

The Impact of YouTube on University Students' English Learning Motivation and Strategies

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Abstract

With the rapid internationalization of higher education and the proliferation of digital media, YouTube has emerged as a pivotal informal platform for English language learning. Unlike traditional classroom instruction, YouTube offers learners diverse, authentic language input and flexible access. This study investigates the relationship between English learning motivation and strategy use among university students in a YouTube-assisted learning context. The research aims to identify the most evident types of motivation and frequently employed strategies, while exploring the influence of background variables such as gender, English certification, and frequency of use.

A quantitative methodology was employed, recruiting 286 valid participants from a technical university in southern Taiwan. Data were collected in June 2025 using a researcher-developed "YouTube on English Learning Motivation and Strategies Questionnaire," which demonstrated high reliability (Cronbach's $\alpha = .957$) and validity. The findings indicate that individual and contextual variables--such as prior learning experiences, digital engagement, and perceived relevance to future goals--play a more critical role than gender in shaping learners' motivation and strategic behaviors. Notably, while possessing an English certificate does not necessarily boost overall motivation, it significantly cultivates specific strategic competencies, particularly compensation and affective strategies, which help students manage communication challenges and emotional pressures.

Furthermore, the results highlight that career aspirations serve as a central motivational anchor, translating intrinsic and instrumental motivation into more effective strategy use in digital environments. Frequent YouTube engagement is associated with both enhanced motivation and more sophisticated learning strategy use, characterized by a highly integrated deployment of cognitive, metacognitive, and affective strategies. Pedagogically, this study suggests that teachers should integrate curated YouTube content into formal instruction and pair it with reflective or collaborative tasks to strengthen social strategies. By aligning instruction with students' future-oriented goals and fostering self-regulatory competence, educators can maximize the pedagogical potential of informal digital learning environments, supporting diverse learning pathways inside and outside the classroom.

Keywords: YouTube-assisted English Learning, Learning Motivation, Learning Strategies, Technical University Students, Future Career Aspirations

1. Introduction

1.1 Research Motivation

With the rapid growth of digital media, YouTube has become an important platform for English language learning, providing diverse and authentic input, flexible access, and interactive opportunities. University students use YouTube for various purposes, motivated by intrinsic enjoyment, external encouragement, or future career goals. They also employ different learning strategies, including cognitive, metacognitive, social, and affective strategies. However, limited research has examined the relationship between motivation and learning strategies in YouTube-assisted English learning. Therefore, this study investigates university students' motivations for using YouTube and the learning strategies they adopt.

1.2 Research Purposes

1. To examine the types and levels of learning motivation among university students when using YouTube to learn English.
2. To analyze the learning strategies employed by students in YouTube-assisted English learning.
3. To explore the relationship between learning motivation and learning strategies.
4. To investigate the influence of background variables (e.g., gender, English certificate possession, frequency of YouTube use, after-class learning) on students' motivation and strategy use.

1.3 Research Questions

Based on the purposes of the study, the following research questions are proposed:

RQ1: What types and levels of learning motivation (intrinsic, extrinsic, and instrumental) are most evident among university students who use YouTube for English learning?

RQ2: What types and levels of learning strategies (cognitive, metacognitive, social, memory, compensation, and affective) are most frequently employed by university students in YouTube-assisted English learning?

RQ3: Do students' learning motivation and strategy use differ significantly according to background variables, such as gender, possession of English certificates, frequency of YouTube use, and participation in extra English learning?

RQ4: Is there a significant relationship between students' learning motivation and their use of learning strategies in YouTube-assisted English learning?

2. Literature Review

2.1 Metacognition, Self-Regulation, and Strategic Learning

Metacognition and self-regulation play important roles in successful second language learning. Anderson (2002) defined metacognition as learners' awareness and control of cognitive processes, including planning, monitoring, and evaluating learning activities. Such awareness helps learners become more autonomous and strategic.

Building on this perspective, Oxford (2016, 2018) incorporated language learning strategies into a broader self-regulatory framework, emphasizing the coordination of cognitive, metacognitive, affective, and compensation strategies. Tseng, Dörnyei, and Schmitt (2006) further argued that self-regulation provides a stronger theoretical basis for understanding strategy use, while Tseng and Schmitt (2008) demonstrated its role in linking motivation with learning outcomes. Chamot (2004) and Plonsky (2011) also highlighted the value of strategy instruction, particularly when strategies are applied autonomously within meaningful learning tasks.

Overall, these studies suggest that metacognitive control and self-regulation are important mechanisms linking learners' motivation, strategy use, and language learning outcomes, providing a theoretical foundation for the present study.

2.2 Learner Autonomy in Digital and Informal Learning Contexts

Learner autonomy is essential for learning beyond the classroom. Benson (2011) defined autonomy as learners' ability to take control of their learning through goal setting, resource selection, and self-evaluation. Reinders and Benson (2017) further viewed autonomy as a dynamic, context-dependent construct, particularly relevant in technology-mediated learning environments.

Digital platforms provide learners with opportunities to independently access informal learning resources. Sockett (2014) found that learners can develop English through online activities such as video viewing and digital interaction, while Chik (2014) showed that digital environments can support autonomous learning and community participation. Teng (2019) further linked autonomy with learner agency, identity, and future orientation. This perspective supports the present study's examination of career aspirations and competitiveness as potential motivational factors influencing students' autonomous use of YouTube and learning strategies.

2.3 Motivation in Second Language Learning

Motivation is a key factor in second language learning. Gardner's (1985) socio-educational model distinguished between integrative and instrumental motivation, with instrumental motivation being particularly relevant in many EFL contexts because of its links to academic and career goals.

Self-Determination Theory (Deci & Ryan, 1985, 2000) further distinguished intrinsic and extrinsic motivation, emphasizing autonomy, competence, and relatedness as important sources of sustained engagement. Dörnyei (2014) highlighted the dynamic nature of language learning motivation, while the L2 Motivational Self System (Dörnyei & Ushioda, 2021) emphasized the role of learners' future-oriented self-images in sustaining motivation and strategic learning. Csizér and Kormos (2009) provided empirical support for the importance of future goals and intercultural experiences in shaping L2 motivation.

Together, these perspectives provide a theoretical foundation for examining how intrinsic, extrinsic, and instrumental motivation, particularly career aspirations and competitiveness, relate to students' learning strategies in YouTube-assisted English learning.

2.4 Emotions, Anxiety, and Affective Regulation

Emotions significantly influence second language learning, particularly in authentic and cognitively demanding contexts. Dewaele (2010) showed that learners' emotional experiences can affect willingness to communicate and learning engagement. Oxford (1990, 2016) further emphasized the role of affective strategies in managing anxiety, maintaining confidence, and sustaining motivation.

In informal digital environments such as YouTube, learners often need to regulate their emotions independently. Affective and compensation strategies may therefore help learners cope with unfamiliar input, rapid speech, and linguistic difficulties, enabling them to remain engaged in the learning process.

2.5 Language Learning Strategies and Individual Differences

Oxford's (1990) taxonomy is a widely used framework for classifying language learning strategies into cognitive, metacognitive, social, memory, compensation, and affective strategies. Griffiths (2015) later emphasized that effective strategy use involves flexibility and adaptation to learners' needs and learning contexts rather than simply the frequency of strategy use.

Individual differences may also influence motivation and strategy use. Green and Oxford (1995) identified gender-related differences in strategy use, whereas Henry (2011) suggested that such effects are often context-dependent. Dörnyei (2014) further argued that learner goals and self-concepts may be more influential than demographic characteristics. These perspectives provide a basis for examining gender and other background variables in relation to students' motivation and strategy use in YouTube-assisted English learning.

2.6 Technology, YouTube, and Language Learning

Digital technologies have expanded opportunities for language learning by providing access to

authentic and multimodal input. Krashen's (1985) Input Hypothesis and Sherman's (2003) work on video-based learning highlight the value of contextualized and authentic language exposure. Godwin-Jones (2018) further noted that digital technologies can promote learner autonomy and intercultural competence.

However, effective technology-assisted learning depends on learners' self-regulation. Lai and Gu (2011) and Lai and Morrison (2013) emphasized the importance of learners' ability to manage technology-based learning independently. Focusing specifically on YouTube, Zarzycki (2021) argued that its learning value depends on strategic engagement, such as selective viewing, repetition, and reflection. Similarly, Chien (2019) found that Taiwanese EFL learners with stronger self-regulation benefited more from technology-assisted learning.

