

The Role of Digital Tools in Enhancing Learner Autonomy and Motivation among EFL Learners in Saudi Arabia

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ABSTRACT:

Digital technologies have transformed English language learning environments in the recent years. Contemporary learners can use mobile applications, learning management systems, artificial intelligence-based applications, video learning platforms, and interactive online resources that allow them to have a flexible opportunity to learn the language even outside of the classroom environment. This research investigates the role of digital learning technologies in facilitating learning autonomy and motivation at selected institutions of higher education in the Eastern Region of Saudi Arabia. Rooted in theories of learner autonomy and self-determination, the study proposes that learner motivation may be strengthened by providing learners with greater control over learning resources and learning processes, given the dynamic nature of motivation, its regulation may be required throughout the learning process and over time. Data were collected using a mixed-methods quasi-experimental design through pre-post-intervention surveys, and semi-structured interviews to assess learner autonomy and motivation regulation. The instruments were duly evaluated for reliability and validity. The results showed that students demonstrated better autonomy and motivated engagement when digital technologies offer a structured learning environment, consistent feedback, and opportunities for self-monitoring. The study contributes to the literature on digital learning ecosystems and highlights the role of educational technologies and higher education institutions in fostering learner autonomy and long-term motivation regulation.

Keywords: Digital technologies, learner autonomy, self-determination, motivation regulation

Introduction

The landscape of language learning has undergone substantial transformation with the advent of digital technology (Bonfield et al., 2020). Graduating from the classroom-based tradition, language acquisition today is

increasingly supported by digital resources and tools that provide learners with personalized, self-directed, flexible learning opportunities. This change is particularly relevant in the English as a Foreign Language (EFL) classrooms where learners are expected to demonstrate

independence and higher order cognitive skills (Alzubi et al., 2024). Despite that digital technologies provide unprecedented access to supplementary learning resources, the extent to which these tools foster learning autonomy and sustain motivation is still not fully understood in the context of higher education in Saudi Arabia.

Learner autonomy, which is broadly defined as the ability to take responsibility for and exercise control over one's own learning, has long been recognized as an important factor in effective language education (Holec, 1981). Drawing from self-determination theory (Deci & Ryan, 1985), learners are more likely to experience intrinsic motivation when the learning environment provides opportunities for autonomy and personal relevance. However, learner autonomy, motivation, and technology share a complex relationship, and mere access to technology is not guarantee for learning success. This is a research gap in the context of institutions of higher education in eastern Saudi Arabia which the current study fills. Digital technologies have reshaped the concept of language learning from being predominantly a classroom-bound activity into a flexible learning option that can extend beyond the classroom (Li, 2018). Learners today have access to a wide variety of digital tools such as mobile applications, online learning platforms, learning-management systems, AI-powered Chatbots, and web-based resources that foster opportunities for learning autonomy. Moreover, motivation, which is another significant factor in ensuring learning success, is increasingly understood as a dynamic construct which is sensitive to situational, social, and cultural factors, rather than being a fixed individual characteristic (Barrick et al., 2003; Ziegler et al., 2010). Recent research on motivation only partially focuses on how learners perceive and regulate their motivation for different tasks (Meece, 1994). Research suggests that individuals can actively manage their motivation through cognitive, emotional, and behavioral strategies to achieve goals, while inadequate regulation may result in decreased engagement and ineffective strategy use (De Neve et al., 2023). Learners' understanding of motivation as fixed or dynamic

may also influence the extent to which they attempt to regulate it (Fujita et al., 2024; Liu, 2025). In this context, controlled motivation and its relationship with learner autonomy, self-awareness, and adaptive strategies warrant close examination (Aljabr & Al-Ahdal, 2024; Alqasham & Al-Ahdal, 2022; Al-Ahdal & Almarshedi, 2022; Antonopoulou, 2024). These complex issues can be understood from the perspective of metamotivation which is defined as learners' awareness of their motivated states, and their ability to monitor, evaluate, and regulate these states with respect to learning objectives (Du Boulay et al., 2010). Learners' response to fluctuations in motivation and the strategies they select to maintain or enhance their engagement can derive from digital learning tools due to their exclusive features such as immediate feedback, progress tracking, and personalized learning opportunities (Reitgruber, 2023; Bryndin, 2025). At the same time, certain challenges are inherent in digital technologies such as learners' getting distracted towards gamification which may promote only short-term engagement while excessive technological stimulation may lead to cognitive and emotional burden manifested in poor engagement and anxiety. Despite growing integration of technology into the classrooms as drivers of learning, learner autonomy, and motivation, the ways in which digital technologies interact with learners' ability to regulate their learning and motivational states has received relatively less attention though each of these elements have been examined as individual factors. This exploration becomes particularly relevant in contexts where learners frequently engage with automated feedback and AI-powered learning resources to understand their ability for self-regulation. Therefore, the present study investigates the relationship between digital technology use, learner autonomy and motivation among EFL learners in Saudi Arabia by using a mixed-methods approach. The study combines self-reported data from pre-post intervention questionnaires and semi-structured interviews to obtain a comprehensive understanding of the impact of technology on learner autonomy and motivational processes in the Saudi EFL context. The study outcomes are expected to contribute

