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Increasing Motivation to Learn English in CIT Students in Saudi Arabia through ESP-TBL Intervention

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Abstract

Background/purpose. This experimental case study explores professional motivation in learning English among Computer Information Technology (CIT) students at an applied college in Saudi Arabia. The study investigates how motivational drivers, integrated with pedagogical intervention, influence language learning.

Materials/methods. A total of 120 students participated in a structured 8-week English for Specific Purposes (ESP) program incorporating Task-Based Learning (TBL) strategies. Using pre-test/post-test and pre- and post-intervention surveys to collect numerical data and structured interviews to collect qualitative data, participants' levels of instrumental and intrinsic motivation were measured.

Results. Results obtained from the post-test and post-intervention motivation survey showed a significant increase in professional motivation, with the majority of the Experimental group participants identifying career advancement and employability as initial motivators. Complementary qualitative data, gathered through semi-structured interviews and analyzed thematically in six phases (following the work of Braun and Clarke), confirmed that learners viewed English as essential for technical documentation, job applications, and international collaboration.

Conclusion. The findings highlight the impact of contextualized ESP-TBL instruction in enhancing professional motivation, offering valuable insights for curriculum designers and educators in technical fields. While promising, the conclusions were constrained by the study's scale and scope. Future research should examine gender-based or proficiency-level variations in motivational response and investigate the impact of AI tools on ESP motivation.

1. Introduction

In today's globalized tech industry, English proficiency is no longer optional for Computer Information Technology (CIT) students; it is a career-critical skill. From interpreting programming documentation to collaborating in multinational teams, English serves as the lingua franca of the digital world (Kuteeva & Airey, 2014). Yet, despite its professional necessity, many CIT learners in non-native English-speaking contexts struggle with low motivation, often perceiving language study as secondary to technical coursework (Alfadda & Mahdi, 2021). As a result, they often struggle to achieve professional success, as success in the CIT field depends on a strong command of English, both oral and written. Considering the professional necessity, it is important to understand the concept of motivation and the factors that drive motivation in English education in Saudi Arabia.

Crookes and Schmidt (1991) define motivation as students' orientation toward achieving a desired outcome. Cole (2007) considers motivation to be an individual's internal state that directs and pushes the person toward doing or achieving something. Motivation in second language (L2) learning has long been framed by Self-Determination Theory (SDT), which distinguishes between autonomous (intrinsic) and controlled (extrinsic) motivational drivers (Ryan & Deci, 2017). In technical education, however, research suggests that instrumental motivation—learning English for career advancement—often dominates the learner mindset (Ismail & Albakri, 2022).

Al-Seghayer (2011), who explored the status of English in the Kingdom of Saudi Arabia (KSA), highlights the lack of learner motivation and appropriate pedagogy as key factors faced by EFL teachers and learners alike. The disconnect between CIT students' professional needs and traditional English pedagogy exacerbates motivational challenges. While general ESL curricula focus on grammar and literature, CIT learners require English for Specific Purposes (ESP)—tailored instruction in technical communication, such as decoding error logs or writing API documentation (Belcher, 2022). Task-based learning (TBL), which integrates real-world problem-solving (e.g., simulating tech support calls), has shown promise in bridging this gap. A study in Malaysian polytechnics reported a 31% increase in engagement when ESP was taught through coding-related tasks rather than abstract exercises (Tan et al., 2023). Gardner's (2019) revised socio-educational model, which emphasizes context-specific motivations, particularly in vocational settings where language skills are tied to employability, is also a good fit for CIT students.

This paper examines how professional incentives shape CIT students' motivation to learn English and evaluates the impact of ESP and TBL interventions in an applied college setting. The research aligns with Gardner's (2019) model. By combining pre-test/post-test measures, motivation surveys, interviews, and classroom observations, we identify actionable strategies to align language instruction with industry demands—a gap underexplored in recent L2 motivation research (Dörnyei, 2020).

1.1. Research Problem and Contribution

CIT students are often not motivated to learn English, as their primary focus is on acquiring technical skills. While motivational factors influencing university students' attitudes toward learning English as a Foreign Language (EFL) have been widely studied (Dörnyei, 2020; Ismail & Albakri, 2022; Ryan & Deci, 2017), a review of the literature reveals a lack of research on specific dimensions. In particular, the significance of professional growth as a motivational factor for learning EFL remains underexplored. Few studies address the application of English for Specific Purposes (ESP) and Task-Based Learning (TBL) as instructional approaches to enhance instrumental motivation among CIT students. Additionally, the effect of aligning language instruction with industry requirements on CIT students' motivation to learn English remains largely unexamined. More context-based investigations that blend new teaching approaches are required. Therefore, this academic field remains under-researched and warrants further investigation. In response to this gap, the present study found that both instrumental and intrinsic professional motivation influence CIT students' English language learning.