These studies suggest that YouTube's effectiveness depends not only on access or frequency of use but also on learners' motivation and strategic engagement, providing a foundation for the present study.

2.7 Synthesis and Research Gap

The literature suggests that effective language learning in digital environments involves the interaction of motivation, learner autonomy, self-regulation, and learning strategies. Although YouTube provides rich and flexible opportunities for English learning, its effectiveness depends largely on how learners' motivations and strategic behaviors shape their engagement with digital content.

Despite growing research on YouTube-assisted language learning, relatively limited attention has been given to the relationships among motivation, learning strategies, and background variables in informal digital learning contexts. In particular, factors such as career aspirations, competitiveness, English certification, YouTube use, and extra English learning have received less systematic quantitative examination. Therefore, the present study integrates motivational and language learning strategy frameworks to examine university students' motivation, strategy use, and their relationships in YouTube-assisted English learning.

3. Methodology

3.1 Participants

A total of 286 valid participants were recruited from a technical university in southern Taiwan. Among them, 127 were male and 159 were female. All participants voluntarily completed the YouTube and English Learning Motivation and Strategies Questionnaire in June 2025. Participation was entirely voluntary, and anonymity was strictly maintained throughout the research process.

3.2 Research Instrument

The data collection instrument was a researcher-developed questionnaire designed to examine the role of YouTube in students' English learning motivation and learning strategies. The questionnaire comprised 34 items, including six demographic items, 10 items measuring English learning motivation, and 18 items assessing English learning strategies (see Appendix).

To establish content validity, three experts in language education reviewed the questionnaire for clarity, relevance, and potential ambiguity. A pilot test involving 34 college students was subsequently conducted to assess the clarity and reliability of the instrument, yielding a Cronbach's alpha of .957. The final questionnaire was administered in classrooms in June 2025, resulting in 286 valid responses for analysis.

To examine the underlying structure of the instrument, a principal component analysis (PCA) was conducted on the 28 items measuring English learning motivation and learning strategies; the six demographic items were excluded because they were not intended to measure the constructs under investigation. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .701, and Bartlett's test of sphericity was significant, $\chi^2(378) = 1047.583$, $p < .001$, indicating that the correlation matrix was suitable for component analysis (see Table 1).

PCA was performed using Varimax rotation with Kaiser normalization. Based on the eigenvalue-greater-than-one criterion, six components were retained. The six components accounted for 50.043%, 8.170%, 6.356%, 5.145%, 4.360%, and 4.183% of the total variance, respectively, yielding a cumulative explained variance of 78.255%. The seventh component had an eigenvalue of .980 and was therefore not retained. The extracted communalities ranged from .666 to .903, indicating that the retained components accounted for a substantial proportion of the variance in all 28 items.

The rotated component matrix showed generally substantial primary loadings, although several items exhibited cross-loadings. The intrinsic motivation items (i1-i4) loaded strongly on Component 1, with loadings ranging from .765 to .906. The cognitive strategy items (co1-co4) also primarily loaded on Component 1, whereas the social strategy items (so1-so3) formed a relatively distinct Component 3, with loadings ranging from .743 to .832. Component 2 comprised items associated with metacognitive, memory, compensation, and affective strategies. The extrinsic motivation items were distributed across Components 4 and 5, while the instrumental motivation items showed loadings across Components 4 and 6.

Several items demonstrated notable cross-loadings. For example, tool3 loaded .530 on Component 2 and .464 on Component 4, while co4 loaded .526 on Component 1 and .437 on Component 3. Similarly, meta3 loaded .612 on Component 2 and .519 on Component 1. These findings indicate that some theoretically distinct dimensions were empirically related within the present sample. Overall, the PCA provided evidence for a six-component empirical structure, although it did not fully reproduce the questionnaire's original nine-dimensional conceptual framework.

Table 1. Results of Principal Component Analysis for the 28 Construct-Related Items ($N = 286$)

Component	Eigenvalue	Variance Explained (%)	Cumulative Variance (%)
1	14.012	50.043	50.043
2	2.287	8.170	58.212
3	1.780	6.356	64.568
4	1.441	5.145	69.712

5	1.221	4.360	74.072
6	1.171	4.183	78.255
7	0.980	3.501	81.756

Note. Extraction method: Principal Component Analysis (PCA). Rotation method: Varimax with Kaiser normalization. Six components were retained based on the eigenvalue-greater-than-one criterion. KMO = .701; Bartlett's test of sphericity, $\chi^2(378) = 1047.583, p < .001$. The six retained components explained 78.255% of the total variance. Communalities ranged from .666 to .903. Component 7 was not retained because its eigenvalue was below 1.00.

4. Results and Discussion

4.1 Descriptive Statistics

Analysis of the questionnaire data revealed several notable patterns in participants' YouTube-related English learning motivation and strategies. Among the 286 valid respondents, approximately 56% were female (see Table 2). The majority (77.3%) reported not holding any English proficiency certificates. Additionally, 16.8% indicated that they never used YouTube for English learning, while 82.1% reported not attending extracurricular English tutoring sessions, suggesting that most students did not pursue additional language learning opportunities beyond formal instruction. In terms of motivation, 75.2% of respondents agreed that learning English would benefit their future careers, and 84.6% believed that English proficiency could enhance their competitiveness.

Table 2. The Summary of the Participants' Background (N=286)

<i>Category</i>	<i>n</i>	<i>%</i>
Gender		
Female	159	55.6%
Male	127	44.4%
English Certificate		
Yes	65	22.7%
No	221	77.3%
English videos on YouTube		
Daily	5	1.7%
Often	51	17.8%
Rarely	182	63.6%
Never	48	16.8%
Extracurricular English learning		
Yes	51	17.8%
No	235	82.1%
Future Career		
Yes	215	75.2%
No	7	2.4%
Not Sure	64	22.4%
Competitiveness		

Yes	242	84.6%
No	3	1.0%
Not Sure	41	14.3%

To answer Research Question 1--Which types of learning motivation (intrinsic, extrinsic, instrumental) are most evident among university students who use YouTube to learn English--and Research Question 2--What learning strategies (cognitive, metacognitive, social, memory, compensation, affective) are most frequently employed by these students--the summary of Table 3 is presented.

More than 43% of participants reported using YouTube to learn English for enjoyment and a sense of accomplishment, while over 42% did so to achieve better grades in school. Over half indicated that they used YouTube for purposes related to future studies, career development, traveling abroad, and broader opportunities. Nearly 40% of participants stated that they repeatedly watched YouTube videos to support their English learning. Most did not adopt social strategies; however, almost half selected YouTube content that matched their proficiency levels. About 45% used imagery and association techniques to memorize vocabulary. In addition, most participants relied on compensation strategies (e.g., guessing, using subtitles, adjusting playback speed) and affective strategies (e.g., watching relaxing or interesting videos) to enhance their English learning.

Table 3. The Summary of the YouTube on English Learning Motivation and Strategies Questionnaire ($N=286$)

<i>Category</i>	<i>Item</i>	<i>1+2 N (%)</i>	<i>3 N (%)</i>	<i>4+5 N (%)</i>
Intrinsic Motivation	Item 1	51(17.8%)	110(38.5%)	125(43.7%)
	Item 2	58(20.2%)	116(40.6%)	112(39.2%)
	Item 3	52(18.2%)	111(38.8%)	123(43.0%)
	Item 4	63(22.0%)	117(40.9%)	106(37.1%)
Extrinsic Motivation	Item 5	102(35.7%)	104(36.4%)	80(27.9%)
	Item 6	73(25.5%)	112(39.2%)	101(35.3%)
	Item 7	57(19.9%)	107(37.4%)	122(42.7%)
Instrumental Motivation	Item 8	38(13.3%)	92(32.2%)	156(54.5%)
	Item 9	45(15.7%)	89(31.1%)	172(60.1%)
	Item 10	32(11.2%)	82(28.7%)	172(60.1%)
Cognitive strategies	Item 11	55(19.2%)	119(41.6%)	112(39.2%)
	Item 12	76(26.6%)	98(34.3%)	112(39.2%)
	Item 13	65(22.7%)	114(39.9%)	107(37.4%)
	Item 14	84(29.4%)	110(38.5%)	92(32.2%)
Social strategies	Item 15	179(62.6%)	82(28.7%)	25(8.7%)
	Item 16	161(56.3%)	87(30.4%)	38(13.3%)
	Item 17	193(67.5%)	74(25.9%)	19(6.6%)
Metacognitive strategies	Item 18	53(18.5%)	98(34.3%)	135(47.2%)
	Item 19	98(34.3%)	113(39.5%)	75(26.2%)

	Item 20	81(28.3%)	111(38.8%)	94(32.9%)
Memory strategies	Item 21	80(28.0%)	112(39.2%)	94(32.9%)
	Item 22	48(16.8%)	110(38.5%)	128(44.8%)
	Item 23	60(21.0%)	98(34.3%)	128(44.8%)
Compensation strategies	Item 24	42(14.7%)	101(35.3%)	143(50.0%)
	Item 25	33(11.5%)	76(26.6%)	177(61.9%)
	Item 26	53(18.5%)	81(28.3%)	152(53.1%)
Affective strategies	Item 27	39(13.6%)	79(27.6%)	168(58.7%)
	Item 28	40(14.0%)	79(27.6%)	167(58.4%)

4.2 Inferential Statistics

To address Research Question 3--Do background variables (e.g., gender, English certificates, extra learning, frequency of YouTube use, job career, and competitiveness) affect students' motivation and strategies?--a series of independent-samples *t*-tests and one-way ANOVAs were conducted (see Tables 4-12).

