

# The Effect of TikTok on Translation Performance Among Undergraduate Translation Students

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**Abstract**—This study explores the impact of TikTok use on translation performance among undergraduate translation students at Qassim University. By employing a combination of survey responses and translation assessments from 46 participants, the results demonstrate that extensive TikTok engagement is significantly associated with an increase in grammatical and spelling errors during translation tasks. Conversely, students who consciously restricted their TikTok usage exhibited substantially fewer errors and reported higher academic productivity, suggesting improved sustained attention and cognitive control. Interpreted through the lens of cognitive load theory, these outcomes indicate that habitual consumption of short-form video content may impair cognitive abilities essential for effective translation. Consequently, the study underscores the importance of implementing educational interventions focused on digital literacy and strategic management of screen time.

**Index Terms**—TikTok, social media, translation performance, cognitive load, mental stress

## I. INTRODUCTION

TikTok's explosive popularity among university students has sparked debate about its impact on academic skills. Translation, a task requiring intense concentration and linguistic accuracy, may be particularly susceptible to the distractions and altered cognitive habits engendered by short-form video consumption. Short videos like those on TikTok can captivate students to the point that nearly 70% report losing track of time while using them (Common Sense Media, 2021; Twenge & Campbell, 2019). Researchers have observed that many students use these platforms for hours, often during evenings when they might otherwise study, and only a small minority feel their routines remain unaffected (Montag et al., 2021). This pervasive use has raised concerns that the rapid, fragmented content could erode sustained attention and careful analytical thinking. In the context of translation, which demands continuous focus and thoughtful language processing, heavy TikTok use might interfere with performance by shortening attention spans and increasing errors.

At the same time, TikTok and other similar platforms are rich with linguistic content, and some educators wonder if exposure to diverse media might have incidental benefits (such as expanding vocabulary or quickening information processing). Nonetheless, the question remains: does frequent TikTok viewing hinder or help translation abilities? This study investigates this question by examining the relationship between TikTok usage and translation performance in a cohort of undergraduate translation students. We draw on cognitive theories and prior studies of social media to frame our expectations. Cognitive load theory suggests that the barrage of stimuli on TikTok could overload students' working memory, making it harder to concentrate on complex tasks (Sweller, 2011). Furthermore, research on attention indicates that constant switching between videos may condition users to seek novelty, potentially reducing their capacity for sustained focus on a single task (Mark et al., 2018; Rosen et al., 2013). By integrating insights from the literature with new empirical data, this paper seeks to clarify TikTok's effect on translation performance, an issue of growing importance as digital habits shape academic outcomes.

## II. LITERATURE REVIEW

Early evidence on social media and academic skills highlights both risks and nuances of social media use. Several studies report that heavy short-video consumption correlates with poorer academic performance, largely due to diminished attention spans. For example, Sha and Dong (2021) found that adolescents with TikTok use disorder exhibited increased memory problems and higher levels of depression and anxiety, suggesting that compulsive use of the app can impair cognitive functions vital for learning. In a related vein, Hu and Li (2023) surveyed Chinese college students and observed that short videos significantly disrupted study habits and time management, with over two-thirds of respondents saying they lose their sense of time on TikTok and similar apps. Only about 12% reported being completely unaffected in their daily routines. This indicates that the majority experience some degree of interference with concentration or schedule—a worrying trend for tasks like translation that require sustained mental effort.

Research specifically linking social media use to language or translation skills is still emerging. Xu et al. (2023), examining Chinese adolescents, found that students who heavily used short-video platforms like TikTok demonstrated weaker working memory, lower verbal abilities, and poorer academic outcomes. These deficits were attributed to reduced

cognitive engagement and attentional control, essential for language acquisition and translation proficiency (Xu et al., 2023). This aligns with broader findings that digital multitasking leads to shallow processing, where students struggle to filter out distractions and make mistakes in complex tasks. The fast-paced, dopamine-driven environment of TikTok may be “rewiring” attentional control in young users, making it harder for them to engage in lengthy, focused work (Firth et al., 2019; Alloway et al., 2013).

On the other hand, some studies offer a more nuanced view. Gong and Tao (2024) investigated short-video usage among elementary students and noted that when moderated appropriately by parental guidance, engagement with platforms like TikTok could foster adaptive visual attention skills. Additionally, a study by Li et al. (2024) reported that college students who maintained high levels of mindfulness were better able to mitigate the negative impacts of short-form video addiction on academic engagement and anxiety. These findings suggest individual differences and effective self-regulation can moderate the effects of social media on academic and cognitive outcomes. Nonetheless, even these researchers caution that without strong self-control, the quick, pleasurable content of TikTok can easily become a distraction that undermines deep learning (Li et al., 2024).