The contribution of the current research lies in employing an experimental ESP-TBL intervention to increase motivation among technical/CIT students in Saudi Arabia. While prior studies have investigated the impact of ESP and TBL separately, this study offers new insights by combining quantitative and qualitative methods to examine how this ESP-TBL approach can support L2 learning in a technical education setting. It is hypothesized that: (a) students are more likely to be motivated by instrumental factors rather than intrinsic ones; (b) students in the experimental group are expected to show greater improvement compared to their counterparts; and (c) the ESP-TBL intervention is also anticipated to foster more positive perceptions among participating students.

2. Literature Review

Motivation is often seen as essentially instrumental in many industries, organizations, and even households. Scholars have long recognized its importance and carefully examined its many facets. In general, extrinsic motivation has received significant attention, most notably from the well-known Hawthorne Experiment (Mayo, 1949), whose applicability was later reexamined by McCambridge et al. (2014). Nonetheless, the process of achievement requires both internal as well as external motivation.

2.1. Conceptualizations of Motivation

Ushioda and Dörnyei (2021) observe that motivation remains a complex, multidimensional construct with varying interpretations across different theoretical frameworks. This lack of consensus persists despite extensive research, highlighting the need for context-specific investigations into motivational drivers, particularly in specialized fields such as technical education. Current definitions of motivation generally converge on the concept of a goal-directed impulse that energizes and sustains learning behavior. Schunk et al. (2014) and Gardner (2019) emphasize the cognitive and affective dimensions of motivation, while Dörnyei (2009) offers a more comprehensive definition that includes effort expenditure, task persistence, goal-setting, and strategic behavior. Motivated learners not only put consistent effort into learning but also derive satisfaction from the learning process itself, experiencing reinforcement from successful outcomes and disappointment from failures. This perspective aligns with broader psychological theories that frame motivation as a dynamic interplay of energy, direction, and persistence (Ryan & Deci, 2017).

2.2. Major Theoretical Frameworks

Within psychology, Self-Determination Theory (SDT) has emerged as a dominant framework for understanding motivation. According to Ryan and Deci (2017), personal interests and satisfaction form the foundation for intrinsic motivation, while extrinsic motivation is mainly stimulated and sustained by external rewards or outcomes. A third dimension, amotivation, describes a state in which learners perceive no meaningful connection between their efforts and desired results. Recent studies applying SDT to L2 learning contexts (e.g., Hiver et al., 2021) reveal that instrumental motivation often outweighs intrinsic motivation, particularly in technical and vocational education. Alrabai (2016) found that lack of motivation contributed to underachievement in Saudi EFL education.

Gardner's (2019) socio-educational model further refines the understanding of motivation by differentiating between integrative and instrumental orientations. Integrative motivation is characterized by a learner's desire to acquire a language for cultural or social integration, whereas instrumental motivation emphasizes pragmatic goals such as employment or academic advancement. In technical and professional education, instrumental motivation tends to dominate, as learners perceive language proficiency as a means to career success rather than an end in itself (Alrabai, 2022). This trend is particularly evident in studies focusing on English for Specific Purposes

(ESP), where learners engage more deeply when language instruction is directly tied to professional objectives (Moskovsky et al., 2016).

Goal-setting theory, as articulated by Locke and Latham (2006), provides additional insights into how motivation operates in educational contexts. Setting clear, challenging goals directs learners' attention and sustains effort. Research by Moskovsky et al. (2016) supports this view, demonstrating that task-based learning (TBL) methodologies with career-relevant objectives significantly boost learner engagement. For instance, when students in technical fields write technical documentation or participate in simulated workplace scenarios, their motivation and participation increase markedly compared to traditional grammar-focused instruction.

Attribution theory examines how learners interpret their successes and failures in language learning. Weiner (2000) highlights the role of causal attributions—such as ability, effort, task difficulty, and luck—in shaping future motivation. Learners who attribute progress to self-regulated habits, like their choice of strategies or effort, are more likely to remain committed despite challenges. In technical education, students who perceive English proficiency as a controllable, career-enhancing skill demonstrate higher motivation and resilience.

2.3. Empirical findings in Technical and L2 Education

Previous studies consistently demonstrated that EFL learners exhibit greater engagement and persistence when language instruction is tailored to individual goals. Therefore, researchers have extensively examined motivation boosters and the impact of various teaching approaches on EFL education and motivation, with approaches such as ESP, TBL, and Artificial Intelligence (AI) being popular and effective in the field. For example, Wei (2023) found that AI-mediated EFL instruction had a positive impact on students' performance and motivation. Similarly, Annamalai (2023) reported that chatbots successfully increased students' autonomy, competence, and motivation. Similarly, integrating ChatGPT into an EFL writing course for Chinese learners enhanced both their writing and motivation (Song & Song, 2023). AI was a useful tool, helping EFL educators tailor ESL instruction to students' needs and motivating students to adopt more self-regulated learning strategies. ESP and TBL, on the other hand, are also believed to have the potential to increase students' motivational levels in the Arab world (Hussain et al., 2020). Gortaire Díaz, Parra, and Leyva (2023) found that a TBL teaching approach improved students' overall motivation and EFL speaking proficiency. Several recent studies employed an ESP-based intervention to examine the impact on the target language and motivation levels, and both reported positive results (Yao & Shi, 2024; Sharifi, Sepehri, & Shafiee, 2025)

At the same time, research has also examined demotivating factors. Al-Khairy (2013) reported that undergraduate students at Saudi universities lacked educational motivation due to difficulties with textbooks, teaching styles, teachers' behaviors, and inappropriate teaching aids. Al-Khasawneh (2017) and Al-Malki (2018) reported consistent results, as they investigated both demotivating and motivating factors associated with English language education in the Saudi context. Lack of practice opportunities outside the campus and the difficulty of English grammar were perceived as demotivating factors. Alsuwailem (2023) found that both extrinsic and intrinsic motivation are essential in workplaces, highlighting the need for more context-specific investigations.