As shown in Table 4, independent-samples *t*-tests revealed no significant gender differences across all types of English learning motivation and strategy use. For intrinsic motivation, male students ($M = 13.61$, $SD = 3.74$) and female students ($M = 13.04$, $SD = 3.89$) demonstrated comparable levels of motivation, $t(284) = 1.24$, $p = .215$. Similarly, no significant gender differences were observed in extrinsic motivation (males: $M = 9.65$, $SD = 2.87$; females: $M = 9.14$, $SD = 2.82$), $t(284) = 1.48$, $p = .141$, or instrumental motivation (males: $M = 11.10$, $SD = 2.78$; females: $M = 10.60$, $SD = 2.79$), $t(284) = 1.50$, $p = .134$.

With regard to learning strategies, the results likewise indicated no statistically significant gender differences across all six strategy categories. Specifically, no significant differences were found for cognitive strategies, $t(284) = .77$, $p = .442$; social strategies, $t(284) = 1.76$, $p = .080$; metacognitive strategies, $t(284) = .77$, $p = .442$; memory strategies, $t(284) = .06$, $p = .951$; compensation strategies, $t(284) = -.40$, $p = .690$; or affective strategies, $t(284) = -.14$, $p = .889$. Overall, across all nine measured variables--three types of motivation and six categories of learning strategies--male ($N = 127$) and female ($N = 159$) participants exhibited highly similar motivational profiles and strategy use patterns.

These findings suggest that gender was not a determining factor influencing students' English learning motivation or their strategic engagement in this context. This result aligns with previous large-scale and meta-analytic research indicating that gender differences in second language motivation and strategy use are often small, context-dependent, or diminishing in contemporary educational settings (Dörnyei, 2014; Henry, 2011; Plonsky, 2011). In particular, Henry (2011) argues that gender effects in L2 motivation may be overshadowed by situational and contextual variables, such as learning environment, instructional design, and access to learning resources.

Moreover, the absence of gender differences in strategy use is consistent with findings reported by Green and Oxford (1995) and Tseng et al. (2006), who suggest that learners' strategic behaviors are more strongly shaped by self-regulatory capacity and task demands than by

demographic variables. In technology-mediated learning environments, such as YouTube-based English learning, learners are afforded similar opportunities for autonomous control, repeated exposure, and individualized pacing, which may further reduce gender-based discrepancies in learning behaviors (Lai & Gu, 2011; Reinders & Benson, 2017).

Taken together, the present results indicate that variations in English learning motivation and strategy use are more likely attributable to factors other than gender--such as learners' prior learning experiences, engagement with informal digital resources, or perceived relevance of English to future goals--rather than to gender itself. This finding reinforces the growing consensus in second language acquisition research that individual and contextual variables play a more critical role than demographic characteristics in shaping learners' motivation and strategic learning behaviors.

Table 4. The One-Sample *T*-Test between Gender and Learning Motivation and Learning Strategies

Section	Gender	N	Mean	SD	<i>t</i>	<i>df</i>	<i>p</i>
Intrinsic Motivation	Male	127	13.61	3.74	1.24	284	.215
	Female	159	13.04	3.89			
Extrinsic Motivation	Male	127	9.65	2.87	1.48	284	.141
	Female	159	9.14	2.82			
Instrumental Motivation	Male	127	11.10	2.78	1.50	284	.134
	Female	159	10.60	2.79			
Cognitive strategies	Male	127	12.95	3.66	.77	284	.442
	Female	159	12.46	3.64			
Social strategies	Male	127	7.01	2.70	1.76	284	.080
	Female	159	6.46	2.57			
Metacognitive strategies	Male	127	9.41	3.03	.77	284	.442
	Female	159	9.14	2.88			
Memory strategies	Male	127	9.73	2.97	.06	284	.951
	Female	159	9.71	2.86			
Compensation strategies	Male	127	10.67	2.69	-.40	284	.690
	Female	159	10.80	2.78			
Affective strategies	Male	127	7.35	2.16	-.14	284	.889
	Female	159	7.39	2.11			

The present study examined multiple factors influencing English learning motivation and strategy use among learners, including possession of English certificates, participation in extra English classes, frequency of YouTube engagement, future career aspirations, and competitiveness. The results indicate that both external experiences and internal traits significantly impact motivation and strategy employment, with internal goal orientation and personal dispositions showing the strongest effects.

As shown in Table 5, independent-samples *t*-tests indicated no significant differences in Intrinsic Motivation between participants with English certificates ($M = 13.35$, $SD = 3.69$) and those without ($M = 13.28$, $SD = 3.87$), $t(284) = 0.14$, $p = .883$. Similarly, Extrinsic Motivation

did not differ significantly between participants with certificates ($M = 9.20$, $SD = 2.88$) and those without ($M = 9.42$, $SD = 2.85$), $t(284) = -0.53$, $p = .595$. Instrumental Motivation also showed no significant difference between those with certificates ($M = 10.86$, $SD = 2.71$) and those without ($M = 10.81$, $SD = 2.82$), $t(284) = 0.12$, $p = .903$.

For learning strategies, no significant differences were found in Cognitive Strategies between participants with certificates ($M = 11.94$, $SD = 3.47$) and those without ($M = 12.90$, $SD = 3.68$), $t(284) = -1.93$, $p = .057$. Likewise, Social Strategies ($M = 6.58$, $SD = 2.50$ vs. $M = 6.74$, $SD = 2.68$), $t(284) = -0.43$, $p = .671$; Metacognitive Strategies ($M = 9.26$, $SD = 2.67$ vs. $M = 9.26$, $SD = 3.02$), $t(284) = 0.01$, $p = .993$; and Memory Strategies ($M = 9.74$, $SD = 2.83$ vs. $M = 9.71$, $SD = 2.93$), $t(284) = 0.06$, $p = .954$, also revealed no significant differences. However, significant differences were observed in Compensation Strategies, where participants with certificates ($M = 11.49$, $SD = 2.22$) scored higher than those without ($M = 10.52$, $SD = 2.83$), $t(284) = 2.90$, $p < .01$, and in Affective Strategies ($M = 7.97$, $SD = 1.94$ vs. $M = 7.20$, $SD = 2.16$), $t(284) = 2.75$, $p < .01$.

The results of the one-sample t -test (Table 5) indicated that possessing an English certificate did not significantly influence students' learning motivation or most categories of learning strategies. No significant differences were identified between students with and without certificates in intrinsic, extrinsic, or instrumental motivation, suggesting that motivational orientations operate independently of certification status (Oxford, 2016; Dörnyei & Ushioda, 2021). Likewise, the two groups showed no significant differences in their use of cognitive, social, metacognitive, or memory strategies, implying that fundamental patterns of strategy use remain relatively stable regardless of whether learners have previously obtained an English certificate (Tseng & Schmitt, 2008).

However, two strategy categories--compensation and affective strategies--revealed statistically significant differences. Students with an English certificate reported higher use of compensation strategies ($p = .004$), a finding consistent with Oxford's (2016) assertion that learners with greater confidence or broader linguistic experience tend to rely more on inferencing skills, paraphrasing techniques, and other mechanisms for overcoming lexical gaps. This heightened use of compensation strategies suggests that the certification process may enhance learners' ability to navigate communicative challenges more effectively.

