## Motivating Language Learners: A Classroom-Oriented Investigation of the Effects of Motivational Strategies on Student Motivation

### MARIE J. GUILLOTEAUX

Gyeongsang National University Jinju, South Korea

### ZOLTÁN DÖRNYEI

University of Nottingham Nottingham, England

> The teacher's use of motivational strategies is generally believed to enhance student motivation, yet the literature has little empirical evidence to support this claim. Based on a large-scale investigation of 40 ESOL classrooms in South Korea involving 27 teachers and more than 1,300 learners, this study examined the link between the teachers' motivational teaching practice and their students' language learning motivation. The students' motivation was measured by a self-report questionnaire and a classroom observation instrument specifically developed for this investigation, the motivation orientation of language teaching (MOLT). The MOLT observation scheme was also used to assess the teachers' use of motivational strategies, along with a posthoc rating scale filled in by the observer. The MOLT follows the real-time coding principle of Spada and Fröhlich's (1995) communication orientation of language teaching (COLT) scheme but uses categories of observable teacher behaviors derived from Dörnyei's (2001) motivational strategies framework for foreign language classrooms. The results indicate that the language teachers' motivational practice is linked to increased levels of the learners' motivated learning behavior as well as their motivational state.

Motivation is one of the most important concepts in psychology. Theories concerning motivation attempt to explain nothing less than why humans behave and think as they do. The notion is also of great importance in language education. Teachers and students commonly use the term to explain what causes success or failure in learning. Indeed, motivation provides the primary impetus to initiate second or foreign language (L2) learning and later the driving force to sustain the

long and often tedious learning process. Without sufficient motivation, individuals with the most remarkable abilities cannot accomplish long-term goals. Similarly, appropriate curricula and good teaching are not enough on their own to ensure student achievement—students also need to have a modicum of motivation (for recent reviews, see Dörnyei, 2005; Ushioda, in press).

Traditionally, motivational psychologists have been more concerned about what motivation is than about how we can use this knowledge to motivate learners. Recently, however, more and more researchers have decided to examine the pedagogical implications of research by conceptualizing *motivational strategies* (for reviews in educational psychology, see, e.g., Brophy, 2004; Ginsberg & Wlodkowski, 2000; Pintrich & Schunk, 2002; within the area of language education, see, e.g., Alison & Halliwell, 2002; Dörnyei, 2001, 2006; Williams & Burden, 1997). Thus, motivation research has reached a level of maturity such that theoretical advances have started to inform methodological developments. This article has been written in that vein.

The motivational strategies reported in the literature are usually grounded in sound theoretical considerations. However, very little research has been done to answer a crucial question: Are the proposed techniques actually effective in language classrooms? This deficiency was already highlighted by Gardner and Tremblay (1994) over a decade ago. In reflecting on the potential usefulness of motivational strategies, they argued that, from a scientific point of view, intuitive appeal without empirical evidence was not enough to justify strong claims in favor of using such strategies. They therefore recommended that motivational strategies be considered merely as hypotheses to be tested and highlighted a number of possible pitfalls that such research should avoid. The possible discrepancy between the assumed and the actual motivational power of certain motives or motivational strategies is indeed a real concern, which is well reflected in the title of a recent article by Chen, Warden, and Chang (2005), "Motivators That Do Not Motivate."

In retrospect, we can conclude that L2 scholars have not taken up Gardner and Tremblay's (1994) recommendation that proposed motivational strategies be investigated in actual language classrooms. Validation studies are labor-intensive because they require the investigator to apply experimental designs and/or extensive classroom observation. We are aware of only two published studies (Cheng & Dörnyei, 2007; Dörnyei & Csizér, 1998) that had the explicit objective to provide empirical data on the effectiveness of motivational strategies. However, these studies relied solely on teachers' self-reports about how important they considered certain strategies and how often they used them; they were not based on documentation of the actual nature of the participat-

ing teachers' motivational practice—which would have been more objective—nor on any classroom student behavior to which such practice might have been linked.

The current research aims to fill this gap by providing empirical data obtained in a large-scale investigation of 40 ESOL classrooms in South Korea, which involved more than 1,300 learners and examined the link between the teachers' motivational teaching practice and their students' language learning motivation. A novel feature of our study is that, in contrast to the usual practice of L2 motivation research, which relies on self-report questionnaires, our research paradigm includes a salient classroom observation component. For this purpose, we developed a new classroom observation instrument, the motivation orientation of language teaching (MOLT), which we used to assess the quality of the teacher's motivational teaching practice as well as the level of the students' motivated behavior. The MOLT follows the real-time coding principle of Spada and Fröhlich's (1995) communication orientation of language teaching (COLT) scheme but uses categories of observable teacher behaviors derived from Dörnyei's (2001) motivational strategies framework for foreign language classrooms.

