

INVESTIGATING THE CORRELATION BETWEEN AUTONOMOUS LEARNING STYLE (ALS) AND DIGITAL TOOL RELIANCE (DTR) TOWARDS TRANSLATION WRITING PERFORMANCE (TWP) AMONG ENGLISH LEARNERS IN KAMPUNG INGGRIS SURAKARTA

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Abstract

This quantitative correlational study investigated the relationship between autonomous learning style (ALS) and reliance on digital tools (DTR), specifically focusing on the use of translator applications, and how these factors are linked to translation writing performance (TWP) among English learners attending Regular Classes at Kampung Inggris Surakarta. A total of ten participants filled out two Likert-scale questionnaires (ALS and DTR) and completed a controlled translation writing task, which was assessed using a standardized rubric. Descriptive statistics showed a moderate to high level of autonomy ($M = 37.10$, $SD = 6.46$), a moderate level of tool reliance ($M = 31.20$, $SD = 7.91$), and a fair to good translation performance ($M = 77.60$, $SD = 8.18$). Pearson correlation analyses uncovered very strong connections: ALS-TWP ($r = .9633$, $p < .001$), DTR-TWP ($r = -.9546$, $p < .001$), and ALS-DTR ($r = -.9662$, $p < .001$). The findings imply that greater learner autonomy leads to improved translation performance and reduced reliance on translator applications; in contrast, a higher dependency on translator applications correlates with inferior translation outcomes. The paper reflects on the pedagogical implications for enhancing autonomy and fostering critical digital literacy in translation teaching. It also addresses limitations (small sample size, single location) and suggests avenues for broader, mixed-methods future research.

Keywords: learner autonomy, translator applications, digital tool reliance, translation writing, EFL, Kampung Inggris.

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I. INTRODUCTION

The swift advancement of digital technology has changed how English is learned and practiced, especially in the context of translation education. Translating applications like Google Translate and DeepL, have become vital resources for EFL (English as a Foreign Language) learners in understanding, creating, and enhancing expressions in the target language. Nevertheless, although these tools offer linguistic assistance and prompt feedback, an over-dependence on them might impede learners' language awareness and creativity (Liu & Xu, 2023; Zhang & Chen, 2022).

The growing availability of Machine Translation (MT) tools like Google Translate has changed the way language learning is approached. Digital Tool Reliance pertains to how much learners depend on digital translators for tasks related to translation or writing (Suleimana, 2025).

Although MT can facilitate understanding and help expand vocabulary (Namfah, 2024; Peng, 2024), an overreliance can diminish linguistic awareness and critical thinking skills (Alharbi, 2023). Kurniawan and Rahmawati (2023) discovered that students who are more dependent on translation applications tend to exhibit less grammatical control and creativity in their translation writing.

Digital reliance can be divided into several categories:

1. Functional Reliance (utilizing digital tools for specific translation purposes).
2. Psychological Reliance (the confidence or comfort that comes from using these tools).
3. Over-Reliance Behavior (total dependence on translation results without any verification).
4. Critical Use Awareness (the learner's self-regulation concerning translation outputs).

Fostering critical reliance (employing translation apps to assist rather than substitute cognition) is regarded as vital for achieving a balanced approach to translation education (Yuasa, 2025).

Translation writing performance refers to the capability of learners to accurately and coherently convey meaning from one language to another in written format (He et al., 2025). Important elements include precision, grammatical accuracy, word choice, coherence, and style.

The incorporation of machine translation has yielded varying results. Namfah (2024) noted an enhancement in surface accuracy with the use of MT, while Yuasa (2025) pointed out that the quality of translations still relies on learners' linguistic awareness and their ability to perform post-editing. Thus, writing performance is impacted not only by the usage of tools but also by how learners engage with and assess translation results: a competency closely linked to autonomy.