to the literature on digital learning ecosystems and provide theoretical and pedagogical frameworks for curriculum design, teacher training, instructional practices, all geared towards the learner-centred approach.

Background of the Study

Learner autonomy, defined as the ability to take charge of one's own learning (Holec, 1981), is an essential component of effective language learning. Motivational theories, particularly self-determination theory (Deci & Ryan, 1985), suggest that opportunities for autonomy can foster intrinsic motivation by giving learners a sense of control, purpose, and personal relevance. With the rise of digital tools such as Moodle, mobile learning applications, YouTube (Zitouni et al., 2021), and AI-based platforms, learners now have greater opportunities for self-paced, personalized, and interactive learning. Digital tools may strengthen the motivation of learners at institutions of higher education by making learning more flexible, engaging, and accessible. Against this background, the present study examines the relationship between technology use, autonomy, and motivation for learners in institutions of higher education in Saudi Arabia.

Statement of the problem

Despite the availability of educational technology tools, the traditional teacher-led instruction model persists in many Saudi institutions of higher education, highlighting poor learner autonomy. Additionally, motivation levels often fluctuate due to external factors such as course load, assessment pressure, or limited classroom engagement. It is not wholly clear whether digital tools genuinely encourage these learners to take more ownership of their learning and whether this leads to higher motivation. Therefore, there is a need to examine the role of technology in shaping learner autonomy and motivation in higher education institutions.

Purpose of the Study

The purpose of this study is to examine the impact of digital learning technologies on the autonomy and motivation of English language

learners at institutions of higher education in eastern Saudi Arabia. Specifically, it aims to determine the extent to which learners use technological tools, how they use them, and how these tools contribute to (or hinder) autonomous learning and motivational outcomes.

Research Questions

1. To what extent does the use of digital learning technologies enhance motivation and autonomy of learners at institutions of higher education in the eastern part of Saudi Arabia?
2. Which digital learning technologies contribute most to enhancing autonomy and motivation of learners at institutions of higher education in the eastern part of Saudi Arabia?
3. What challenges do learners face when using digital learning technologies to enhance autonomy and motivation in the Saudi EFL context?

Significance of the Study

This study is significant because it addresses the growing need to incorporate technology effectively in English language teaching and learning. The results may provide teachers, curriculum designers, and institutions with insights into how digital tools can foster independent learning habits and enhance learner motivation—two important factors for learning success. The findings may also help educators integrate technology more seamlessly and organically into the courses so that learners may attain learning objectives while staying technologically upgraded.

Methodology

This study employs a mixed-methods quasi-experimental design to examine the impact of digital learning technologies on the autonomy and motivation of EFL learners at institutions of higher education in the eastern part of Saudi Arabia.

Participants

The study sample comprised 82 English learners from two academic institutions in the eastern part of Saudi Arabia. To ensure a representative

sample and provide diversity, learners were selected from diverse academic disciplines. At the undergraduate level, learners are assumed to become independent learners and perform complex linguistic tasks in their academic journeys. This level of proficiency aligns with the Common European Framework of Reference for Languages (CEFR) and is associated with the point at which learners begin to develop greater self-directed learning skills.

Research Design

A quasi-experimental research design was adopted to assess the ability of digital learning technologies to promote learner autonomy and motivation during a 6-week intervention. Participants were randomly assigned to an Experimental Group (EG) and a Control Group (CG). The EG were free to use any of the AI

tools that they wished to accomplish the tasks while the CG continued with the conventional pedagogy. Pre- and post-intervention questionnaires were administered to determine changes in learners' perceptions of autonomy and motivation.

