
The Internal Structure of Language Learning Motivation and Its Relationship with Language Choice and Learning Effort

KATA CSIZÉR

Department of English Applied Linguistics

Eötvös University

1146 Budapest

Ajtósi Dürer sor 19-21

Hungary

Email: weinkata@yahoo.com

ZOLTÁN DÖRNYEI

School of English Studies

University of Nottingham

University Park, Nottingham

NG7 2RD

United Kingdom

Email: Zoltan.Dornyei@nottingham.ac.uk

Language learning motivation is a complex, composite construct, and although past research has identified a number of its key components, the interrelationship of these components has often been subject to debate. Similarly, the exact contribution of the various motivational components to learning behaviors and learning achievement has also been interpreted in different ways. The purpose of this study is to use structural equation modeling to evaluate a proposed theoretical model concerning the internal structure of the second language (L2) motivation complex and its impact on motivated behavior. The basis of the analysis is survey data collected in Hungary from 8,593 pupils, 13 to 14 years old, on two occasions, in 1993 and in 1999. Our main finding is that *integrativeness* appears to be the single most important factor, subsuming or mediating the effects of all the other responses to questions asked. In light of this finding, we analyze what motivational content this core component might represent in various settings.

ALTHOUGH MUCH EFFORT HAS BEEN expended in the past on the empirical examination of various measured or latent concepts concerning motivation to learn a second language (L2), less attention has been paid to evaluating the internal structure of L2 motivation. This lack of attention is partly due to the fact that, in order to test relationships in multivariable designs, researchers need to apply a relatively new and rather complex statistical procedure, *structural equation modeling* (SEM). SEM is a multivariate statistical technique that, like factor analysis, is used to interpret the relationship among several variables within a single framework. Its big advantage over factor analysis, however, is that a SEM model also includes directional paths between the variables and not just information about how the variables

“hang together.” Thus, as Dörnyei (2001) concluded, the technique is appropriate for testing “grand” theories, that is, comprehensive models made up of a number of complex, interrelated variables, which is exactly the case with most factors involved in explaining issues in L2 acquisition. We feel that SEM has been underutilized in L2 research in general. In L2 motivation research, however, there exist some important studies using this procedure, most notably by Robert Gardner and his associates in Canada (e.g., Gardner, 1985; Gardner, Masgoret, & Tremblay, 1999; Gardner, Tremblay, & Masgoret, 1997; MacIntyre, MacMaster, & Baker, 2001; Tremblay & Gardner, 1995), as well as by some researchers outside the Canadian context (e.g., Kraemer, 1993; Laine, 1995; Yamashiro & McLaughlin, 2000; Yashima, Zenuk-Nishide, & Shimizu, 2004).

In this article we propose a new, empirically grounded construct of language learning motivation, which is then submitted to SEM so that

we can evaluate the extent to which it is compatible with our data by computing goodness-of-fit measures. An important feature of our SEM model is that we relate the various motivational factors to criterion measures associated with L2 learning behavior rather than with holistic outcome measures, such as L2 proficiency or course achievement. We believe that by doing so we can accomplish increased theoretical clarity: As is explained by Dörnyei (2001) in more detail, motivation is only indirectly related to learning outcomes/achievement because it is, by definition, an antecedent of behavior rather than of achievement. In other words, motivation is a concept that explains why people behave as they do rather than how successful their behavior will be. And although motivation obviously matters with respect to how successful learning is likely to be, several factors other than motivation also affect the strength of the motivation-outcome relationship (e.g., the learners' ability, learning opportunities, or the quality of instruction). As an extreme, we could even conceive of a learning task that students pursue with great enthusiasm without learning anything because of the instructional inadequacy of the activity—in this hypothetical case there would be no relationship between the students' motivation and the learning outcome. Thus, studies that look only at the impact of motivation on language proficiency or other L2 achievement measures (such as course grades) ignore, in effect, the mediating link, behavior, and suggest a false linear relationship between motivation and learning outcomes. In our current investigation, therefore, we examine attitudinal/motivational factors in the light of two criterion measures related to motivated language behavior: (a) the students' language choice for future L2 studies, and (b) the amount of effort the students intend to exert on learning a given language. These two measures are central concepts in motivation research because they concern the two main aspects of motivated human behavior, its direction and its magnitude.

The data were drawn from a two-phase survey of Hungarian schoolchildren's motivation to learn five different foreign languages—English, German, French, Italian, and Russian—in Hungary (for further findings of this study, see Dörnyei & Csizér, 2002). The extensive size of the sample (over 8,500 pupils), representing a total cohort within the Hungarian population, lends a certain amount of validity to the results, and the repeated cross-sectional and multilanguage design made it possible to examine the internal structure of L2 motivation in terms of its varia-

tion across different target languages and temporal phases. The nature of the data, however, also posed some restrictions: In order to obtain comparable measures from the diverse locations, we needed to focus on motivational variables that were generalizable across various learning situations. Thus, the study reported in this article did not involve situation-specific motives that are rooted in the L2 learners' immediate learning environment; instead we targeted more stable and generalized motives that stem from a succession of the student's past experiences in the social world.

