

# The Effects of Teachers' Motivational Strategies on Learners' Motivation: A Controlled Investigation of Second Language Acquisition

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While consensus exists about the critical role of learners' motivation in second language acquisition, controlled investigations of the effects of teachers' motivational strategies are limited. The research reported here used a quasi-experimental design to assess the effects of motivational strategies used by Saudi English as a foreign language (EFL) teachers ( $N = 14$ ) on Saudi EFL learners' ( $N = 296$ ) self-reported learning motivation. The experimental treatment involved class-time exposure to 10 preselected motivational strategies over an 8-week period; the control group received traditional teaching methods. Multivariate analyses revealed a significant rise in learner motivation over time exclusively or predominantly among experimental vs. control learners, which held robust even when controlling for pretreatment group differences. These results provide compelling evidence that teachers' motivational behaviors cause enhanced motivation in second language learners.

**Keywords** foreign language motivation; teacher strategies; EFL; language teaching

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## Introduction

The study of second language (SL) acquisition has in the past 40 years been among the most dynamic and rapidly expanding sciences within the humanities. Few issues have seen as much attention by SL researchers as the role that motivation plays with regard to the attainment of nonprimary languages. In a field that is notorious for its lack of agreement on almost anything, there is essentially a consensus that SL motivation is related to achievement and that SL motivation is the driving force that enables learners to expend the continuous sustained effort language learning requires. It is widely accepted that, everything else being equal, more motivated learners would be more successful at learning the second/foreign language than less motivated learners, and that without sufficient motivation even highly competent and cognitively capable individuals may be unable to accomplish long-term goals (Dörnyei & Csizér, 1998; Wlodkowski, 1999; see also Cheng & Dörnyei, 2007; Guilloteaux & Dörnyei, 2008). It has also been suggested that motivation influences the whole range of learner-internal and learner-external factors that are involved in second/foreign language acquisition, such as attitudes, aptitude, self-confidence, language anxiety, intelligence, learning strategies, communication strategies, and so on, and has the potential to determine to what extent these factors are realized (Gardner, 2001; Oxford & Shearin, 1994, among others). Motivation for learning a second/foreign language, however, is not a given: Levels of motivation have been found to vary, sometimes substantially, among individual learners, as well as among groups of learners (see, e.g., Guilloteaux, 2007, among many others).

In light of the undeniable importance that motivation has for learning outcomes, the need to find effective means of reinforcing and sustaining learners' motivation does not seem to require justification. The amount of research on practical applications designed to enhance learner motivation however has been extremely limited. The current study looks in particular at the role that teachers can play in that regard by implementing specific motivational strategies in their classrooms.

## Motivational Strategies

Dörnyei (2007) distinguishes three phases in SL motivation research: a social-psychological period, a cognitive-situated period, and a process-oriented period. Historically motivation research in SL acquisition is associated with

Gardner's social-psychological approach and the highly influential integrative-instrumental motivation dichotomy (originally proposed in the early 1960s), which dominated the field for quite a while (e.g., Gardner & Tremblay, 1994). From around the 1990s on there has been a significant shift in the focus and nature of research on SL motivation. This shift gave rise to a range of new theories of SL motivation typically drawing on related research in the field of psychology, including expectancy-value theories, attribution theories, self-efficacy theories (Dörnyei, 2001; Oxford & Shearin, 1994), self-worth theories (Stipek, 2002), and value of success theories. Overall, "the cognitive-situated period of SL motivation research shifted the attention to classroom-specific aspects of motivation and created a fertile ground for educational implications directly relevant to classroom practice" (Dörnyei, 2007, p. 111).

It deserves to be noted that, even though these theories may take different perspectives on motivation and often disagree in relation to how to define SL motivation theoretically and how to explain its operation, they all acknowledge—explicitly or implicitly—the crucial role that the teacher can play in enhancing his/her learners' motivational levels. In light of this the question of what teachers can do to enhance their learners' motivation assumes critical significance. This brings us to the most central issue of the current study: teacher motivational strategies.

Dörnyei (2001) defines motivational strategies as "the motivational influences that are consciously exerted to achieve some systematic and enduring positive effect" (p. 28). Guilloteaux and Dörnyei (2008) propose that motivational strategies fall into two categories: (a) instructional interventions applied by the teacher to elicit and stimulate student motivation and (b) self-regulating strategies used purposefully by individual learners to manage the level of their own motivation. Our study is specifically concerned with the former.

Literature abounds with sources defining and categorizing motivational techniques to be used in the language classroom (e.g., Alison, 1993; Brown, 2001; Chambers, 1999; Dörnyei, 2001; Williams & Burden, 1997; see also Alison & Halliwell, 2002). As Cheng and Dörnyei (2007) acknowledge, however, the studies that have actually looked at practical applications of such motivational strategies are disappointingly few, and regardless of how much intuitive appeal the idea of motivational strategies may hold their usefulness can only be established empirically (Gardner & Tremblay, 1994).

The only three studies that we are aware of which have actually attempted to empirically test the effectiveness of motivational strategies are Dörnyei and Csizér (1998) in Hungary, Cheng and Dörnyei (2007) in Taiwan, and

Guilloteaux and Dörnyei (2008) in South Korea. In the first two studies, relatively large groups of English as a foreign language (EFL) teachers were asked to rank 50 odd motivational strategies according to their perceived importance and also according to how frequently the EFL teachers thought they actually used them in their language classes. Notably, neither of the two studies based its findings on actual observation and evaluation of teachers' classroom motivational practices or learners' behaviors, but rather just on teachers' responses to a self-report questionnaire. As suggested by critics (e.g., Bernaus & Gardner, 2008), such studies are unrevealing with regard to the actual motivational effect that teachers' classroom behaviors can have on learners.

The third of these studies (Guilloteaux & Dörnyei, 2008), which involved 27 EFL teachers and over 1,300 EFL learners in South Korea, is to our knowledge the only one so far that has attempted to assess empirically the effects of motivational strategies on learners' motivation in language classes, using a range of instruments, as follows:

- (a) a 20-item self-report questionnaire designed to measure the learners' situation-specific motivational disposition (e.g., attitudes toward their current SL course, linguistic self-confidence, SL classroom anxiety, etc.);
- (b) a classroom observation instrument used to assess both the quality of the teachers' teaching practices and the levels of the learners' motivated behavior; and
- (c) a postlesson teacher evaluation scale developed to provide a post hoc evaluation of the teachers' motivational practices.

Guilloteaux and Dörnyei (2008) found a strong positive correlation between teachers' motivational teaching practices and their learners' learning motivation in the actual classroom. It is necessary to recognize, however, that even though in comparison with the other two the Guilloteaux and Dörnyei study employed a much more rigorous methodology, it still had a cross-sectional design (with data collected once at the end of the term and no experimental treatment) and did not involve a control group. This type of methodology does not allow for stringent causality inferences. These can only be established experimentally and/or via a longitudinal study. It is also noteworthy that the study was concerned with the teachers' general motivational practice in the classroom and did not specifically target the implementation of motivational strategies. Hence, to the best of our knowledge, there has not so far been a controlled (i.e.,

experimental and/or longitudinal) study that has addressed the issue of the effect of the implementation of motivational strategies in the language classroom.

