly, Setti et al. (2022) demonstrate that CQ serves as a strong predictor of cross-cultural adaptation, reinforcing the need to cultivate CQ to enhance students' adaptability in diverse cultural contexts.

Those results illustrate the broader importance of CQ in helping individuals navigate cultural differences, providing a foundation for further exploration into its effects on specific academic abilities. For instance, Dewi et al. (2022) examined the relationship between CQ and listening comprehension among EFL students and found a positive but insignificant correlation. Other research, such as that by Vural and Peker (2019), revealed that higher levels of CQ are associated with enhanced academic self-efficacy among university students, while Aydin (2019) found a positive impact of CQ on technical skills among physical education students, suggesting that those with elevated CQ tend to excel in sports practice.

Moreover, Ghonsooly et al. (2013) identified a notable connection between CQ scores and IELTS writing performance in Iranian EFL learners, underscoring the significance of cultural awareness in producing effective writing. Peivandi (2011) established a direct relationship between CQ and writing abilities in adult learners, suggesting that greater CQ enhances engagement with culturally diverse materials. Aljuaid (2024) discovered that educators possessing higher CQ levels were more inclined to implement culturally responsive

teaching strategies, resulting in better student outcomes in writing assignments. This highlights the vital importance of CQ in writing education and its potential to boost EFL students' performance, particularly in culturally varied environments (Peivandi, 2011; Ghonsooly et al., 2013; Aljuaid, 2024).

Incorporating CQ into writing instruction addresses notable deficiencies in students' capability to generate culturally appropriate and effective written communication. Unlike speaking or listening, writing is deeply contextual and requires a comprehensive understanding of cultural norms and expectations that influence tone, style, and subject matter. Therefore, integrating CQ into writing instruction offers a valuable opportunity to advance EFL students' writing competencies while equipping them for cross-cultural interactions in both academic and professional contexts.

Given the limited body of research on the connection between Cultural Intelligence and writing performance in the Indonesian context, this study seeks to enrich the literature by investigating how Cultural Intelligence relates to writing performance among EFL learners. This leads to a central research question: What is the relationship between Cultural Intelligence and writing performance among EFL learners? In line with this inquiry, the study specifically aims to examine the strength and direction of the relationship between Cultural Intelligence and writing performance, providing empirical insights that contribute to the development of

effective language instruction in multicultural settings.

METHODOLOGY

This study employed a quantitative approach. As stated by Creswell (2021), quantitative research emphasizes the gathering of numerical information and the use of statistical analysis to explain observations. This approach enabled the researcher to measure variables objectively and evaluate the relationships between them (Creswell, 2021, p. 45).

A correlational design was utilized to assess the extent of the relationship between the variables in question (Fraenkel et al., 2019, p. 331). This design aligns to explore the relationship between Cultural Intelligence (CQ) and writing performance among EFL students, allowing for an evaluation of whether a significant relationship exists between students' cultural intelligence and their writing quality.

The participants in this study consisted of 26 first-semester students of the English Education Department of a private university in Indonesia. Due to the limited number of participants, the total sampling technique was employed, involving the entire population as the sample. As noted by Arikunto (2013), total sampling is appropriate when the population is fewer than 100 and ensures the sample adequately represents the entire population (Arikunto, 2013, p. 134).

The study utilized two instruments: the Cultural Intelligence Scale (CQS)

developed by Ang and Van Dyne (2008), and a writing performance test adapted from Brown (2014). The CQS consisted of 20 items measuring four dimensions of cultural intelligence: metacognitive, cognitive, motivational, and behavioral. The items were rated on a five-point Likert scale. The maximum possible score was 100, and the minimum was 20. This instrument was distributed online (Ang & Dyne, 2008, p. 17).

Meanwhile, the writing test required students to compose an opinion paragraph as an extensive writing task (Brown, 2014, p. 235). This test assessed five indicators: content, organization, language use, coherence and cohesion, and vocabulary and mechanics. Scoring was based on a scale of 1, 3, and 5 for each indicator. The scoring rubric was adopted from Brown (2018).

Before being administered to participants, both instruments underwent validity and reliability testing. For the writing test, the Intraclass Correlation Coefficient (ICC) was 0.784, categorized as good reliability (Portney & Watkins, 2009, p. 585). This indicates that the writing test provides consistent results across raters. Validity was examined through content and construct analysis. Content validity confirmed that the test items were consistent with writing proficiency criteria (Hyland, 2003, pp.22-23). Construct validity showed that the writing task reflected the skills necessary for producing coherent and contextually appropriate

opinion paragraphs (Richards & Schmidt, 2013, p. 122).

RESULTS AND DISCUSSION

This research included two categories of data: the cultural intelligence scores of students, which were acquired using the Cultural Intelligence Scale (Ang & Dyne, 2008, pp. 15-17), and the writing performance scores of students assessed through an extensive writing test. This writing assessment required students to write an opinion paragraph (Brown, 2014, p. 235).

To answer the research question, *What is the relationship between Cultural Intelligence (CQ) and writing performance among EFL learners?* The researcher conducted hypothesis testing procedures.

Before proceeding to hypothesis testing, the researcher ensured that the data followed a normal distribution. To achieve this, a normality test was conducted. The researcher used the Shapiro-Wilk test in SPSS version 29 to evaluate the normality of the data due to the small sample size, which is less than fifty. The results of this normality test are presented in Table 1.

