

Self-Determination Theory and Motivational Profiles of Saudi EFL Learners

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Abstract

This study investigates motivational self-determination profiles among 1,237 Preparatory Year Program (PYP) university students learning English in Saudi Arabia. Using a validated six-point Likert-scale instrument, six motivational constructs derived from Self-Determination Theory (SDT)—Identified Regulation (IR), External Regulation (ER), Introjected Regulation (IntroR), Integrated Regulation (IntegR), Intrinsic Motivation (IM), and Amotivation (AM)—were examined in relation to age, gender, academic major, English proficiency, and international study experience. Identified Regulation yielded the highest mean score ($M = 5.13$), indicating predominantly goal-oriented, self-determined motivation. One-way ANOVAs and independent-samples t-tests revealed statistically significant effects of age on ER and IM, gender on ER (males scoring higher), proficiency level on IR and IntegR, and academic major across multiple subscales. Students with prior English study abroad experience reported significantly lower IntroR and AM scores. These findings advance SDT-based understanding of EFL motivation and carry direct implications for instructional design in Gulf higher education contexts.

Keywords: Self-Determination Theory, EFL motivation, Saudi Arabia, motivational regulations, English language learning, university students..

Introduction

Despite significant investment in English language infrastructure in Saudi Arabia—qualified teachers, modern curricula, and technology-enhanced classrooms—many Preparatory Year Program students fail to attain required levels of linguistic competence. Motivation is widely recognized as a primary determinant of language learning success (McDonough, 1983; Ellis, 1994), yet EFL motivation research in the Gulf region has been predominantly anchored in Gardner's (1985) integrative-instrumental binary, which may insufficiently capture the nuanced regulatory dynamics present among Arab learners. Self-Determination Theory (SDT; Deci & Ryan, 2000) offers a theoretically richer continuum, spanning amotivation through externally regulated, introjected, identified, integrated, and intrinsically motivated orientations.

Research consistently demonstrates that Saudi and Gulf students hold broadly positive attitudes toward English, motivated principally by instrumental concerns—academic advancement and professional utility—rather than integrative identification with target-language communities (Al-Zahrani, 2008; Alhuqbani, 2009). Al-Hoorie et al. (2022) confirmed the explanatory power of SDT across three decades of second language acquisition research, and several studies have linked autonomy-supportive pedagogical conditions with higher internalized motivation (McEown & Oga-Baldwin, 2019; Parrish & Vernon, 2022). However, empirical investigations applying the full SDT continuum to large, disciplinarily diverse Saudi EFL samples remain limited. The present study addresses this gap by examining how motivational regulation profiles differ across key demographic and academic variables.

Methods

Participants and Design

This cross-sectional survey study recruited 1,237 PYP students (783 male, 454 female) from three faculties: Humanities ($n = 476$), Science/Engineering ($n = 458$), and Medicine ($n = 303$). The age distribution was concentrated at 19 years ($n = 745$; 60.2%). English proficiency was classified as Level A (lower, $n = 653$) or Levels B/C (higher, $n = 584$). A minority had prior English study abroad experience ($n = 213$; 17.2%).

Instrument

The survey comprised a validated six-point Likert-scale questionnaire operationalizing six SDT constructs: IR (10 items), ER (11 items), IntroR (11 items), IntegR (8 items), IM (20 items), and AM (2 items). Internal consistency was satisfactory to excellent across most subscales (Table 1), with the exception of AM ($\alpha = .49$), attributable to its two-item structure.

Table 1. Internal Consistency of SDT Subscales

Construct	No. of Items	Cronbach's Alpha
IR	10	0.800
ER	11	0.868
IntroR	11	0.769
IM	20	0.892
IntegR	8	0.768
AM	2	0.494

Note. IR = Identified Regulation; ER = External Regulation; IntroR = Introjected Regulation; IM = Intrinsic Motivation; IntegR = Integrated Regulation; AM = Amotivation.