Additionally, certified students exhibited significantly greater use of affective strategies ($p = .007$), indicating stronger abilities in managing anxiety, regulating emotions, and maintaining self-encouragement during language learning (Dörnyei & Ushioda, 2021; Csizér & Kormos, 2009). These findings align with previous research suggesting that structured test preparation can cultivate emotional resilience and coping mechanisms that support sustained engagement in language tasks.

Taken together, these results suggest that while English certification does not contribute to higher overall motivation or to increased use of general cognitive and metacognitive strategies, it may cultivate specific forms of strategic competence—particularly compensation and affective strategies--that facilitate more effective language learning. In other words, certificates may not change why students learn English, but they may shape how they manage

communication challenges and emotional pressures during the learning process.

Table 5. The One-Sample *T*-Test between English Certificate and Learning Motivation and Learning Strategies

Section	Certificate	N	Mean	SD	<i>t</i>	<i>df</i>	<i>p</i>
Intrinsic Motivation	Yes	65	13.35	3.69	.14	284	.883
	No	221	13.28	3.87			
Extrinsic Motivation	Yes	65	9.20	2.88	-.53	284	.595
	No	221	9.42	2.85			
Instrumental Motivation	Yes	65	10.86	2.71	.12	284	.903
	No	221	10.81	2.82			
Cognitive strategies	Yes	65	11.94	3.47	-1.93	284	.057
	No	221	12.90	3.68			
Social strategies	Yes	65	6.58	2.50	-.43	284	.671
	No	221	6.74	2.68			
Metacognitive strategies	Yes	65	9.26	2.67	.01	284	.993
	No	221	9.26	3.02			
Memory strategies	Yes	65	9.74	2.83	.06	284	.954
	No	221	9.71	2.93			
Compensation strategies	Yes	65	11.49	2.22	2.90	284	.004
	No	221	10.52	2.83			
Affective strategies	Yes	65	7.97	1.94	2.75	284	.007
	No	221	7.20	2.16			

As shown in Table 6, independent-samples *t*-tests revealed significant differences in Intrinsic Motivation between participants with extra English learning ($M = 15.55$, $SD = 3.60$) and those without ($M = 12.80$, $SD = 3.70$), $t(284) = 4.92$, $p < .001$. Instrumental Motivation also differed significantly, with higher scores among participants with extra English learning ($M = 12.25$, $SD = 2.26$) compared to those without ($M = 10.51$, $SD = 2.80$), $t(284) = 4.76$, $p < .001$. By contrast, Extrinsic Motivation showed no significant difference between the two groups ($M = 9.53$, $SD = 2.89$ vs. $M = 9.33$, $SD = 2.85$), $t(284) = 0.45$, $p = .659$.

For learning strategies, participants with extra English learning reported significantly higher use of Cognitive Strategies ($M = 14.41$, $SD = 3.76$ vs. $M = 12.30$, $SD = 3.52$), $t(284) = 3.67$, $p < .001$, as well as Metacognitive Strategies ($M = 10.69$, $SD = 2.80$ vs. $M = 8.95$, $SD = 2.88$), $t(284) = 4.00$, $p < .001$; Memory Strategies ($M = 11.35$, $SD = 2.86$ vs. $M = 9.37$, $SD = 2.80$), $t(284) = 4.51$, $p < .001$; Compensation Strategies ($M = 12.35$, $SD = 1.97$ vs. $M = 10.39$, $SD = 2.75$), $t(284) = 5.96$, $p < .001$; and Affective Strategies ($M = 8.49$, $SD = 1.58$ vs. $M = 7.13$, $SD = 2.16$), $t(284) = 5.18$, $p < .001$. However, no significant differences were observed in Social Strategies ($M = 7.29$, $SD = 2.78$ vs. $M = 6.57$, $SD = 2.58$), $t(284) = 1.09$, $p = .095$.

Based on the data presented in Table 6, the independent-samples *t*-tests revealed clear and consistent differences between students who participated in extra English learning (e.g., tutoring, cram schools, private lessons) and those who did not. Participation in extra learning exerted a strong positive impact on almost all aspects of learning motivation and strategy use.

Students who engaged in extracurricular English learning demonstrated significantly higher levels of intrinsic motivation ($p < .001$), indicating greater enjoyment and interest in learning English, as well as higher levels of instrumental motivation ($p < .001$), suggesting stronger goal-oriented and future-oriented learning purposes. In contrast, extrinsic motivation did not significantly differ between groups ($p = .659$), implying that external rewards, parental pressure, or teacher evaluations were not central determinants of participation in extra classes (Dörnyei & Ushioda, 2021).

With respect to strategy use, students who attended extra English classes reported significantly greater use of cognitive, metacognitive, memory, compensation, and affective strategies (all $p < .001$). This pattern suggests that structured learning environments may enhance learners' ability to process and organize linguistic information, regulate their own learning process, retain vocabulary more efficiently, infer meaning when encountering unknown expressions, and manage anxiety or emotions during communication tasks (Oxford, 2016; Tseng & Schmitt, 2008). Social strategies were the only category that did not show a significant difference ($p = .095$), indicating that students' tendency to seek help, ask questions, or collaborate with peers may be influenced more by personality or classroom context than by additional instruction.

Overall, these findings demonstrate that extra English learning plays a crucial role in elevating both the motivational depth and strategic complexity of learners. Students who invest time and effort beyond formal schooling exhibit not only stronger intrinsic and instrumental motivation but also a wider and more sophisticated repertoire of learning strategies. This aligns with prior research emphasizing how increased exposure, scaffolding, and structured guidance can enhance learners' self-regulatory capacity and strategic engagement (Tseng & Schmitt, 2008).

The patterns observed in Table 6 also parallel findings from students' digital English-learning behaviors. Learners who frequently used YouTube and other online platforms for English exposure (Tables 7 and 8) similarly demonstrated higher learning motivation and greater use of diverse strategies. This consistency reflects previous studies showing that informal digital learning increases autonomy, supports intrinsic motivation, and encourages self-directed use of cognitive and metacognitive strategies (Lai & Morrison, 2013; Sockett, 2014). Together, these results indicate that both formal (e.g., tutoring) and informal (e.g., YouTube) supplementary learning experiences significantly enrich learners' psychological engagement and strategic competence.

The descriptive statistics and one-way ANOVA results reveal a clear and consistent pattern: students who frequently use YouTube for English learning exhibit significantly higher levels of learning motivation and learning strategy use compared with those who rarely or never use the platform (Table 7). Across all motivational dimensions--intrinsic, extrinsic, and instrumental--daily users reported the highest scores, followed by frequent, rare, and non-users. ANOVA results confirmed significant group differences in intrinsic ($p < .001$), extrinsic ($p = .002$), and instrumental motivation ($p < .001$), with post hoc tests indicating that daily and frequent users consistently outperformed rare and non-users. These findings align with prior research showing that digital environments rich in authentic and multimodal content can increase learners' interest, engagement, and persistence (Chik, 2014; Lai & Gu, 2011). From a

self-determination theory perspective, the autonomy afforded by YouTube--allowing learners to choose topics, control pacing, and revisit content--likely enhances intrinsic motivation by fulfilling autonomy and competence needs (Deci & Ryan, 2000).

A similar pattern emerged in learners' use of English learning strategies. Daily YouTube users demonstrated significantly higher use of cognitive, metacognitive, memory, compensation, and affective strategies (all $ps < .001$), with daily and frequent users again outperforming rare or non-users. These results are consistent with Oxford's (1990, 2018) strategy framework, which posits that exposure to abundant comprehensible input and varied communicative tasks promotes broader strategy development. Research on digital and mobile-assisted language learning similarly suggests that repeated, self-paced, and multimodal exposure facilitates learners' ability to monitor comprehension, process information more deeply, and manage emotions during learning (Godwin-Jones, 2018). Daily users' higher strategy use may also stem from interacting with diverse YouTube genres--such as tutorials, vlogs, interviews, gaming commentary, or educational channels--which require learners to infer meaning, regulate learning choices, or cope with comprehension difficulties independently.

Social strategies showed the weakest differences across groups ($p = .014$). Although daily users still scored significantly higher than rare or non-users, the effect was smaller than in other strategy categories. This pattern is consistent with research indicating that YouTube, while rich in input, is not inherently interactive compared with communication-oriented platforms like messaging apps, video conferencing tools, or language exchange communities (Teng, 2019). Because YouTube typically lacks direct peer interaction, opportunities to ask questions, negotiate meaning, or collaborate with others are limited, which may constrain the development of social strategy use.