Research indicates that EFL instruction focused on instrumental needs increases student motivation to engage and learn (Alshaye et al., 2024; Ugla, 2021), and Instrumental motivation is widely recognized as a primary factor in student improvement. However, experimental studies investigating alternative teaching approaches, such as English for Specific Purposes (ESP) combined with Task-Based Learning (TBL), remain limited, despite suggestions of their significant potential to enhance student motivation in the Arab world (Hussain et al., 2020).

2.4. Research Gap and Questions

The present study aims to fill this gap by exploring the professional motivation of CIT students at a Saudi applied college, evaluating both their initial motivational profile and the effects of a focused ESP–TBL intervention. The primary objective is to examine the impact of a contextualized ESP–TBL intervention on enhancing students’ motivation to learn English. A corollary objective is to investigate which factors—instrumental (extrinsic) or intrinsic—motivate these learners more. Instrumental factors involve the perception that learning English is directly linked to professional growth, while intrinsic factors are subjective motivators indirectly linked to professional growth, such as aesthetic enjoyment and the pleasure of learning a foreign language.

- RQ1. What are the dominant types of professional motivation (instrumental vs. intrinsic) among CIT students towards learning English?
- RQ2. To what extent does the ESP–TBL intervention affect the levels of professional motivation towards learning English among CIT students?
- RQ3. How do students perceive the effect of the intervention on their motivation to learn the language for professional purposes?

3. Methodology

This study employed a mixed-methods case study design to investigate the effects of an English for Specific Purposes–Task-Based Learning (ESP-TBL) intervention on the professional motivation of College of Information Technology (CIT) students in an authentic educational context. The research design was informed by Tirén's (2021) mixed-methods approach, which examined the role of digital games in motivating adult English learners. Given the alignment of research objectives, a mixed-methods approach was deemed appropriate for this investigation. The methodology combined quantitative and qualitative data to assess changes in student motivation following the instructional intervention comprehensively. Quantitative data were collected through pre- and post-intervention tests and survey questionnaires. Qualitative data were gathered via semi-structured interviews. The intervention consisted of an eight-week ESP module incorporating Task-Based Learning activities. The case study framework facilitated an in-depth analysis within the specific context of students at a single applied college.

3.1. Research Design

This study applies the stimulus-response model to evaluate the effectiveness of a teaching method designed to increase motivation among English as a Foreign Language (EFL) learners. Participants received a stimulus in the form of an English for Specific Purposes (ESP) course tailored to their professional requirements and incorporating real-life learning situations through the Task-Based Learning (TBL) model. Learner responses were assessed by measuring their acquisition of technical vocabulary and their ability to complete technical tasks in English. Motivational changes were compared to a control group that received only general English instruction without ESP or TBL components.

3.2. Participants

The participants comprised 120 undergraduate CIT students (aged 18–22) enrolled at an applied college in Saudi Arabia during the Spring 2025 academic semester. A purposive sampling technique was used to recruit the sample. Recruitment was based on participants' enrollment in English language support classes and their willingness to participate in the experimental intervention. All participants had intermediate English proficiency (CEFR B1–B2), as assessed through institutional placement tests.

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3.3. Research Procedure

After administering the pre-test, participants were divided into two groups: the experimental and control groups, each comprising 60 participants. The researcher used a computerized randomization tool to assign participants to groups, taking into account demographic factors such as academic achievement, English proficiency level, and prior exposure to ESP. This was a stratified random assignment, ensuring that students with similar profiles were evenly distributed across the groups. The goal was to ensure balance between the two groups in terms of academic achievement, English proficiency, and prior exposure to ESP courses, if any.

The experimental group was taught ESP contents and instructed to perform CIT tasks, while the control group was taught English without ESP-TBL emphasis, that is, general English appropriate for adult university learners. In the control group, instruction focused on grammar, vocabulary, and reading comprehension using a standard general English textbook, without any task-based ESP components.