The literature indicates a likely negative impact of excessive TikTok use on focused academic tasks, though context and individual factors matter. Heavy use has been linked to attention difficulties, memory issues, and lower academic performance in general. For translation students, whose work demands concentration and accuracy, these findings raise concerns. The present study builds on this literature by empirically testing whether high TikTok usage is associated with more translation errors and lower translation quality. It also considers students’ own perceptions, providing a fuller picture of TikTok’s role in their learning process.

### III. METHODOLOGY

This study employed a mixed-methods approach to investigate the effect of TikTok usage on the translation performance of undergraduate students majoring in translation. The research design combined a detailed usage survey, objective assessment of translation outputs, and statistical analysis to explore correlations between social media habits and translation quality.

#### A. Participants

Forty-six ( $N = 46$ ) undergraduate male translation students at Qassim University in Saudi Arabia participated in the study. All participants were native Arabic speakers in the 19–22 age range and were in their third or fourth year of a translation studies program. Participation was voluntary, and all students reported that they use TikTok at least occasionally, which was important for capturing variation in usage intensity.

#### B. Survey on TikTok Usage

Each student first completed a comprehensive TikTok and short video usage survey adapted from a standard usage questionnaire. The survey gathered data on:

- frequency of TikTok use (e.g., “multiple times a day,” “a few times a week”);
- average daily screen time dedicated to TikTok/short videos (self-reported in ranges: < 30 minutes, 30–60 minutes, 1–2 hours, > 2 hours per day);
- timing of use (preferred viewing times, such as morning, evening, and late-night);
- content preferences and purposes (e.g., watching for entertainment, education, relaxation); and
- study habits and self-reported effects (daily study hours; and whether TikTok interferes with their studying, causes procrastination, reduces focus, etc.).

The survey included both closed-ended questions (Likert-scale or multiple choice) and a few open-ended prompts. One open-ended question asked students to describe in their own words how their TikTok usage has impacted their academic work, particularly any effects on concentration or mistakes in assignments. This provided qualitative data on their personal insights.

#### C. Grouping by Usage Level

Based on the daily screen time data, participants were categorized into three usage groups for comparative analysis:

- High usage: students who reported using TikTok more than two hours per day (13 students)
- Moderate usage: students using TikTok about 1–2 hours per day (22 students)
- Low usage: students who used TikTok less than one hour per day (11 students; including “<30 min” and “30–60 min” respondents)

This grouping allowed to examine differences in translation performance between heavy, moderate, and light TikTok users. The cut-offs chosen correspond to common benchmarks in digital well-being guidelines and reflected natural breakpoints in our sample’s responses (with <1 hr, 1–2 hr, and >2 hr forming distinct clusters).

#### D. Translation Task and Performance Evaluation

After the survey, all participants completed a translation task designed to objectively measure their translation performance. The task involved translating an approximately 150-word informative-type English paragraph into Arabic. This paragraph was at an upper-intermediate reading level, containing a mix of general and semi-technical vocabulary.

Students were given unlimited time to produce their best translation, mimicking a take-home translation assignment scenario (thus any differences would likely stem from their ability and habits, not time pressure).

Two professional translators (Arabic-English bilinguals with translation teaching experience) independently evaluated each student's translated text. They assessed translation quality through error analysis, focusing on two key error categories:

- grammatical errors: mistakes in syntax, morphology, or usage that violate Arabic grammar rules (e.g., incorrect sentence structure, improper verb conjugation or tense, subject-verb agreement errors, or misused prepositions);
- spelling and orthographic errors: mistakes in writing conventions, including misspellings of common words, incorrect use of hamza (ء) and other diacritical marks, confusion between visually similar Arabic letters, and incorrect spacing or punctuation that affected readability.

The evaluators used a standardized error typology and marking scheme. Each distinct grammatical error in the translation was marked and counted; similarly, each spelling/orthographic error was counted. If the same type of mistake occurred repeatedly in one student's text, each occurrence was counted to gauge their overall accuracy. The two evaluators cross-checked their markings and discussed any discrepancies to reach consensus. The total number of grammatical errors and total number of spelling errors were tallied for each student's translation. These quantitative error counts served as the primary performance metrics, where fewer errors indicated better translation performance.

In addition to error counts, the evaluators provided an overall quality rating for each translation (high quality, moderate quality, or low quality). This rating was based on holistic judgment of the translation's fidelity and readability, but it correlated strongly with the error counts (e.g., translations with few errors were rated high quality). For consistency, we treat this as an ordinal outcome reflecting the error analysis results.

#### E. Data Analysis

We analyzed the data in two stages. First, descriptive statistics were compiled for each TikTok usage group's translation performance. We calculated the mean and standard deviation of grammatical errors and spelling errors for high, moderate, and low usage groups and noted the distribution of overall quality ratings across groups. We also examined the survey responses by group to contextualize performance differences (for instance, comparing the proportion of students who reported study difficulties in each group).