Overall, the findings provide strong empirical support for the role of YouTube as a meaningful supplementary resource for English learning. Frequent YouTube engagement is associated with both enhanced motivation and more sophisticated learning strategy use, reinforcing earlier studies recognizing the central role of informal digital learning environments in contemporary language education (Sockett, 2014). When viewed alongside the impacts of extracurricular English classes (Table 6), the results illustrate that both structured instruction and self-directed digital learning significantly enhance students' motivational profiles and strategic behaviors. Students who actively seek additional English exposure--whether through tutoring or through YouTube--tend to be more intrinsically motivated, more goal-oriented, and more capable of employing diverse strategies that support effective learning.

These findings suggest important pedagogical implications. Teachers may consider integrating curated YouTube content into formal instruction to leverage learners' pre-existing digital engagement and to enrich input with authentic, meaningful language use. Furthermore, pairing YouTube-based learning with reflective tasks or collaborative classroom activities may strengthen social strategies, addressing the relatively weaker outcomes noted in this domain. In sum, extracurricular English learning--both structured and self-directed--plays a critical role in promoting higher motivation and more effective strategy use, underscoring the value of supporting diverse learning pathways inside and outside the classroom.

Table 6. The One-Sample *T*-Test between Extra Class and Learning Motivation and Learning Strategies

Section	Extra Class	N	Mean	SD	<i>t</i>	<i>df</i>	<i>p</i>
Intrinsic Motivation	Yes	51	15.55	3.60	4.92	284	.000
	No	235	12.80	3.70			
Extrinsic Motivation	Yes	51	9.53	2.89	.45	284	.659
	No	235	9.33	2.85			
Instrumental Motivation	Yes	51	12.25	2.26	4.76	284	.000
	No	235	10.51	2.80			
Cognitive strategies	Yes	51	14.41	3.76	3.67	284	.000
	No	235	12.30	3.52			
Social strategies	Yes	51	7.29	2.78	1.09	284	.095
	No	235	6.57	2.58			
Metacognitive strategies	Yes	51	10.69	2.80	4.00	284	.000
	No	235	8.95	2.88			
Memory strategies	Yes	51	11.35	2.86	4.51	284	.000
	No	235	9.37	2.80			
Compensation strategies	Yes	51	12.35	1.97	5.96	284	.000
	No	235	10.39	2.75			
Affective strategies	Yes	51	8.49	1.58	5.18	284	.000
	No	235	7.13	2.16			

Table 7. The Summary of YouTube Frequency and English Learning Motivation and Strategies

Section	YouTube Frequency	<i>N</i>	Mean	SD
Intrinsic Motivation	Daily	5	19.20	1.79
	Often	51	15.55	3.16
	Rarely	182	13.27	3.40
	Never	48	10.38	3.93
Extrinsic Motivation	Daily	5	12.20	3.03
	Often	51	9.29	2.79
	Rarely	182	9.62	2.72
	Never	48	8.21	3.04
Instrumental Motivation	Daily	5	14.40	1.34
	Often	51	11.78	2.50
	Rarely	182	11.01	2.47
	Never	48	8.73	3.17
Cognitive strategies	Daily	5	17.80	2.95
	Often	51	14.14	3.70
	Rarely	182	12.85	3.26
	Never	48	9.96	4.44

Social strategies	Daily	5	10.00	2.00
	Often	51	7.02	2.69
	Rarely	182	6.66	2.65
	Never	48	6.17	2.35
Metacognitive strategies	Daily	5	13.60	2.19
	Often	51	10.16	2.93
	Rarely	182	9.35	2.62
	Never	48	7.52	3.25
Memory strategies	Daily	5	14.00	1.41
	Often	51	10.69	2.83
	Rarely	182	9.77	2.64
	Never	48	8.06	3.14
Compensation strategies	Daily	5	14.40	.89
	Often	51	11.57	2.66
	Rarely	182	10.91	2.41
	Never	48	8.83	3.07
Affective strategies	Daily	5	10.00	.00
	Often	51	8.45	1.85
	Rarely	182	7.37	1.90
	Never	48	5.96	2.45

Table 8. The One-Way ANOVA among YouTube Frequency and English Learning Motivation and Strategies ($N=286$)

Section		<i>SS</i>	<i>df</i>	<i>F</i>	<i>p</i>	
Intrinsic Motivation	Between	842.844	3	23.817	.000	1>3/1>4/2>3/2>4/3>4
	Within	3326.485	282			
	Total	4169.329	285			
Extrinsic Motivation	Between	116.069	3	4.958	.002	1>4/3>4
	Within	2200.382	282			
	Total	2316.451	285			
Instrumental Motivation	Between	327.974	3	16.266	.000	1>3/1>4/2>4/3>4
	Within	1895.285	282			
	Total	2223.259	285			
Cognitive strategies	Between	559.957	3	17.621	.000	1>3/1>4/2>4/3>4
	Within	3200.448	282			
	Total	3800.406	285			
Social strategies	Between	73.536	3	3.622	.014	1>3/1>4
	Within	1908.202	282			
	Total	1981.738	285			

Metacognitive strategies	Between	281.737	3	12.120	.000	1>3/1>4/ 2>4/3>4
	Within	2185.117	282			
	Total	2466.853	285			
Memory strategies	Between	271.522	3	11.960	.000	1>3/1>4/ 2>4/3>4
	Within	2134.101	282			
	Total	2405.622	285			
Compensation strategies	Between	281.883	3	14.331	.000	1>3/1>4/ 2>4/3>4
	Within	1848.970	282			
	Total	2130.853	285			
Affective strategies	Between	189.831	3	16.176	.000	1>3/1>4/2> 3/2>4/3>4
	Within	1103.138	282			
	Total	1292.969	285			

Table 9 presents the descriptive statistics for English learning motivation and strategy use across three groups of future career aspirations: students who intended to pursue a future career involving English (“Yes”), those who did not (“No”), and those who were uncertain (“Unsure”). Overall, learners with clear career intentions consistently reported higher mean scores across most motivational and strategic dimensions.

For learning motivation, students in the “Yes” group demonstrated the highest levels of intrinsic motivation ($M = 13.80$, $SD = 3.65$), extrinsic motivation ($M = 9.67$, $SD = 2.82$), and instrumental motivation ($M = 11.40$, $SD = 2.65$). In contrast, the “Unsure” group reported lower mean scores (intrinsic: $M = 11.89$, $SD = 3.89$; extrinsic: $M = 8.56$, $SD = 2.72$; instrumental: $M = 9.16$, $SD = 2.44$), while the “No” group exhibited the lowest motivation levels overall.

A similar pattern was observed for learning strategies. Learners with future career intentions reported higher use of cognitive strategies ($M = 13.11$, $SD = 3.52$), metacognitive strategies ($M = 9.52$, $SD = 2.93$), memory strategies ($M = 10.07$, $SD = 2.85$), and compensation strategies ($M = 11.14$, $SD = 2.62$), compared with both the “Unsure” and “No” groups. Differences in social strategies were comparatively small across groups, whereas affective strategies showed modest variation, with the “Yes” group reporting slightly higher usage ($M = 7.67$, $SD = 2.05$) than the other two groups.

To further examine whether these group differences were statistically significant, one-way analyses of variance (ANOVAs) were conducted (Table 10). Results indicated a significant main effect of future career aspirations on intrinsic motivation, $F(2, 283) = 8.38$, $p < .001$. Post hoc comparisons revealed that students with clear career intentions scored significantly higher than those in the “Unsure” group. Significant effects were also found for extrinsic motivation, $F(2, 283) = 5.27$, $p = .006$, and instrumental motivation, $F(2, 283) = 20.70$, $p < .001$, with the “Yes” group outperforming both the “No” and “Unsure” groups.

Regarding learning strategies, significant group differences emerged for cognitive strategies,

$F(2, 283) = 6.52, p = .002$; metacognitive strategies, $F(2, 283) = 4.23, p = .015$; memory strategies, $F(2, 283) = 7.01, p = .001$; compensation strategies, $F(2, 283) = 9.76, p < .001$; and affective strategies, $F(2, 283) = 8.80, p < .001$. In each case, post hoc analyses indicated that learners with future career intentions (“Yes”) reported significantly higher strategy use than those who were unsure about their future careers. However, no significant differences were found for social strategies, $F(2, 283) = 0.82, p = .441$.