### A FRAMEWORK FOR MOTIVATIONAL STRATEGIES

Motivational strategies refer to (a) instructional interventions applied by the teacher to elicit and stimulate student motivation and (b) self-regulating strategies that are used purposefully by individual students to manage the level of their own motivation; the motivational strategies discussed in this article belong to type (a). Motivational strategies first received substantial attention in the L2 literature in the 1990s, when a major paradigm shift in L2 motivation research highlighted the importance of the learning environment in shaping situated aspects of the learners' motivational disposition. Various scholars published slightly different lists of recommended motivational techniques (e.g., Alison, 1993; Dörnyei, 1994; Oxford & Shearin, 1994; Williams & Burden, 1997) that classroom practitioners could apply to improve their teaching practice by creating a more motivating classroom environment. It soon became clear that the spectrum of available techniques was much wider than the *carrot-and-stick approach* (i.e., offering rewards and punishment) that most language teachers associated with motivational teaching practice. However, the diverse techniques lacked a theory-based framework that could accommodate them. The most systematic attempt to date to produce such a taxonomy was made by Dörnyei (2001), who proposed a parsimonious system of four main dimensions:

- Creating basic motivational conditions by establishing a good teacherstudent rapport, creating a pleasant and supportive classroom atmosphere, and generating a cohesive learner group with appropriate group norms.
- Generating initial motivation, that is, "whetting the students' appetite" by using strategies designed to (a) increase the learners' expectancy of success and (b) develop positive attitudes toward the language course and language learning in general.
- Maintaining and protecting motivation by promoting situation-specific
  task motivation (e.g., through the use of stimulating, enjoyable, and
  relevant tasks), providing learners with experiences of success, allowing them to maintain a positive social image even during the often
  face-threatening task of having to communicate with a severely limited language code, and promoting learner autonomy.
- Encouraging positive retrospective self-evaluation by promoting adaptive attributions, providing effective and encouraging feedback, increasing learner satisfaction, and offering grades in a motivational manner.

Figure 1 presents the schematic representation of the model, indicating the main macrostrategies associated with each dimension. Dörnyei (2001) broke these macrostrategies down further into more than 100 specific motivational techniques. This motivational strategies framework served as background to our investigation when we designed the classroom observation instruments.

### RESEARCH DESIGN AND RESEARCH QUESTIONS

In the current study, we set out to examine empirically how a teacher's motivational teaching practice affects his or her students' motivated learning behavior, as manifested by the amount of attention the students pay in class and the extent of their participation and volunteering in tasks. When we designed the study, we realized that the standard data gathering technique of L2 motivation research—namely, the administration of questionnaires—would not be sufficient to assess this process. We therefore decided to carry out a large-scale classroom observation study with a motivational focus, with the intention of producing generalizable results and of obtaining varied and rich quantitative data concerning both the teacher and the students. To this effect, we designed a highly structured observation scheme following the model of Spada and Fröhlich's (1995) COLT. We supplemented this instrument with a student questionnaire and a teacher appraisal form.

FIGURE 1
The Components of a Motivational L2 Teaching Practice



(Dörnyei, 2001, p. 29; used with permission)

At the beginning of the study, we faced an important decision: Should we visit each site more than once, or should we increase the sample size to the level that is appropriate to produce statistically significant results? The former option would have enhanced the picture we obtained of each class but would have reduced the number of L2 classes that we could include in our sample. Therefore, partly because we wanted to combine the observational data with a student survey, we chose the

second option and included 40 learner groups in our study, with a student population of more than 1,300. It followed from such a design that, instead of focusing on the impact of specific strategies used by specific teachers, which would have required a more intensive and preferably longitudinal investigation, we focused on examining the quality of the teachers' overall motivational teaching practice by generating a composite index of the rich observational data. In other words, although we did not intend to claim that the particular motivational techniques we documented in an observed class were all typical of the particular teacher's general practice, we felt it was fair to assume that the sum of all the motivational techniques a teacher applied in his or her class would offer a representative index of that teacher's overall motivational awareness and skills. Having created this composite index, we followed a correlational design whereby we computed correlations between the measures related to the teacher and the students in order to establish links between the teacher's practice and the students' behavior. Our research questions were as follows:

- 1. How does the teacher's motivational teaching practice affect the students' classroom motivation in terms of the level of their attention, participation, and volunteering?
- 2. What is the relationship between the students' self-reported motivation (assessed by questionnaire), their actual classroom behavior, and the teacher's classroom practice?

### **METHOD**

### Participating Schools, Teachers, and Students

In South Korea, the site of our research project, there is a conscious effort to provide equal educational opportunities for secondary school children (Seth, 2002). Students who reside in a specific local education district are allocated to a school within the district through a lottery system, and teachers, vice-principals, and principals in state schools are rotated within their provincial or metropolitan (not just local) education district, usually every four years. This was good news from our sampling perspective because it guaranteed a certain degree of school comparability and thus helped to avoid ending up with a biased sample. The main criterion for our specific sampling was to generate as much diversity as possible in terms of school location and the teachers' age, qualifications, experience, and level of English proficiency. To ensure a large enough sample size, we approached a wide network of regional contacts and also

applied *snowball sampling*, that is, participating teachers introduced us to other willing participants who met our criteria. In the end, 20 junior high school principals granted permission to carry out research in their schools, which were located in a variety of mainland, island, rural, urban, and metropolitan sites within one large region of South Korea. Our sample of schools included 8 boys' schools, 5 girls' schools, 5 coed schools with coed learner groups, and 2 coed schools with single-sex learner groups.

After receiving their principals' permission, 27 language teachers (4 male and 23 female) agreed to take part in the main study. They presented a suitable variety: Their ages ranged from 23–44 (M = 31.65) and their teaching experience ranged from 1–20 years (M = 8.32). All teacher-participants were asked to evaluate their own level of proficiency in English: None of them rated themselves as *fluent*, 30% judged themselves to be *advanced*, 40% *higher intermediate*, and 30% *lower intermediate*.