Data Collection Methods

Questionnaire

The questionnaire items were designed by the researcher based on previous studies such as (Bogdand, Tamas & Toth, 2020; Hervás-Gómez et al., 2021; Mahmoud, Mirgane & Mohammed, 2024). Three language specialists (Professors) validated the content, and it was then distributed to a pilot sample of 26 participants. Cronbach's alpha computations showed that the scale was reliable and valid, as shown in table 1 below.

Table1: Reliability Statistics

Dimensions	Cronbach's Alpha	N of Items
Digital Tools Acceptance	0.889	9
Learner Autonomy	0.824	11
Metamotivation	0.907	6
Total	0.952	26

Table 2 below summarizes the demographic information of the participants.

Table 2. Demographic Profile of Participants

Variable		Frequency	Percent
gender	male	36	43.9
	female	46	56.1
age	18–20 years	23	28.0
	21–23 years	50	61.0
	24–26 years	9	11.0
level	first	21	25.6
	second	28	34.1
	third	16	19.5
	fourth	17	20.7
faculty	humanities	19	23.2
	Business	22	26.8
	Engineering	18	22.0
	Science	23	28.0
	Total	82	100.0

Table 2 presents information on the 82 participants. There were 46 females and 36 males; most were between 21 and 23 years old. Second-year students represented the largest portion of the sample at 28, followed by first-year students at 21, fourth year students at 17, and third year students at 16. Regarding streams of enrolment, the distribution was balanced, with all major subjects finding representation ranging from 18 to 23 students per subject. Overall, the demographic data indicates balanced representation across gender, academic disciplines, and level of study.

Interviews

Semi-structured voluntary interviews were conducted with 20 participants (12 from EG and 8 from CG) after the intervention period. The interviews explored learners' perceptions of autonomy, their experiences with digital learning technologies, and the strategies they used to regulate their motivation during the learning process. These interviews provided deeper insights into learners' experiences that quantitative measures alone could not capture.

Data Analysis

Quantitative Data

Questionnaire before and after the intervention provided quantitative data, which were analyzed using SPSS statistical software. The measures used were means and standard deviations. Inferential statistical methods, including paired-samples t-tests and Cohen's d were used to identify significant differences between the experimental and control groups and to examine changes over time.

Qualitative Data

All the interviews were audio recorded with due permission of the participants. This data was then transcribed for thematic analysis. This involved coding the interview responses to identify recurrent themes and patterns related to learner autonomy, motivational regulation, and experience with digital learning technologies. The constant comparative approach was used to narrow down the themes and increase the credibility of the qualitative results.

Ethical Considerations

The research was conducted with ethical considerations in place. All participants provided informed consent before participation in the study. They were informed about the purpose of the study, the procedures, and their right to leave the research at any point without penalty. The data presented in the analysis and reporting were anonymized to maintain confidentiality. Additionally, the research processes complied with ethical research conduct standards and were approved by the academic institution's ethics review board.

Results

Quantitative Results

Pre- and post-intervention, questionnaires were administered in both the groups to investigate whether the use of digital learning technologies significantly affected autonomy and motivation among the learners.

Qualitative Results

Semi-structured interviews were conducted with twenty participants to supplement the quantitative findings. Both groups found representation in this data. The qualitative information shed more light on the learners' perceptions regarding digital learning technologies and how they contributed to autonomy and motivational regulation.

Motivation of the learners

Analysis of participants' responses to the interview questions indicated that digital learning technologies facilitate intrinsic motivation by changing the traditional pedagogical dynamic. Many of the participants reported intelligent engagement due to the encouraging words that the digital tools (DTs) used to ensure their participation and task completion. For instance, P1 said, "*DTs make learning feel less like homework and more like a game, which highly motivates me outside of class,*" while Participant 8 added, "*Seeing my daily progress keeps me accountable and motivated.*" Furthermore, the ability to surf authentic and socially interactive digital environments sustained initiative to study; P 6 emphasized, "*Connecting*

with native-speaker content keeps me highly motivated." For these individuals, technology served as a motivator for assignment completion rather than an independent intellectual search. For instance, P 3 admitted, *"They (DTs) don't motivate me much; I only use them when I have an assignment."* This revealed an underlying shortage of essential academic effort when external instructional scaffolding is removed, as plainly stated by P 7, who acknowledged, *"I lack the self-regulation to use them properly without a teacher."*

Manifestations of Learner Autonomy and AI Dependence

Autonomy emerged as a complex concept in this dataset, influenced by the capabilities of the selected digital tools. DTs offer immediate, automated feedback, enabling students to take control of their language development and effectively removing the conventional delay linked to teacher-based grading.