Taken together, the results demonstrate that future career aspirations exert a significant influence on both English learning motivation and strategy use. Learners who envisioned English as part of their future career exhibited stronger motivational orientations and more frequent use of a wide range of learning strategies, whereas students lacking clear career goals showed consistently lower engagement. These findings suggest that future-oriented goals play a crucial role in shaping both affective and strategic dimensions of English learning.

While previous research has extensively documented the roles of digital media, learner motivation, and language learning strategies in second language acquisition, fewer studies have empirically integrated these constructs using robust statistical evidence. The findings from Tables 9 and 10 of the present study offer important empirical support for existing theoretical frameworks, particularly by demonstrating how future-oriented motivation systematically shapes learners’ engagement with English learning strategies in a YouTube-assisted learning context.

Consistent with Gardner’s (1985) socio-educational model and the instrumental dimension of motivation, learners who reported a clear intention to pursue a future career involving English exhibited significantly higher levels of instrumental motivation ($M = 11.40, SD = 2.65$) compared with those who were unsure ($M = 9.16, SD = 2.44$) or had no such intention ($M = 8.57, SD = 3.31$). The one-way ANOVA confirmed a strong main effect of future career aspiration on instrumental motivation, $F(2, 283) = 20.70, p < .001$. This finding supports earlier studies suggesting that career-related goals provide a powerful and sustained motivational drive in English learning, particularly in EFL contexts where immediate contact with the target language community is limited.

From the perspective of Self-Determination Theory (Deci & Ryan, 1985), the results further indicate that future career aspirations are associated not only with instrumental goals but also with heightened intrinsic motivation. Learners in the “Yes” group reported significantly higher intrinsic motivation ($M = 13.80, SD = 3.65$) than their “Unsure” counterparts ($M = 11.89, SD = 3.89$), $F(2, 283) = 8.38, p < .001$. This pattern suggests that clearly defined future goals may internalize external demands, transforming extrinsic pressures into more self-determined forms of motivation. Such internalization aligns with Dörnyei’s (2014) L2 Motivational Self System, in which a well-developed ideal L2 self energizes sustained learning effort.

Beyond motivation, the present findings strongly corroborate Oxford’s (1990) strategy framework by showing that motivated learners deploy a broader and more sophisticated repertoire of learning strategies. As shown in Table 8, learners with clear future career intentions reported significantly higher use of cognitive strategies ($M = 13.11, SD = 3.52$), metacognitive strategies ($M = 9.52, SD = 2.93$), memory strategies ($M = 10.07, SD = 2.85$), and

compensation strategies ($M = 11.14$, $SD = 2.62$). These differences were statistically supported by ANOVA results for cognitive strategies, $F(2, 283) = 6.52$, $p = .002$; metacognitive strategies, $F(2, 283) = 4.23$, $p = .015$; memory strategies, $F(2, 283) = 7.01$, $p = .001$; and compensation strategies, $F(2, 283) = 9.76$, $p < .001$.

These results echo Chamot's (2004) and Griffiths's (2015) assertions that effective language learners are distinguished not by a single strategy but by their flexible and purposeful strategy orchestration. In a YouTube learning environment, cognitively and metacognitively engaged learners may actively select videos aligned with their goals, replay segments, utilize subtitles strategically, and monitor their comprehension--behaviors that mirror the strategic profiles observed in the "Yes" group.

Interestingly, social strategies did not show significant group differences, $F(2, 283) = 0.82$, $p = .441$. This finding nuances earlier claims that YouTube inherently promotes social interaction (Sokkett, 2014), suggesting that while the platform allows for interaction, many learners may engage with YouTube primarily as a self-regulated, individual learning tool rather than a socially interactive space. In contrast, affective strategies demonstrated significant differences, $F(2, 283) = 8.80$, $p < .001$, indicating that learners with strong future goals are more capable of regulating emotions and anxiety--an outcome consistent with Oxford's (2016) emphasis on affective control as a key component of strategic competence.

Taken together, the results from Tables 9 and 10 extend prior literature by empirically demonstrating that future career aspiration functions as a central motivational anchor that not only elevates intrinsic and instrumental motivation but also translates into more frequent and effective strategy use in digital learning environments. While previous studies have independently examined YouTube use (Chien, 2019), motivation (Gardner, 1985; Deci & Ryan, 1985), or strategies (Oxford, 1990), the present findings integrate these strands, showing that motivation and strategy use are dynamically intertwined.

In sum, the literature and empirical evidence jointly suggest that YouTube's pedagogical potential is maximized when learners possess clear future-oriented goals. Digital affordances alone do not guarantee effective learning; rather, it is the alignment between learners' future selves, motivational orientations, and strategic engagement that determines learning outcomes. This integrative perspective highlights the importance of incorporating goal-setting and future career awareness into YouTube-assisted English instruction.

Table 9. The Summary of Future Career and English Learning Motivation and Strategies

Section	Future Career	<i>N</i>	<i>Mean</i>	<i>SD</i>
Intrinsic Motivation	Yes	215	13.80	3.65
	No	7	10.57	4.69
	Unsure	64	11.89	3.89
Extrinsic Motivation	Yes	215	9.67	2.82
	No	7	7.57	3.21
	Unsure	64	8.56	2.72
	Yes	215	11.40	2.65

Instrumental Motivation	No	7	8.57	3.31
	Unsure	64	9.16	2.44
Cognitive strategies	Yes	215	13.11	3.52
	No	7	10.57	3.82
	Unsure	64	11.45	3.76
Social strategies	Yes	215	6.80	2.70
	No	7	7.14	3.08
	Unsure	64	6.34	2.37
Metacognitive strategies	Yes	215	9.52	2.93
	No	7	9.71	2.43
	Unsure	64	8.33	2.89
Memory strategies	Yes	215	10.07	2.85
	No	7	7.86	1.86
	Unsure	64	8.73	2.92
Compensation strategies	Yes	215	11.14	2.62
	No	7	9.43	2.37
	Unsure	64	9.55	2.78
Affective strategies	Yes	215	7.67	2.05
	No	7	6.43	1.40
	Unsure	64	6.48	2.19

Table 10. The One-Way ANOVA among Future Career and English Learning Motivation and Strategies (N=286)

Section		SS	df	F	p	
Intrinsic Motivation	Between	232.980	2	8.375	.000	1>3
	Within	3936.349	283			
	Total	4169.329	285			
Extrinsic Motivation	Between	83.098	2	5.265	.006	1>3
	Within	2233.353	283			
	Total	2316.451	285			
Instrumental Motivation	Between	283.712	2	20.698	.000	1>2 /1>3
	Within	1939.547	283			
	Total	2223.259	285			
Cognitive strategies	Between	167.511	2	6.524	.002	1>3
	Within	3632.895	283			
	Total	3800.406	285			
Social strategies	Between	11.448	2	.822	.441	
	Within	1970.290	283			
	Total	1981.738	285			
Metacognitive strategies	Between	71.659	2	4.233	.015	1>3
	Within	2395.194	283			
	Total	2466.853	285			
Memory	Between	113.472	2	7.005	.001	1>3

strategies	Within	2292.151	283			
	Total	2405.622	285			
Compensation strategies	Between	137.466	2	9.758	.000	1>3
	Within	1993.388	283			
	Total	2130.853	285			
Affective strategies	Between	75.716	2	8.802	.000	1>3
	Within	1217.252	283			
	Total	1292.969	285			

Tables 11 and 12 present the descriptive statistics and one-way ANOVA results examining the effects of learners' beliefs that English learning enhances competitiveness on English learning motivation and strategy use. Learners who perceived English as enhancing their competitiveness ("Yes") demonstrated significantly higher intrinsic motivation ($M = 13.48$, $SD = 3.83$) than those who were unsure ($M = 12.51$, $SD = 3.45$) or did not hold this belief ($M = 9.00$, $SD = 6.25$), $F(2, 283) = 3.08$, $p = .048$. This finding aligns with Self-Determination Theory, which posits that when learners perceive learning activities as personally meaningful and aligned with self-development goals, intrinsic motivation is strengthened (Deci & Ryan, 1985). Instrumental motivation also differed significantly across groups, $F(2, 283) = 10.08$, $p < .001$, with the "Yes" group ($M = 11.12$, $SD = 2.74$) scoring higher than the "Unsure" group ($M = 9.34$, $SD = 2.34$), supporting Gardner's (1985) view that pragmatic, goal-oriented beliefs--such as competitiveness in the job market--play a central role in sustaining language learning effort.