To minimize bias and furtherly ensure consistency across the groups, the researcher upheld intervention fidelity by using structured lesson plans and conducting regular independent classroom observations. At the end of the intervention, the groups were administered a post-test. Post-intervention test scores for the groups were compared to assess progress in their English achievement. The achievement scores were associated with learning motivation. The measurement components were as given in Table 1, below:

Table 1. Measurement Components

No.	Test Components	Scores
1	Introduction to technical vocabulary	5
2	Motivational awareness-building	5
3	Writing GitHub issue reports	5
4	Simulating IT help desk calls	5
5	Reading API documentation	5
6	Gamified coding documentation	5
	Total	30

3.4. Intervention Procedure

An 8-week ESP-TBL module was developed and delivered by the researcher in collaboration with subject experts. The module included, Week 1-2: Introduction to technical vocabulary and motivational awareness-building, Week 3-5: TBL activities such as writing GitHub issue reports, simulating IT help desk calls, and reading API documentation, and Week 6-8: Project-based tasks involving gamified coding documentation and collaborative network configuration reporting. The instructional model followed a progressive scaffolded structure, moving from controlled language input to authentic task performance. Classroom instruction was delivered by the same teacher for 3 hours per week, with 25% of sessions dedicated to task-based learning and 75% comprising instructor-led instruction.

3.5. Data Collection Instruments

3.5.1. Quantitative Instruments

Pre-test and post-test: The tests were administered to collect numerical data on participants' English proficiency before and after the intervention. Scores Improvement after the intervention was associated with (a) participants' enhanced motivation to learn English, and (b) the success of the ESP-TBL intervention to enhance learner motivation. The test components discussed above each carried 5 marks, for a total of 30 marks.

Professional Motivation Questionnaire (PMQ): The questionnaire was derived from Gardner's Attitude/Motivation Test Battery (AMTB) and contextualized for the CIT environment. The modified PMQ items underwent piloting with a separate group to assess validity, reliability, and appropriateness for the current study's setting. The internal consistency of the adopted PMQ was assessed using Cronbach's alpha, yielding a score of $\alpha = 0.82$. In fact, the PMQ was derived from Gardner's Attitude/Motivation Test Battery (AMTB), a widely recognized instrument in motivation research, and numerous studies have reported high internal consistency, with Cronbach's alpha ranging from 0.71 to 0.91. (Gardner, 1985; Dordi Nejad & Emam Jomeh, 2011; Hardianti, 2022).

The tool measured two core dimensions: Instrumental Motivation (e.g., job attainment, salary increase) and Intrinsic Motivation (e.g., personal growth, enjoyment of language learning). The PMQ consisted of 15 Likert-scale items (1 = Strongly Disagree, 5 = Strongly Agree) and was administered pre- and post-intervention. (See Appendix)

3.5.2. Qualitative Instruments

A series of semi-structured interviews was conducted with a stratified subsample of 20 participants. Interview protocols explored students' perceptions of English use in professional contexts, engagement with tasks, and motivational shifts. The interviews lasted 20 to 30 minutes. Audio recordings were retained to facilitate transcription.

3.6. Data Analysis

3.6.1. Quantitative Analysis

The study analyzed data from tests and PMQ using general statistical methods and paired-sample t-tests to measure statistically significant changes in motivation levels pre- and post-intervention. Descriptive statistics (mean, standard deviation, standard error, and variance) were also computed to provide a general overview of motivation trends. Statistical analysis was performed using SPSS version 26.

3.6.2. Qualitative Analysis

Interview data were analyzed using Braun and Clarke's (2006) six-phase thematic analysis approach, covering the following 6 steps: Familiarization with the data, generation of initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. Themes were validated through inter-coder agreement ($k = 0.83$) and triangulated with quantitative findings to enhance interpretive validity.

3.7. Ethical Considerations

Ethical approvals were obtained prior to conducting the study. Data were anonymized. Participants were informed about the study's aims, assured of confidentiality, and provided written consent. They were informed that they could withdraw at any stage of the study without penalty.

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4. Results

4.1. Quantitative Analysis

The raw scores obtained from pre-test and post-test were tabulated and analyzed statistically. The descriptive statistics based on the results obtained are presented in Table 2, given below:

Table 2. Descriptive Statistics of Participants' Pre-test and Post-test Scores

	Pre-test		Post-test	
	Exp. Group	Control Group	Exp. Group	Control Group
Descriptive Statistics	Mean: 18.93 SD: 2.24 Variance: 4.86 SE: 0.409	Mean: 19.6 SD: 2.11 Variance: 4.30 SE: 0.385	Mean: 23.13 SD: 2.44 Variance: 5.78 SE: 0.446	Mean: 21.33 SD: 2.0 Variance: 3.95 SE: 0.369

N = 60+60

As shown in Table 2 above, while the control group (M = 19.6) and the experimental group (M 18.93) demonstrated similar performance levels at the baseline, the experimental group outperformed the control group at the post-test phase, gaining a score of (+4.2), which indicates a larger impact of the intervention on the experimental group.