Because of the considerable washback effect of the university entrance examination (i.e., teaching to the test) in Korea, we excluded high school classes from our sample in favor of junior high classes, and among the junior high students, we preferred Year 1 and Year 2 learner groups (12–13 and 13–14 year olds) to Year 3 students (14–15 year olds) whenever possible. The final student sample involved 1,381 students in 40 classes; 46% of the sample was from Year 1, 46% from Year 2, and 8% from Year 3. The participating students were 60% boys and 40% girls. All of them were South Koreans and spoke Korean as their first language.

### **Instruments**

To obtain a valid and reliable picture of the motivational characteristics of the sample, we used three different types of instrument: (a) a classroom observation scheme, (b) a student questionnaire, and (c) a postlesson teacher evaluation scale. All three instruments were developed for this study. Each instrument underwent extensive piloting, which is described in the Procedures section.

### The MOLT Classroom Observation Scheme

The MOLT classroom observation scheme (see Appendix A) combines two established schemes or frameworks: Dörnyei's (2001) system of motivational teaching practice and Spada and Fröhlich's (1995) class-

<sup>&</sup>lt;sup>1</sup> We must note that the final sample does not fully reflect the characteristics of the population in terms of its gender and age distribution; however, because of the large sample size, we believe the results are still generalizable.

room observation scheme, the COLT. To replicate the real-time nature of Part A of the COLT, the MOLT follows a time-sampling format whereby relevant classroom events are recorded every minute in an ongoing manner.

The content categories included in the MOLT concerned features of the learners' motivated behavior and the teacher's motivational teaching practice. The learners' motivated behavior was operationalized as the students' levels of behavioral engagement in instructional events. More precisely, it involved the observer's assessment of the learners' level of motivated behavior in terms of the proportion of students who paid attention or actively participated during the class and who eagerly volunteered during teacher-fronted oral activities. Table 1 presents a description of the three variables belonging to the learners' motivated behavior cluster. The attention and participation variables were encoded similarly to Emmer (1971, cited in Good & Brophy, 2003) but in this case, a three level-scale was used: *very low* = a few students, *low* = one third to two thirds of the students, and high = more than two thirds of the students. For the purpose of the analyses, a conservative stance was taken and learners' motivated behavior was equated with only the high level of engagement.

The aspects of the teacher's motivational teaching practice included in the MOLT were based on Dörnyei's (2001) model of motivational teaching practice described earlier. We selected 25 motivational variables that were clearly definable and observable using our real-time observation scheme; these are presented in Table 2. These variables were grouped in the observation sheet into four categories: teacher discourse, participation structure, encouraging positive retrospective self-evaluation, and activity design. In accordance with Spada and Fröhlich's (1995) concept of the primary focus coding convention, whenever two different events belonging to the same category took place within a one-minute time segment, only the event that had taken up the greater portion of the one-minute segment

TABLE 1 Observational Variables Measuring Learners' Motivated Behavior

Variables	Description
Attention	Students appear to be paying attention: They are not displaying any inattentive or disruptive behavior; they are looking at the teacher and following his or her movements, looking at visual stimuli, turning to watch another student who is contributing to the task, following the text being read, or making appropriate nonverbal responses.
Participation	Students are actively taking part in classroom interaction or working on assigned activity.
Volunteering for teacher-fronted activity	At least one third of the students are volunteering without the teacher having to coax them in any way.

TABLE 2 The 25 Observational Variables Measuring the Teacher's Motivational Practice (Continued on p.  $\theta\theta$ )

	Description	Range* (minutes)	Mean
Social chat	Having an informal (often humorous) chat with the students on matters unrelated to the lesson.	0-7.11	1.08
Signposting	Stating the lesson objectives explicitly or giving retrospective summaries of progress already made toward realizing the objectives.	0-4.39	0.55
Stating the communicative purpose or utility of the activity	While presenting an activity, mentioning its communicative purpose, its usefulness outside the classroom, its cross-curricular utility, or the way it fits into the sequence of activities planned for the lesson.	0-3.38	0.44
Establishing relevance	Connecting what has to be learned to the students' everyday lives (e.g., giving grammatical examples with references to pop stars).	0-12.38	3.95
Promoting integrative values	Promoting contact with L2 speakers and cultural products and encouraging students to explore the L2 culture and community.	0-1.00	0.03
Promoting instrumental values	Highlighting the role that the L2 plays in the world and how knowing the L2 can be potentially useful for the students themselves as well as their community.	0-1.02	0.05
Arousing curiosity or attention	During the presentation of an activity, raising the students' expectations that the upcoming activity is going to be interesting and/or important (e.g., by asking them to guess what they are going to do next, or by pointing out fun, challenging, or important aspects of the activity or contents to be learned).	0-9.00	1.49
Scaffolding	Providing appropriate strategies and/or models to help students complete an activity successfully (e.g., the teacher thinks aloud while demonstrating, reminds students of previously learned knowledge or skills that will help them complete the activity, or has the class brainstorm a list of strategies to carry out the activity).	0-9.00	1.10
Promoting cooperation	Setting up a cooperative learning activity, or explicitly encouraging students to help one another, offering suggestions on how best to do this.	0-3.07	0.43
Promoting autonomy	Offering students a choice of activities, involving them in making decisions regarding the timing of an activity, having them use the Internet or do research (e.g., for oral presentations, projects, and displays).	0–7.87	0.66
Referential questions	Asking the class questions to which the teacher does not already know the answer, including questions about the students' lives.	0-7.00	2.47
Group work	The students are mingling, working in fluid pairs, or working in groups (simultaneously or presenting to the whole class).	0-25.00	2.73
Pair work	The students are working in fixed pairs (simultaneously or presenting to the whole class).	0-14.65	3.24