BACKGROUND TO THE RESEARCH

In our study, we conceptualized the generalized aspects of L2 motivation in terms of seven components: *Integrativeness*, *Instrumentality*, *Vitality of the L2 Community*, *Attitudes toward the L2 Speakers/Community* (formerly labeled by Dörnyei & Clément, 2001, as "*Direct Contact with L2 Speakers*") and *Cultural Interest* (formerly, "*Media Usage*"), *Linguistic Self-Confidence*, and *Milieu*. As described by Dörnyei and Csizér (2002), these dimensions originally emerged from factor analysis, and the multi-item scales that were formed on the basis of these factors displayed satisfactory internal consistency reliability. They also displayed remarkable consistency across the five different target languages examined and across time. Appendix A provides illustrative examples of the factor pattern matrixes obtained for one language (English/United Kingdom, in both 1993 and 1999). These seven motivational constituents are among the most common dimensions investigated in past L2 motivation research. A brief description and review of the content areas they cover follow.

Integrativeness is a key component in Gardner and Lambert's (1959, 1972; Gardner, 1985; Lambert, 1980) influential conceptualization of L2 motivation, reflecting a positive outlook on the L2 and its culture, to the extent that learners scoring high on this factor may want to integrate themselves into the L2 culture and become similar to the L2 speakers. It is among the most often researched concepts in the field and a great number of empirical investigations connected it to various aspects of the learning process and to the intensity of L2 learners' work in a statistically significant way (e.g., Clément, 1980; Clément, Dörnyei, & Noels, 1994; Clément & Kruidenier, 1985; Dörnyei, 1990, 1994a; Dörnyei & Kormos, 2000; Gardner, Day, & MacIntyre, 1992; Gardner, Lalonde, & Moorcroft, 1985; Gardner & MacIntyre, 1991; Schumann,

1986). As a consequence, the concept has been a principal building block of several theoretical constructs of L2 motivation (cf. Dörnyei, 2001). Yet, in spite of this popularity, the notion has remained somewhat of an enigma (Dörnyei, 2003a): It has no obvious parallels in any areas of mainstream motivational psychology, and its exact nature is difficult to define, which may explain Gardner's (2001) observation that the "term is used frequently in the literature, though close inspection will reveal that it has slightly different meanings to many different individuals" (p. 1). We will come back to the question of what content area the term covers at the end of this article.

Besides Integrativeness, *Instrumentality* has been the other most frequently highlighted variable in L2 motivational studies (e.g., Belmechri & Hummel, 1998; Dörnyei, 1990; Gardner, 1985; Gardner & MacIntyre, 1991; Kraemer, 1993; Lukmani, 1972; Shaaban & Ghaith, 2000; Tremblay & Gardner, 1995; Warden & Lin, 2000; Wen, 1997). It refers to the perceived pragmatic benefits of L2 proficiency and reflects the recognition that for many language learners it is the usefulness of L2 proficiency that provides the greatest driving force. Although the instrumental dimension appears to be relatively straightforward in terms of its content domain, conceptualizing it in practical terms is not as unambiguous as it seems. When analyzing why a previous study by Clément et al. (1994) did not produce the expected clear-cut instrumental factor, Dörnyei (1994b) argued that, in the case of their sample (secondary school learners of English in Hungary), utilitarian benefits, such as better job prospects, might not have been directly relevant, which is why the instrumental variable clustered together with items that emphasized the general educational significance of knowing English (i.e., helping learners to become more knowledgeable). Investigating a different sample in Hungary, Dörnyei and Kormos (2000) and Dörnyei (2002) also concluded that the traditional *instrumental* label did not do justice to the utilitarian dimension that emerged because the factor they obtained also involved, besides the pragmatic goals of getting a job or a place in higher education, a range of other incentives such as traveling, making foreign friends, and understanding the lyrics of English songs. Therefore, they used the label *incentive values* to refer to this motivational dimension. In our present dataset, Instrumentality concerned the pragmatic incentives that are usually associated with the concept, as well as the importance of the particular L2 in the world and the contribution its proficiency makes to becoming an educated person.

Attitudes toward the L2 Speakers/Community has been a central component in Gardner's motivation theory, and Gardner (1985) presented a review of several studies conducted in varied contexts that produced evidence that these attitudes are key constituents of the L2 motivation construct. He quoted Spolsky (1969), who, after devoting a whole article to summarizing and evaluating the attitudinal basis of language attainment, concluded, "One of the most important attitudinal factors is the attitude of the learner to the language and to its speakers" (p. 274). Accordingly, almost all studies of L2 motivation have included in the past a salient component focusing on the learners' attitudes toward members of the L2 community and toward the community itself. In our study, this component was associated with attitudes toward meeting L2 speakers and traveling to their country, that is, attitudes toward having direct contact with them.