Next, we conducted correlation and comparative analyses:

- A Pearson correlation was computed between daily TikTok usage (in minutes) and the total number of translation errors. Correlations with sub-categories (usage vs grammatical errors, and usage vs spelling errors separately) were also examined.
- An ANOVA (analysis of variance) was planned to test for statistically significant differences in error counts between the three usage groups. Given the relatively small sample, we also checked effect sizes (Cohen's *d* between pairs of groups) to quantify the magnitude of differences.
- We qualitatively analyzed the open-ended survey comments to capture common sentiments among heavy and light users regarding focus and performance.

All analyses were performed with the aid of statistical software (IBM SPSS (Statistical Package for the Social Sciences)), and a significance threshold of  $p < .05$  was used for inferential tests. The combination of quantitative and qualitative data in this methodology provides a robust way to triangulate findings on how TikTok use might influence translation performance.

## IV. FINDINGS

### A. Participant TikTok Usage

The surveyed students displayed a wide range of TikTok usage habits. Daily usage times ranged from a low of 16 minutes to a high of 175 minutes (nearly three hours), with a sample average of approximately 92 minutes per day ( $SD = 45$  min). By design, all 46 participants were TikTok users; however, their self-regulated use differed markedly.

#### **Low Usage Group (<1 hr/day)**

Eleven students (24% of the sample) fell into this category, using TikTok for at most an hour per day (often just a few times a week). Many in this group reported conscious moderation of their screen time. Notably, they tended to also report studying more hours per day (often 2–4 hours of daily study) and rarely experiencing TikTok-related distractions.

#### **Moderate Usage Group (1–2 hr/day)**

Twenty-two students (48%) used TikTok around one to two hours daily, typically once a day or multiple times a day in shorter sessions. They represented the median usage behavior in our sample.

#### **High Usage Group (>2 hr/day)**

Thirteen students (28%) were heavy TikTok consumers, exceeding two hours per day (with some spending nearly three hours daily). These students commonly checked TikTok multiple times a day, including late at night.

This grouping was reflected not only in the quantitative screen-time data but also in self-reported behavior and academic habits. Importantly, students with higher TikTok use overwhelmingly indicated more academic difficulties related to concentration and time management. For instance, all 13 heavy users answered "Yes, often" when asked if TikTok causes them to postpone study tasks or lose focus, whereas those in the low-use group mostly answered "No" or

“Rarely” to these questions. In their open-ended responses, heavy users frequently mentioned struggling with procrastination and reduced attention span, while light users often wrote that limiting TikTok helped them maintain productivity (as quoted earlier).

*B. Translation Performance by Usage Group*

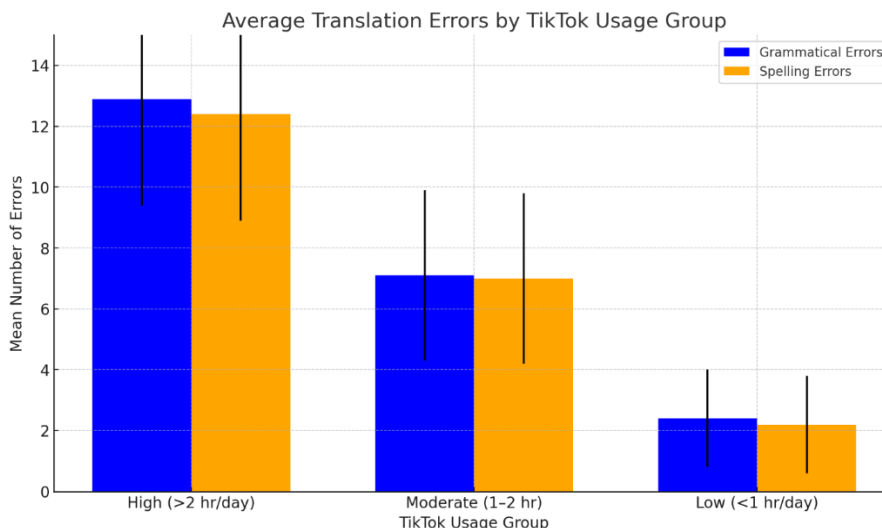


Figure 1. High TikTok Users Made Significantly More Grammatical and Spelling Errors Compared to Moderate and Low Users. Error Bars Represent Standard Deviations.

There were clear performance disparities among the groups on the translation task. Figure 1 summarizes the average number of errors per group.

**High Usage (>2 hr)**

This group had the poorest translation outcomes. On average, a high-usage student made approximately 12.9 grammatical errors and 12.4 spelling errors, totaling about 25 errors per translation. Virtually all translations in this group were rated “low quality” by the evaluators. Common issues in their work included serious grammatical mistakes like incorrect sentence structure and frequent misuse of modifiers or prepositions, as well as numerous spelling mistakes (e.g., inconsistent use of hamza and confusion between similar-looking Arabic letters like *ي* and *ى*). It was evident that heavy TikTok users struggled to produce accurate, error-free translations in this task.

