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A STUDY ON TRANSLATION APP DEPENDENCY AMONG CHINESE STUDENTS IN BELARUS

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Based on a survey of 30 Chinese master's students in Belarus, this study examines translation app dependency. Results show high usage and moderate-to-high dependency, alongside awareness of negative impacts. The findings reveal an ambivalence interpreted through the Technology Acceptance Model.

Keywords: translation apps; dependency; Chinese students; Belarus; English-medium instruction; Technology Acceptance Model.

1. Introduction. Over the past decade, free online translation tools–such as Google Translate, DeepL, and Baidu Translate–have become widely available and essential tools for foreign language learners. For international students learning a language other than their native tongue, these applications offer immediate assistance in reading, writing, and daily communication. Their convenience undoubtedly reduces anxiety associated with language barriers.

At the same time, language educators worry that over-reliance on machine translation may undermine the development of students' independent language skills. <<Some researchers have documented cases where students cannot even write simple sentences without translation apps>>[**Ошибка! Неизвестный аргумент ключа.**,p.627]. The tension between short-term efficiency and long-term learning is particularly pronounced in one-year master's programs–students face heavy academic pressure while having limited time for language improvement.

The number of Chinese students in English-taught Master's programs in Belarus is steadily increasing. These students typically possess intermediate English proficiency and face the dual challenge of understanding subject matter and completing written assignments at a satisfactory academic level. In this context, translation software is readily available and often seen as a necessary tool. However, existing literature has paid relatively little attention to the dependence on translation software among Chinese students in Belarus. This study attempts to explore this issue preliminarily.

Specifically, this study answers the following four research questions:

1. How frequently and for what purposes do Chinese students in Belarus use translation apps?

2. To what extent do they consider themselves dependent on this software?

3. What positive benefits and negative impacts do they perceive from using translation software?

4. How do their perceptions align with technology acceptance models?

2.Literature Review and Theoretical Framework

2.1Existing Research on Translation apps in Language Learning

In recent years, an increasing number of studies have examined the use of machine translation in educational settings.<<Nino conducted an empirical study of EFL college students and found that students who used Google Translate to complete writing tasks produced longer texts but also made more errors>>[**Ошибка! Неизвестный**

аргумент ключа., p. 627].<<Importantly, even when explicitly instructed not to use translation software, many students still relied on it, indicating the formation of habitual dependence>>[**Ошибка! Неизвестный аргумент ключа.**, p. 627].

<<Jolley and Maimone provide a comprehensive review of machine translation research in language teaching over the past three decades>>[**Ошибка! Неизвестный аргумент ключа.**, p.240]. They point out that<< while translation tools can support vocabulary learning and reading comprehension, unguided use often leads to over-reliance and reduces students' attention to language forms>> [**Ошибка! Неизвестный аргумент ключа.**, P. 240]. They also note that<< learners rarely receive explicit guidance on how to use these tools appropriately >>[**Ошибка! Неизвестный аргумент ключа.**, P. 255].

Research on Chinese learners also provides a reference for this study. Li and Zhang surveyed domestic university students and<< reported that over 80% of students use translation apps weekly, and a significant number admitted that they "cannot complete English assignments without help" >>[**Ошибка! Неизвестный аргумент ключа.**, p. 74]. Zhang and Zou surveyed Chinese students in the UK and<< found that machine translation was strategically used to generate drafts, but participants also worried about plagiarism and losing their academic voice >>[**Ошибка! Неизвестный аргумент ключа.**, p.12]. However, none of these studies specifically targeted Chinese students in English-taught environments in Belarus. This study attempts to conduct preliminary empirical research in this specific context.

2.2 Theoretical Framework: Technology Acceptance Model

<<This study adopts the Technology Acceptance Model (TAM) proposed by Davis>> [**Ошибка! Неизвестный аргумент ключа.**, p. 320]. <<TAM posits that two core beliefs determine technology adoption behavior: perceived usefulness (the degree to which an individual believes using a technology will improve their performance) and perceived ease of use (the degree to which an individual believes using a technology is effortless). These beliefs shape users' attitudes toward technology, thereby influencing behavioral intentions and actual use>> [**Ошибка! Неизвестный аргумент ключа.**, p. 325].