Cultural Interest reflects the appreciation of cultural products associated with the particular L2 and conveyed by the media (e.g., films, videos, TV programs, pop music, magazines, and books). In certain learning environments—which have often been referred to as *foreign language learning contexts*—direct contact with L2 speakers is minimal, yet the L2 community may still be well-known to the learners through indirect contact with it, that is, through their exposure to a range of L2 cultural products and artifacts. In their seminal investigation of various L2 learning orientations, Clément and Kruidenier (1983) isolated a factor that tapped into the "social-cultural" dimension of L2 motivation and covered "an interest in the way of life and the artistic production of the target language group" (p. 285). In this study, the presence of this sociocultural dimension characterized the investigated groups in multicultural milieus, whereas for the groups that lived in unicultural settings the factor also included other meanings such as a general knowledge about the world and the self. Clément et al. (1994) investigated different motivational orientations in the relatively unicultural Hungarian context¹ and they also identified a component called *English media* that concerned English cultural products. This factor received strong endorsement from the Grade 11 students participating in the study, and similar results were obtained in our current project. These results highlight the salient role that L2 cultural products play in familiarizing learners with the L2 community and thus shaping their L2 attitudes.

Vitality of the L2 Community concerns the perceived importance and wealth of the L2

communities in question. The concept stems from Giles and Byrne's (1982) *intergroup model*, which explains the conditions that lead minority group members in a multilingual setting to learn and use the dominant language of the majority group. According to these scholars, a key factor in such contexts is *ethnolinguistic vitality*, which determines a particular ethnolinguistic group's distinctiveness as a collective entity. It is defined by three sociostructural factors: *status factors* (economic, political, social, etc.), *demographic factors* (size and distribution of the group), and *institutional support factors* (representation of the ethnic group in the media, education, government, etc.). The notion has been used in studies on L2 motivation in multicultural context (e.g., Clément, 1986; Clément & Kruidenier, 1985), and it has also emerged in the present study associated with a unicultural context.

Milieu has been used in L2 motivation research to refer to the social influences stemming from the immediate environment as opposed to the macrocontext (cf. Gardner's [1985] socio-educational model), and it is usually operationalized as the perceived influence of significant others, such as parents, family, and friends. It is important to point out that the standard conception of milieu only covers the "civil sphere," that is, it does not encompass education-specific motives such as the role of the teachers—these roles are typically discussed with regard to the learning situation. In the L2 field, most research has been directed at looking at the role of the parents in shaping L2 motivation (cf. Colletta, Clément, & Edwards, 1983; Gardner, 1985; Gardner, Masgoret, & Tremblay, 1999), and the general conclusion is that the children's perception of their parents' support is related to their "willingness to continue language study and in their own assessment of how hard they work to learn the second language" (Gardner, 1985, p. 122). In a relatively recent study, Gardner et al. (1999) provided further confirmation that parental support was related to the learners' attitudes toward the learning situation and language learning effort, and Spolsky (2000) warned that we should not underestimate the socialization effect of the learners' peer group, either.

Linguistic Self-Confidence, introduced into L2 motivation research by Richard Clément (Clément, 1980; Clément, Gardner, & Smythe, 1977), reflects a confident, anxiety-free belief that the mastery of a L2 is well within the learner's means. It subsumes the individual's beliefs about his or her abilities to reach goals successfully or to finish tasks, and it usually concerns a generalized

perception of one's coping potentials, relevant to a range of tasks and subject domains. The operationalization of linguistic self-confidence can be done in at least two ways, either referring to the learning of a particular language (e.g., the research done by Clément), or concerning L2 learning in general without any specific reference to concrete target languages (e.g., in the present study). According to Clément's (1980) theory, the main antecedents of self-confidence are the quality and quantity of social contact. Empirical results (Clément & Kruidenier, 1985) supported the hypothetical construct. Clément et al. (1994) also demonstrated that linguistic self-confidence was not only crucial in multicultural contexts, but its importance was also significant in a unicultural environment.

In earlier phases of our research, we examined the relationship of the previously cited motivational factors with two criterion measures, *L2 Choice* and *Intended Effort* (cf. Dörnyei & Clément, 2001; Dörnyei & Csizér, 2002). Based on correlational, multiple correlational, and regression analyses, we concluded that Integrativeness was the single most important factor in shaping the students' L2 motivated behavior in our Hungarian context. The only other factor that seemed to have a direct influence on some criterion measures was Instrumentality, but its importance did not reach that of Integrativeness. This finding led us to hypothesize in Dörnyei and Csizér (2002) that the scope of Integrativeness in this context was somewhat different from Gardner's (1985) traditional conceptualization, and it suggested that the factor should be looked at within the larger framework of the *Ideal Self* or the *Ideal L2 Self* (Higgins, 1987; Markus & Nurius, 1986). However, the analytical procedures in the previous studies did not allow us to go beyond mere informed speculation, and, therefore, in order to be able to explore the internal structure of L2 motivation and verify the proposed new interpretation of *Integrativeness*, it was necessary to reanalyze the data. Thus, the main objective of our present study is to provide empirical evaluation of the hypothetical construct that emerged from our previous research by means of SEM.