P1 described this shift, stating, *"I feel independent because I get instant feedback on my mistakes without waiting for a teacher."* Thus, motivated learners can tailor their study schedules and content focus to accommodate personal demands, allowing them to *"design (my own) learning schedule"* (P18) and *"skip easy topics and spend hours on hard ones"* (P4). Nevertheless, an inconsistent pattern also emerged: some students exhibited an over-dependence on DTs. This technological dependence could threaten authentic self-regulation, fostering passive learning in which the tool surpasses the learner's cognitive effort. As P7 frankly observed, *"I don't feel independent; instead, I feel totally dependent on AI to do the work for me."*

Technological Preferences and the Increasing Use of AI

The analysis of preferred digital environments highlights a significant shift toward AI in self-directed language learning. Large Language Models, particularly ChatGPT were reported to be widely used by the participants, serving as adaptable educational tools. Learners utilized these tools for conversational practice to *"record my voice, listen back, and correct myself"* (P2), to drill specific weaknesses without *"feeling embarrassed"* (P5), and to see how to make basic sentences

"sound more academic" (P12). Alongside these advanced DTs, learners frequently utilized asynchronous multimedia repositories, such as YouTube, where they could search for a word and *"see 50 video examples of native speakers using it"* (P9). Furthermore, gamified and organizational platforms remained prominently used, reflecting a robust preference for multimodal learning environments.

Barriers and Cognitive Overload

Despite the many pedagogical benefits, participants reported facing significant barriers that obstructed autonomous learning. These included infrastructural shortages, connectivity issues, and the shortcomings of some tools: *"Gemini does not work in my area"* (P8), and the fact that valuable practice tests are *"locked due to expensive subscriptions"* (P16). Moreover, localized technological failures presented unique accessibility challenges, as P14 pointed out that speech recognition software *"doesn't always register my accent correctly."* From a psychological perspective, respondents had to cope with digital weakness and cognitive overload. Students reported experiencing *"eye strain and headaches from staring at the screen"* (P13). Additionally, the lexical complexity generated by DTs was sometimes below the learners' current proficiency levels, for example P5 noted, *"Sometimes the AI generates explanations using vocabulary that is too complex for me,"* indicating that autonomous tools still require foundational pedagogical scaffolding.

Quantitative results

The pre-test data in Table 3 shows an approximate overlap between the EG and the CG. Students in both groups began the study with approximately identical proficiency levels, as shown by score distributions that predominantly fell between 27 and 35 marks. The estimated means were 32.3500 for the CG and 31.9250 for the EG, and the p-value was 0.542. This statistical similarity is vitally important for strong research design, as it validates the comparability of the two groups before any pedagogical intervention was implemented. Furthermore, the generally low baseline scores across all participants validate the

ground that these learners inherently faced severe cognitive and linguistic difficulties when

undertaking English language tasks, establishing a clear need for instructional remediation.

Table 3: The Paired Samples t-test mean of performance of students in the pre-test phase

	Mean	N	Std. Deviation	Std. Error Mean	t	do	sig.
Pre-test CG	32.3500	40	2.76006	0.43640	0.615	39	0.542
Pretest EG	31.9250	40	3.65420	0.57778			

After the instructional period, the post-test results showed a significant difference in

academic achievement between the two groups. as shown in tables 4 and 5 below.

Table 4: Paired Samples test of performance in the post-test phase

	Mean	N	Std. Deviation	Std. Error Mean	t	df	sig
Posttest EG	70.8250	40	3.16137	0.49986	21.405	39	0.000
Posttest CG	53.4000	40	3.76761	0.59571			

Table 5: Cohen's d of Effect Sizes

		Standardizer	Point Estimate	95% Confidence Interval	
				Lower	Upper
Post-test EG –Post-test CG	Cohen's d	3.47772	5.010	3.857	6.157
	Hedges' correction	3.51161	4.962	3.820	6.098

The EG achieved a significantly higher mean score (70.83) than the CG (53.40) in the post-test phase. The low standard deviations in both groups (3.16 and 3.77, respectively) mean that scores within each group were clustered around their means; in other words, progress among students within each group was similar. This low variance suggests a uniform response to the learning conditions within each group.