The statistical significance of the difference between participants' pre-test and post-test scores was assessed using a paired-samples t-test. The results obtained from the t-test are presented in Table 3, given below:

Table 3. Paired-Sample t-test of the Experimental and Control groups

No	Group	N	Pre-Test			Post-Test			t-test value	df (n-2)	P Value
			Mean	SD	Var.	Mean	SD	Var.			
1.	Experimental Group	60	18.93	2.24	4.86	23.13	2.44	5.78	10.268	58	1.2e-14*
2.	Control Group	60	19.60	2.11	4.30	21.33	2.00	3.95	4.493	58	0.0000340**
3.	Experimental vs. Control Group (pre-test)	120	--	--	--	--	--	--	1.638	118	0.10684†
4.	Experimental vs. Control Group (post-test)	120	--	--	--	--	--	--	4.035	118	0.0001618‡

N = 60+60

*Significant at < p 0.05

**Significant at p < 0.05

† *Not* Significant at p < 0.05

‡ Significant at p < 0.05

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Table 3 above shows that both the experimental and control groups demonstrated significant improvement from pre-test to post-test. The experimental group's score increased from (M = 18.93 SD = 2.24) to (M = 23.13 SD = 2.44), $t(58) = 10.27$, $p < .001$. The control group's score improved from (M = 19.60 SD = 2.11) to (M = 21.33 SD = 2.00), $t(58) = 4.49$, $p < .001$. An independent-samples t-test indicated no significant difference between groups at pre-test, $t(118) = 1.64$, $p = .107$. At post-test, the experimental group achieved significantly higher scores than the control group, $t(118) = 4.04$, $p < .001$.

The descriptive statistics for participants' pre-test PMQ results are presented in Table 4 below. The results show that intrinsic motivation received a lower mean score (M = 3.18) than instrumental motivation (M = 4.27). The responses were rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree):

Table 4. Descriptive Statistics of Pre-test Professional Motivation Dimensions

Motivation Type	Mean (M)	Standard Deviation (SD)	% Agreement (Agree + Strongly Agree)
Instrumental	4.27	0.61	85%
Intrinsic	3.18	0.78	42%

N= 120

The PMQ pre-test statistical analysis is graphically represented as in Figure 1, below:

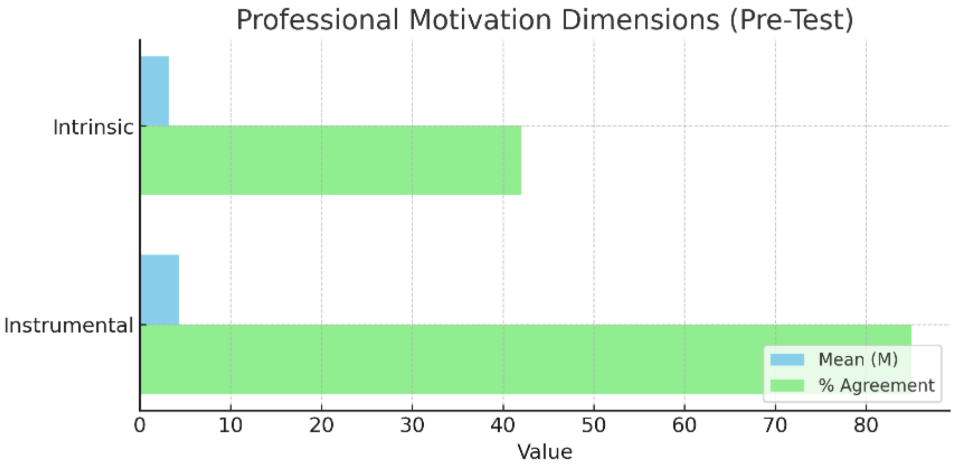

Figure 1. Graphical representation of pre-test professional motivation dimensions

Table 5 below shows that the statistical significance of the differences in participants' pre- and post-intervention Professional Motivation Questionnaire (PMQ) scores was assessed using paired-samples t-tests and p-value calculations. The results showed a statistically significant increase in overall motivation among the experimental group participants, as indicated by the Pre-test (M = 3.58, SD = 0.65) and Post-test (M = 4.13, SD = 0.60), t (df 58) = 2.43, $p < 0.0182$. The greatest improvement was noted in items related to task engagement, practical application, and confidence in using English in technical contexts. The results of the analysis are presented in Table 5 below.

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Table 5. Paired-Samples t-Test Results for Overall Motivation Scores (Pre-Post Comparison)

No	Group	N	Instrumental		Post-Test		Overall		t-test value	df (n-2)	P Value
			Mean	SD	Mean	SD	Mean	SD			
1.	Experimental Group	60	4.45	.58	3.64	.73	4.13	.60	2.43	58	0.0182*
2.	Control Group	60	4.30	.60	3.70	.80	3.58	.65	.389	58	0.6987**
3.	Experimental vs. Control Group (post-test)	120	--	--	--	--	--	--	2.27	118	0.02502†

N= 60+60

*Significant at < p 0.05

***Not* Significant at p < 0.05

† Significant at p < 0.05

For visual clarity, the comparative analysis of the experimental group participants' pre- and post-intervention mean motivation scores is presented in Figure 2 below. The table shows that the differences between the experimental group participants' pre- and post-intervention scores are statistically significant, whereas the difference in the Control Group participants' scores is not. The difference between the post-test scores of the two groups is also statistically significant.