**Moderate Usage (1–2 hr)**

The moderate users showed intermediate performance. They averaged 7.1 grammatical errors and 7.0 spelling errors, for about 14 total errors per translation. Their translations were predominantly rated “moderate quality.” While they made notable mistakes, they made roughly 40% fewer errors than the heavy-usage group, indicating better performance. Common errors for moderate users still included grammatical lapses (e.g., occasional tense misuse) and some spelling mistakes, but far fewer than the high usage group. This group’s work was more comprehensible overall, though still falling short of polished accuracy.

**Low Usage (<1 hr)**

Students with minimal TikTok use delivered the best translation performance. They made only 2.4 grammatical errors and 2.2 spelling errors on average, totaling about 4–5 errors per translation. Many low-use students produced translations that were nearly flawless; their texts were rated “high quality.” Minor errors did occur, but these were often isolated slips such as a single misspelled word or a small grammatical oversight. Impressively, some low-use individuals made as few as 1–2 total errors. This indicates that light TikTok users—or those who abstain from TikTok during study time—maintained strong translation accuracy.

The differences between groups were stark. High-frequency users made about five times as many errors as low-frequency users and roughly double the errors of moderate users. An ANOVA confirmed that the differences in total error count across the three groups were statistically significant ( $F(2, 43) \gg 50, p < .001$ ). Post-hoc comparisons (Tukey’s HSD) showed that each pair of groups (high vs moderate, high vs low, moderate vs low) differed significantly ( $p < .01$  for all). The effect of TikTok usage level on translation errors appears very large (estimated  $\eta^2 > 0.70$ , indicating over 70% of the variance in error rates can be associated with the student’s usage group).

*C. Correlation Analyses*

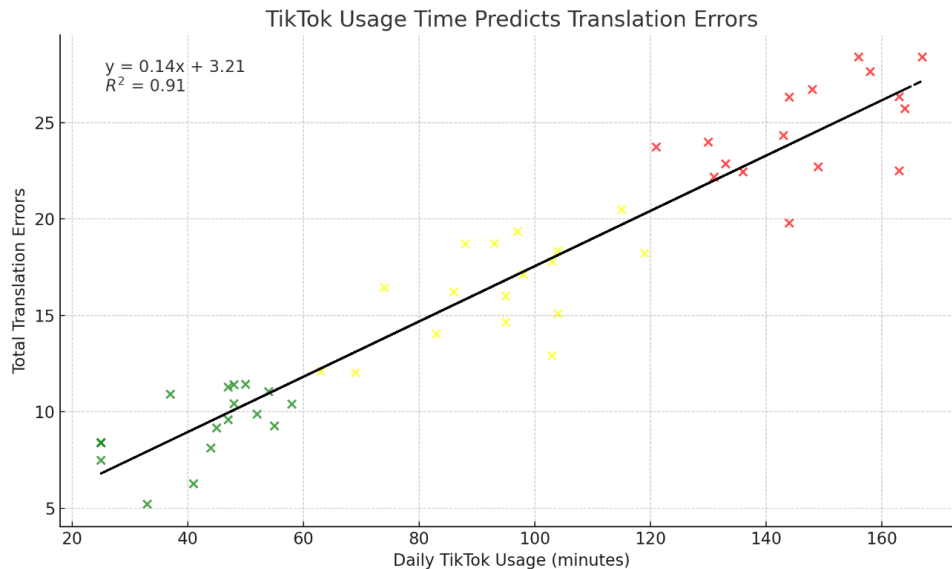


Figure 2. Daily TikTok Usage Strongly Correlates With Increased Translation Errors ( $r \approx 0.96$ ). Each Additional Hour of TikTok Use Predicts 8-10 More Errors.

Treating daily TikTok minutes as a continuous variable, we found a strong positive correlation between TikTok use and translation errors. The Pearson correlation coefficient was  $r = +0.90$  (approximately) for usage time vs total errors, which is exceptionally high. This suggests a nearly linear relationship where more TikTok minutes predicts more translation mistakes. Below is the breakdown by error type:

- usage vs grammatical errors:  $r \approx +0.89$
- usage vs spelling errors:  $r \approx +0.86$

All correlations were significant at the  $p < .001$  level. Figure 2 shows a scatterplot of daily TikTok minutes against total errors, illustrating this tight, upward trend. In practical terms, students who spent minimal time on TikTok (under 30 min) typically made under five errors, while those at the extreme high end (around three hours) made 25–30 errors. For every additional hour on TikTok, students tended to make 8–10 more translation mistakes. While correlation does not prove causation, it can be said that the strength of this association is notable. It remains robust even when controlling for self-reported study hours and academic performance; TikTok use itself was the strongest predictor of poor translation outcomes in our data.