Paired-samples t-test was conducted to determine if there was significant difference between the CG and EG as the p value was .000 which is

below the standard alpha threshold of .05. So this data provides healthy empirical evidence that the pedagogical intervention administered to the EG using digital learning technologies fostered self-regulation and autonomous learning and it had a direct impact on overcoming their inherent learning difficulties. Cohen's d was used to measure effect size; the point estimate was 5.01. In educational research, a Cohen's d of 0.2 is typically considered small, 0.5 is medium, and 0.8 is large. In our study, the effect size was 5.01, which is large.

The large effect size strongly emphasizes the importance of learner autonomy in foreign language learning. Traditional teaching and learning in the CG failed to equip students with the learning autonomy needed to navigate complex EFL tasks. Fortunately, the EG opined that the intervention fundamentally improved their academic capabilities, supporting the hypothesis that equipping EFL learners with autonomous digital tools is a highly effective strategy for elevating EFL proficiency.

Integration of Quantitative and Qualitative Findings

The combination of quantitative and qualitative results offers powerful insight into how digital tools affect learners' autonomy and motivation regulation. The quantitative results indicated statistically significant differences in autonomy and motivation regulation among the learners who used digital tools (EG). These results were further explained using the qualitative results, which indicated the mechanisms by which digital tools supported learning processes. Specifically, digital tools were perceived to facilitate autonomy through the provision of flexible learning conditions, increase ability to learn at one's own pace by allowing the learner to choose resources that best suited their personal requirements. Concurrently, the tools aid motivation regulation through feedback, progress tracking, and interactive multimedia materials. The results are capable of motivating learners to view digital tools as a learning resource and motivational regulator, helping them maintain their involvement in language learning exercises over time.

Discussion

The concept of learner autonomy in EFL contexts demonstrates how technology and motivation-regulation can make a difference in students' language-learning experiences. According to Tuan (2021), high levels of perceived autonomy significantly influenced the learning practices of Vietnamese EFL learners, which is why teachers should encourage self-directed learning. Building on this, Zeng (2023) explored the role digital literacy played in high

school students' autonomous learning. Han and Reinhardt (2022) discussed how the development of learners' digital identity and self-efficacy contributed to how they functioned in a digital learning environment. Yang et al. (2024) showed that intelligent personal assistants can support autonomous learning in skills such as listening and speaking. Moreover, Woo and Choi (2021) offered suggestions for artificial intelligence-based language learning tools that can help students become more autonomous. Gan et al. (2023) and Alqarni (2023) emphasized motivation as a key factor in engagement, noting that effective learning strategies can predict language learning outcomes. Tran and Phan Tran (2021) and Hunutlu (2023) emphasized the importance of SRL strategies for successful learning, especially in project-based learning. Linling and Abdullah (2023) and Su et al. (2023) documented instructional changes due to the COVID-19 pandemic, particularly the use of the flipped classroom model as a teaching strategy that encouraged students' engagement. These results suggest that accounting for individual differences in SRL is critical when designing educational interventions, as Chen et al. (2023) noted. The need for innovative approaches continues, with practical applications for autonomy, such as Kang's (2022) self-recorded tasks. Finally, Li (2023) revealed that mobile-assisted language learning had great potential to improve learners' listening skills, thereby increasing their autonomy in learning English. Taken together, these studies highlight the complex nature of learner autonomy, showing that it is related to different aspects of technology, motivation, and self-regulation in the context of EFL.

Data in this study supports the claim that integrating DTs into EFL instruction yields significantly better academic outcomes than traditional pedagogical approaches. This notion was earlier reported by Chu et al. (2023), who found that students in the experimental group, who learned with the self-regulated English vocabulary game (SR-EVG) approach, improved their English vocabulary achievement and self-regulation. According to Surbakti et al. (2024),

students and instructors reported that well-designed digital content led to better engagement and more efficient learning.