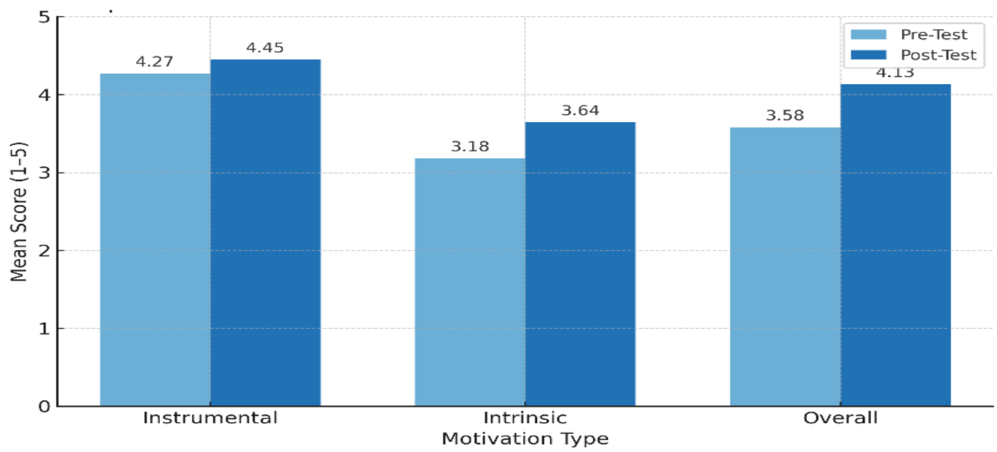

Figure 2. Graphical Representation of Participants' Pre- and Post-Intervention Mean Motivation Scores

4.2. Qualitative Analysis

Using Braun and Clarke's six-phase thematic model, the following themes and subthemes emerged, as listed in Table 6, below:

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Table 6. Themes emerging from the ESP-TBL interaction

Theme	Sub-Themes
Task Relevance	Reporting. API documentation. Real-world simulations
Learner Autonomy	Self-paced gamified coding
Language–Career Link	IT certifications. global communication
Reduced Language Anxiety	TBL reduced speaking fear. improved technical discussions

The emergent themes can be graphically represented as in figure 3, given below:

Figure 3. Themes emerged from the ESP-TBL interaction

These findings support the effectiveness of the ESP-TBL intervention in improving motivational and affective engagement with English. Several participants expressed that task relevance to future real-world jobs helps reduce anxiety and increase eagerness to use more English. As one participant noted:

I mostly feel shy and unconfident to jump in class conversations (referring to English) regarding things I barely care about (referring to daily use of English), even though I need English to get a job. But this experience boosted my confidence because I felt English was used to get things done, unlike in other classes (regular EFL classes), where the focus was solely on English (Khalid).

This quote demonstrates that incorporating task-based instruction in ESP classrooms can meaningfully connect students to their field of study, thereby increasing their motivation and confidence. Professional needs were also a recurring topic that participants seemed to enjoy discussing. Ali stated that:

I know for sure that this type of English is my way to get a job and I really need it to get a better income or get a promotion. The English we did in these classes was minimal, and easier, if I could say so, which made me more willing to talk and learn. I no longer think much about what other students think of my English because it feels like a job more than a class.

This response illustrates that professional needs, when combined with ESP pedagogy, can heighten learners' extrinsic and intrinsic motivation. The value of English among participants appeared to increase after the intervention. A few participants expressed awareness of the role of English as a lingua franca and its connection to the Information Technology (IT) sector. Some reported that this task-based intervention was encouraging in developing various self-regulated English learning habits. For example, one participant comments:

I am aware that if I want to get a job at a tech company with a good salary, I need to improve my English; not all clients in KSA use Arabic, and big companies deal with international clients. This means presentations, emails, meetings, workshops, etc. are all done in English; so, I'm really more determined to improve my English, and I started using phone applications to find people I can talk to in my free time (Rakan).

This quote shows that the ESP-TBL intervention stimulated both participants' extrinsic and intrinsic motivation, a point further supported by the PMQ data. Rakan's example demonstrates that employing career-based goals in ESP classrooms raises learners' awareness of the importance of English in the IT sector, not merely as an academic subject but as a vital tool for greater career prospects and better employability.

5. Discussion

The purpose of this study was to explore professional motivation for English language learning among Computer Information Technology (CIT) students through an experimental case study incorporating an ESP-TBL intervention. The results obtained from data analysis have successfully answered the three research questions concerning the dominant types of professional motivation among CIT students towards learning English, the potential effectiveness of ESP-TBL intervention to enhance professional motivation among CIT students to learn English, and students' perception of the effect of the intervention on their motivation to learn English for professional purposes. Quantitative analysis showed that the differences in Experimental Group participants' pre-test and post-test scores, and their post-test scores compared to Control Group participants' scores, were statistically significant. The findings provide compelling evidence that instrumental motivation significantly outweighs intrinsic motivation among technical learners, aligning with previous research on English for Specific Purposes in vocational settings (Dörnyei, 2005; Al-Tamimi & Shuib, 2009). The statistically significant increase in post-intervention motivation among Experimental Group participants ($t = 2.43$, $p = .0182$) highlights the effectiveness of contextualized, task-based learning when tailored to students' professional needs. This echoes the findings of Long (2015), who argued that pedagogical tasks grounded in learners' real-life domains lead to increased engagement (motivated by this connection) and the internalization of language for better learning and desired outcomes. A look at Table 3 above shows that 85% of participants expressed agreement or strong agreement with the statement that learning English would enhance their job opportunities, salary potential, and career mobility.