TABLE 2 The 25 Observational Variables Measuring the Teacher's Motivational Practice (Continued from  $p.\ 00$ )

	Description	Range* (minutes)	Mean
Tangible reward	Offering students tangible rewards (e.g., candy, stickers) for successfully taking part in an activity.	0-10.47	1.71
Personalization	Creating opportunities for students to express personal meanings (e.g., experiences, feelings, opinions).	0–18.00	2.41
Element of interest, creativity, fantasy	The activity contains ambiguous, paradoxical, problematic, controversial, contradictory, incongruous, or exotic material; connects with students' interests, values, creativity, fantasy, or arouses their curiosity (e.g., predict-and-confirm activity).	0–19.88	3.51
Intellectual challenge	The activity presents an intellectual challenge (e.g., it involves a memory challenge, problem or puzzle solving, discovering something, overcoming obstacles, avoiding traps, or finding hidden information).	0–10.98	1.74
Tangible task product	The students are working on the production of a tangible outcome (e.g., a poster, a brochure).	0-18.00	2.16
Individual competition	The activity involves an element of individual competition.	0-21.00	1.25
Team competition	The activity involves an element of team competition.	0-18.66	1.45
Neutral feedback	Going over the answers of an exercise with the class without communicating any expression of irritation or personal criticism.	0-24.55	6.42
Process feedback	Focusing on what can be learned from the mistakes that have been made, and from the process of producing the correct answer.	0-7.00	1.74
Elicitation of self or peer correction	Encouraging students to correct their own mistakes, revise their own work, or review/correct their peers' work.	0-5.11	0.44
Effective praise	Offering praise for effort or achievement that is sincere, specific (i.e., more than merely saying "Good job!"), and commensurate with the student's achievement. <i>N.B.</i> : Ability feedback ("You are very good at English") or praise involving social comparison ("You did better than anyone else in the class") is not recorded as <i>effective praise</i> .	0-5.00	0.30
Class applause	Celebrating a student's or group's success, risk-taking, or effort by applauding (either spontaneously or following the teacher's lead).	0-10.00	1.09

<sup>\*</sup> Late starts caused slight variations in lesson length; scores were therefore adjusted for a standard length of 45 minutes, resulting in maximum values that are not always round numbers.

was recorded. However, events that were coded under the *activity design* category, and thus concerned students working on tasks, did not fall under the primary focus coding convention. This category fell outside the coding convention because these variables represent motivational

elements that can be added to the basic task design, alone or in combination with one or more others; all relevant additional elements are therefore recorded for each one-minute segment.

### The Student Motivational State Questionnaire

The student motivational state questionnaire (see Appendix B) was designed to target the students' situation-specific motivational disposition related to their current L2 course. Consequently, the questionnaire did not include items seeking to tap into more general attitudinal or motivational factors, such as the incentive values of English proficiency or integrativeness. The final version of the questionnaire included 20 items rated on a 6-point scale, anchored at 1 (definitely not) and 6 (totally true). Some items were adapted from existing scales (e.g., Clément, Dörnyei, & Noels, 1994; Gardner, 1985), and some were newly written to assess the students' (a) attitudes toward their current L2 course, (b) linguistic self-confidence, and (c) L2 classroom anxiety. The questionnaire was translated from English into Korean by an expert and back into English by several graduate students. During this process, minor modifications were made until we were satisfied that the Korean translation was accurate.

### Postlesson Teacher Evaluation Scale

To increase the reliability of our appraisal of the teachers' motivational practice, we also developed a short rating scale consisting of nine 6-point semantic differential scale items (see Appendix C). This was to be filled in after each lesson to provide a posthoc evaluation of the teacher's behavior. Drawing partly on Gardner's *attitudes toward the L2 teacher scale* (Gardner, 1985), the 9 bipolar adjectives focused on various motivation-specific features of the teacher's instructional behavior.

### **Procedures**

### **Piloting**

The main study was preceded by a thorough piloting phase whereby all the instruments were tested in a sample of eight English as a foreign language (EFL) classes (N= 293) taught by four teachers (two classes per teacher). The students represented a population similar to that of the main study sample but were not included in the main study. They filled in the first version of the student questionnaire, and based on the item analysis, the wording of some items was modified. The observation of the

eight classes was followed by an interview with each teacher to verify the coding of the instructional events, thereby helping the observer (Guilloteaux) to check the consistency and accuracy of her recording. In general, the teachers agreed with the initial coding and added insights that prompted some modifications of the classroom observation scheme in order to create more exhaustive, discrete, and unambiguous categories.