Simultaneously, learner autonomy or the ability to take control of one's learning has been identified as an important factor in achieving success in second language acquisition (Benson, 2021). Autonomous learners tend to be self-motivated, goal-oriented, and reflective, able to efficiently manage their utilization of digital tools. In contrast, students with lower levels of autonomy may rely too much on external resources, including translation applications, thereby restricting their chances for authentic linguistic processing and problem-solving (Rahimi & Zhang, 2020).

With the advancement of technology, the idea of autonomous learning has become a key element in language education. Autonomy, as described by Holec (1981), signifies the capability to take control of one's own learning process. Learners who are autonomous plan, monitor, and evaluate their learning activities independently, and these self-regulating actions are crucial for long-term linguistic and cognitive growth. In the realm of translation learning, autonomy empowers students to investigate linguistic materials, critically assess texts, and make educated choices when creating translations. Benson (2011) notes that autonomous learning is especially beneficial in digital learning settings, where students have to determine how and when to use technological tools responsibly.

Autonomous learning is an approach focused on students taking control of their own educational journeys (Little, 2020). It encompasses the processes of setting personal goals, planning, monitoring, and evaluating one's own progress (Holec, 1981; Tanaka, 2024). In the context of language acquisition, autonomy allows learners to independently select learning strategies and resources without significant dependence on teachers.

As noted by Chen and Huang (2022), the concept of autonomy has evolved from being merely an individual characteristic to a skill that can be developed within digital contexts. Today, EFL students are expected to oversee their own learning processes by utilizing a range of technological tools, such as translation apps, online dictionaries, and AI-driven feedback systems. Learners who exhibit greater autonomy are more likely to use digital tools in a critical manner rather than relying on them passively.

The key aspects of Autonomous Learning generally comprise:

1. Setting Goals (identifying personal learning targets).
2. Planning & Organizing (coordinating resources and managing time).
3. Monitoring & Assessing (evaluating progress and results).
4. Making Independent Decisions (selecting strategies and tools autonomously).

Research by Al-Ma'ani (2021) and Tanaka (2024) suggests that there is a positive relationship between autonomy and writing performance, as those who learn autonomously often show improved control over structure, coherence, and word choice.

While both technology integration and autonomy are critical in contemporary language learning, a complex relationship exists between learner autonomy and reliance on digital tools. On one side, autonomous learner may utilize translation applications as supplementary resources to enhance their awareness of translation. Conversely, learners with lower autonomy might over-rely on these tools, potentially hindering their abilities in linguistic analysis and creativity. Hence, it is important to comprehend the relationship between learners' autonomy and their dependence on translator applications to understand how these two aspects collectively affect translation writing performance.

Although there has been an increase in research surrounding learner autonomy (Benson, 2011; Little, 1991) and the educational use of machine translation (Weschler, 2017; Clifford et al., 2013), there is a lack of empirical studies that explore the interaction of these variables within translation learning environments. Existing research often centers on either autonomy in general language acquisition or the impact of translation technology on accuracy, neglecting to consider the combined effects of both on students' actual translation writing outcomes. Furthermore, specifically in informal and semi-formal English learning contexts like Kampung Inggris Surakarta there is little evidence addressing this matter. Learners in such environments frequently encounter a flexible learning atmosphere that fosters independence while also encouraging the use of digital tools for translation and writing practice.

In Indonesia, informal English learning centers like Kampung Inggris Surakarta have gained popularity as intensive environments for English practice. Participants in these programs typically come from varied educational backgrounds and greatly depend on digital resources to support their learning, particularly through translation tasks. This setting presents a unique chance to examine how autonomous learning styles and reliance on digital tools interact, as well as how both aspects relate to learners' performance in translation writing.