Data Analysis

IBM SPSS was used for all analyses. Descriptive statistics characterized the sample's motivational profiles. Levene's test confirmed variance homogeneity assumptions. Independent-samples t-tests assessed gender, proficiency, and study-abroad effects; one-way ANOVAs with LSD and Games-Howell post-hoc tests examined age-group and major differences. Effect sizes were estimated using Cohen's *d* / Hedges' *g* (t-tests) and omega squared (ANOVAs).

Results

Descriptive Statistics and Correlations

Identified Regulation returned the highest mean score ($M = 5.13$, $SD = 0.72$), indicating strong personal endorsement of language learning goals. External Regulation yielded the lowest score ($M = 4.08$, $SD = 1.04$). Notably, Amotivation also scored relatively high ($M = 5.11$, $SD = 1.03$), a finding warranting cautious interpretation given AM's limited reliability. All six constructs were significantly and positively intercorrelated ($p < .01$; Table 2). The strongest association was between IM and IntegR ($r = .826$), consistent with their theoretical proximity at the self-determined end of the SDT continuum.

Table 2. Descriptive Statistics and Correlations for Motivational Constructs (N = 1,237)

Variable	Mean	SD	1	2	3	4	5
1. IR	5.13	0.72	--				
2. ER	4.08	1.04	.539**	--			
3. IntegR	4.82	0.84	.746**	.477**	--		
4. IntroR	4.35	0.81	.598**	.622**	.594**	--	
5. IM	4.52	0.83	.712**	.548**	.826**	.710**	--
6. AM	5.11	1.03	.457**	.331**	.327**	.409**	.307**

Note. ** $p \leq .01$. 1 = Strongly Disagree; 6 = Strongly Agree.

Age Effects

One-way ANOVAs revealed statistically significant between-group differences in both ER, $F(4, 1232) = 2.471$, $p = .043$, $\omega^2 = .008$, and IM, $F(4, 1232) = 2.570$, $p = .037$, $\omega^2 = .008$, across age groups. Post-hoc comparisons (Table 3) showed that 20-year-olds reported higher ER than 18- ($p = .006$) and 19-year-olds ($p = .004$), and higher IM than 18-year-olds ($p = .032$), with 21-year-olds reporting the highest IM ($p = .019$ vs. 18-year-olds). These patterns suggest incremental internalization of motivation with maturity.

Table 3. Significant Post-Hoc Comparisons for Age Effects on ER and IM

Variable	Age	N	Mean	p-value
ER	18	258	4.013	.006*
	19	745	4.040	.004*
	20	173	4.294	ref.

IM	18	258	4.471	.032*
	20	173	4.645	ref.
	21	34	4.827	.019*

Note. * $p < .05$. ER = External Regulation; IM = Intrinsic Motivation.

Gender and Proficiency Effects

Males reported significantly higher ER than females, $t(1235) = 7.147$, $p < .001$, Cohen's $d = 1.019$ (Table 4), suggesting stronger responsiveness to external academic pressures among male students. Regarding proficiency, higher-proficiency students (Level C) reported significantly higher IR, $t(1235) = -2.538$, $p = .006$, and IntegR, $t(1235) = -3.361$, $p < .001$, whereas lower-proficiency students (Level A/B) reported higher ER, $t(1235) = 2.525$, $p = .006$. These results reflect a progression from externally regulated toward more internalized motivation as proficiency develops.

Table 4. t-Test Results for Gender and Proficiency Effects

Variable	Group	N	Mean	p-value
ER (Gender)	Male	783	4.23	<.001***
	Female	454	3.80	
IR (Proficiency)	Level C (high)	584	5.19	.006*
	Level A/B (low)	653	5.08	
ER (Proficiency)	Level A/B	653	4.15	.006*
IntegR (Proficiency)	Level C	584	4.90	<.001***

Note. * $p < .05$; *** $p < .001$. IR = Identified Regulation; ER = External Regulation; IntegR = Integrated Regulation.