### Main Study

The 40 observations of the main study took place in the last 2 months of the first semester of the 2003–2004 academic year (i.e., in June and July 2003), during regularly scheduled, 45-minute English lessons. On the day of the observations, the first author administered the student questionnaire to every participating learner group before the first period of the morning or afternoon. To increase the reliability of the MOLT, she collected all the subsequent observational and teacher evaluation data. During the lesson observations, as each minute elapsed on the timer, she completed the coding of what had taken place during that previous minute. She filled in the teacher evaluation scale immediately after each class. Several teachers asked to see and discuss the observation sheet after the lesson was over; this practice provided a good opportunity to check on the reliability of the coding, particularly of the episodes that had taken place in Korean.

### **Data Analysis**

To process the observational data, for each variable on the observation sheets (i.e., each column) we first added up the tally marks indicating the number of minutes during which a specific behavior or activity had taken place. We then entered these sums, which ranged from 0–45, into an SPSS data file. Because occasional late starts produced a slight variation in the actual length of the classes observed, we standardized the variable scores for time. To do this, we divided the tally mark totals by the actual lesson length in minutes and multiplied them by 100 to obtain proportionate rates that could be compared (Hatch & Lazaraton, 1991). Following this, we computed composite scores to give us measures of the teacher's motivational practice and the students' motivated behavior. This process, along with the computation of other composite measures, will be explained in a later section.

The *postlesson teacher evaluation scale* items were all related to one underlying construct, the teacher's personal qualities as a language teacher, and were therefore summed up into one composite variable by comput-

ing the mean of the nine item scores. The items in the *student question-naire* formed three multiscale variables, which were submitted to factor analysis. A one-factor solution emerged, which was subsequently used as a single index for the purpose of further analysis. Because both the observational and teacher evaluation data were organized at the class level, we aggregated the student scores according to the classes, thereby obtaining class-level means. This procedure enabled us to merge the student motivation questionnaire data with the observational and the teacher evaluation data. Finally, we submitted the obtained composite scores to correlation analysis and computed multiple correlations.

### RESULTS AND DISCUSSION

### **Computing Composite Variables**

As discussed earlier, the evaluation of the motivational aspect of the teachers' classroom conduct was carried out by the first author in two complementary ways: (a) by taking a minute-by-minute microperspective of how the teachers conducted their lessons and (b) by providing a postlesson, overall appraisal of various aspects of the teachers' professional qualities. The first index was formed by calculating the means of the variables described in Table 2. In view of the fact that the 25 constituents of this composite score were behavioral items, we did not expect too high an internal consistency among them, so it was reassuring that the Cronbach alpha reliability coefficient of this measure was as high as 0.70.2 The second measure was formed from the nine semantic differential scale items of the postlesson teacher evaluation scale. As expected, all nine items measured the same construct, with a Cronbach alpha internal consistency reliability coefficient of 0.91. We expected a significant positive correlation between these two measures because they addressed the same target, namely, the teacher's conduct. This correlation

<sup>&</sup>lt;sup>2</sup> Internal consistency reliability is measured by the Cronbach alpha coefficient. This is a figure typically ranging between 0 and +1 (although in extreme cases—e.g., with very small samples and with items that measure different things—it can also be negative), and if it proves to be very low, either the particular scale is too short or the items have very little in common. Internal consistency estimates for well-developed scales containing as few as 10 items ought to approach 0.80. In view of the complexity of the second language acquisition process, L2 researchers typically want to measure many different areas in one questionnaire, and therefore they cannot use very long scales because completing the questionnaire would take several hours. As a result, somewhat lower Cronbach alpha coefficients are to be expected, but even with short scales of three or four items, we should aim at reliability coefficients in excess of 0.70; a scale with a Cronbach alpha that does not reach 0.60 should sound warning bells (Dörnyei, 2007).

did indeed emerge (r = 0.46; p < 0.01), and it also served as some confirmation of the validity of the measurement.<sup>3</sup> To form a composite measure of the teacher's motivational teaching practice, we merged the two measures by summing up their standardized scores (z scores)<sup>4</sup> and labeled the combined variable the *teacher's motivational practice*.

The observational data were also used to create another composite measure of the students' classroom motivation in terms of the level of attention they paid, the extent of their participation in tasks, and the degree of their volunteering in teacher-fronted activities. This index was formed by calculating the means of the three variables described in Table 1, and was labeled *learners' motivated behavior*. The three factors making up this variable complement each other because they describe the learners' reactions to different types of activities within the class; a high score indicates that the majority of the learners (at least two thirds of them) were actively engaged in a significant proportion of the class. In the classes that were observed, students who displayed motivated behavior were alert and, depending on the type of instructional event taking place, appeared to be either on-task or attentive. For instance, they focused on the teacher while he or she was talking, they responded appropriately, participated in choral repetition, worked on assigned tasks, or were engaged in noncognitive, goal-directed behaviors such as collecting equipment. Observed off-task behaviors included chatting, daydreaming instead of completing assigned tasks, sleeping, studying another subject, playing cards, or reading comic books. Students' eagerness to volunteer during teacher-fronted oral activities manifested itself in raising their hands and/or shouting "Me!" or "Seon-saeng-nim!" (i.e., Mr./ Ms. [teacher's name]!), or in standing up and walking up to the front of the class.