In the context of translation apps, Chinese students in Belarus are likely to perceive these tools as highly useful for overcoming language barriers, completing academic assignments, and reducing anxiety in reading and writing. The apps are also typically easy to access – free, mobile‑friendly, and requiring no training. According to TAM, such positive perceptions would lead to frequent and continued use. However, when usage becomes habitual and the user feels unable to perform academic tasks without the tool, this can be conceptualized as dependency. Dependency is not a construct originally in TAM, but it can be seen as an extreme outcome of high perceived usefulness combined with low perceived alternative efficacy. This study operationalizes dependency as a combination of high frequency of use, self‑reported reliance in academic contexts, and perceived difficulty in completing tasks without the apps.

Notably, TAM also allows us to examine the relationship between positive perceptions and awareness of negative consequences. It is possible for users to hold both high perceived usefulness and clear recognition of long‑term drawbacks – a state of ambivalence that TAM alone does not fully explain but which can be empirically described.

3. Methodology

3.1 Participants and sampling

The target population was Chinese students enrolled in English‑medium master's programs at Belarusian universities. Because the total size of this population is relatively small and access is limited, convenience sampling was used. A total of 30 valid responses were obtained. All participants were native speakers of Chinese. The sample mainly came from Belarusian State University.

3.2 Instrument

A self-administered questionnaire was designed in Chinese to ensure accurate understanding. The questionnaire consisted of six sections:

Section 1: Demographic information (gender, university, length of stay in Belarus, self-rated English proficiency).

Section 2: Frequency and scenarios of translation app use.

Section 3: Perceived usefulness, ease of use, and overall satisfaction (four-point Likert scales).

Section 4: Dependency measures (four statements on a five‑point Likert scale, 1 = strongly disagree, 5 = strongly agree).

Section 5: Perceived negative effects (three statements on the same five-point scale).

Section 6: One open-ended question: "What is the biggest help or drawback of using translation apps for your English learning or daily life in Belarus?"

The questionnaire was piloted with four students, and minor wording adjustments were made.

3.3 Data collection and analysis

The questionnaire was distributed via WeChat and disseminated through WeChat group chats. Data were collected in April 2026 over a period of ten days. Quantitative data were analyzed using descriptive statistics (frequencies, percentages, means, standard deviations). Open‑ended responses were coded thematically: all answers were read repeatedly, recurring themes were identified, and their frequencies were counted. No inferential statistics were performed due to the exploratory nature of the study and the small sample size.

4. Research Findings

4.1 Basic Characteristics of Participants

Of the 30 respondents, 22 were female (73.33%) and 8 were male (26.67%).

Table 1. – Participant characteristics(N=30)

Variable	Category	n	%
Gender	Male	8	26.67
	Female	22	73.33
Length of stay	Less than 6 months	2	6.67
	6-12months	27	90.00
	1-2 years	1	3.33
Self-rated English	Beginner	4	13.33
	Lower-intermediate	4	13.33
	Intermediate	16	53.33
	Upper-intermediate	5	16.67
	Advanced	1	3.33

Duration of study in Belarus: less than 6 months for 2 (6.67%), 6-12 months for 27 (90%), 1-2 years for 1 (3.33%), and more than 2 years for 0. Self-assessed English

proficiency: beginner level for 4 (13.33%), lower-intermediate level for 4 (13.33%), intermediate level for 16 (53.33%), upper-intermediate level for 5 (16.67%), and advanced level for 1 (3.33%).

4.2 Frequency and scenarios of use

As shown in Table 2, the majority of students used translation apps frequently: 43.33% "often (3-5 times per class)" and 23.33% "frequently in every class", totaling 66.66%. Only 6.67% reported "almost never".

Table 2. – Frequency of using translation apps in English classes (N=30)

Frequency	n	%
Almost never	2	6.67
Occasionally(1-2 times/class)	8	26.67
Often(3-5times/class)	13	43.33
Frequently in every class	7	23.33

Regarding scenarios (multiple choices allowed): reading course materials (24, 80%), preparing presentations (17, 56.67%), taking notes (16, 53.33%), completing assignments (16, 53.33%), and others (3, 10%) such as " translating exam questions" or "reading extracurricular materials".