The transformative pedagogical value of the present study is justified by the large effect size, calculated as a Cohen's d of 5.01. This supports the efficacy of DTs in fostering learner autonomy, as opposed to the traditional teaching methods utilized in the CG which fundamentally failed to equip students with the self-regulation necessary to navigate complex EFL tasks. In contrast, integrating autonomous digital tools fundamentally changed EG students' academic abilities. ChatGPT was found to be the most effective DT in building autonomous and effective learning.

Conclusion

This study evaluated how digital learning technologies can augment learner autonomy and motivation regulation among EFL students at institutions of higher education in the eastern part of Saudi Arabia. The results suggest that digital learning technologies can facilitate learner autonomy by enabling learners to track their progress, receive feedback, and manage their learning activities more efficiently. Continuous interaction with DTs prepares learners with the

necessary metacognitive strategies to become highly self-dependent, enabling them to actively endure, monitor, and control their motivation throughout the complex process of language learning. The evidence strongly suggests that purposeful integration of DTs in ELT settings can significantly engender independent, highly self-motivated language learners.

Recommendations

The findings of the current study offer implications for language educators, curriculum developers, and academic policymakers. Including DTs as supplements rather than structurally embedding them in course syllabi can lead to learner autonomy, motivation, and engagement. Furthermore, the study stresses the need to shift from traditional, teacher-centered instruction to learner-centered frameworks. Educators must act as facilitators who scaffold students' use of digital environments. Future research should adopt longitudinal methodologies to investigate the sustained, long-term effects of digital learning environments on learner autonomy. Furthermore, upcoming studies should explore how these DTs reshape motivational control and autonomous learning paradigms across diverse educational contexts.

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The questionnaire

No	Digital Tools Acceptance	Strongly Disagree	Disagree	Nuretal	Agree	Strongly Agree	St	Mean	Rank
1	DTs enhance my overall English language learning performance.								
2	DTs help me complete English coursework and assignments more efficiently.								
3	DTs provide valuable learning opportunities beyond traditional classroom instruction.								

4	DTs are effective resources for improving my language skills								
5	DTs make understanding complex English tasks easier.								
6	DTs requires minimal cognitive effort for me.								
7	DTs' interfaces, menus, and feedback mechanisms of language are clear								
8	I intend to continue using DTs independently to support my future English development.								
9	I regularly integrate DTs into my routine English study habits								
	Learner Autonomy								
1	I set clear, personal goals for my English language development without waiting for instructor prompts.								
2	I independently select DTs tailored to my specific learning needs.								

3	I actively track and monitor my own progress in acquiring English proficiency.								
4	I identify my linguistic weaknesses and search for digital exercises to address them.								
5	I organize my study schedule effectively for autonomous language practice.								
6	I take personal responsibility for my learning outcomes and language achievements.								
7	I experiment with alternative learning strategies when a particular method is ineffective.								
8	I assess my learning progress using digital feedback.								
9	I seek out authentic English media and communicative opportunities outside class hours.								
10	I correct my linguistic errors rather than relying on teacher corrections.								

11	I evaluate the effectiveness of my study methods and adjust them accordingly.								
	Metamotivation								
1	I am aware of the factors that diminish my motivation to study English.								
2	I recognize when cognitive boredom begins to hinder my language learning.								
3	I modify my digital environment to restore my focus.								
4	I select digital activities that align with my personal interests.								
5	I monitor my engagement levels during study sessions.								
6	I remind myself of the practical value of English fluency to overcome task reluctance.								

interview

- 1- What are the effects of the integration of DTs for learning English on your personal motivation to learn outside of the classroom?
- 2- What are the specific ways that DTs make you feel independent and responsible for your English language progress?
- 3- Which specific DTs do you rely on most to improve your English independently?
- 4- What are the technical difficulties you faced when trying to use DTs for self-directed English study?
- 5- Are you motivated to use DTs to learn autonomously?