The final composite variable was derived from the student questionnaire. As described earlier, this instrument measured three multiscale

<sup>&</sup>lt;sup>3</sup> The observational data and the posthoc teacher evaluation were both produced by the same person—Guilloteaux—which raises the question as to whether the correlation between the results can be seen as a reliability check. On the one hand, the process of filling in the observation scheme undoubtedly affected the posthoc evaluation, and in this sense, the posthoc evaluation can be seen as a mere summary of filling in the observation scheme. On the other hand, completing the observation scheme was a complex microanalytical exercise, with the researcher having to consider dozens of categories every minute. This process required a different sort of attendance on the part of the observer than the holistic retrospective evaluation. Thus, although the obtained correlation is partly the function of the common observer factor, the corroboration of the two types of data provides some confirmation that the two methods of tapping into the same classroom reality produced valid results.

<sup>&</sup>lt;sup>4</sup> The standardization of raw scores involves converting the distribution within a sample such that the mean will be 0 and the standard deviation 1. The resulting z-scores express how much each raw value is different from the group mean, and by equalizing the means, scores obtained from different sources are readily comparable (Dörnyei, 2007).

variables, attitudes toward the L2 course (9 items, Cronbach alpha = 0.85), linguistic self-confidence (8 items, Cronbach alpha = 0.80) and anxiety (3 items, Cronbach alpha = 0.63). Because the three variables were highly intercorrelated, we expected them to form a single second-order factor. A principal component analysis confirmed our prediction because it yielded a one-factor solution (with the first factor having an eigenvalue of 1.8 that was twice as large as the eigenvalue of a possible second factor), which explained 60% of the total variance. Consequently, we used this factor score as the self-reported student motivation index.

# **Correlations Between the Teacher's Motivational Practice and Student Motivation**

Classroom motivation research is ultimately about one key issue, analyzing the determinants of the learners' motivated behavior, which then leads to learning outcomes. In our study, we addressed two factors that were theoretically expected to have a bearing on the student's motivated classroom behavior: (a) the self-report index of their course-related motivation, which was measured by the questionnaire, and (b) the teacher's motivational influence, which was measured by the composite teacher instructional behavior factor. In analyzing student motivation in specific language tasks, Dörnyei (2002) argued that both situation-specific and more general motives contribute to task motivation, but that the more situated a measure is, the more directly it will be linked to a particular motivated behavior. Therefore, within our research paradigm, we expected the teacher's motivational practice to have the stronger association with the students' motivated behavior. The correlation coefficients confirmed this prediction: As Table 3 shows, the teacher's motivational practice has a highly significant positive correlation with the learners' motivated behavior, with a coefficient exceeding 0.6 and explaining 37% of the variance in the students' motivated learning behavior measure. L2 motivation studies typically detect meaningful correlations within the 0.3–0.5 range. Therefore, the coefficient found in our study attests to a particularly strong link, indicating that the teachers' motivational teach-

TABLE 3
Correlations Among the Three Composite Motivational Measures

	Learners' motivated behavior	Self-reported student motivation
Teacher's motivational practice Self-reported student motivation	0.61*** 0.35*	0.31*

<sup>\*</sup> p < .05; \*\*p < .01; \*\*\*p < .001

ing practice is directly related to how the students approach classroom learning. Another lower, but still significant, positive relationship (r = 0.35, p < 0.05) between the students' self-reported motivation and their motivated classroom behavior suggests that the students' appraisal of the language course in general has a bearing on how they approach the specific learning tasks in the course, regardless of their attitudes toward the actual task.

Given that we found multiple influences on students' motivated behavior, it made sense to compute a multiple correlation to investigate the strength of the relationship between the antecedents (teacher's motivational practice and self-reported student motivation) and the motivational outcome (learners' motivated behavior). *Multiple correlations* refer to a statistical procedure whereby a correlation is calculated between one dependent variable and a group of independent variables, taking into account the interrelationship of the independent variables. The analysis produced a multiple correlation coefficient of 0.63 (p < 0.001). Taken together, the teacher's motivational practice and self-reported student motivation explain 40% of the variance in the students' motivated behavior measure. This result is remarkably high in view of the many other elements that can affect students' behavioral engagement in class (e.g., physical and social environments, individual psychological factors, etc.).

We also computed the correlation between the teacher's motivational practice and the students' self-reported motivation. This is obviously an indirect measure because it compares the way the teacher behaved in one specific class with the students' overall course-related motivational disposition. However, we still expected a significant relationship because we assumed that the teacher's behavior in the observed class was representative of his or her overall conduct. The correlation between the two measures is indeed significant (r= 0.31, p < 0.05), which serves as further evidence of the validity of our results; it also confirms that the teacher's motivational teaching practice not only affects the students' immediate response in the classroom but is also associated with a more general appreciation of the whole course.

### Considering the Cause-Effect Relationship

It is a well-known statistical principle that correlations do not indicate causal relationships (i.e., only experimental studies can produce unambiguous causal links), and therefore, we cannot simply claim that the teachers' motivational practice increased student motivation. An alternative explanation would be that the results reflect some sort of school effect. For example, the general lethargy of a demotivated student body in a school in a deprived area can demotivate a teacher, causing him or

her to teach in an uninspired and uninspiring way. Similarly, students' highly motivated behavior and involvement in class is likely to enhance a teacher's performance and thus account for high correlations found between the students' motivated behavior and their teacher's practice. However, we would argue that such scenarios do not apply in our study for two reasons: First, we described briefly in the introduction the measures that the South Korean government applies to minimize the differences between schools, including the random distribution of students into schools and classes, and the regular rotation of staff, including principals and vice-principals. Second, these measures are accompanied by a strict control over the curriculum, as a result of which the variation found among schools, especially outside Seoul, is relatively small.