Academic Major Effects

One-way ANOVAs revealed significant disciplinary differences in ER, $F(2, 1234) = 7.397$, $p < .001$; IntegR ($p = .048$); IntroR ($p < .001$); and IM, $F(2, 1234) = 4.177$, $p = .016$ (Table 5). Humanities students consistently scored highest across all significant subscales, while Medicine students scored lowest, indicating that disciplinary context moderates motivational orientation. Post-hoc comparisons confirmed significant differences between Humanities and Medicine for ER ($p < .001$), IntroR ($p < .001$), IntegR ($p = .022$), and IM ($p = .010$), and between Medicine and Science/Engineering for ER ($p = .001$) and IntroR ($p < .001$).

Table 5. ANOVA Results for Academic Major Effects on Motivational Regulations

Variable	Major	N	Mean	p-value
ER	Humanities	476	4.153	<.001***
	Medicine	303	3.878	
IntegR	Humanities	476	4.855	.048*
IntroR	Humanities	476	4.430	<.001***
IM	Humanities	476	4.557	.016*
	Medicine	303	4.400	

Note. * $p < .05$; *** $p < .001$. ER = External Regulation; IntegR = Integrated Regulation; IntroR = Introjected Regulation; IM = Intrinsic Motivation.

Study-Abroad Effects

Students with international English study experience reported significantly lower IntroR, $t(1235) = -2.108$, $p = .035$, and AM, $t(1235) = -2.414$, $p = .016$, compared to those without such experience. This pattern suggests that immersive cross-cultural engagement reduces both ego-driven regulatory pressure and motivational disengagement.

Discussion

The results confirm that Saudi EFL university students are predominantly motivated through Identified Regulation—personally valued, goal-directed engagement—rather than through either pure intrinsic enjoyment or external compliance. This instrumental-but-internalized profile is consistent with findings from across the Gulf region (Alhuqbani, 2009; Elyas, 2008) and coheres with SDT predictions regarding instrumentally motivated learners who nonetheless experience high autonomy (Dörnyei, 1998).

Age-related increases in ER and IM reflect a developmental trajectory in which older students simultaneously encounter heightened contextual pressures and develop deeper personal investment in language learning—a pattern theorized within SDT as progressive internalization (Deci & Ryan, 2000). The significant gender effect on ER, with males reporting higher scores, likely reflects sociocultural and institutional pressures placing greater academic accountability on male students in the Saudi context.

The proficiency-motivation relationship mirrors SDT's internalization continuum: lower-proficiency learners depend more on external regulation, while higher-proficiency learners demonstrate greater identified and integrated regulation, consistent with Noels and Vallerand's (n.d.) findings on motivational development. Major-based differences, with Humanities students uniformly more motivated, may reflect disciplinary alignment between English language competence and field-specific professional demands. The study-abroad effect on reducing IntroR and AM suggests that real-world, communicatively authentic language environments attenuate guilt-driven and disengaged motivational orientations (Shelton-Strong & Mynard, 2021).

Pedagogically, these findings argue for autonomy-supportive instructional environments that foreground personal goal relevance, provide informational feedback to build competence, and foster relational connectedness—the three basic psychological needs identified by SDT (Parrish & Vernon, 2022). Differentiated motivational strategies calibrated to gender, proficiency, and disciplinary context are more likely to produce durable engagement than uniform approaches.

Conclusion

This study provides a demographically nuanced SDT-informed analysis of EFL motivational regulation in a large Saudi university sample. Identified and Integrated Regulation emerged as dominant motivational orientations, while external regulation and amotivation varied significantly across gender, age, proficiency, major, and study-abroad experience. The findings reinforce SDT as a productive framework for EFL motivation research in Gulf contexts and highlight the need for contextually adaptive, autonomy-supportive pedagogical design. Longitudinal and cross-institutional studies are needed to examine how motivational orientations develop over time and across diverse institutional settings.

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Conflicts of Interest

The authors declare no conflict of interest.

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