## **The Present Study**

This article reports on the main findings of a quasi-experimental study with a pre–post intervention plus control design specifically conducted to fill this gap. The project involved a relatively large number of participants (14 teachers and nearly 300 EFL learners in Saudi Arabia) split into an experimental and a control group. Learners in the former were exposed to 10 preselected motivational strategies over an eight-week period, while the latter only received traditional teaching methods. Motivation questionnaires were administered to learners at the start and the end of this treatment period. To strengthen our interpretations with potentially nonequivalent groups, a careful matching procedure of experimental and control teachers and learners was implemented during data collection. Moreover, statistical control was carried out during analyses to further minimize the impact of any preexisting differences between groups and to ascertain that any posttreatment advantage in motivational levels of the experimental group over the control group was independent from confounding factors. We expected the analyses to reveal a significant rise in motivational levels over time exclusively, or to a greater extent, among experimental (vs. control) learners.

In light of the design and the careful procedure and analytical approach used, we believe that our results provide a compelling test for the most fundamental assumption in each and all motivational theories: that teachers' motivational behaviors cause enhanced motivation in their SL learners.

## **Method**

### **Participants**

The selection and recruitment of participants was aimed at capturing as much variance as possible in terms of school levels, the teachers' age, qualification, and teaching experience, the learners' age and learning experience, and the social and regional backgrounds of both teachers and learners. Potential participants were informed that the research project was about the role that teachers' motivational strategies play in enhancing learner motivation, and were given a broad outline of its methodology and its relevance for the study of SL motivation. While no material incentives were offered to participants, the

**Table 1** Social demographic information for participating EFL teachers

Condition	Highest qualifications						Teaching experience					
	BA		MA		PhD		5–10y		10–15y		over 15y	
	FQ	%	FQ	%	FQ	%	FQ	%	FQ	%	FQ	%
Experimental	2	28.60	4	57.10	1	14.30	4	57.10	2	28.60	1	14.30
Control	2	28.60	4	57.10	1	14.30	4	57.10	2	28.60	1	14.30
Total	4	28.60	8	57.10	2	14.30	8	57.14	4	28.58	2	14.28

*Note.* FQ = frequency. Sample sizes: 153 (experimental group), 143 (control group), and 296 (total).

research project was generally well received by both the teachers and learners that were approached.

Invitations for participation in the project were extended to a large number of educational institutions all over Saudi Arabia. Seven of them provided their formal consent to take part in the research. These institutions were located in three parts of Saudi Arabia as follows. Two high schools and two university colleges were in Riyadh (the capital city), one university college and one technical institution were in the southern region in Saudi Arabia, and another technical institution was in the western region.

Fourteen EFL teachers between 20 and 50 years of age took part in this study. They were holders of several qualifications and had a range of teaching experience from as little as 5 years to over 15 years. Social demographic information about participating teachers is reported in Table 1.

The participating learners were 296 Saudi EFL students of different ages (from 12 to over 25 years), different levels of study (secondary and tertiary), and of different levels of English proficiency (beginner, intermediate, and advanced). Learner participants were all males and all spoke Arabic as their first language. They had different regional backgrounds (rural and urban). Social demographic information about participating learners is reported in Table 2.

### Design and Matching Procedure

Participating teachers were allocated to one of the two conditions of a 2 Condition (experimental/control) between-subjects design partly based on teachers' expressed preference to be involved in either group. Hence, to minimize the impact of any preexisting differences between groups, the two cohorts of teachers were carefully matched for qualifications, experience, and age. This matching

**Table 2** Social demographic information for participating EFL learners ( $N = 296$ )

Demographic variable	Condition			
	Experimental ( $N = 153$ )		Control ( $N = 143$ )	
	Frequency	%	Frequency	%
Age				
12–15	4	2.60	1	0.70
15–18	33	21.60	24	16.80
18–22	93	60.70	97	67.80
22–25	20	13.10	18	12.60
over 25	3	2.00	3	2.10
EFL learning experience				
1–5y	17	11.10	19	13.30
5–10y	123	80.40	116	81.10
10–15y	13	8.50	8	5.60
School level				
High school	34	22.20	24	16.50
Diploma	57	37.30	45	31.50
University	62	40.50	74	51.70
Region of origin				
Capital city	72	41.10	45	31.50
Western region	32	20.90	26	18.20
Southern region	49	32.00	72	50.30

procedure was aimed at ensuring that the single key difference between the two groups was the implementation of the motivational strategies.

Learner participants were almost evenly divided between the experimental and the control groups (153 and 143, respectively). The allocation of learners to different groups naturally followed from the allocation of the teachers (i.e., learners were assigned to their own teachers).

Effective matching of teachers and learners to the two study conditions along key social demographic variables can be appreciated in Tables 1 and 2. Effective matching along these (categorical and ordinal) variables was also statistically tested through a set of chi-square tests performed on the teachers' and students' demographic data, which revealed that condition had a null effect on all but one of the variables. Students from the capital city were significantly

overrepresented in the experimental group; students from the Southern Region were overrepresented in the control group (see Table 2),  $\chi^2(2) = 10.898$ ,  $p < .005$ . However, the size of this effect was small, Cramer's  $V = .19$ .

Altogether, this set of null differences between experimental and control teachers/learners indicates that our matching procedure had indeed been effective at creating two groups that were comparable on key social dimensions. In the Results and Discussion section, we report additional analyses carried out on the learners' motivational variables and further ascertaining the comparability of experimental and control learners.

### **Instruments**

The main goal of the study was to test the effects of teachers' motivational teaching practices on learners' motivated behaviors. For the purposes of the study we developed a designated guide to help experimental teachers with the implementation of motivational strategies, and we used a quantitative instrument (a motivation questionnaire) to measure participating learners' motivational levels before and after the treatment. We ran a pilot study to assist us in selecting the specific motivational strategies to be used in the current study.

#### *Pilot Study*

As part of the pilot study, we conducted a survey involving 119 Saudi EFL teachers who were asked to evaluate 53 motivational strategies according to their perceived importance. This survey was to a large degree a replication of Dörnyei and Csizér (1998) and Cheng and Dörnyei (2007). It used essentially the same set of motivational strategies<sup>1</sup> and produced results that are consistent with the earlier studies. A detailed discussion of this preliminary study is beyond the scope of this article and will be presented elsewhere.

Pilot study participants ranked the following ten strategies as the most important ones, and these are the strategies that we used for the experimental treatment in the current study:

1. Break the routine of the classroom by varying learning tasks and the presentation format.
2. Show students that you care about their progress.
3. Show students that you accept and care about them.
4. Recognize students' effort and achievement.
5. Be mentally and physically available to respond to your students' academic needs in the classroom.
6. Increase the amount of English you use in the language classroom.