With respect to learning strategies, significant group differences were found for cognitive strategies, $F(2, 283) = 4.51$, $p = .012$, as learners who believed English enhanced competitiveness reported greater use ($M = 12.85$, $SD = 3.62$) than those who were unsure ($M = 12.10$, $SD = 3.43$). This pattern is consistent with Dörnyei's (2014) argument that motivated learners are more likely to engage in effortful and deep-processing strategies. Significant effects were also observed for compensation strategies, $F(2, 283) = 7.61$, $p = .001$, and affective strategies, $F(2, 283) = 7.26$, $p = .001$. Learners in the "Yes" group reported lower reliance on compensation strategies ($M = 7.53$, $SD = 2.13$) and greater use of affective strategies ($M = 9.33$, $SD = 1.15$) than those who were unsure ($M = 9.24$, $SD = 2.36$; $M = 6.32$, $SD = 1.84$). These findings suggest that learners with strong competitive beliefs may experience greater emotional regulation and confidence, reducing their need for compensatory behaviors, which echoes Oxford's (2016) assertion that affective control facilitates more efficient strategy deployment.

Taken together, these results indicate that perceiving English learning as a means of enhancing competitiveness strengthens both motivational intensity and selective strategy use. In line with the L2 Motivational Self System, such beliefs likely contribute to a more vivid and goal-oriented future self, which in turn promotes sustained engagement and adaptive learning behaviors (Dörnyei, 2014; Dörnyei & Ushioda, 2021). Thus, competitiveness-related beliefs appear to function as a meaningful motivational resource rather than merely an external pressure, shaping how learners invest effort and manage their learning processes.

Table 11. The Summary of Competitiveness and English Learning Motivation and Strategies (N=286)

Section	Future Career	<i>N</i>	<i>Mean</i>	<i>SD</i>
Intrinsic Motivation	Yes	242	13.48	3.83
	No	3	9.00	6.25
	Unsure	41	12.51	3.45
Extrinsic Motivation	Yes	242	9.45	2.90
	No	3	5.67	3.06
	Unsure	41	9.17	2.39
Instrumental Motivation	Yes	242	11.12	2.74
	No	3	7.33	4.51
	Unsure	41	9.34	2.34
Cognitive strategies	Yes	242	12.85	3.62
	No	3	7.00	5.20
	Unsure	41	12.10	3.43
Social strategies	Yes	242	6.67	2.65
	No	3	6.67	4.73
	Unsure	41	6.71	2.44
Metacognitive strategies	Yes	242	9.41	2.96
	No	3	7.33	3.79
	Unsure	41	8.49	2.68
Memory strategies	Yes	242	9.88	2.90
	No	3	8.00	4.58
	Unsure	41	8.93	2.71
Compensation strategies	Yes	242	10.98	2.73
	No	3	11.67	1.15
	Unsure	41	9.24	2.36
Affective strategies	Yes	242	7.53	2.13
	No	3	9.33	1.15
	Unsure	41	6.32	1.84

Table 12. The One-Way ANOVA among Competitiveness and English Learning Motivation and Strategies (N=286)

Section		<i>SS</i>	<i>df</i>	<i>F</i>	<i>p</i>
Intrinsic Motivation	Between	88.688	2	3.075	.048
	Within	4080.641	283		
	Total	4169.329	285		
Extrinsic Motivation	Between	44.178	2	2.751	.066
	Within	2272.273	283		
	Total	2316.451	285		
Instrumental Motivation	Between	147.848	2	10.080	.000
	Within	2075.411	283		

	Total	2223.259	285			
Cognitive strategies	Between	117.453	2	4.513	.012	1>2
	Within	3682.953	283			
	Total	3800.406	285			
Social strategies	Between	.005	2	.000	1.000	
	Within	1981.733	283			
	Total	1981.738	285			
Metacognitive strategies	Between	41.265	2	2.407	.092	
	Within	2425.588	283			
	Total	2466.853	285			
Memory strategies	Between	40.561	2	2.427	.090	
	Within	2365.061	283			
	Total	2405.622	285			
Compensation strategies	Between	108.692	2	7.606	.001	1>3
	Within	2022.162	283			
	Total	2130.853	285			
Affective strategies	Between	63.126	2	7.263	.001	1>3
	Within	1229.842	283			
	Total	1292.969	285			

To address Research Question 4--Is there a significant relationship between students' learning motivation and their learning strategies?--Pearson product-moment correlation analyses were conducted to examine the relationships among English learning strategies employed through YouTube, including cognitive, social, metacognitive, memory, compensation, affective, and instrumental strategies. As shown in Table 13, all strategy categories were significantly and positively correlated ($ps < .05$), indicating a coherent and interrelated pattern of strategy use in YouTube-mediated English learning.

Cognitive strategies were strongly associated with metacognitive strategies ($r = .71$), memory strategies ($r = .75$), and instrumental strategies ($r = .67$), suggesting that learners who actively process linguistic input through YouTube also tend to regulate their learning, reinforce retention, and employ digital tools to support comprehension. This finding aligns with Oxford's (1990, 2018) assertion that effective language learning involves the coordinated use of multiple strategy types rather than isolated behaviors. In particular, the strong links between cognitive and metacognitive strategies support the view that metacognitive regulation functions as a supervisory mechanism that guides strategy selection and execution (Anderson, 2002).

Metacognitive strategies also demonstrated particularly strong correlations with memory strategies ($r = .79$) and compensation strategies ($r = .66$), highlighting the central role of self-regulation in managing the cognitive demands of video-based learning environments. YouTube requires learners to process rapid speech, multimodal input, and authentic discourse, which in turn necessitates active monitoring of comprehension and flexible strategy adjustment. This pattern is consistent with research suggesting that metacognitive awareness is especially critical in technology-mediated and autonomous learning contexts (Tseng & Schmitt, 2008).

Compensation strategies were very strongly correlated with affective strategies ($r = .80$), indicating that learners who rely on inferencing, guessing from context, or visual cues during video viewing also actively regulate their emotions and anxiety. This finding underscores the affective demands of authentic video input and supports previous research emphasizing that strategy use serves not only cognitive but also emotional regulation functions in second language learning (Oxford, 2016; Dewaele, 2010). When learners encounter unfamiliar vocabulary, fast speech, or diverse accents on YouTube, affective strategies such as self-encouragement or anxiety reduction appear to facilitate sustained engagement and prevent comprehension breakdowns.

In contrast, social strategies showed comparatively weaker, though still significant, correlations with other strategy categories (e.g., with affective strategies, $r = .14$). This pattern suggests that YouTube-based English learning is predominantly self-regulated rather than interaction-oriented. Unlike classroom settings that emphasize peer collaboration and teacher feedback, YouTube primarily functions as a one-way input platform, encouraging learners to rely on internal cognitive and emotional resources. From a sociocultural perspective, YouTube may be perceived as a low-risk learning space that allows repeated exposure and experimentation without immediate social evaluation (Benson, 2011). Cultural factors in many Asian learning contexts, where learners may avoid public displays of uncertainty, may further reduce reliance on social strategies in online environments.

Overall, the results indicate that YouTube-based English learning is characterized by highly integrated strategy deployment, in which cognitive, metacognitive, affective, compensation, and instrumental strategies operate in tandem rather than independently. Consistent with Oxford's (1990, 2018) language learning strategy framework, these findings demonstrate that effective digital language learning relies on learners' ability to simultaneously manage linguistic processing, self-regulation, and emotional control. The present study thus extends existing strategy theory to informal, technology-mediated learning contexts and highlights the importance of fostering strategic flexibility and self-regulatory competence in YouTube-assisted English learning.

Table 13. Pearson Correlation Matrix of YouTube-Based English Learning Strategy Dimensions YouTube ($N = 286$)

Variable	Cognition	Social	Metacognition	Memory	Compensation	Affective	Instrumental
Cognition	—						
Social	.326**	—					
Metacognition	.706**	.433**	—				
Memory	.745**	.353**	.792**	—			
Compensation	.636**	.231**	.659**	.684**	—		
Affective	.556**	.142*	.573**	.623**	.803**	—	
Instrumental	.670**	.173**	.520**	.573**	.544**	.547**	—

Note: * $p < .05$, ** $p < .01$ (two-tailed)

5. Conclusions and Implication

5.1 Conclusions

The present study investigated how background variables--including gender, English certification, extracurricular English learning, frequency of YouTube use, future career aspirations, and perceived competitiveness--relate to university students' English learning motivation and strategy use in a YouTube-assisted learning context. Several important conclusions can be drawn from the findings.