Table 3. – Scenarios of using translation apps (multiple choices, N=30)

Scenario	n	%(of 30)
Reading course materials	24	80.00
Preparing presentations	17	56.67
Taking notes	16	53.33
Completing assignments	16	53.33
Other	3	10.00

4.3 Perceived usefulness, ease of use, and satisfaction

Table 4 shows the results of the three TAM‑related questions. The vast majority of students found the apps "comparatively" or "very" useful (93.34%), easy to use (93.33%), and were "comparatively" or "very" satisfied (80%). These data indicate that students generally hold highly positive evaluations of translation apps.

Table 4. – TAM perceptions(N=30,four-point scale)

Item	Not at all(%)	Not really(%)	Comparatively(%)	Very(%)
Useful for English learning	3.33	3.33	56.67	36.67
Easy to use	0	6.67	43.33	50.00
Overall satisfaction	3.33	16.67	56.67	23.33

4.4 Dependency and perceived negative effects

Table 5 presents the mean, standard deviation, and the proportion of agreement (4 or

5 on a 5-point scale) for the four dependency statements and three negative-effect statements. The statement “Without translation apps, my learning efficiency would drop significantly” had the highest mean (3.67), with 56.66% agreeing or strongly agreeing. “Translation apps have become a necessity” was endorsed by 46.66%. Among the negative items, “Translation apps make me lazy in thinking or organizing language myself” had the highest mean (3.33), with 43.34% agreement.

Table 5. – Dependency and perceived negative effects (1=strongly disagree, 5=strongly agree, N=30*)*

Statement	Mean	SD	%(4+5)
Dependency			
Without translation apps,I would struggle to complete English classroom tasks	3.53	1.04	33.33
Without translation apps,my learning efficiency would drop significantly.	3.67	1.06	56.66
I habitually rely on translation apps and rarely try to read English directly	3.27	1.08	43.33
Translation apps have become a necessity in my academic life	3.43	1.01	46.66
Perceived negative effects			
Overusing translation apps hinders my English progress	3.10	1.12	33.34
Translation apps make me lazy in thinking or organizing language myself	3.33	1.18	43.34
Translations are sometimes inaccurate and mislead my understanding	3.03	1.07	33.33

4.5 Open-ended responses: help and drawbacks

Twenty‑six participants answered the open‑ended question (four answered “none”). Thematic analysis identified the following core themes.

Help themes (frequency in parentheses): completing academic tasks (8), daily/local communication (7), improving classroom comprehension (5), making life more convenient (3), vocabulary learning (2). Typical answers: “The biggest help is successfully completing learning tasks”; “Helps me communicate better with local people, shopping, and buying things”; “I can understand what the teacher says”.

Drawback themes: causing dependency / loss of independent thinking (7), inaccurate/misleading translations (7), hindering English progress (5), technical problems (3), cross‑linguistic issues (Chinese‑Russian, 2). Typical answers: “Over‑reliance means my English does not improve much”; “It makes me habitually dependent on translation apps and I lose the ability to think for myself”; “The translation from Chinese to Russian or Russian to Chinese often contains big errors, causing occasional misunderstandings”.

Many students expressed ambivalence in a single answer. For example: “It helps me fully understand the teacher’s assignment requirements, but it also makes my English improve very little.” Another wrote: “It helps me communicate better with local people, complete assignments, and understand class content, but to some extent it hinders my English progress.” These responses directly confirm the ambivalence revealed in the

quantitative data: high dependency coexisting with high awareness of negative effects.

5. Discussion

5.1 Contextual differences in dependency level

Compared with the study by Zhang and Zou on Chinese students in the UK, the dependency level observed in this study is somewhat higher (56.66% agreed that efficiency would drop without translation apps). This difference may be explained by the weaker language support services in English-medium programs in Belarus. In English-speaking countries, international students usually have access to writing centers, language-buddy schemes, and extensive English for Academic Purposes courses. In Belarus, such resources are either scarce or not easily available. Under academic pressure, students turn to translation apps as the most accessible tool. In other words, dependency is not merely a matter of individual choice but also reflects structural inadequacies in support.