7. Make learning tasks more attractive by adding new and humorous elements to them.
8. Remind students of the importance of English as a global language and the usefulness of mastering the skills of this language.
9. Relate the subject content and learning tasks to the everyday experiences and backgrounds of the students.
10. Consistently encourage students by drawing their attention to the fact that you believe in their effort to learn and their capabilities to succeed.

### *Implementation Guide*

Based on the results of the pilot study and the identified key motivational strategies, an advisory guide was constructed to assist the teachers who taught in the experimental groups in strategy implementation. The guide comprised a range of specific techniques to translate the preselected motivational strategies in the classroom context. For this operational translation, we drew on leading textbooks on motivation, educational psychology, and motivation in education (e.g., Malouff, Rooke, Schutte, Foster, & Bhullar, 2008; Pintrich & Schunck, 2002; Plax & Kearney, 1992; Woolfolk & Margetts, 2007) and also consulted a number of experts in the field of SL motivation, psychology, and education,<sup>2</sup> as well as some participating teachers. Thus for Strategy 3, for instance, the guide specified a range of teacher behaviors, such as:

- (i) show respect to your students in the way that you address them or comment on their work and behavior;
- (ii) help your students get to know and appreciate you as a person by sharing some of your background, life experiences, interests, and opinions with them;
- (iii) get to know your students: learn their preferred names quickly and use these names frequently as you interact with them;
- (iv) show warmth to students (e.g., by greeting your students with a smile when you enter class or wherever you meet them).

Prior to the implementation of the experimental treatment, the teachers in the experimental group were provided with instructions on how to use the advisory guide. They were also equipped with a checklist of strategies designed to ensure that they were using the strategies regularly in their classes during the intervention period. Teachers were required to consult the implementation guide before every class and to make sure that they used all (or, at least, most) in each individual lesson. Structured classroom observations conducted by one of the coauthors over the experimental period established that the experimental

teachers did follow the implementation guide and did engage in at least some of the designated behaviors. Classroom observations in the control group on the other hand showed little evidence of similar behaviors occurring on a spontaneous basis.

### *Learners' Motivation Questionnaire*

To assess learners' motivation in the class, a motivation questionnaire was constructed in line with the view that learner motivation can have either a trait or state orientation (Brophy, 1987; Tremblay, Goldberg, & Gardner, 1995), and that learners' task motivation involves both situation-specific and general motives (Dörnyei, 2002; Julkunen, 2001). The full questionnaire (in the English translation) can be found in Appendix S1 in the Supporting Information online. The questionnaire consists of three individual parts. Part A (32 items) targeted learners' trait motivation for learning generally; Part B (44 items) targeted learners' situation-specific motivational dispositions for learning English; and Part C (four groups of altogether 56 items) targeted learners' attitudes to: (i) their English language teacher, (ii) the English course, (iii) the group of EFL learners in their class, and (iv) themselves as EFL learners. Most of the questionnaire items were drawn from Dörnyei's (1994) Model of SL motivation, although in the construction of the instrument a range of other sources were also consulted (AlMaiman, 2005; Al-Shammary, 1984; Clément & Baker, 2001; Clément, Dörnyei, & Noels, 1994; Dörnyei, 1990; Gardner, Tremblay, & Masgoret, 1997; Guilloteaux, 2007; Horwitz, Horwitz, & Cope, 1986; Jacques, 2001; Moskovsky & Alrabai, 2009; Pintrich & Groot, 1990; Schmidt & Watanabe, 2001; Schmidt, Boraie, & Kassabgy, 1996; Tremblay & Gardner, 1995).

While the instrument included questions about trait motivation and language attitudes, there was a greater representation of items targeting state motivation, which we expected to be particularly sensitive to the experimental treatment. All items used a 1–7-point Likert-type scale where high scores indicated high statement endorsement and low scores indicated low statement endorsement. The tool was administered in the learners' native language, Arabic, in order to eliminate the risk that some learners' limited competence in English could affect their ability to respond to all questions. An English version of the questionnaire can be found in Appendix S1 in the online Supporting Information.

### **Intervention Schedule and Data Collection**

The intervention period was over eight weeks during the 2009 autumn term of the Saudi academic year, including a 2-week semester break in the middle. The

study commenced in the 3rd week of the term to make sure that students had enrolled at their institutions and started their actual classes. The study concluded three weeks prior to final exams to make sure that exam arrangements would not affect the study and to avoid the course withdrawals that might occur at the end of the semester. The learner motivation questionnaire was administered to participating learners twice: once at the start of the treatment (Time 1 or T1) and a second time at its end (Time 2 or T2). The same member of the research team was involved in the administration of the questionnaire with all groups. Participating learners received ample reassurance of the anonymity and confidentiality of the responses they provide. To avoid undue influences and possible bias in learners' responses, their teachers and/or other representatives of the participating institution were not allowed in the classroom during the administration of the questionnaire. This, and the anonymous nature of the questionnaire, ensured that learners would be in a position to provide honest responses to all questionnaire items, including some that could be described as sensitive, such as providing an evaluation of their teacher. It took learners between 60 to 90 minutes to complete the whole questionnaire booklet at each point in time. To diminish possible fatigue effects, learners were given a short break after completing each section of the questionnaire.

## Results and Discussion

### Preliminary Data Analyses

Preliminary analyses were conducted to check for out-of-range and missing values. Principal component analysis with oblimin rotation was conducted on the *evaluation of English teacher* and *evaluation of the EFL group of learners* scales (in part C of the questionnaire—both consisting of a larger number of items than the rest of the scales) in order to identify their underlying dimensions (the final groupings of specific questionnaire items which loaded on each factor are shown in Appendix S1 in the online Supporting Information). The results indicated that *evaluation of English teacher* was comprised of two factors. The first factor (49.53% variance explained) loaded on items like “organized,” “intelligent,” and “competent,” and we labeled it *teacher teaching style and competence*. The second factor (7.77% variance explained) loaded on items such as “trusting” and “lenient,” and we labeled it *teacher's personality*. Similarly, two factors were found to underlie *evaluation of the EFL group of learners* and we labeled these *collectivist* (50.17% variance explained; loading on items like “considerate,” “respectful,” and “obedient”) and *individualist* (10.08% variance explained; loading on items like “ambitious,”

“competitive,” and “stimulated”)—labels which we thought best reflected the respondents' perceptions of their peers' orientations in a classroom context. For sets of items with recognized factor structure, we simply checked reliability and computed an aggregate score. The next step in the analysis was to screen all aggregate indices for normality. The resulting motivational indices are reported in Table 3, with their descriptive statistics and information about their psychometric properties.

*Trait motivation* and *state motivation* were computed as higher order variables comprising specific and lower-level trait (vs. state) variables as listed in rows 1–19 in Table 3. With the exception of *trait motivation*, all aggregate motivational indices proved to be internally consistent (alphas ranging between .60 and .96) and displayed satisfactory test-retest reliability (*rs* ranging between .44 and .98). Despite its borderline alpha (.58), the index for *trait motivation* was included in subsequent analyses for comparison purposes; the reader should bear this in mind with regard to the interpretation of this portion of the results.