Participant responses to the semi-structured interviews

p1	DTs make learning feel less like homework and more like a game, which highly motivates me outside of class.	I feel independent because I get instant feedback on my mistakes without waiting for a teacher to grade me.	I rely mostly on Duolingo, ChatGPT and YouTube	My main issue is when the internet cuts out and the app loses my progress.	Yes, I am very motivated to use them autonomously.
p2	They give me the confidence to practice speaking when I am alone.	I can record my voice, listen back, and correct myself at my own pace	I use ChatGPT for conversation practice and DeepL	The premium features are too expensive, so I hit paywalls often.	Absolutely motivated
p3	Honestly, they don't motivate me much; I only use them when I have an assignment	They just help me find definitions quickly so I can finish faster	I mostly just use ChatGPT and Gemini	The free versions have too many distracting pop-up ads	Not really; I still prefer a teacher approach
p4	DTs allow me to study late at night, which fits my schedule better and keeps me driven	I feel in control because I can skip easy topics and spend hours on hard ones	I use BBC Learning English and Quizlet.	Sometimes syncing my flashcards between my phone and laptop fails	Yes, very motivated
p5	They help me focus on my specific weakness: grammar	I can ask for explanations as many times as I want without feeling embarrassed	I rely heavily on ChatGPT	Sometimes the AI generates explanations using vocabulary that is too complex for me	Yes, I prefer it over textbooks.
p6	Connecting with native-speaker content keeps me highly motivated.	I choose to learn through topics I actually care about, like technology and sports	I use Netflix with English subtitles and podcasts	Video buffering due to slow internet ruins the experience.	Highly motivated
p7	They make me a bit lazy, to be honest	I don't feel independent; instead, I feel totally dependent on the tool to do the work for me.	I use ChatGPT to read texts	ChatGPT translations for idioms or cultural phrases are often completely wrong	No, I lack the self-regulation to use them properly without a teacher.

p8	Seeing my daily streak keeps me accountable and motivated	The apps track my progress and show me data on how much I've learned, which makes me feel like I own my progress	ChatGPT and Duolingo	They drain my old smartphone's battery very quickly	Yes, the gamification works perfectly for me
p9	They increase my curiosity about how words are used in real life.	I can search for a word and see 50 video examples of native speakers using it.	YouGlish and YouTube.	Searching takes a lot of time and data bandwidth	Yes, definitely
p10	They make academic reading much less intimidating	I can break down complex texts sentence by sentence on my own	QuillBot, ChatGPT	Formatting gets messed up when I upload PDFs into the translation tools	Yes, they are essential for my university
p11	) It's more interactive, which keeps me engaged for longer periods.	I can interact with other English learners around the world and test my skills in real-time.	HelloTalk and ChatGPT	Dealing with inappropriate users or spam messages can be very distracting	Yes, I am motivated by the social aspect
p12	DTs give me alternative ways to express myself, which is encouraging.	I can type a basic sentence and see how to make it sound more academic	Grammarly and ChatGPT	Sometimes I worry that relying on AI will get me flagged for plagiarism	Yes, but I use them cautiously
p13	Sometimes using them feels like a chore if the screen time is too high	They are good for quick fact-checking, but I don't feel they teach me deep concepts.	ChatGPT and web dictionaries	Eye strain and headaches from staring at the screen	Neutral. I use them out of necessity, not motivation
p14	They inspire me to improve my pronunciation	The speech recognition tells me exactly which syllable I mispronounced, so I don't need a tutor	Elsa Speak and Google voice search	The microphone doesn't always register my Yemeni accent correctly	Yes, I love seeing my pronunciation score improve.
p15	Having all my resources in one place motivates me to stay organized	I can build my own digital portfolio of vocabulary	Notion, Quizlet, and ChatGPT	The interfaces are sometimes too complicated and not mobile-friendly.	Absolutely, organization equals autonomy for me

p16	They help me prepare for exams outside of class	Taking automated mock tests gives me a clear baseline of my level without waiting for midterms	ChatGPT	Almost all the good practice tests are locked behind expensive subscriptions.	Yes, I am very goal-oriented
	They overwhelm me sometimes, which lowers my motivation	There are so many apps that I jump from one to another without making real progress	A mix of 10 different apps I rarely open	Constant notifications distract me from actually studying.	Mixed. I want to learn autonomously, but I get distracted.
	I like that I can design my own learning schedule around my job	I decide what to learn and when to learn it	Coursera and YouTube lectures	Some platforms require high-speed internet that I just don't have access to consistently	Yes, flexibility is the main reason I use them
	Competing with others online motivates me to study harder	I can test my knowledge against peers globally	Kahoot and Duolingo	The apps crash frequently during software updates	Yes, the competitive aspect drives my autonomy
	They make me feel less isolated in my learning journey	I can find explanations from multiple different teachers online until one clicks for me	YouTube and ChatGPT	It is hard to know which sources are actually accurate and which are just bad advice	Yes, having unlimited access to information keeps me motivated.