#### D. Error Pattern Analysis

Beyond the sheer quantity of errors, we examined whether the types of errors differed by usage group. Interestingly, both grammatical and spelling errors increased in tandem with TikTok use—heavy users didn't disproportionately favor one kind of mistake; they made more of both kinds. Among grammatical errors, the most frequent across the whole sample were:

- incorrect use of prepositions (e.g., using the wrong preposition in Arabic; 25 occurrences, mostly in moderate/high users)
- misplaced modifiers (e.g., incorrect word order for adjectives; 19 instances)
- incorrect sentence structure (e.g., sentence fragment or wrong clause order; 18 instances)
- improper verb tense usage (18 instances)
- subject-verb agreement errors (16 instances)

High-usage students often accumulated several of these in one translation. For example, a heavy user might misuse multiple prepositions and also form a couple of grammatically incomplete sentences. Low-usage students, by contrast, if they erred at all, usually had at most one of these issues in their text.

For spelling/orthography, common problems included:

- misspelling of common words (19 total cases)
- confusion between similar-looking letters (e.g., mixing up  $\text{أ}/\text{آ}$  or  $\text{د}/\text{ذ}$  in Arabic; 19 cases)
- missing diacritical marks where needed for meaning (18 cases) (Though use of diacritics is often optional, errors were counted when meaning was affected.)
- incorrect use of hamza (ء) (17 cases)
- incorrect spacing between words or after punctuation (13 cases)

Again, heavy users tended to exhibit several of these in each translation, indicating sloppy or rushed writing, whereas light users had perhaps a single typographical error or no errors at all. One interpretation is that heavy users not only struggle with complex grammar but may also pay less attention to detail, leading to more typographical errors. This complements their survey feedback reporting reduced focus.

### *E. Self-Reported vs Actual Performance*

The survey's self-evaluation of translation quality ("Perceived Translation Quality") aligned closely with the objective results. All low-usage students had rated their own translation ability as "high quality" or "good" in the survey, which matched their low error counts. In contrast, every heavy user had self-rated as "low quality"—possibly aware of their difficulties—and indeed their error counts were high. Moderate users mostly self-identified as "moderate quality," which our grading confirmed. This consistency adds credibility to the performance data and suggests students have some awareness of how TikTok might be affecting them. It is telling that even students themselves recognize a drop in their translation quality with increased TikTok usage.

Finally, qualitative comments from the open-ended survey questions provided illustrative context. Common themes are described below, arranged by participant grouping.

#### ***Heavy Users***

Heavy users frequently mentioned a loss of concentration. For example, one student wrote, "After scrolling TikTok late into the night, I can't focus on translating texts the next day—my mind wanders." Others noted "rushing through homework to get back on TikTok," which could explain the careless errors. A sense of regret was apparent, with many heavy users saying they "wish to reduce TikTok use" because they notice it hurting their academics.

#### ***Moderate Users***

This group showed mixed feelings. Some believed TikTok provided useful mental breaks or even occasional language tips (e.g., exposure to English media on TikTok), but many still cautioned that "too much scrolling makes it hard to stay on task." A few mentioned they try to limit usage during weekdays as a strategy.

#### ***Light Users***

Nearly all light users expressed that limiting social media use was a deliberate choice to protect their study time. Comments like, "I only use TikTok as a reward after finishing my work," or "I prefer not to get too absorbed; it's how I maintain my grades" were common. These students did not report significant negative impact—in fact, some credited their minimal TikTok use as a factor helping them achieve "excellent" academic performance.

The findings consistently point to a detrimental effect of heavy TikTok usage on translation performance. Students who spent more time on TikTok made substantially more translation errors and struggled with focus, whereas those who limited their use did much better. The next section will discuss these results in light of cognitive theories and prior research, exploring possible explanations for the strong link observed between TikTok and translation outcomes.

## V. DISCUSSION

The results of this study reveal a clear pattern: increased TikTok usage is associated with lower translation performance among translation students. This aligns with the growing body of literature suggesting that excessive engagement with short-form video platforms can impair academic and cognitive abilities (Xu et al., 2023; Sha & Dong, 2021). The heavy TikTok users in our sample exhibited classic signs of what cognitive psychologists would describe as attention fragmentation and cognitive overload. They made numerous errors in their translations, likely because the mental faculties required—sustained attention, working memory for grammar rules, and careful proofreading—were compromised by their habitual content consumption behavior.

One useful lens to interpreting these findings is cognitive load theory (Sweller, 1988).<sup>1</sup> According to this theory, working memory has limited capacity, and excessive stimuli can overwhelm a learner's ability to process information. TikTok's fast-paced streams of videos could be contributing to a high extraneous cognitive load on students' minds. Every few seconds on TikTok, users must reset their attention to a new video context and parse new audio-visual information, often experiencing a dopamine-driven emotional reaction. This constant resetting and stimulation trains the brain for quick shifts, not prolonged focus. When a heavy user then sits down to perform a translation, their brain may be less adept at filtering out distractions and maintaining the thread of a complex task. The high error rates among heavy users support this; their cognitive resources might be depleted or misallocated due to their media habits. This is consistent with Bhandari and Beswick's (2025) experimental finding that adolescents made more mistakes on memory and attention tasks after a TikTok viewing session, whereas they performed better after a reading session. The TikTok condition in their study likely induced a form of cognitive overload or "spotlight" attention that couldn't be easily refocused on subsequent tasks. In our context, heavy TikTok users similarly appeared less able to muster the concentration needed for translation, echoing the idea that short-form media consumption can have detrimental short-term effects on attention and memory.