5.2 Theoretical interpretation of ambivalence

This study found a clear ambivalence: students heavily depend on translation apps (56.66% agree on efficiency drop) while being clearly aware of negative consequences (43.34% admit mental laziness, 33.34% believe it hinders progress). This is consistent with the observation by Jolley and Maimone that<<learners often continue using machine translation despite knowing its drawbacks>>[**Ошибка! Неизвестный аргумент ключа.**, p.248]. From the perspective of the Technology Acceptance Model, <<this ambivalence can be understood as the immediacy of perceived usefulness overriding long-term concerns>>[**Ошибка! Неизвестный аргумент ключа.**, p.322]. The deadlines for assignments and the immediate need to understand class content are concrete and urgent, whereas "improving English" is abstract and delayed. In a one-year master's program with limited time, turning to translation apps is a rational coping strategy in a resource-poor environment, rather than pure laziness or ignorance.

5.3 The specificity of the Belarusian context: Chinese-Russian translation

Two participants explicitly mentioned that Chinese-Russian translation errors caused communication misunderstandings. This finding has received little attention in the existing literature, which mostly focuses on translation between English and the learner's first language. In Belarus, Chinese students must not only handle English academic tasks but also manage daily communication in Russian. Chinese-Russian translation tools (e.g., Google Translate for this language pair) are currently less mature than Chinese-English tools, with higher error rates. This may create a vicious cycle: inaccurate translations force students to spend more time verifying, which paradoxically increases their reliance on translation apps to "save time", or after communication failures they become even more dependent on technological mediation. This mechanism deserves further investigation.

5.4 Pedagogical implications. The findings suggest several practical recommendations. First, instructors should acknowledge the ubiquity of translation apps instead of simply banning or morally condemning them. A short 20-30 minute "critical use" workshop could teach students how to use machine output as a draft and then manually revise grammar and style. Second, for the specific problem of Chinese-Russian inaccuracy, students could be advised to use Chinese-English translation as an intermediate step, or to acquire a basic phrasebook in Russian to reduce real-time reliance on translation. Third, universities could provide simple English academic writing support (e.g., one hour per week of peer feedback) to lower overall

dependence on translation software. Fourth, students could be encouraged to conduct "translation‑free periods" – for example, 30 minutes a day of reading original English materials without any translation aid – to gradually rebuild language confidence.

6. Conclusion. Based on survey data from 30 Chinese students (quantitative and qualitative), this study provides a preliminary empirical investigation of translation app dependency among Chinese students in English‑medium master's programs in Belarus. The results show that the vast majority of students heavily rely on translation apps, with dependency levels higher than those found in comparable studies in English‑speaking countries. At the same time, students are clearly aware of the potential negative effects, such as mental laziness, inaccurate translations, and hindered language progress. This ambivalence is not irrational but rather a strategic adaptation to an environment with limited language support.

The main limitations include the small sample size (N=30) and the fact that the sample came mainly from one university, so the results may not be generalizable to all Chinese students in Belarus. All data are self‑reported, which may be subject to social desirability bias. The cross‑sectional design cannot establish causality. Future research should recruit larger and more diverse samples and employ mixed methods (e.g., diary studies or screen recording) to obtain more objective behavioral data. The impact of Chinese‑Russian translation quality on Chinese students' daily communication in Belarus also deserves dedicated study.

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ИССЛЕДОВАНИЕ ЗАВИСИМОСТИ КИТАЙСКИХ СТУДЕНТОВ В БЕЛАРУСИ ОТ ПРИЛОЖЕНИЙ ДЛЯ ПЕРЕВОДА

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В этом исследовании, основанном на опросе 30 китайских магистрантов в Беларуси, рассматривается зависимость от приложений для перевода. Результаты показывают высокий уровень использования и зависимость от среднего до высокого уровня, а также осведомленность о негативных последствиях. Результаты показывают неоднозначность, интерпретируемую через модель принятия технологий.

Ключевые слова: приложения для перевода; зависимость; китайские студенты; Беларусь; Обучение на английском языке; Модель принятия технологий.