Table 1
Normality Test

	Kol-Smir			**Shap-Wilk**		
	S	Df	Sig.	S	df	Sig.
W. T	.118	26	.200*	.951	26	.246
CQS	.106	26	.200*	.955	26	.296

Description:
Kol-Smir: Kolmogorov-Smirnov
Shap-Wilk: Shapiro-Wilk
W.T.: Writing Test
CQS: Cultural Intelligence Scale
S: Statistic

In the table above, the significance values for cultural intelligence data are 0.296 and for writing ability are 0.246, both of which are greater than 0.05. Therefore, it can be concluded that both writing ability and cultural

intelligence data follow a normal distribution (Ghozali, 2021, p. 160).

To test the hypothesis, the researcher used the Pearson Product-Moment correlation test because the data were normally distributed. Data analysis using SPSS version 29 resulted in a 2-tailed significance value of 0.830. The results are as follows.

Table 2
Pearson Product-Moment Test

		W. T	CQS
W. T	P. S	1	-.044
	Sig.(2-t)		.830
	N		26
CQS	P. S	-.044	1
	Sig.(2-t)	.830	
	N	26	

Description:
W.T.: Writing Test
CQS: Cultural Intelligence Scale
P.S.: Pearson Correlation
Sig. (2-t): Significance (2-tailed)

Since the significance value of 0.830 is greater than 0.05, it can be concluded that there is no significant correlation between cultural intelligence and writing performance (Field, 2018, pp. 235-236). This insignificant correlation may be attributed to various factors that can influence writing performance, such as language skills, writing experience, motivation, and education level.

The results of this study revealed no significant correlation between Cultural Intelligence (CQ) and writing performance among EFL learners. A Pearson correlation coefficient of 0.830 suggests that CQ does not directly influence students' competence in producing written texts. This finding aligns with earlier studies by Dewi et al. (2022), which also reported no significant relationship between CQ and listening comprehension among EFL learners, implying that the effect of CQ may not be uniform across various language competencies. Conversely, the research conducted by Ghonsooly and Golparvar (2013), as well as

Peivandi (2011), found a positive correlation between CQ and IELTS writing results, suggesting that other contextual factors might shape this relationship (Peivandi, 2011; Ghonsooly et al., 2013).

The absence of a significant correlation in this study could be linked to the presence of other vital elements that impact writing performance, such as grammatical proficiency, vocabulary knowledge, and writing experience. This agrees with the perspectives of Hyland (2003) and Brown (2014), who emphasize the importance of technical writing skills, including coherence, organization, and appropriate language structure (Hyland, 2003; Brown, 2014). Although certain aspects of CQ, such as metacognitive or motivational elements, may provide indirect support to the writing process, the findings reveal that they alone are insufficient to guarantee writing success in the studied EFL context.

The implications of these findings are significant for both theoretical understanding and practical applications. Theoretically, the results call into question the idea that elevated levels of cultural intelligence (CQ) consistently boost language capabilities, highlighting the necessity for a more nuanced understanding of how CQ interacts with language competencies. On a practical level, educators ought to emphasize targeted interventions aimed at improving technical writing skills instead of assuming that CQ by itself will considerably enhance writing abilities. For example, tailored writing workshops that focus on aspects such as grammar,

organization of paragraphs, and coherence could yield more substantial improvements in the performance of EFL students.

Nonetheless, this study is not without its limitations. The limited sample size of 26 participants may constrain how broadly the findings can be applied. Moreover, relying on a single writing assessment to measure writing performance may fail to adequately represent the complex nature of writing performance. Future research could enhance these aspects by expanding the sample size, employing longitudinal approaches, and incorporating a variety of writing tasks to better elucidate the relationship between CQ and writing performance.

Further research should also explore potential moderating variables that may influence this relationship, including motivation, prior cultural experiences, and specific teaching methods. Investigating these factors could enrich our understanding of how CQ interacts with diverse components of writing performance, leading to more precise recommendations for integrating cultural awareness into language instruction.

CONCLUSION

This study examined the relationship between Cultural Intelligence (CQ) and writing performance among English Foreign Language (EFL) learners, providing important insights into methods of language learning and teaching. The results indicated that there was no significant relationship between CQ and writing performance, suggesting that other factors, such as

grammatical proficiency, vocabulary knowledge, and writing experience, might have a more significant impact on students' writing abilities. These results align with previous studies that have highlighted the intricacies of writing skills, underscoring the importance of technical competencies over broader cognitive or motivational elements in achieving writing success.

The study adds to the expanding body of literature regarding the role of cultural intelligence in education by delivering a comprehensive evaluation of its relevance in EFL settings. While CQ has been demonstrated to enhance adaptability and intercultural communication in other areas of language, this research indicates that its effect on writing performance is minimal, challenging the notion of its universal applicability. By incorporating these findings into the educational discussion, this study encourages a reevaluation of the focus on cultural intelligence in EFL writing instruction.

In terms of practical application, this study underscores the importance of tailored interventions that address essential writing competencies, including grammar, coherence, and organization. Educators should focus on structured workshops and practical activities that improve these technical abilities rather than solely emphasizing cultural awareness. Additionally, incorporating contextual writing tasks into the curriculum could provide students with the necessary skills for effective written communication, particularly in academic and professional settings.

Future research should expand upon these results by exploring potential moderating factors that influence the relationship between cultural intelligence (CQ) and writing performance, such as individual motivation, exposure to different cultures, or teaching methodologies. Longitudinal studies involving larger and more diverse groups of participants, along with various writing assessments, could offer greater insights into how cultural intelligence relates to language skills. These efforts will not only enhance theoretical frameworks but also direct innovative strategies for advancing English as a Foreign Language (EFL) instruction in multicultural and global learning contexts.

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