Additionally, the concept of attentional inertia and multitasking is relevant. Once students become accustomed to the multitasking environment of social media (swiping, watching, commenting simultaneously), they may develop a habitual need for constant stimulation as that may eventually affect the quality of focus in learning. Guo and Liu (2022) note that digital content often requires frequent attention switches, which might train rapid shifting at the expense of deep focus. Our heavy users indeed reported difficulty in focusing on one thing for long (responding "Yes, often" to focus difficulty items in our survey) and their translations showed evidence of lapses that could result from letting their minds wander (e.g., leaving sentences unfinished or making obvious mistakes, as if they weren't fully attending to the text). This

<sup>1</sup> Cognitive Load Theory (CLT), initially proposed by Sweller (1988), describes how tasks that impose heavy demands on cognitive-processing capacity can hinder learning by limiting the mental resources available for acquiring new schemas or knowledge structures (Sweller, 1988, p. 261).

suggests that overuse of TikTok could diminish a student's ability to sustain attention on a single task, a conclusion also drawn by other researchers studying the impact of short videos on learning.

The correlation between TikTok time and errors ( $r \sim 0.9$ ) in this study is remarkably high. While one must be cautious in interpreting such a strong correlation (there could be third variables, and the sample is moderate in size), it does raise the question of causality and direction. It is plausible that heavy TikTok use causes poorer performance by the mechanisms discussed (distraction, reduced study time, cognitive overload). However, we should also consider if students who naturally struggle with translation might be more inclined to escape into TikTok (i.e., reverse causation). For instance, a student who finds translating difficult or tedious might procrastinate by scrolling videos, thus accumulating more TikTok hours. Some of our qualitative data hints at this loop: a few heavy users admitted they use TikTok as a procrastination tool to avoid challenging homework. In such cases, the relationship can become cyclical—TikTok use impedes progress, which leads to frustration and further avoidance via TikTok. Over time, this vicious cycle could significantly erode translation competence. Breaking this cycle would require interventions both on the behavioral level (reducing screen time, as many students expressed a desire to do) and on the motivational level (helping students engage more with the translation process so it feels less burdensome).

The findings also resonate with the concept of cognitive and metacognitive self-regulation. The light users in our study seem to have better self-regulatory habits—they budget their time, they consciously limit distractions, and they possibly engage more in deep work. Many light users had excellent academic records and presumably well-honed study routines. This group's success in translation tasks aligns with what we'd expect if effective self-regulation shields one from the negative impacts of social media. On the other hand, heavy users perhaps lacked such self-discipline or fell into habitual overuse. This dovetails with Li et al. (2024), who found that the impact of social media on student performance was moderated by factors like academic self-efficacy and self-control. In their study, students with higher self-efficacy could use social media (even for collaboration or learning) without suffering academically, whereas those with lower self-regulation saw performance drops. In our context, the heavy users might represent lower self-regulation, allowing TikTok to consume time and attention, whereas light users either have higher self-regulation or inherently prioritize academics.

Our error type analysis offers additional insight into how cognitive effects might manifest. Heavy users didn't just make one kind of mistake; they made more of every kind. This widespread increase in errors suggests a general decline in carefulness and cognitive precision. It's not as if they still applied grammar correctly but just had more typographical errors, or vice versa—rather, their entire translation process was less rigorous. A possible explanation is increased cognitive load and fatigue: if a student's mental resources are taxed (perhaps by late-night TikTok binges leading to tiredness, or by a mind primed for distraction), they may fail to thoroughly apply grammar rules and fail to catch spelling mistakes. It's well documented that divided attention impairs both higher-order and lower-order tasks; for example, in driving simulations, phone-distracted drivers make both strategic errors (wrong turns) and tactical errors (lane swerves) (Strayer & Johnston, 2001). Similarly, our heavy users under a form of "attention deficit" made strategic errors (grammar) and tactical errors (spelling). This broad impairment aligns with cognitive load theory's prediction that an overwhelmed working memory will lead to errors across the board, not just in one specific area (Sweller, 1988).

It is also worth discussing the role of sleep and time of day, as these might indirectly affect performance. Hu and Li's (2023) survey noted that the majority of college students watched short videos between 5 p.m. and midnight. In our sample, many heavy users listed evening and late-night as their primary TikTok times. It is conceivable that heavy TikTok users are cutting into their sleep or peak mental hours, leaving them fatigued or less alert when performing academic work. Some heavy users explicitly mentioned staying up late on TikTok. Sleep deprivation is known to harm concentration and increase error rates (Lim & Dinges, 2010). While our study didn't measure sleep, this could be an underlying factor connecting high usage to poor performance. Essentially, TikTok could be indirectly affecting translation competence by reducing the quantity or quality of study time and rest.