To check for any preexisting differences between the experimental and control groups on the key motivation variables post group matching, a 2 Condition (experimental vs. control) between-subjects analysis of variance (ANOVA) was performed on all T1 aggregate indices. (Relevant T1 means are in the body of Table 4.) There were no significant preexisting differences between learners in the two groups in terms of *learning anxiety*, *learning self-efficacy*, *English class anxiety*, *English self-efficacy*, *instrumental motivation for learning English*, and *integrative motivation for learning English* (all *ps* > .05). The Condition factor, however, had a significant effect on the other variables (all *ps* < .05).

While learners in the experimental condition reported significantly higher ratings on the remaining variables, reflecting some preexisting differences between learners in their favor that were not nullified by the careful matching procedure, it is important to note that the size of most of these differences was very small. With the exception of the differences on learners' perceptions of the *teacher's personality*,  $F(1,294) = 45.82, p < .001, \eta_p^2 = .14$ , and their *evaluation of the English teacher*,  $F(1,294) = 36.12, p < .001, \eta_p^2 = .11$ , all eta squares ranged between .01 and .09 indicating a small to marginally moderate effect (Kinnear & Gray, 2009). Nevertheless, in our key analyses testing for the effects of our experimental treatment, we took into careful consideration, and controlled statistically for, any of these modest residual group differences to identify the net effects of the motivational strategies intervention. These key analyses are reported in the next two sections.

**Table 3** Means (and standard deviations), internal consistency (alphas), and test-retest reliability (*rs*) for the motivational indices across the whole sample at Time 1 and Time 2

Construct	No. of items	Example(s)	T1		T2		<i>r</i>
			Mean (SD)	( $\alpha$ )	Mean (SD)	( $\alpha$ )	
1. Learning anxiety	5	I usually feel uneasy whenever my teacher asks me a question.	2.10 (1.46)	.81	2.49 (1.52)	.86	.50
2. Learning self-efficacy <sup>o</sup>	4	I am confident I can master hard learning tasks if I try.	5.61 (.92)	.69	5.71 (.87)	.75	.58
3. Positive attributions for learning <sup>^o</sup>	3	If I do well in my study, it will be because I have high ability to do so.	5.61 (1.05)	.60	5.66 (1.06)	.71	.58
4. Intrinsic motivation for learning	8	When classes end, I often wish they would continue.	4.83 (1.07)	.79	4.94 (1.14)	.84	.64
5. English class anxiety	5	It embarrasses me to volunteer answers in English classes this semester.	2.34 (1.45)	.84	2.19 (1.64)	.90	.53
6. English motivational intensity	6	I have been working hard to learn English this semester.	4.48 (1.19)	.80	4.54 (1.33)	.86	.67
7. English self-efficacy <sup>o</sup>	4	I feel confident that I can do an excellent job on the problems and tasks we do in English class this semester.	5.28 (1.13)	.83	5.48 (1.12)	.87	.64
8. Intrinsic motivation for learning English	8	I would study English even if it were not required by this school/university.	4.91 (1.39)	.90	5.05 (1.33)	.90	.67

(Continued)

**Table 3** Continued

Construct	No. of items	Example(s)	T1		T2		<i>r</i>
			<i>Mean</i> ( <i>SD</i> )	( <i>α</i> )	<i>Mean</i> ( <i>SD</i> )	( <i>α</i> )	
9. Positive attributions for learning English <sup>o</sup>	3	If I do well in English this semester, it is because I try hard.	5.18 (1.35)	.76	5.47 (1.24)	.76	.63
10. Instrumental motivation <sup>o</sup>	5	Studying English is important to me because it will be useful in getting a job in the future.	5.85 (1.09)	.83	5.97 (1.02)	.83	.50
11. Integrative motivation <sup>o</sup>	5	Studying English is important to me because I want to know the way of life of the English-speaking nations.	5.59 (1.26)	.86	5.64 (1.17)	.86	.48
12. Evaluation of English teacher <sup>o</sup>	23	Competent vs. Incompetent Friendly vs. Hostile	5.49 (1.22)	.95	5.69 (1.31)	.95	.64
13. Teacher's teaching style and competence <sup>o</sup>	18	Capable vs. Incapable Helpful vs. Unhelpful	5.53 (1.31)	.96	5.75 (1.31)	.96	.62
14. Teacher's personality	5	Strict vs. Lenient Suspicious vs. Trusting	5.34 (1.38)	.76	5.46 (1.52)	.76	.55
15. Evaluation of English course <sup>^</sup>	7	Enjoyable vs. Unenjoyable Difficult vs. Easy	4.76 (1.54)	.90	4.84 (1.61)	.90	.62

(Continued)

**Table 3** Continued

Construct	No. of items	Example(s)	T1		T2		<i>r</i>
			Mean (SD)	$\alpha$	Mean (SD)	$\alpha$	
16. Evaluation of the EFL learner group	9	Cooperative vs. Uncooperative Considerate vs. Inconsiderate	4.97 (1.26)	.88	5.29 (1.22)	.87	.51
17. Collectivist orientation	6	Unreliable vs. Reliable Coherent vs. Incoherent	5.10 (1.29)	.83	5.45 (1.23)	.85	.44
18. Individualist orientation	3	Competitive vs. Uncompetitive	4.72 (1.59)	.85	4.97 (1.67)	.88	.47
19. EFL learners' motivational self-evaluation <sup>^</sup>	15	Autonomous vs. Controlled Unambitious vs. Ambitious	5.11 (1.88)	.90	5.21 (1.34)	.94	.75
Trait motivation	4	Variables 1–4 above	5.35 (.70)	.58	5.62 (.65)	.58	.80
State motivation	15	Variables 5–19 above	5.39 (.65)	.84	5.58 (.71)	.87	.98

*Note.* *SD* = Standard deviation,  $\alpha$  = Cronbach alpha coefficient, *r* = test-retest reliability. All indices ranged between 1 and 7; high scores indicate high representation of the construct. All values reported for total *N* = 296.

<sup>^</sup>Isolated items were discarded from this construct due to low (.30) item-total correlations (numbers of items refer to items retained in aggregated indices).

<sup>o</sup>Indicates transformed (square root) variable.