METHOD

Participants

The participants in the survey consisted of 4,765 pupils (2,377 males; 2,305 females; 83 with missing gender data) in 1993 and 3,828 pupils (1,847 males; 1,907 females; 74 with missing

gender data) in 1999. They were all 13 to 14 years old, attending the final, eighth, grade of the Hungarian primary school system. We selected this population in 1993 because, at that time, this was the most mature age group in the Hungarian educational system that studied within a more or less homogeneous curricular and organizational framework (i.e., the national primary school system).² Therefore, by sampling students from this cohort, we did not need to be concerned with the modifying influences of various specialized secondary school types. At the same time, these learners were in the final year of their primary school studies and were just about to decide what type of secondary education to choose for their further studies and which foreign language they wished to study during the following years. The fact that the participants were at this crucial point in their schooling lent particular relevance and validity to our question concerning language choice.³ In the 1999 survey, the sampling of the participating schools was almost identical to the sampling in the first survey phase (93% of the total number of settlements in the two samples were the same), and, therefore, our project can be considered longitudinal in nature: Although it is not a classic “panel study” in which the same participants are investigated on two or more occasions, and, thereby, their later behavior can be examined in the light of the earlier self-report measures, because the project involved the same population in both survey occasions, it qualifies as a “trend study” that can inform us about changes over time (cf. Keeves, 1994; Menard, 1991).

Instrument

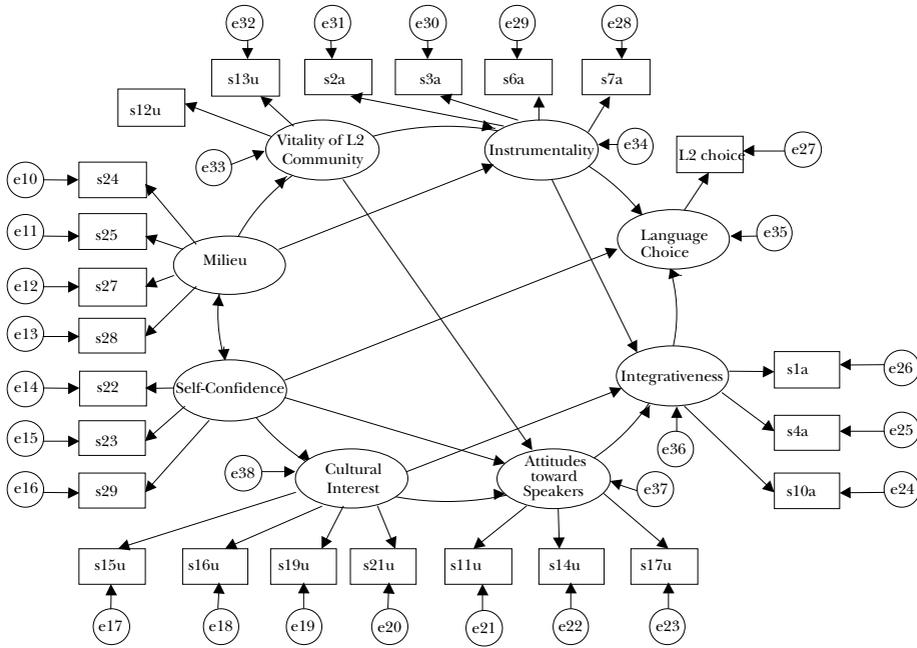
For the sake of space economy, only an outline of the main variables is presented here; the complete questionnaire can be found in Dörnyei and Clément (2001) and Dörnyei (2001). Self-reported data were collected on five target languages (English, German, French, Italian, and Russian) and six L2 communities (the United States, the United Kingdom, Germany, France, Italy, and Russia). In order to ensure that the instrument had appropriate psychometric properties, the items were adopted from established motivation questionnaires (some of which had been specifically developed to be used in Hungary), with sufficient validity and reliability coefficients (Clément et al., 1994; Dörnyei, 1990; Gardner, 1985). As described in the introduction, the targeted motivational variables involved the most salient factors investigated in the domain.

The main variable groups in the questionnaire were as follows (with the total number of items given in parentheses):

1. Items concerning the five target languages (5-point rating scales):
 - (a) *Orientations*, that is, the students' various reasons for learning a given language (5 items).
 - (b) *Attitudes toward the L2* (2 items).
 - (c) *Intended effort*, that is, the amount of effort the student was willing to put into learning the given language (1 item).
 - (d) *Parents' language proficiency* (2 items).
2. Items concerning the six target language communities (5-point rating scales). Britain and the United States were mentioned separately to explore differences in the evaluations of the two communities, in spite of their common language (referred to in this study where relevant as English/United Kingdom and English/United States).
 - (a) *Attitudes toward the L2 community*, that is, the extent to which students felt positively toward the particular countries and their citizens (2 items), and the international importance they attached to these communities (2 items).
 - (b) *Contact with the L2 and its speakers*, both the quantity (2 items) and the quality (5 items) of the contact (e.g., watching L2 TV programs, meeting tourists) were assessed.
3. Non-language-specific Likert scales (5-point scales).
 - (a) *Attitudes toward L2 learning at school* (1 item).
 - (b) *Contact with foreign languages* through watching satellite TV (1 item).
 - (c) *Fear of assimilation*, that is, the extent to which students believed that learning and using the foreign language might lead to the loss of the native language and culture (1 item).
 - (d) *Self-confidence* in L2 learning and use (3 items).
 - (e) *Language learning milieu*, that is, the extent of the parents' support (1 item) and the friends' attitudes toward L2 learning (1 item).
4. Background questions (open-ended and multiple-choice items).
 - (a) *Language choice*: Students were asked to name three languages they were intending to study in the next school year (1 item).
 - (b) *Personal variables*, such as the student's gender and language-learning background (7 items).