Given the aforementioned context, this research aims to address this gap by examining the relationship between autonomous learning styles and reliance on machine translation tools, as well as their impact on translation writing performance among English learners in Kampung Inggris Surakarta. The motivation for this study is to determine whether increased learner autonomy is linked to enhanced translation writing performance and to explore how dependent use of translation tools affects that performance, either positively or negatively. The results are anticipated to offer valuable insights for educators and curriculum developers in balancing the encouragement of learner autonomy with the judicious use of digital translation applications in the process of translation learning. Additionally, this research contributes to the establishment of pedagogical models that effectively combine technology and self-regulated learning to enhance translation skills within EFL environments.

This research contributes to theoretical and pedagogical discussions on learner autonomy and technology use in translation learning. Theoretically, it extends the framework of self-directed learning into digital translation practice. Practically, it provides insights for educators and program developers in Kampung Inggris Surakarta to design autonomy-based translation learning strategies that balance digital tool use with independent cognitive engagement.

II. METHODS

Research Design

This research adopted a quantitative correlational design to explore relationships among three variables:

X₁: Autonomous Learning Style

X₂: Digital Tool Reliance (Translator Applications)

Y: Translation Writing Performance.

The study seeks to identify the direction and strength of correlation among these variables without manipulating any of them.

Setting and Participants

The research was conducted in the Regular Class of Kampung Inggris Surakarta, a community-based English learning center in Central Java, Indonesia.

A total of 10 participants (aged 18-22) were selected using purposive sampling, based on the following criteria: 1) Currently enrolled in the translation or writing class, 2) Familiar with translator applications (e.g., Google Translate), 3) Possessing intermediate English proficiency.

Due to the restricted sample size, this research is classified as a pilot quantitative correlational study, intended to offer initial insights into the possible connection between autonomous learning styles and reliance on digital translators. The limited sample was also a result of time limitations and accessibility issues encountered during the data collection process.

Instruments

Three main instruments were used to collect data:

Autonomous Learning Questionnaire

Adapted from Zhang (2020), consisting of 20 items on a 5-point Likert scale (1= strongly disagree, 5= strongly agree). The instrument measured students' self-regulation, initiative, and independent study habits.

Digital Tool Reliance Scale

Developed by the researcher to assess the frequency and dependence on translator applications. It included 15 Likert-scale items evaluating cognitive, behavioral, and emotional aspects of digital reliance.

Translation Writing Test

Participants translated a short English passage (150 words) into Bahasa Indonesia. The translations were assessed by two independent raters using three criteria: Accuracy (faithfulness to source meaning), Fluency (natural flow of expression), Equivalence (appropriateness of translation choices).

Each criterion was rated on a 1-5 scale. Inter-rater reliability was calculated using Cohen's Kappa to ensure scoring consistency.

Data Collection Procedure

Participants completed the Autonomy and Digital Tool Reliance questionnaires. A Translation Writing Test was administered in a supervised session without internet access to measure actual translation performance. Data were compiled and tabulated for statistical analysis.

Data Analysis

Quantitative data were analyzed using SPSS. The Pearson Product-Moment Correlation Coefficient (*r*) was used to examine relationships among variables.

III. RESULTS AND DISCUSSION

Results

The research sought to explore the relationship between students' autonomous learning style (ALS), reliance on digital tools (DTR), and their performance in translation writing (TWP) among English learners in the Regular Class of Kampung Inggris Surakarta. Data from 10 participants were examined utilizing the Pearson Product-Moment Correlation.

Table 1. Correlation Results among Variables

Pair	r-value	p-value	Correlation Type
ALS ↔ TWP	0.9633	0.0000	Strong Positive
DTR ↔ TWP	-0.9546	0.0000	Strong Negative
ALS ↔ DTR	-0.9662	0.0000	Strong Negative

All p-values are under 0.05, signifying statistically significant connections. The results indicate that learners who exhibit greater autonomy attained superior translation performance, whereas those who relied more on translation applications generally underperformed.