**Table 4** *F* and descriptive statistics for experimental vs. control learners' motivational variables as a function of Time and Time × Condition interactions

Construct	EXPERIMENTAL Time						CONTROL Time						Time by Condition INTERACTION		
	T1		T2		<i>F</i> (1,152)	<i>p</i>	$\eta^2$	T1		T2		<i>F</i> (1,294)	<i>p</i>	$\eta^2$	
	Mean	Mean	Mean	Mean											
1. Learning anxiety	9.55	.00	.06	3.36	3.05	9.41	.00	.06	3.66	3.97	18.92	.00	.06		
2. Learning self-efficacy	7.64	.01	.05	6.50	6.56	.09	.77	.001	6.46	6.46	3.13	.08	.01		
3. Positive attributions for learning	132.33	.00	.47	5.77	6.57	161.34	.00	.53	5.44	6.44	3.71	.06	.01		
4. Intrinsic motivation for learning	11.21	.00	.07	4.98	5.18	.03	.87	.000	4.66	4.67	5.41	.02	.02		
5. English class anxiety	27.81	.00	.16	3.21	2.75	2.11	.15	.02	3.47	3.66	17.32	.00	.06		
6. English motivational intensity	13.30	.00	.08	4.62	4.91	7.10	.01	.05	4.32	4.13	20.01	.00	.06		
7. English self-efficacy	248.86	.00	.62	5.39	6.54	203.49	.00	.59	5.15	6.35	.22	.64	.00		
8. Intrinsic motivation for learning English	22.12	.00	.13	5.09	5.45	1.36	.25	.01	4.72	4.63	16.99	.00	.06		
9. Positive attributions for learning English	95.28	.00	.39	6.54	5.75	162.02	.00	.53	6.44	5.17	13.80	.00	.05		
10. Instrumental motivation for learning English	6.11	.02	.04	6.58	6.64	.59	.44	.004	6.57	6.59	1.07	.30	.00		
11. Integrative motivation for learning English	4.69	.03	.03	6.49	6.55	1.27	.26	.01	6.50	6.46	5.08	.03	.02		

(Continued)



**Table 4** Continued

Construct	EXPERIMENTAL Time				CONTROL Time				Time by Condition INTERACTION			
	<i>F</i>	$\eta^2$	<i>Mean</i>	<i>T2</i>	<i>F</i>	$\eta^2$	<i>Mean</i>	<i>T2</i>	<i>F</i>	$\eta^2$	<i>p</i>	$\eta^2$
	(1,152)		<i>Mean</i>	<i>T1</i>	(1,142)		<i>Mean</i>	<i>T1</i>	(1,294)			
12. Evaluation of English teacher	155.56	.00	5.88	6.75	176.74	.00	5.07	6.30	9.58	.00	.03	
13. Teacher's teaching style and competence	54.43	.00	6.59	6.76	.70	.41	6.36	6.33	27.02	.00	.08	
14. Teacher's personality	37.03	.00	5.83	6.29	3.69	.06	4.81	4.59	24.64	.00	.08	
15. Evaluation of English course	3.72	.06	5.19	5.38	.16	.69	4.31	4.26	2.41	.12	.00	
16. Evaluation of the EFL group of learners	32.68	.00	5.19	5.67	2.87	.09	4.79	4.94	7.52	.01	.03	
17. Learners' collectivist Orientation	26.71	.00	5.26	5.70	8.63	.00	4.92	5.18	2.18	.14	.01	
18. Learners' individualist Orientation	19.61	.00	4.96	5.52	.31	.58	4.46	4.38	12.10	.00	.04	
19. EFL learner's motivational self-evaluation	30.33	.00	5.30	5.69	7.05	.01	4.91	4.69	31.68	.00	.10	
Trait motivation	67.57	.00	5.47	5.82	20.88	.00	5.22	5.40	8.46	.00	.03	
State motivation	133.20	.00	5.58	5.92	6.54	.01	5.19	5.22	31.35	.00	.10	

*Note.* *F* = variance of the group means, *p* = significance value,  $\eta^2$  = Partial Eta square,  $\eta^2$  = Eta square. All indices ranged between 1 and 7; high scores indicate high representation of the construct. *N* = 153 (experimental group), 143 (control group), and 296 (total).

### Differential Changes in Learners' Motivation Over Time as a Function of Treatment

Table 4 reports the means for T1 and T2 motivational variables, separately by experimental and control conditions. While most of these variables were expected to change over time due to basic maturation processes and to the influence of standard teaching practices in common between the experimental and control groups, the key focus of this research was on the incremental changes on the motivational variables due to the experimental treatment. To identify the variables that changed over time to a greater extent in the experimental (vs. control) condition, we first ran a 2 Condition (experimental vs. control)  $\times$  2 Time (T1 vs. T2) mixed-model ANOVA with time as repeated measure factor on each of the learners' motivation variables. The effects of key interest, here, are the significant Condition  $\times$  Time interactions (for relevant  $F$  statistics and  $p$  values see the right-most column in Table 4). Significant interaction indicates that changes over time in learners' motivation were statistically different for the two groups.

The Time  $\times$  Condition interaction was statistically significant for all motivational variables, all  $ps < .05$ , except for *learning self-efficacy*, *positive attributions for learning*, *instrumental motivation for learning English*, *evaluation of English course*, and *learners' collectivistic orientation*, all  $ps > .05$ . Hence, most variables had changed over time differently for the experimental and the control groups. It is worth noting that these interactive effects are independent from preexisting differences between groups, because they gauge differential changes over time rather than absolute group differences at a specific point in time.

We followed up the significant interactions with simple effects analyses. For this, a 2 Time (T1 vs. T2) repeated-measure ANOVA was carried out separately among experimental and control learners. We expected changes in motivational variables over time to be significant exclusively among experimental learners or to be larger among experimental than control learners. The relevant  $F$  statistics and  $p$  values for the effects of Time separately by conditions are reported in the central columns in Table 4. Importantly, we expected the advantage of the experimental condition over the control condition to reflect increases, rather than decreases, in learners' motivation over time due to the experimental treatment. The means relevant to interpret the direction of these Time effects are also reported in the central columns in Table 4.

Learners' motivation increased significantly over time exclusively among experimental learners in terms of increased *intrinsic motivation for learning*, reduced *English class anxiety*, increased *intrinsic motivation for learning*

*English, integrative motivation for learning English, teachers' teaching style and competence, learners' individualist orientation, and evaluation of the EFL group learners.* The significant changes for these variables must be attributed to the experimental treatment implemented in the experimental group.

Learners' motivation increased over time more among experimental than control learners along *learners' evaluations of teacher's personality and EFL learner's motivational self-evaluation* or declined significantly less among experimental learners than control learners along *positive attributions for learning English*. These effects indicate that the experimental treatment had an incremental effect on these motivational variables above and beyond the effects of standard teaching practices and basic maturation effects.

There were also two isolated cases in which changes over time occurred in different directions for the experimental and control groups. While *learning anxiety* significantly decreased and *English motivational intensity* significantly increased in the experimental condition, *learning anxiety* significantly increased and *English motivational intensity* significantly decreased in the control condition. These oppositional changes over time suggest that the new strategies teachers used in the experimental group had to play against natural decrements over time in these motivational variables, as displayed in the control group. There were also two cases, *evaluation of English teacher* and *positive attributions for learning English*, in which changes over time were larger in the control than the experimental condition. However, these two unexpected findings are likely to do with a ceiling effect in the experimental group caused by the particularly high value of these variables at T1, limiting room for changes over time among these learners ( $M = 5.88$  for *evaluation of English teacher* and  $M = 5.77$  for *positive attributions for learning English* on a 7-point scale).