The final multi-item scales describing the seven motivational dimensions that were examined in

FIGURE 1
The Initially Tested Model (English/US, 1993)



Note.

Self-Confidence

- s22: Sure to be able to learn a L2 well
- s23: Would feel anxious to speak a L2
- s29: Learning a L2 is a difficult task

Vitality of the L2 Community

- s12u: Country: developed
- s13u: Country: important

Attitudes toward the L2 Speakers/Community

- s11u: Travel to country
- s14u: Meet L2 speakers
- s17u: Like L2 speakers

Integrativeness

- s1a: Like L2
- s4a: Get to know the culture
- s10a: Become similar to L2 speakers

Milieu

- s24: People around me think it is good to know a L2
- s25: L2s are important school subjects*
- s27: Parents think L2s are important school subjects*
- s28: I will feel less Hungarian when learning L2s

Cultural Interest

- s15u: Like films
- s16u: Like TV programs
- s19u: Like magazines
- s21u: Like pop music

Instrumentality

- s2a: Become knowledgeable
- s3a: L2 important in the world
- s6a: Useful for travel
- s7a: Useful for career

*Originally worded negatively but reversed prior to analysis.

this study are presented in Figure 1. The mean Cronbach's alpha internal consistency reliability coefficient of all the scales for all the L2s/L2 communities was .67 in 1993 and .71 in 1999, which is acceptable for such short scales.

Data Collection

The data collection process was conducted in a similar way in 1993 and 1999. On both occasions, we first approached the selected schools through an official letter from Eötvös University, Budapest

(which hosted the project), providing information about the purpose of the survey and details of the actual administration of the questionnaires. Once we received permission from the principal of a school, we contacted the form-masters of the selected classes individually, asking for their cooperation. The questionnaires were filled in during class time, with a representative of the university always present to provide the introduction and oversee the procedure. Answering the questions took the students approximately 20 minutes on average.

Statistical Procedures

Structural equation modeling was applied to evaluate the relationships between the various latent variables investigated in the study, using the software AMOS 4.0. SEM is a multivariate statistical approach that allows for hypothesis testing concerning the interrelationship of multiple variables. The structural relationships under investigation are tested by means of a series of regression equations (hence the words *structural equation* in the name). The name *modeling* simply suggests that the structural relations can be modeled pictorially. According to Byrne (2001), several aspects set SEM apart from the older generation of multivariate procedures: First, unlike exploratory factor analysis, SEM takes a confirmatory approach rather than a descriptive one; second, SEM estimates the error variance patterns; third, it can incorporate into the analysis both unobserved latent variables (that are identified on a theoretical basis) and observed concrete variables (corresponding, e.g., to specific questionnaire items); finally, “there are no widely and easily applied alternative methods for modeling multivariate relations, or for estimating point and/or interval indirect effects” (p. 4). Throughout the statistical analysis, two publications offered invaluable help, Arbuckle and Wothke’s (1999) *Amos 4.0 User’s Guide* and Byrne’s (2001) *Structural Equation Modeling with AMOS*.

The *measurement models* (i.e., the models that describe the relationship between the latent variables and actual questionnaire items) were drawn up in accordance with the earlier factor analytical results reported by Dörnyei and Clément (2001) and by Dörnyei and Csizér (2002). Next, the various latent variables were combined into a full structural model on the basis of theoretical considerations as well as the correlational and regression analyses conducted at previous phases of the research. In order to gain testable models (i.e., models that are identified), several relationships were fixed at 1.0 in the measurement models, and therefore only standardized scores are given throughout the article.

To assess the overall model fit, several measures might be used (for a good summary, see Byrne, 2001). The most often used measures are the chi-square statistics and the CMIN/*df* (chi-square divided by the degrees of freedom). However, because these measures are affected by sample size, it is extremely difficult to get the indexes of fit based on the chi-square analysis to meet traditionally accepted levels if the sample size is as large as ours (Bentler & Bonett, 1980; Jöreskog, 1969). There-

fore, we used the Comparative Fit Index (CFI) to gain information about the model-data fit. It has been suggested in the literature that in the case of the CFI, any values above .95 on the 0 to 1.0 scale are acceptable (see Fan, Thompson, & Wang, 1999; Hu & Bentler, 1999). Because it is useful to consult more than one index when deciding on the model fit, four further indexes will also be reported: (a) the Bentler-Bonett normed fit index (NFI); (b) the Tucker-Lewis coefficient (TLI; also known as the Bentler-Bonett nonnormed fit index [NNFI])—in both cases, values close to 1 indicate a very good fit (Bentler & Bonett, 1980); (c) the root mean square error of approximation (RMSEA)—here a close fit is indicated by values not exceeding 0.1 (Browne & Cudeck, 1993) or even 0.07, as was more recently suggested by Fan, Thompson, and Wang (1999) and Hu and Bentler (1999); and (d) the Parsimony-Adjusted Comparative Fit Index (PCFI) that takes into account the degrees of freedom available for testing the model.