First, gender was not found to be a significant factor influencing students' English learning motivation or strategy use. Across all three motivational orientations (intrinsic, extrinsic, and instrumental) and six categories of learning strategies, male and female students demonstrated comparable levels of engagement. This result supports a growing body of second language acquisition research suggesting that individual and contextual factors play a more decisive role than demographic characteristics in shaping learners' motivational and strategic behaviors. Rather than gender, learners' prior experiences, learning environments, and goal orientations appear to exert greater influence on how they approach English learning.

Second, holding English proficiency certificates did not significantly enhance overall motivation or the use of general cognitive and metacognitive strategies. However, certification was associated with higher use of compensation and affective strategies, indicating that certified learners may develop specific forms of strategic competence that help them cope with communication gaps and emotional challenges. These findings suggest that certification may shape how learners manage learning difficulties and anxiety, even if it does not fundamentally alter their motivational orientations.

Third, extracurricular English learning emerged as a critical factor influencing both motivation and strategy use. Students who engaged in additional English learning beyond formal schooling exhibited stronger intrinsic and instrumental motivation, as well as a broader and more sophisticated repertoire of learning strategies. This pattern highlights the cumulative effects of increased exposure, scaffolding, and guided practice in fostering learners' self-regulatory capacity and strategic flexibility.

Fourth, frequent engagement with YouTube was found to significantly enhance students' motivational profiles and strategic behaviors. Learners who used YouTube more often demonstrated higher motivation and more integrated strategy use, reinforcing the role of informal digital learning environments as meaningful supplements to classroom instruction. When considered alongside extracurricular English classes, the findings suggest that both structured instruction and self-directed digital learning contribute synergistically to learners' motivation and strategic development.

Fifth, future career aspirations played a central role in shaping English learning motivation and strategy use. Students who perceived English as relevant to their future careers consistently showed stronger intrinsic and instrumental motivation and employed learning strategies more frequently and effectively. These results underscore the importance of future-oriented goals in sustaining engagement and guiding strategic learning behaviors.

Finally, perceiving English learning as a means of enhancing competitiveness further intensified motivation and selective strategy use. In line with the L2 Motivational Self System,

competitiveness-related beliefs appear to function as a positive motivational resource by strengthening learners' future self-images and promoting goal-directed engagement rather than merely exerting external pressure.

Overall, the findings reveal that YouTube-based English learning is characterized by highly integrated strategy deployment. Cognitive, metacognitive, affective, compensation, and instrumental strategies operate in tandem, highlighting the importance of strategic flexibility and self-regulatory competence in informal, technology-mediated language learning environments.

5.2 Pedagogical Implications

Based on the findings, several pedagogical implications can be drawn for English language teaching and curriculum design.

First, educators should move beyond gender-based assumptions and instead focus on cultivating supportive learning environments that address learners' motivational orientations and strategic needs. Instructional interventions may be more effective when tailored to learners' goals, experiences, and learning contexts rather than demographic characteristics.

Second, while English certification remains an important benchmark, educators should explicitly support learners in developing affective and compensation strategies, particularly for managing anxiety and communication breakdowns. Strategy-based instruction that emphasizes emotional regulation and inferencing skills may help learners transfer exam-related competence to real-world language use.

Third, institutions are encouraged to promote extracurricular English learning opportunities, such as tutoring programs, language clubs, or guided self-study initiatives. These experiences can enhance both motivation and strategic sophistication by providing sustained exposure and structured support beyond the classroom.

Fourth, given the positive role of YouTube, teachers may consider integrating curated YouTube content into formal instruction to leverage students' existing digital engagement. Combining video-based input with reflective tasks, learning journals, or strategy-focused activities may further strengthen learners' metacognitive awareness and learning effectiveness.

Fifth, embedding future career awareness and goal-setting activities into English courses may enhance learners' motivation and strategic engagement. Helping students connect English learning to their envisioned future selves can transform abstract learning goals into personally meaningful pursuits.

Finally, to address the relatively weaker role of social strategies in YouTube-based learning, instructors may design collaborative tasks that extend digital learning into interactive classroom contexts. Pairing individual video viewing with peer discussion or group problem-solving can balance autonomy with social interaction.

In sum, the present study highlights the importance of supporting diverse learning pathways that integrate structured instruction, self-directed digital learning, and future-oriented goal

development. By fostering motivation, strategic flexibility, and self-regulatory competence, educators can better harness the pedagogical potential of YouTube and other informal digital resources in contemporary English language education.

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Appendix

YouTube on English Learning Motivation and Strategies Questionnaire

A. Gender: ☐ Male ☐ Female

B. Do you have any English language certification (e.g., GEPT, TOEIC, PVQC, CSEPT...)?

☐ Yes ☐ No

C. How often do you watch English-related videos on YouTube? ☐ Daily

☐ Often ☐ Rarely ☐ Never

D. Do you engage in extracurricular English learning (e.g., cram school, self-study)?

☐ Yes ☐ No

E. Do you think learning English is helpful for your future career? ☐ Yes ☐ No ☐ Not sure

F. Do you believe learning English enhances your competitiveness? ☐ Yes ☐ No ☐ Not sure

Part 1: YouTube on English Learning Motivation Scale (10 Items)

Scale: 1 = Strongly disagree, 5 = Strongly agree

Intrinsic Motivation					
1. I enjoy learning English through YouTube because it is fun and makes me happy.	1	2	3	4	5
2. I use YouTube to learn English because I am interested in the language and culture.	1	2	3	4	5
3. Watching English videos on YouTube gives me a sense of achievement and motivates me to improve.	1	2	3	4	5
4. I enjoy the process of learning English, even without external pressure or requirements.	1	2	3	4	5
Extrinsic Motivation					
5. I use YouTube to learn English because my family, teachers, or friends encourage me to do so.	1	2	3	4	5

6. I want to learn English well through YouTube to gain recognition or praise from others.	1	2	3	4	5
7. I learn English to get better grades in exams or schoolwork.	1	2	3	4	5
Instrumental Motivation					
8. I use YouTube to learn English because it is useful for future jobs or further studies.	1	2	3	4	5
9. I want to improve my English through YouTube to travel or study abroad more smoothly.	1	2	3	4	5
10. I hope to master English to gain more learning or job opportunities.	1	2	3	4	5

Part 2: YouTube on English Learning Strategies Scale (18 Items)

Scale: 1 = Strongly disagree, 5 = Strongly agree

Cognitive Strategies					
11. I learn new vocabulary from YouTube videos and use them in sentences.	1	2	3	4	5
12. I enhance my understanding of English by watching YouTube videos repeatedly.	1	2	3	4	5
13. I imitate the pronunciation and intonation in YouTube videos to improve my speaking.	1	2	3	4	5
14. I do dictation of YouTube content to improve listening and spelling.	1	2	3	4	5
Social Strategies					
15. I leave comments or join discussions on YouTube to improve my English expression.	1	2	3	4	5

16. I share English YouTube videos with friends and discuss the language points.	1	2	3	4	5
17. I join YouTube live classes or talk with foreigners to improve speaking.	1	2	3	4	5
Metacognitive Strategies					
18. I choose YouTube videos that match my learning goals.	1	2	3	4	5
19. I make a learning schedule for YouTube English study and check my progress regularly.	1	2	3	4	5
20. I focus while watching YouTube videos and avoid distractions.	1	2	3	4	5
Memory Strategies					
21. I write down key sentences from YouTube and read them repeatedly.	1	2	3	4	5
22. I use images or contexts from YouTube videos to remember vocabulary and phrases.	1	2	3	4	5
23. I use association (e.g., linking new words to familiar things) to memorize vocabulary.	1	2	3	4	5
Compensation Strategies					
24. When I don't understand a word, I guess its meaning based on the video context.	1	2	3	4	5
25. I use subtitles to help understand YouTube video content.	1	2	3	4	5
26. I adjust the playback speed of YouTube videos to suit my learning needs.	1	2	3	4	5
Affective Strategies					

27. I watch YouTube videos that interest me to stay motivated in learning English.	1	2	3	4	5
28. I watch fun and relaxing YouTube videos to reduce anxiety about learning English.	1	2	3	4	5

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