It is also interesting to note that the experimental treatment produced a large positive effect on both aggregate *trait* and *state motivation* of learners and these effects were again in favor of the experimental group (see, e.g., in Table 4, state variable 19 *EFL learner's motivational self-evaluation*, and trait variable 4 *intrinsic motivation for learning*). Notably, the treatment effect was comparatively larger in the *state* (vs. *trait*) *motivation* variable, in line with Christophel (1990) and Frymier (1993). The significant change which occurred in learners' *trait motivation* in the experimental group at T2 is not unexpected either: Guilloteaux (2007) argued that appropriate interventions by the teacher designed to stimulate state motivation would lead to positive changes in trait motivation also in the longer term.

Overall, increases in learners' motivation over time were significantly more pronounced in the experimental than control conditions, and were in the

predicted direction. This pattern of findings speaks for the substantial capacity of motivational strategies of the type used in our study to increase learners' motivation.

### **Group Differences in Learners' Motivation at T2 Due to Treatment (and Independent of Preexisting Group Differences)**

First, it is worth noting in Table 4 that all the variables that had no significant differences between the experimental and control groups at T1 (i.e., *learning anxiety*, *English class anxiety*, *learning self-efficacy*, *English self-efficacy*, *instrumental motivation*, and *integrative motivation*) became significantly different at T2, as a result of the treatment. This means that the variables that in this study were most directly comparable displayed the expected advantage of the experimental group over the control group. Moreover, across all variables, the size of the Condition effect (i.e., the difference between the experimental and control condition, as expressed as  $\eta_p^2$ ) was larger at T2 than T1 in 16 out of 18 variables that significantly changed at T2. Together, these results already indicate that any minor preexisting differences between experimental and control groups were glossed over by the positive effects on learners' motivation of the experimental treatment.

Yet, we carried out a final and more incisive set of analyses to better deal with any preexisting group differences potentially clouding our key effects. For this, we ran a set of 2 Condition (experimental vs. control) between-subjects analyses of covariance on each T2 index with T1 data as covariate. These analyses were carried out to identify key posttreatment differences between experimental and control learners at T2 that held after the impact of any group difference at T1 had been controlled for (i.e., statistically removed). The results are shown in Table 5.

As indicated in Table 5, after controlling for preexisting group differences at T1, the Condition factor (intervention variable) had a significant effect on all the variables at T2, except on *instrumental motivation for learning English*. Because these analyses control for any residual group differences, they are capable of capturing the net effects of the experimental treatment.

The only null finding in Table 5 on *instrumental motivation for learning English* deserves some commentary. Many previous studies that investigated the role of SL motivation in the Saudi EFL context (e.g., Al-Amr, 1998; Al-Otaibi, 2004; Alrabai, 2007; Al-Shamary, 1984) found that Saudi EFL learners were instrumentally motivated in the first place. This fact was confirmed by the extremely high (and almost equal) marginal mean values this variable scored at T1 in both the experimental and control groups ( $M = 6.58$  for experimental,

**Table 5** Effect of Condition on T2 learners' motivation indices while controlling for T1 variable (analyses of covariance)

Construct	Experimental ( <i>N</i> = 153)		Control ( <i>N</i> = 143)		<i>F</i> (1,293)	<i>p</i>	$\eta p^2$
	<i>M Mean</i>	<i>SD</i>	<i>M Mean</i>	<i>SD</i>			
1. Learning anxiety	3.14	1.41	3.87	1.50	31	.00	.10
2. Learning self-efficacy	6.55	.26	6.48	.29	7.85	.01	.03
3. Positive attributions for learning	6.54	.31	6.47	.35	4.60	.03	.02
4. Intrinsic motivation for learning	5.06	1.04	4.81	1.18	9.39	.00	.03
5. English class anxiety	2.84	1.44	3.57	1.72	25	.00	.08
6. English motivational intensity	4.80	1.24	4.26	1.31	28	.00	.09
7. English self-efficacy	6.52	.31	6.38	.35	22	.00	.07
8. Intrinsic motivation for learning English	5.33	1.18	4.76	1.36	33	.00	.10
9. Positive attributions for learning English	5.67	1.07	5.26	1.34	10	.00	.03
10. Instrumental motivation for learning English	6.63	.33	6.60	.34	1.57	.21	.005
11. Integrative motivation for learning English	6.55	.36	6.46	.37	6.50	.01	.02
12. Evaluation of English teacher	6.68	.26	6.37	.40	89	.00	.23
13. Teacher's teaching style and competence	6.70	.27	6.40	.40	83	.00	.22
14. Teacher's personality	6.01	.89	4.88	1.57	75	.00	.21
15. Evaluation of English course	5.12	1.33	4.54	1.68	16	.00	.05

*(Continued)*

**Table 5** Continued

Construct	Experimental ( <i>N</i> = 153)		Control ( <i>N</i> = 143)		<i>F</i> (1,293)	<i>p</i>	$\eta^2$
	<i>M Mean</i>	<i>SD</i>	<i>M Mean</i>	<i>SD</i>			
16. Evaluation of the EFL group of learners	5.52	1.06	5.04	1.28	21	.00	.07
17. Collectivist	5.60	1.08	5.29	1.33	8.34	.00	.03
18. Individualist	5.39	1.45	4.52	1.69	30	.00	.09
19. EFL learner's motivational self-evaluation	5.56	1.06	4.84	1.41	47	.00	.14
Trait motivation	5.74	.58	5.49	.65	25.79	.00	.08
State motivation	5.79	.53	5.36	.70	62.96	.00	.18

*Note.* *M Mean* = Marginal means are means that adjust for the removal of the covariate's influence, *SD* = standard deviation, *F* = variance of the group means, *p* = significance value,  $\eta^2$  = Partial Eta square. All indices ranged between 1 and 7; high scores indicate high representation of the construct.

6.57 for control, on a 7-point scale). Given these originally existing high values, we had limited expectations of change on this indicator.

The single largest group difference ( $\eta_p^2 = .23$ ) in Table 5, scored for the *evaluation of English teacher*, is most noteworthy. There is a huge amount of theoretical research that recognizes teacher behavior as the most powerful means for motivating learners (see, e.g., Brophy, 2004; Burden, 2000; Oxford & Shearian, 1994; Wlodkowski, 1999). In Dörnyei's (2001) words, "[a]lmost everything a teacher does in the classroom has a motivational influence on learners, which makes teacher behavior the most powerful motivational tool" (p. 120). Based on the findings from research on motivational strategies (e.g., Chambers, 1999; Cheng & Dörnyei, 2007; Dörnyei & Csizér, 1998), EFL teachers also overwhelmingly acknowledge the crucial importance of what they do in the classroom with regard to their learners' motivation. These findings are additionally reinforced by the results of our pilot study with Saudi EFL teachers (briefly referred to in the Method section) and the 10 key strategies they identified. As far as our current study is concerned, the data presented here leave little doubt that the teachers' enhanced motivational behaviors in the experimental group were responsible for a significant increase in learner motivation along a range of motivational dimensions at the end of the eight-week English course. The experimentally induced advantage in motivation of

the experimental group over the control group remained significant even when controlling for weak preexisting advantages of the experimental group over the control group. The experimentally induced advantage overrode the effects of mere maturation processes and of traditional teaching methods as they were captured by motivational changes in our control group.