Missing Data

When working with questionnaire data, it is inevitable to be confronted with missing cases. Given that SEM does not tolerate missing data (i.e., only fully crossed datasets can be used), steps had to be taken to handle missing data. Instead of using pairwise or listwise deletion, we decided to impute data using full information maximum-likelihood estimations. This state-of-the-art estimation results in both consistent and efficient estimates and, therefore, relatively unbiased results (Arbuckle & Wothke, 1999).

RESULTS

The Initial Model

The initial structural model that forms the basis of the further discussions is presented in Figure 1. It was computed for 1993 data that concerned learning English and related to the United States as the primary L2 community (in contrast to the United Kingdom), with Language Choice as the criterion measure. It is important to note here that this initial model is only one of the possible models to explain our data because, from a theoretical statistical perspective, “infinitely many models can fit any data set” (Thompson, 2000, p. 277). Obviously, researchers cannot test all the possible models, which means, however, that one can never claim that a “true model” has been discovered. The most we can say is that a proposed

model seems to describe adequately the data under investigation.

As mentioned above, the proposed hypothetical relationships in Figure 1 have been based on theoretical considerations and earlier analyses of the same data. Let us briefly explain our rationale. The fact that both Integrativeness and Instrumentality are hypothesized to be directly linked to motivated behavior (i.e., Language Choice in this model) does not need much justification because these variables have been the most often researched concepts in the field in this respect. Basing our decision on Clément's theory, we included a further direct path leading to the criterion measure, linking Self-Confidence and Language Choice. Following the Canadian social psychological tradition, we also hypothesized that two antecedents of Integrativeness would be Attitudes toward the L2 Speakers/Community and Cultural Interest, and Cultural Interest was assumed to lead also to Attitudes toward the L2 Speakers/Community. With regard to Instrumentality, it was hypothesized on the basis of our earlier results (Dörnyei & Clément, 2001) that it would be related to Integrativeness; this assumption was in accordance with Gardner's (1985) argument that integrativeness and instrumentality are not mutually exclusive factors but often occur in concert, and the assumption also followed from Dörnyei and Csizér's (2002) theoretical speculation, already mentioned briefly, that integrativeness is associated with the L2 dimension of the ideal self. Because the perceived utilitarian benefit of a language depends on a social agreement of this importance, we postulated that Instrumentality would be influenced by the Milieu. The direct paths from Vitality toward Attitudes toward the L2 Speakers/Community and Instrumentality were suggested by Giles and Byrne's (1982) intergroup model. Finally, Clément's work warranted suggesting the links between Self-Confidence and Milieu, Attitudes toward the L2 Speakers/Community, and Cultural Interest.

The Final Model

After the initial model had been submitted to evaluation using maximum-likelihood estimation, we found that although the hypothetical model provided acceptable model-data fit indexes (e.g., CFI = .988), the following four hypothesized relationships were not significant: Self-Confidence → L2 Choice, Self-Confidence → Attitudes toward the L2 Speakers/Community, Instrumentality → L2 Choice, and Cultural Interest → Integrativeness. These were, thus, removed from the initial

model. Figure 2 contains the schematic representation of the final model with the standardized estimates (for the actual AMOS output, see Appendix B) and Table 1 presents various goodness of fit measures for the model.

As can be seen in Table 1, the chi-square/*df* ratio is well above the usually recommended value of 2 (Byrne, 1989); however, as we pointed out earlier, it is extremely difficult to get an acceptable level of this index if the sample size is large; therefore, we have focused on alternative fit indexes. These indexes all indicate a very good fit; thus we can conclude that the model in Figure 2 provides an adequate representation of our data (i.e., the 1993 English/United States dataset). The model was then also evaluated for (a) all the other languages/L2 communities, (b) the second phase of the survey, and (c) the second criterion measure, Intended Effort. The permutations of these parameters produced a total of 24 solutions, the results of which are tabulated in Appendixes C and D. The goodness of fit measures and the standardized estimates of the various relationships indicate that the proposed final model is stable across the various target languages and the two criterion measures, as well as over time.