Qualitative results further support these quantitative trends. The emergence of themes such as English as a Professional Tool, Confidence through Contextual Practice, and Global Employability Awareness underscores the perceived value of English as a functional resource, not just an academic subject. These insights align with Gardner’s socio-educational model (1985), suggesting that motivation is enhanced when learners view language acquisition as instrumental to their identity and career goals.

The PMQ results show that 42% of participants indicated personal enjoyment and interest in English learning as their main reason for studying the subject. In other words, the intrinsic motivation scores showed minimal growth, while total motivation levels rose substantially. The study results align with previous research findings (Al-Khasawneh, 2017; Almalki, 2018). The factors that drive EFL education in Saudi Arabia explain this outcome. The majority of Saudi students view English as their ticket to professional success because it leads to employment possibilities and career progression (Alrabai, 2022; Al-Seghayer, 2011). The main factors which drive these students stem from instrumental motivations. Students need sustained contact with their target language to develop

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intrinsic motivation for learning that goes beyond personal goals. The eight-week intervention duration does not provide enough time to produce substantial changes in intrinsic motivation levels. Research shows that brief language-learning interventions produce greater effects on students' instrumental motivation than on their intrinsic motivation (Dörnyei & Ushioda, 2021). The short duration of the intervention period explains the minimal rise in intrinsic motivation. Developing language-learning enjoyment and engagement takes time, especially among students driven mainly by employment-related goals.

However, the positive impact of the ESP-TBL approach on overall motivation underscores the potential generalizability of the findings. Although the study was conducted in a Saudi technical educational program, the findings can arguably be generalized beyond the Saudi context to global technical education settings. Instrumental motivation drivers such as securing employment and career advancement are not unique to Saudi CIT students. As discussed above, research on L2 motivation has consistently highlighted the predominance of instrumental factors across numerous international contexts of technical education. Therefore, ESP-TBL interventions have the potential to help EFL students in similar technical educational contexts by linking their language learning to their career goals.

Notably, this study also found results similar to those argued by Alrabai (2016) and Al-Seghayer (2011) regarding the impact of student autonomy and the lack of task relevance on achieving desired outcomes. Almost all participants agreed on the importance of engaging in more ESP task-based and real-world classroom activities. They argued that the current standard EFL pedagogy predominating higher education is demotivating to students, as students struggle to see its connection to job attainment and professional and language growth. The shift from passive learning to active task-based engagement also contributed to reduced language anxiety, a finding corroborated by Ellis (2003) and Swain and Lapkin (2001), who emphasize the role of output-driven tasks in promoting fluency and learner confidence.

The findings also go beyond just boosting engagement and easing anxiety; they suggest that the ESP-TBL intervention might have helped students gradually embrace extrinsic goals, as explained by Self-Determination Theory (SDT). Initially, students were highly motivated by external rewards like jobs and salaries, but the slight increase in intrinsic motivation after the intervention suggests a shift towards more self-directed forms of motivation. This aligns with Ryan and Deci's (2017) idea that meaningful, contextualized tasks can promote identified or integrated regulation, in which learners come to appreciate language learning not just for its practical benefits but also as part of who they are, both personally and professionally. The relevance of the ESP content grounded in real-world technical tasks likely played a crucial role in this motivational shift, helping students view English as a tool for self-efficacy rather than just another academic hurdle.

Moreover, the intervention seems to have tapped into aspects of the Ideal L2 Self, as outlined in Dörnyei's L2 Motivational Self System. By participating in authentic, career-related language tasks, learners were inspired to see themselves as capable English-speaking professionals, a vision that can be a strong motivator. Such a conclusion aligns with the Goal-Setting Theory, which holds that setting ambitious goals promotes concentration and long-term motivation and commitment. The task-based approach of the ESP module provided these kinds of goals, allowing students to connect their language practice directly to their future aspirations. Additionally, the growth of learner autonomy and confidence may indicate a positive change in how they view their abilities, in line with Attribution Theory; students started to credit their success in English to their effort and strategies rather than just talent or luck, which in turn reinforced their motivation through a sense of control and competence.

6. Conclusion

The current study concluded that instrumental motivation among Saudi technical students is more dominant than intrinsic motivation. The study reported that the ESP-TBL intervention significantly increased professional motivation in the experimental group. Furthermore, this intervention can enhance intrinsic motivation in some cases. This is evident both in the post-intervention quantitative measures and the qualitative data, where students reported positive perceptions of the ESP-TBL approach, noting that they were able not only to engage in more career-focused learning settings but also to develop a new set of intrinsic-driven learning strategies.