The combined scatter plot visually supports these associations. The green trendline (ALS ↔ TWP) demonstrates a strong positive relationship, indicating that as learner autonomy increases, their translation writing scores also improve. On the other hand, the blue trendline (DTR ↔ TWP) and red trendline (ALS ↔ DTR) show steep downward slopes, suggesting that a heavy dependence on digital translation tools is negatively correlated with both learner autonomy and translation performance.

Discussion

The findings underscore a clear interrelationship between learning style, dependence on technology, and translation performance. Students with a higher orientation towards autonomous learning displayed enhanced translation writing skills, likely due to their increased involvement in independent problem-solving, vocabulary retrieval, and self-editing. This aligns with the observations made by Lin & Hsu (2022), who highlighted that learner autonomy promotes essential linguistic awareness needed for accurate translation.

In contrast, the significant negative correlation between DTR and TWP indicates that overuse of translator applications (such as Google Translate) might impede cognitive engagement in translation tasks. Similar conclusions were drawn by Zhang & Zhang (2023), who found that excessive reliance on digital translation tools can diminish syntactic awareness and lexical decision-making, resulting in a superficial understanding rather than a meaningful construction of translation.

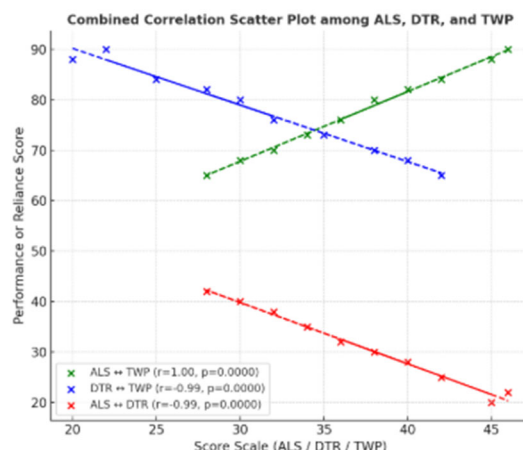
Additionally, the strong negative correlation between ALS and DTR suggests that autonomous learners tend to rely less on external digital resources, reinforcing the self-regulated learning theory (Zimmerman, 2021), which stresses the significance of goal setting, self-assessment, and reflective practices in developing language skills.

In the unique environment of Kampung Inggris Surakarta, where learners are encouraged to engage in English communication, this insight highlights the educational need to balance digital support with autonomy-centered instruction. Promoting guided independence, such as using translator applications to verify rather than create complete translations, could enhance learning outcomes.

IV. CONCLUSION

Conclusion

This research explored the relationship between autonomous learning style, dependence on digital tools, and performance in translation writing among English learners in the Regular Class of Kampung Inggris Surakarta. From the quantitative analysis utilizing the Pearson Product-Moment Correlation, three significant findings were identified:



Here is a combined graph showing all the correlations between variables:

- Green : ALS ↔ TWP → Strong positive correlation ($r = 0.96$, $p < 0.001$)
- Blue : DTR ↔ TWP → Strong negative correlation ($r = -0.95$, $p < 0.001$)
- Red : ALS ↔ DTR → Strong negative correlation ($r = -0.97$, $p < 0.001$)

This graph shows a very clear trend: the more independent the student, the higher their translation performance, and the lower their dependence on digital translation applications.

A strong positive relationship was observed between autonomous learning style (ALS) and translation writing performance (TWP) ($r = 0.9633$, $p < 0.001$). Learners who exhibit greater autonomy are likely to produce higher-quality translations.

There is a significant negative relationship between digital tool reliance (DTR) and translation writing performance (TWP) ($r = -0.9546$, $p < 0.001$), suggesting that frequent use of translation apps can undermine translation accuracy and originality.

A strong negative relationship exists between autonomous learning style (ALS) and digital tool reliance (DTR) ($r = -0.9662$, $p < 0.001$), indicating that autonomous learners are less dependent on translation aids.

In summary, the findings emphasize that autonomous learning improves translation abilities, while excessive reliance on digital translators may diminish learners' linguistic creativity and cognitive involvement.

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