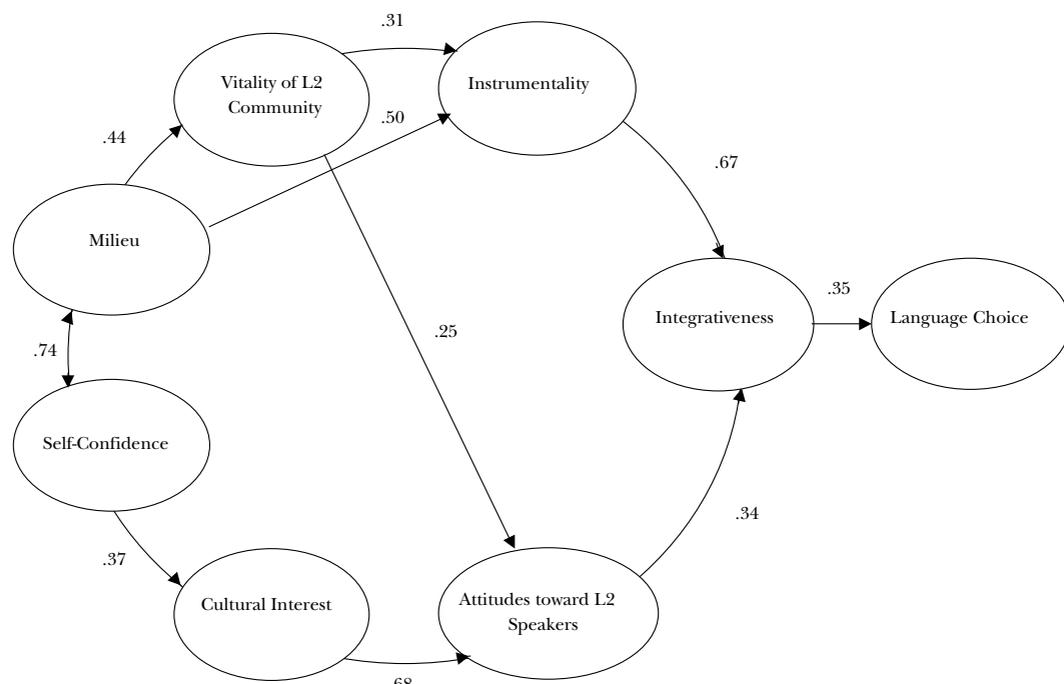
DISCUSSION

Based on the structural equation models explaining Intended Effort and Language Choice, we propose a combined model to describe the internal structure of L2 motivation. This construct is based on the SEM models discussed earlier and displays satisfactory goodness of fit. We would like to reiterate at this point, however, that the range of motives addressed in this study is confined to non-situation-specific, stable, and generalized motives that stem from a succession of the student's past experiences in the social world. That is, situation-specific motives associated with the executive stage of the motivational process (cf. Dörnyei, 2000) are not included in the model. Figure 3 presents the schematic representation of the proposed construct.

The most important feature of the model in Figure 3 is that the criterion measures are directly affected by Integrativeness only. Placing integrativeness in such a core position is in accordance with the importance attached to the concept by Robert Gardner (e.g., 1985, 2001), but the fact that it also subsumes instrumentality warrants explanation. Although instrumentality and integrativeness have been seen by several L2 scholars as antagonistic counterparts, this claim has been strongly rejected by Gardner and by other

FIGURE 2

The Schematic Representation of the Final Model (English/US, 1993) with the Standardized Estimates among the Latent Variables



researchers (see, e.g., Gardner & Tremblay, 1994; Clément et al., 1994). We would like to go one step further and propose that not only can instrumentality complement integrativeness, but it can also feed into it as a primary contributor. However, in order to achieve an accurate understanding of this relationship, we believe that we need to reconsider the content areas of the two concepts, which we will do in a separate section to follow

in this article. We will also discuss there the other antecedent of Integrativeness in our model, Attitudes toward the L2 Speakers/Community, as well as the absence of any direct link between these attitudes and Cultural Interest.

With regard to the antecedents of Instrumentality and Attitudes toward the L2 Speakers/Community, our model corresponds to earlier theorizing. Instrumentality is affected by Milieu both directly and indirectly, in the latter case through Vitality of the L2 Community. This effect makes sense: Pragmatic, utilitarian expectations concerning a L2 are socially constructed and reinforced in a community through social influences (hence the link with Milieu), but they are also dependent on the perceived importance of the L2 (hence the link with Vitality of the L2 Community), which, of course, is again at least partially a function of a social consensus rather than merely of the objective vitality of the L2 community (hence the link between Milieu and Vitality of the L2 Community). Similar socially grounded perceptions explain the direct link between Vitality of the L2 Community and Attitudes toward the L2 Speakers/Community: Members of a L2 community that is seen as

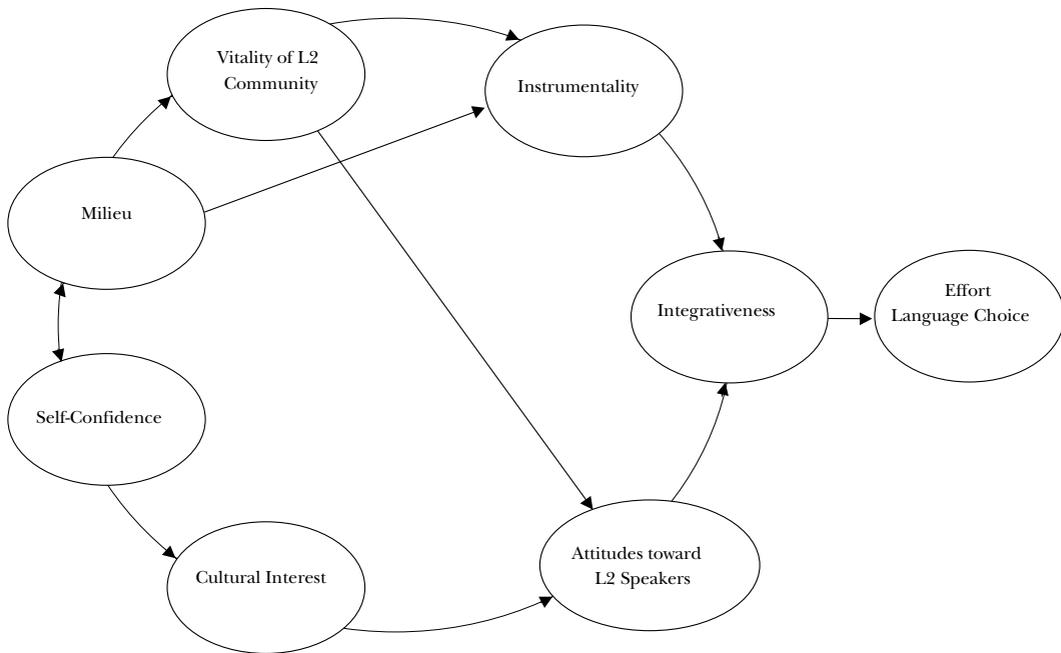
TABLE 1
Selected Fit Measures for the Final Model
(English/US, 1993)