The minimal degree of school effect can also be confirmed in our study by examining pairs of teachers observed in the same school (see Table 4). Learner groups within the same school often show considerable differences in terms of their motivational indexes, particularly in their motivated behavior, which indicates that the school does not exert a unifying effect. Out of the 14 pairs of student measures reported in Table 4, only three (learners' motivated behavior in Schools 6 and 7, and students' self-reported motivation in School 5) present differences that are not in the direction expected on the basis of the corresponding teacher's motivational practice index. Thus, the variation in the students' motivated behavior is more likely a function of the quality of the teacher's motivational practice, which explains the positive relationships observed in our study between teacher practice and student engagement in class activities. Accordingly, the significant positive link that emerged

TABLE 4
Comparisons of Motivational Indexes Between Pairs of Teachers From the Same School

School	Teacher	Learners' motivated behavior	Students' self-reported motivation	Teacher's motivational practice
1	A	0.34	0.22	3.66
	В	0.16	0.18	-0.78
2	A	0.36	0.51	1.97
	В	0.02	-0.36	-0.76
3	A	0.07	-0.15	-1.79
	В	0.16	-0.05	-0.49
4	A	0.00	-0.38	-4.22
	В	0.18	-0.26	-0.51
5	A	0.20	$0.07^{a}$	0.02
	В	0.08	$0.10^{a}$	-3.41
6	A	0.17*	0.31	2.44
	В	0.21*	0.11	0.23
7	A	0.11*	-0.16	0.49
	В	0.15*	-0.27	-1.96

*Note.* \*When Teachers A and B are compared, this value is not in the expected direction based on the values these teachers obtained on the teacher's motivational practice measure.

in our investigation indicates that language teachers can make a real difference in their students' motivational disposition by applying various motivational techniques and strategies.

### CONCLUSION AND IMPLICATIONS

This study examined how the teacher's motivational teaching practice affected student motivation as manifested in the students' classroom behavior. The primary research approach involved gathering structured classroom observation data. The inclusion of this type of data is a novel element in motivational studies, where past investigations have relied almost solely on survey research rather than objective observational data. For the purpose of this study, we developed a special instrument, the MOLT scheme, which follows the real-time coding principle of Spada and Fröhlich's (1995) COLT scheme while using categories of observable teacher behaviors that are derived from Dörnyei's (2001) motivational strategies framework.

The significant positive correlations we found between the teacher and student measures are particularly strong within the context of L2 motivation research, thereby providing powerful evidence that the teacher's motivational practice does matter. Even in Korea, where relatively rigid classroom traditions do not lend themselves readily to the use of motivational strategies, the limited motivational practice that was applied by the participating teachers was associated with a significant difference in student motivation. This finding is important because so far the literature has not reported any empirical evidence concerning the concrete, classroom-specific impact of language teachers' motivational strategies. Although our study looked at the teachers' motivational teaching practice as a whole without focusing on specific individual strategies, the results are so robust that they warrant further research in more narrowly defined strategy domains.

### **Pedagogical Implications**

Our results have far-reaching practical implications because they confirm the belief held by many education experts that student motivation is related to the teacher's motivational practice. The question to answer now is whether teachers would benefit from being specifically trained in the use of motivational strategies as part of preservice or in-service teacher education programs. Our study does not provide any data concerning the teachability of motivational strategies, and it may not be a

straightforward issue to transfer knowledge of these strategies into motivating practices. Yet, given that student demotivation is a major problem in educational settings worldwide, finding ways to raise teachers' awareness of their motivating practices and to train them in using skills that can help them to motivate learners should be a prominent methodological concern. By establishing a link between teacher behaviors and student motivation, our study provides a first step toward putting motivational issues on the teacher education agenda. In addition, Dörnyei's (2001) taxonomy of motivational strategies and the corresponding MOLT scheme that was tested in this study offer relevant course contents, as well as a useable observation instrument for devising and assessing motivational training modules.

We believe that the development of a theoretically sound and empirically tested teacher education module that focuses on the teacher's motivational practice would be an important step forward in making language education more effective. Our results show that teaching the curriculum in a motivating manner is a realistic possibility: The teachers in this study had received no explicit motivational training, and were by no means motivational wizards working in a motivationally conducive environment. Yet, the motivational teaching practices that they managed to implement in their classes resulted in tangible positive changes in their students' overall motivational disposition and concrete classroom behavior. We cannot help speculating that this positive effect might be further amplified if teachers were to apply motivational strategies systematically and in a context-appropriate manner.

### **Implications for Future Research**

We can identify four directions for future investigations into the full potential of integrating motivational and instructional practices. First, it would be useful to confirm that the increase in students' motivated behavior resulting from teachers' motivational practices, in turn, translates into improved learning. The literature has reported ample evidence that student motivation and learning achievement are correlated (see, e.g., Dörnyei, 2005), but it would be important to specify the optimum conditions for realizing this link. Second, hardly any research has been done to examine the extent to which motivational strategies are culture specific (for a recent exception, see Cheng & Dörnyei, 2007). It would be useful to know which aspects of a motivational teaching practice are freely transferable across learning situations. Third, in line with the considerations outlined in the previous section, future research needs to assess the teachability of motivational strategies in general and to explore the specific ways by which these strategies can be taught in particular.