### **Summary of Main Findings and Contributions**

The present research built on scant prior empirical investigations on the effects of motivational strategies in EFL contexts (Cheng & Dörnyei, 2007; Dörnyei & Csizér, 1998; Guilloteaux & Dörnyei, 2008). It used a pre–post treatment quasi-experimental design with a control group to provide a methodologically controlled investigation of the effects that 10 preselected teachers' motivational strategies, as implemented in an 8-week teaching program in an experimental group, had on SL learners' motivation above and beyond the effects of traditional teaching methods (and maturation processes), as implemented in a control group. To minimize the impact of group nonequivalence and strengthen data interpretation, a careful matching procedure was implemented during data collection, and statistical control for minor preexisting group differences was maintained during data analysis.

Self-reported motivational levels in Saudi EFL learners were recorded both prior and post experimental treatment with motivational strategies. When subjected to multivariate statistical analyses, these data indicated that, overall, increases in learners' motivation over time were significantly more pronounced in the experimental than control conditions, and they were in the predicted direction of a relative greater increase in the experimental group. Importantly, this experimentally induced advantage remained significant even when controlling for weak preexisting group differences, suggesting that it was not a mere reflection of a positive selection bias among teachers (and as a consequence among learners) due to lack of complete randomization to groups, but rather reflected a net benefit on motivation of the experimental treatment.

In particular, we were able to discard simple maturation as an explanatory variable. Namely, the time factor had a strong positive effect on nearly all of the variables in the experimental group while in the control group less than a third of all variables changed overtime, and some of the changes in that group were, in fact, in the negative direction. Importantly, even where positive changes occurred in both groups, the size of the change in these variables was statistically larger in the experimental group. Likewise, the results concerning the effects of the condition/treatment in the analysis of covariance also reflect very sizeable differences between the two groups. With the exception of one variable, at T2

the treatment factor produced meaningful and sizeable group differences on all other variables and in favor of the experimental group. Notably, these effects held after controlling for preexisting group differences at T1, thus capturing net effects of the motivational strategies intervention. Overall, in light of the quasi-experimental design of our study, it is clear that the Time/Condition differences obtained for the two groups can only be attributed to the treatment that the learners in the experimental group received. Finally, as far as the trait/state motivation dichotomy is concerned, our data show that regardless of any preexisting differences found between learners in the two groups at T1, the experimental treatment produced a large and statistically significant positive effect on both the trait and state motivation of learners in the experimental group. Notably, this effect was larger in the state motivation variable than in the trait variable, suggesting that especially learners' state motivation was strongly influenced by the treatment and that changes in trait variables might need prolonged or repeated interventions over time to show a comparable degree of change.

Overall, therefore, the results of the present investigation provide compelling evidence that implementing motivational strategies in Saudi EFL classrooms resulted in a significant positive change in the learners' SL motivation in these classes. More generally, these results speak not for mere correlational evidence but for the causal influence of teachers' motivational practices on learners' motivated behaviors. They reinforce and significantly extend the correlational findings of Guilloteaux and Dörnyei (2008) in the South Korean EFL context, which established that EFL teachers' motivational practices covary positively with learners' motivation. The present study is the first to shed light on the exact direction and causal nature of such covariations. Because of our reliance on a quasi-experimental pre-post treatment design, with multiple control mechanisms (i.e., a base-line control group, a matching procedure, and the statistical assessment and control for group differences), we are confident that the motivational practices of our experimental EFL teachers as predicted caused increases in learners' motivation. Our confidence stems from the fact that our research design, data collection procedure, and choice of statistical analyses were geared toward obtaining stringent and unequivocal results. Moreover, because we moved away from Guilloteaux and Dörnyei's general focus on the teachers' motivational practice as a whole toward a range of individual motivational strategies, we believe that the present investigation is the first to appropriately respond to Gardner and Tremblay's (1994) call for empirical tests of the effectiveness of motivational strategies in language classes. In so doing, our study is one of few set out to test empirically the fundamental assumption



in SL learning motivation theory, namely, that teacher behavior is responsible for enhanced motivation among SL learners.

## Conclusion

Notwithstanding this study's strengths, it is necessary to recognize two important limitations. First, because of the comprehensive gender segregation characteristic of all levels of the Saudi educational system we were unable to recruit from female institutions. While it seems extremely unlikely that there would be gender-based differences in the effects of teachers' motivating behaviors like the ones involved in our study, it would fall on future research to demonstrate the generalizability of our findings to female teachers and learners in segregated and mix-gender class contexts. More importantly, our data are unrevealing with regard to the effects that heightened learners' motivation would have on their actual achievement. In other words, although it is very widely accepted that higher motivation leads to higher achievement (e.g., Bernaus & Gardner, 2008; Chambers, 1999), as far as our population of learners is concerned we do not know whether the enhanced motivational levels in the experimental group were ultimately translated into improved learning outcomes. This was not among the goals of the current study. However, given this issue's undeniable theoretical and practical importance, it is definitely something for future research to examine empirically—possibly with an experimental design of the kind we employed. We expect this future work to demonstrate that the implementation of motivational strategies in the language classroom causes higher motivation in learners—like in the present case—and this effect, in turn, leads to better achievement.

To conclude, we believe that our study's results provide compelling evidence that teachers' motivational behaviors not just only relate but do cause enhanced motivation in their SL learners. In so doing, this study reinforces the importance of the language teacher's teaching behaviors as a critical tool for motivating learners. The implications of these findings for language teaching/learning practices, including teaching methodologies, teacher training, curriculum design and language policies, are far reaching.

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## Notes

- 1 With minor changes/modifications in the wording of some of the strategies to adapt them to the Saudi educational, cultural, and social context.

- 2 We received valuable suggestions from J. Brophy, G. Chambers, K. Csizér, D. Schunk, and J. Malouff, for which we are profoundly grateful.