On a more optimistic note, our findings do not necessarily condemn all TikTok usage. The moderate group performed reasonably, and some even pointed out minor benefits (like picking up new vocabulary or getting quick breaks to refresh). This suggests a balanced use of TikTok—in moderation and perhaps with educational content—might be compatible with maintaining translation skills. The key is that usage must be controlled and not allowed to interfere with study routines. The literature supports this nuanced view; for example, some scholars argue that short video platforms might be integrated into language education as a tool, rather than simply being seen as a distraction. Gong and Tao (2024), for instance, discuss collaborative learning possibilities. However, controlling TikTok usage requires guidance and self-discipline on the student's part, to avoid the slippery slope from a "5-minute educational video" to an hour of mindless scrolling.

Our study's qualitative feedback underscores students' awareness of the issue. Many heavy users expressed a desire to curb their TikTok habits, indicating they recognize the trade-off they're making. This is encouraging, as recognition is the first step to change. Educators could leverage this self-awareness by developing workshops or advising sessions on time management and digital wellness tailored for students in demanding fields like translation. Since translation requires intensive practice, perhaps framing TikTok overuse as directly detrimental to a skill they care about (and have felt the effects of) could motivate behavior change.

In terms of limitations of our research, we acknowledge that our sample size is modest and specific to one university program. Larger studies across multiple institutions would be valuable to generalize findings. Additionally, while we established correlation, experimental or longitudinal designs would help confirm causality—for instance, an intervention

that asks students to reduce TikTok use for a semester to see if their translation performance improves relative to a control group. Another limitation is that translation performance was measured on a single task. We assumed it reflects general skill, but performance can fluctuate. Repeated measures or a portfolio of translations would increase reliability. Despite these limitations, the extremely clear-cut differences observed (with essentially no overlap between heavy and low users in error rates) give us confidence in the robustness of the effect in our sample.

## VI. CONCLUSION

This study provides compelling evidence that excessive TikTok use can adversely affect translation performance in university students. Heavy daily engagement with TikTok was associated with dramatically higher rates of grammatical and spelling errors in a translation task, as well as self-reported difficulties in concentration and study habits. In contrast, students who limited their TikTok usage to less than an hour a day maintained strong translation quality and reported little to no negative academic impact. These findings contribute to the growing understanding of how short-form digital content consumption intersects with cognitive academic skills, highlighting both the potential risks and the importance of self-regulation.

The implications extend beyond translation studies. Translation here served as a proxy for tasks requiring sustained attention, complex reasoning, and detail orientation. The clear pattern of poorer outcomes with heavier TikTok use likely applies to other academic activities like writing essays, solving problems, or reading comprehension. As such, educators and students should be mindful of the opportunity costs of extensive social media use. Time spent on TikTok is not just time taken away from studying; it may also actively impair the quality of subsequent study by overloading the brain or fragmenting attention.

However, banning or demonizing TikTok is not a straightforward solution. Given the platform's popularity and potential to offer creative or educational content, a more productive approach is moderation and mindful use. Universities could offer digital literacy modules that teach students how to manage screen time and recognize signs of distraction. For translation instructors, an interesting pedagogical strategy might be to explicitly discuss with students how attention works and why translation requires a certain mental state, which constant multitasking can undermine. Our participants' awareness of their problem suggests that such conversations would be well received.

In future research, it would be worthwhile to explore if qualitative aspects of TikTok content have differential effects—for example, do students who mostly watch educational TikToks do better than those who watch only entertainment skits? Additionally, investigating long-term effects would be important (e.g., “Does heavy TikTok use over years lead to a lasting decline in language proficiency?”). Since our data and other recent studies hint at attention span as a mediating factor, interventions to improve attention (like mindfulness training) in tandem with reduced TikTok use could be tested for their impact on academic performance. Furthermore, future studies might include both genders within the sample and integrate personality assessment instruments such as the Myers-Briggs Type Indicator (MBTI®) or CliftonStrengths assessment (Gallup®). This will help examine whether gender or personality traits moderate the relationship between TikTok usage and academic outcomes.

In conclusion, the balance between digital life and academic success is a defining challenge for today's students. This research, focusing on translation performance, underscores a simple yet significant trade-off: the more hours one scrolls short videos, the more one's careful writing and translation skills may suffer. By recognizing this trade-off, students can make informed choices about their media consumption. Moderating TikTok use, especially during weekdays, and practicing sustained focus could not only improve their translation assignments but also enrich their overall learning experience in the long run. The immediate gratification of TikTok must be weighed against the cumulative rewards of deep, undistracted study—a lesson that extends to all of us navigating the distractions of the digital age.