One key question is whether motivational teacher behaviors can be modified through focused intervention, or whether a broader awareness-raising program is needed that facilitates teachers' motivational thinking. Fourth, future research should examine the relationship between motivational strategy use and good teaching. It seems obvious that motivational strategies should be accompanied by quality instruction for the overall process to be effective; yet it is not clear which aspects of instructional shortcomings (e.g., lack of clear explanations) have the potential to cancel the positive impact of motivational teaching, and which aspects of motivational teaching can compensate for instructional shortcomings.

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### THE AUTHORS

Marie J. Guilloteaux is an assistant professor in the Department of English Education, Gyeongsang National University, Jinju, South Korea. Her research interests include motivation and motivating foreign language learners, language teacher education, communicative and task-based language teaching, and materials development.

Zoltán Dörnyei is a professor of psycholinguistics at the School of English Studies, University of Nottingham, Nottingham, England. He has published more than 60 academic papers on various aspects of second language acquisition and is the author of several books, including *The Psychology of the Language Learner* (2005) and *Research Methods in Applied Linguistics* (2007).

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# APPENDIX A

# Extract from the MOLT Classroom Observation Scheme

	Learners' motivated behavior		Eager volunteering (>1/3 of the class)					
			Engagement (>2/3 of the class)					
	Le	pe m	Attention (>2/3 of the class)					
Encouraging positive			Class applause					
	ging e	tive	Effective praise					
	ourag	retrospective self-evaluation	Elicitation of self/peer correction session					
	Generating, maintaining, and protecting situation-specific task motivation	retr self-e	Process feedback session					
			Neutral feedback session					
			+ team competition					
			+ individual competition					
	u	esign	+ tangible task product					
	vatio	Activity design	+ intellectual challenge					
ice	moti	Acti	+ creative/interesting/fantasy element					
pract	task		+ personalization					
ional	ecific		+ tangible reward					
otivati	and protecting situation-sp	P.S.ª	Group work					
Teacher's mc		P.	Pair work					
			Referential Questions					
			Promoting autonomy					
		Teacher discourse	Promoting cooperation					
	ing,		Scaffolding					
	intain		Arousing curiosity or attention					
	, ma		Promoting instrumental values					
	rating		Promoting integrative values					
	Gene		Establishing relevance					
			Stating communicative purpose/utility of activity					
			Signposting					
			Social chat (unrelated to the lesson)					
			minutes	-	2	<i>&amp;</i>	4	יכנ

Note. <sup>a</sup>P.S. = Participation structure

### APPENDIX B

### **Student Motivational State Questionnaire**

### Attitudes Toward the Course (9 items, Cronbach alpha = .85)

- I wish we had more English lessons at school this semester.
- I like English lessons this semester.
- English is one of my favorite subjects at school this semester.
- When the English lesson ends, I often wish it could continue.
- I want to work hard in English lessons to make my teacher happy.
- I enjoy my English lessons this semester because what we do is neither too hard nor too easy.
- I would rather spend time on subjects other than English. (REVERSED)
- Learning English at school is a burden for me this semester. (REVERSED)
- In English lessons this semester, we are learning things that will be useful in the future.

### Linguistic Self-Confidence (8 items; Cronbach alpha = .80)

- I feel I am making progress in English this semester.
- I believe I will receive good grades in English this semester.
- I often experience a feeling of success in my English lessons this semester.
- I am sure that 1 day I will be able to speak English.
- In English lessons this semester, I usually understand what to do and how to do it.
- This semester, I think I am good at learning English.
- I am worried about my ability to do well in English this semester. (REVERSED)
- I often volunteer to do speaking presentations in English lessons.

### L2-Classroom Anxiety (3 items; Cronbach alpha = .63)

- I get very worried if I make mistakes during English lessons this semester.
- I am afraid that my classmates will laugh at me when I have to speak in English lessons.
- I feel more nervous in English class this semester than in my other classes.

### APPENDIX C

### Postlesson Teacher Evaluation Scale and Descriptive Statistics

	Scale		Min.	Max.	Mean
Linguistically competent	$6 \leftrightarrow 1$	Linguistically incompetent	1	6	4.65
Focused/Task-oriented	$6 \leftrightarrow 1$	Unfocused/Wastes time	1	6	5.35
Increases students' expectancy of success (e.g., makes sure that Ss receive sufficient preparation)	$6 \leftrightarrow 1$	Increases students' expectancy of failure (e.g., missed steps in lesson)	1	6	4.68
Clear instructions and explanations	$6 \leftrightarrow 1$	Confusing instructions and explanations	1	6	4.65
Kind, caring: creates a pleasant atmosphere	$6 \leftrightarrow 1$	Unkind, uncaring: creates an unpleasant atmosphere	2	6	5.15
Radiates enthusiasm	$6 \leftrightarrow 1$	Unenthusiastic	1	6	4.93
Humorous/light-hearted style	$6 \leftrightarrow 1$	Dry style	1	6	4.43
Encouraging	$6 \leftrightarrow 1$	Not encouraging	1	6	4.35
Creative/Takes risks	$6 \leftrightarrow 1$	Uncreative/Does not take risks	1	6	3.45
Overall teacher evaluation score			1.56	6	4.66