## References

- Al-Amr, B. (1998). *Attitudes, motivation, and socio-cultural effects on English foreign language learning and proficiency: The Saudi Arabian context*. Unpublished master's thesis, University of Essex.
- Alison, J. (1993). *Not bothered? Motivating reluctant language learners in key stage 4*. London: CILT.
- Alison, J., & Halliwell, S. (2002). *Challenging classes: Focus on pupil behavior*. London: CILT.
- AlMaiman, I. (2005). *A study of seventh-grade Saudi students' motivation level to learn English as a foreign language*. Unpublished doctoral thesis, University of Kansas.
- Al-Otaibi, G. N. (2004). *Language learning strategy use among Saudi EFL students and its relationship to language proficiency level, gender and motivation*. Unpublished doctoral thesis, Indiana University of Pennsylvania.
- Alrabai, F. (2007). *The role of intrinsic motivation in learning English as a foreign language by Saudi EFL learners*. Unpublished master's thesis, University of Newcastle.
- Al-Shammary, E. (1984). *A study of motivation in the learning of English as a foreign language in intermediate and secondary schools in Saudi Arabia*. Unpublished doctoral thesis, Indiana University.
- Bernaus, M., & Gardner, R. (2008). Teacher motivation strategies, student perceptions, student motivation, and English achievement. *Modern Language Journal*, 92, 387–401.
- Brophy, J. (1987). On motivating students. In D. Berliner & B. Rosenshine (Eds.), *Talks to teachers* (pp. 201–245). New York: Random House.
- Brophy, J. (2004). *Motivating students to learn* (2nd ed.). Mahwah, NJ: Erlbaum.
- Brown, H. D. (2001). *Teaching by principles: An interactive approach to language pedagogy* (2nd ed.). New York: Longman.
- Burden, P. R. (2000). *Powerful classroom management strategies: Motivating students to learn*. Thousand Oaks, CA: Corwin Press.
- Chambers, G. N. (1999). *Motivating language learners*. Clevedon, UK: Multilingual Matters.
- Cheng, H., & Dörnyei, Z. (2007). The use of motivational strategies in language instruction: The case of EFL teaching in Taiwan. *Innovation in Language Learning and Teaching*, 1, 153–174.
- Christophel, D. M. (1990). The relationships among teacher immediacy behaviors, student motivation, and learning. *Communication Education*, 39, 323–340.

- Clément, R., & Baker, S. (2001). *Measuring social aspects of L2 acquisition and use: Scale characteristics and administration*. Ottawa, Canada: University of Ottawa.
- Clément, R., Dörnyei, Z., & Noels, K. A. (1994). Motivation, self-confidence and group cohesion in the foreign language classroom. *Language Learning, 44*, 417–448.
- Dörnyei, Z. (1990). Conceptualizing motivation in foreign language learning. *Language Learning, 40*, 45–78.
- Dörnyei, Z. (1994). Motivation and motivating in the foreign language classroom. *Modern Language Journal, 78*, 273–284.
- Dörnyei, Z. (2001). *Motivational strategies in the language classroom*. Cambridge, UK: Cambridge University Press.
- Dörnyei, Z. (2002). The motivational basis of language learning tasks. In P. Robinson (Ed.), *Individual differences and instructed language learning* (pp. 137–158). Amsterdam: John Benjamins.
- Dörnyei, Z. (2007). Creating a motivating classroom environment. In J. Cummins & C. Davison (Eds.), *International handbook of English language teaching* (Vol. 2, pp. 719–731). New York: Springer.
- Dörnyei, Z., & Csizér, K. (1998). Ten commandments for motivating language learners: Results of an empirical study. *Language Teaching Research, 2*, 203–229.
- Frymier, A. B. (1993). The relationships among communication apprehension, immediacy and motivation to study. *Communication Reports, 6*, 8–17.
- Gardner, R. (2001). Language learning motivation: The student, the teacher, and the researcher. *Texas Papers in Foreign Language Education, 6*(1), 1–18.
- Gardner, R., & Tremblay, P. F. (1994). On motivation, research agendas, and theoretical frameworks. *Modern Language Journal, 78*, 359–368.
- Gardner, R., Tremblay, P. F., & Masgoret, A.-M. (1997). Towards a full model of second language learning: An empirical investigation. *Modern Language Journal, 81*, 344–362.
- Guilloteaux, M. J. (2007). *Motivating language learners: A classroom-oriented investigation of teachers' motivational practices and students' motivation*. Unpublished doctoral thesis, University of Nottingham.
- Guilloteaux, M. J., & Dörnyei, Z. (2008). Motivating language learners: A classroom-oriented investigation of the effects of motivational strategies on student motivation. *TESOL Quarterly, 42*, 55–77.
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *Modern Language Journal, 70*, 125–132.
- Jacques, S. (2001). Preferences for instructional activities and motivation: A comparison of student and teacher perspectives. In Z. Dörnyei & R. Schmidt (Eds.), *Motivation and second language acquisition* (pp. 185–211). Honolulu: University of Hawai'i Second Language Teaching and Curriculum Center.

- Julkunen, K. (2001). Situation and task-specific motivation in foreign language learning. In Z. Dörnyei & R. Schmidt (Eds.), *Motivation and second language acquisition* (pp. 29–42). Honolulu: University of Hawai'i Second Language Teaching and Curriculum Center.
- Kinncar, P. R., & Gray, C. D. (2009). *SPSS 16 made simple*. New York: Hove.
- Malouff, J., Rooke, S., Schutte, N., Foster, R., & Bhullar, N. (2008). *Methods of motivational teaching*. ERIC Doc. No. ED499496.
- Moskovsky, C., & Alrabai, F. (2009). Intrinsic motivation in Saudi learners of English as a foreign language. *The Open Applied Linguistics Journal*, 2, 1–10.
- Oxford, R., & Shearin, J. (1994). Language learning motivation: Expanding the theoretical framework. *Modern Language Journal*, 78, 12–28.
- Pintrich, P., & Groot, E. V. D. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, 82, 33–40.
- Pintrich, P., & Schunk, D. (2002). *Motivation in education: Theory, research, and applications* (2nd ed.). Upper Saddle River, NJ: Merrill Prentice Hall.
- Plax, T. G., & Kearney, P. (1992). Teacher power in the classroom: Defining and advancing a program of research. In V. P. Richmond & J. C. McCroskey (Eds.), *Power in the classroom: Communication, control, and concern* (pp. 67–84). Mahwah, NJ: Erlbaum.
- Schmidt, R., Boraie, D., & Kassabgy, O. (1996). Foreign language motivation: Internal structure and external connections. In R. Oxford (Ed.), *Language learning motivation: Pathways to the new century* (pp. 9–70). Honolulu: University of Hawai'i Second Language Teaching and Curriculum Center.
- Schmidt, R., & Watanabe, Y. (2001). Motivation, strategy use, and pedagogical preferences in foreign language learning. In Z. Dörnyei & R. Schmidt (Eds.), *Motivation and second language acquisition* (pp. 313–359). Honolulu: University of Hawai'i Second Language Teaching and Curriculum Center.
- Stipek, D. (2002). *Motivation to learn: Integrating theory and practice* (4th ed.). Boston: Allyn & Bacon.
- Tremblay, P., & Gardner, R. (1995). Expanding the motivation construct in language learning. *Modern Language Journal*, 79, 505–518.
- Tremblay, P., Goldberg, M., & Gardner, R. (1995). Trait and state motivation and the acquisition of Hebrew vocabulary. *Canadian Journal of Behavioral Science*, 27, 356–370.
- Williams, M., & Burden, R. (1997). *Psychology for language teachers: A social constructivist approach*. Cambridge, UK: Cambridge University Press.
- Wlodkowski, R. (1999). *Enhancing adult motivation to learn: A comprehensive guide for teaching all adults* (2nd ed.). San Francisco: Jossey-Bass.
- Woolfolk, A., & Margetts, K. (2007). *Educational psychology*. New York: Pearson Education.

## **Supporting Information**

Additional Supporting Information may be found in the online version of this article:

**Appendix S1.** Learners' Questionnaire (English Version).

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