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## REFERENCES

- [1] Alloway, T. P., Horton, J., Alloway, R. G., & Dawson, C. (2013). Social networking sites and cognitive abilities: Do they make you smarter? *Computers & Education*, 63, 10–16. <https://doi.org/10.1016/j.compedu.2012.10.030>
- [2] Bhandari, K., & Beswick, E. (2025). Impact of watching TikTok on memory and attention in adolescents. *International Journal of Scientific Research*, 14(2), 1–3. <https://doi.org/10.36106/ijsr>
- [3] Common Sense Media. (2018). *Social media, social life: Teens reveal their experiences*. Retrieved from <https://www.commonsensemedia.org/sites/default/files/research/report/2018-social-media-social-life-executive-summary-web.pdf>
- [4] Firth, J., Torous, J., Stubbs, B., Firth, J. A., Steiner, G. Z., Smith, L., & Sarris, J. (2019). The “online brain”: How the internet may be changing our cognition. *World Psychiatry*, 18(2), 119–129. <https://doi.org/10.1002/wps.20617>
- [5] Gong, Q., & Tao, T. (2024). The relationship between short video usage and academic achievement among elementary school students: The mediating effect of attention and the moderating effect of parental short video usage. *PLOS ONE*, 19(11), e0309899. <https://doi.org/10.1371/journal.pone.0309899>

- [6] Guo, R. Q., & Liu, Y. (2022). The attention dilemma in the digital age: A perspective from media multitasking. *Chinese Journal of Applied Psychology*, 28(5), 402–412. <https://doi.org/10.3785/CJAP.2022.05.0402>
- [7] Hu, X., & Li, Y. (2023). The impact of short videos on university students: Evidence from TikTok. *Communications in Humanities Research*, 12, 273–284. <https://doi.org/10.54254/2753-7064/12/20230121>
- [8] Li, G., Geng, Y., & Wu, T. (2024). Effects of short-form video app addiction on academic anxiety and academic engagement: The mediating role of mindfulness. *Frontiers in Psychology*, 15:1428813. <https://doi.org/10.3389/fpsyg.2024.1428813>
- [9] Lim, J., & Dinges, D. F. (2010). A meta-analysis of the impact of short-term sleep deprivation on cognitive variables. *Psychological Bulletin*, 136(3), 375–389. <https://doi.org/10.1037/a0018883>
- [10] Mark, G., Gudith, D., & Klocke, U. (2008). The cost of interrupted work: More speed and stress. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '08)* (pp. 107–110). Association for Computing Machinery. <https://doi.org/10.1145/1357054.1357072>
- [11] Montag, C., Yang, H., & Elhai, J. D. (2021). On the psychology of TikTok use: A first glimpse from empirical findings. *Frontiers in Public Health*, 9, Article 641673. <https://doi.org/10.3389/fpubh.2021.641673>
- [12] Rosen, L. D., Carrier, L. M., & Cheever, N. A. (2013). Facebook and texting made me do it: Media-induced task-switching while studying. *Computers in Human Behavior*, 29(3), 948–958. <https://doi.org/10.1016/j.chb.2012.12.001>
- [13] Sha, P., & Dong, X. (2021). Research on adolescents regarding the indirect effect of depression, anxiety, and stress between TikTok use disorder and memory loss. *International Journal of Environmental Research and Public Health*, 18(16), Article 8820. <https://doi.org/10.3390/ijerph18168820>
- [14] Strayer, D. L., & Johnston, W. A. (2001). Driven to distraction: Dual-task studies of simulated driving and conversing on a cellular telephone. *Psychological Science*, 12(6), 462–466. <https://doi.org/10.1111/1467-9280.00386>
- [15] Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12(2), 257–285. [https://doi.org/10.1207/s15516709cog1202\\_4](https://doi.org/10.1207/s15516709cog1202_4)
- [16] Sweller, J. (2011). Cognitive load theory. In B. H. Ross (Ed.), *Psychology of learning and motivation* (Vol. 55, pp. 37–76). Academic Press. <https://doi.org/10.1016/B978-0-12-387691-1.00002-8>
- [17] Twenge, J. M., & Campbell, W. K. (2018). Associations between screen time and lower psychological well-being among children and adolescents: Evidence from a population-based study. *Preventive Medicine Reports*, 12, 271–283. <https://doi.org/10.1016/j.pmedr.2018.10.003>
- [18] Xu, Z., Gao, X., Wei, J., Liu, H., & Zhang, Y. (2023). Adolescent user behaviors on short video application, cognitive functioning and academic performance. *Computers & Education*, 203:104865. <https://doi.org/10.1016/j.compedu.2023.104865>
- [19] Zhang, Y. (2022). The impact of college students' using TikTok on their mental health from the perspective of media society. *BCP Social Sciences & Humanities*, 18, 170–181. <https://doi.org/10.54691/bcpssh.v18i.972>

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