Motivation is considered a key issue in psycholinguistics and educational settings. Motivating students to learn English for general or Specific Purposes (ESP) is essential for effective learning and achievements. Therefore, it is important to know what motivation is in a certain context, what increases motivation, and how motivation contributes to learning outcomes. In this connection, learning strategies and teaching techniques create a motivating learning environment that enhances learners' language learning abilities, ultimately leading to learning outcomes. By incorporating engaging pedagogical ESP-TBL strategies, educators can foster learning enthusiasm and help students achieve academic and professional goals.

6.1. Pedagogical Implications

The results of this study have direct implications for ESP curriculum design in applied colleges and technical education. Institutions and instructors should integrate TBL frameworks within ESP courses to simulate the real-world communicative demands of IT workplaces. Industry-relevant content, such as GitHub workflows, error log documentation, and software installation guides, should be prioritized to foster instrumental motivation. The incorporation of gamified tasks, like English-based coding challenges, can increase student motivation and task completion rates. While instrumental motivation is dominant, educators should not neglect intrinsic elements and should design tasks that also evoke curiosity, autonomy, and enjoyment.

6.2. Theoretical Implications

This study extends the applicability of Dörnyei's L2 Motivational Self System to technical students in the Arab context in general. It also reinforces the task-based language teaching (TBLT) paradigm as a motivational enhancer in ESP education in particular. The integration of motivation theory and task design provides a framework for future research on language instruction for Science, Technology, Engineering, and Maths (STEM) students.

7. Limitations

While the findings of the present study are quite promising, the study has its own limitations. First, the study was limited to a single institution and a specific discipline. A study conducted involving a greater number of institutions and several study disciplines may produce slightly different results. Second, although significant pre-test/post-test and pre-post differences, as well as inter-group differences in Experimental subjects' motivation levels, indicate a potential positive effect of the ESP-TBL intervention, there is a possibility that other external factors influenced the results. Therefore, the findings of the present study should be accepted with caution and after corroboration by further research.

8. Recommendation

Future studies should include a greater number of institutions and study disciplines in data collection to support stronger causal claims; incorporate longitudinal follow-up to assess retention of motivation; investigate gender-based or proficiency-level variations in motivational responses; and explore the impact of AI tools and virtual labs on ESP motivation.

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Declarations

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Appendix I.

PROFESSIONAL MOTIVATION QUESTIONNAIRE (PMQ)

Instructions: Please rate the extent to which you agree with the following statements on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree).

Section A: Instrumental Motivation

No.	Statement
1.	Learning English will help me get a better job in the IT sector.
2.	English proficiency is essential for international career opportunities.
3.	I need English to understand programming documentation and manuals.
4.	I am learning English to increase my salary potential.
5.	Employers in my field prefer candidates with strong English skills.

Section B: Intrinsic Motivation

No.	Statement
6.	I enjoy learning English regardless of job needs.
7.	I find English language learning intellectually stimulating.
8.	I study English because it helps me connect with global cultures.
9.	I feel a sense of personal achievement when I improve my English.
10.	I like challenging myself with new language tasks in English.

Section C: Task Engagement (Post-Intervention only)

No.	Statement
11.	I enjoyed working on English-based technical tasks (e.g., GitHub issues, API templates).
12.	Task-based activities increased my confidence in using English.
13.	I found gamified tasks helpful in learning technical vocabulary.
14.	The ESP-TBL tasks felt relevant to my career goals.
15.	I would like to continue learning English through similar task-based methods.

Appendix II.

APPENDIX B: PMQ ITEMS BY DIMENSIONS

Item No.	PMQ Statement	Dimension
1	Learning English will help me get a better job in the IT sector.	Instrumental Motivation
2	English proficiency is essential for international career opportunities.	Instrumental Motivation
3	I need English to understand programming documentation and manuals.	Instrumental Motivation
4	I am learning English to increase my salary potential.	Instrumental Motivation
5	Employers in my field prefer candidates with strong English skills.	Instrumental Motivation
6	I enjoy learning English regardless of job needs.	Intrinsic Motivation
7	I find English language learning intellectually stimulating.	Intrinsic Motivation
8	I study English because it helps me connect with global cultures.	Intrinsic Motivation
9	I feel a sense of personal achievement when I improve my English.	Intrinsic Motivation
10	I like challenging myself with new language tasks in English.	Intrinsic Motivation
11	I enjoyed working on English-based technical tasks (e.g., GitHub issues, API templates).	Task Engagement (Post)
12	Task-based activities increased my confidence in using English.	Task Engagement (Post)
13	I found gamified tasks helpful in learning technical vocabulary.	Task Engagement (Post)
14	The ESP-TBL tasks felt relevant to my career goals.	Task Engagement (Post)
15	I would like to continue learning English through similar task-based methods.	Task Engagement (Post)

Note: Items 1–10 were used in both pre- and post-tests. Items 11–15 were used only in the post-test to assess perceived impact of the ESP-TBL intervention.