Chi-square/df ratio	19.4
CFI	.988
NFI	.988
NNFI	.986
RMSEA	.062
PCFI	.804

Note. CFI = Comparative Fit Index; NFI = Bentler-Bonett Normed Fit Index; NNFI = Bentler-Bonett Non-Normed Fit Index; RMSEA = Root Mean Square Error of Approximation; PCFI = Parsimony-Adjusted Comparative Fit Index.

FIGURE 3

The Interrelationship of the Motivational Variables and the Criterion Measures



powerful and prestigious are assigned a higher status and, consequently, a more favorable standing than members of L2 communities that lack power or prestige.

Finally, let us look at the position of Self-Confidence in the construct. This variable was measured in our survey in a non-language-specific manner, referring to a basic learner disposition of trust in one's ability to learn a foreign language. That is, it was not linked to specific past learning experiences with specific L2s, and as such, it is partially a function of the beliefs conveyed by one's environment (i.e., if community members generally believe that learning a L2 is doable, this belief will shape every learner's perception). This link to a general belief is reflected by the correlations between Self-Confidence and Milieu. However, the relationship between Self-Confidence and Attitudes toward the L2 Speakers/Community is mediated through Cultural Interest. For learners in a foreign language learning environment that does not offer extensive opportunities for direct contact with the L2 speakers (such as Hungary), the main source of contact with the language will be indirect, through exposure to various L2-specific cultural products. We believe that the extent of the learners' confidence in dealing with the L2 will determine his or her willingness to seek mean-

ingful engagement with these cultural products, which in turn leads to an enhanced interest in them.

A Closer Look at Integrativeness within L2 Motivation

As we have seen, our results point to integrativeness as the key component in the generalized motivational disposition of language learners. Although this finding may make intuitive sense in a multicultural setting, such as Canada where the notion originated, it is not easy to explain this superior position in the context of the present study where not only was any real integration into the L2 community impossible, but even direct communication with members of the L2 community was an unrealistic expectation for most respondents. So what then does the label *Integrativeness* actually include?

Gardner's (2001) traditional definition of *Integrativeness* has been centered around the desire for interaction and "emotional identification with another cultural group" (p. 5). This personal identification aspect of the notion has been confirmed in our research by the fact that Attitudes toward the L2 Speakers/Community have emerged as one of the main antecedents of

integrativeness. Even Cultural Interest—a component that has been traditionally associated with an integrative outlook—exerted its effect on Integrativeness only through the mediation of these more personal attitudes. Curiously, however, the other antecedent of Integrativeness—and thus the counterpart of Attitudes toward the L2 Speakers/Community—was Instrumentality, a component that is associated with utilitarian benefits and goals. Thus, our results indicate that integrativeness is closely associated with two very different variables, “faceless” practical incentives and “personal” attitudes toward members of the L2 community. How can we interpret the content of integrativeness so that it can accommodate both aspects?

The solution, we believe, lies in interpreting *Integrativeness* in a broader sense than has been done before. We have suggested in an earlier article (Dörnyei & Csizér, 2002) that the motivation dimension captured by the term may not be related so much to any actual, or metaphorical, integration into a L2 community as to some more basic identification process within the individual’s self-concept. A useful theoretical framework for examining such an internal identification process has been provided by past research on *possible selves* (e.g., Markus & Nurius, 1986; Oyserman, Bybee, Terry, & Hart-Johnson, 2004; Ruvalo & Markus, 1992; for a review, see Dörnyei, in press). *Possible selves* represent “individuals’ ideas of what they might become, what they would like to become, and what they are afraid of becoming, and thus provide a conceptual link between cognition and motivation” (Markus & Nurius, 1986, p. 954). Motivation, therefore, can be seen as the desire to reduce the perceived discrepancies between the learner’s actual and possible self.

An important further distinction among possible selves was made by Higgins (1987, 1996) when he distinguished between the *ideal self*, which represents the attributes that a person would like to possess (e.g., hopes, aspirations, desires), and the *ought self*, which represents the attributes people believe that they ought to possess (e.g., sense of duty, obligations, responsibilities). Although the ideal and ought selves are similar to each other in that they are both related to the attainment of a desired end-state, Higgins (1998) emphasized that the predilections associated with the two different types of future selves are motivationally distinct from each other: Ideal-self guides have a promotion focus, concerned with hopes, aspirations, advancements, growth, and accomplishments, whereas ought-self guides have a preven-

tion focus, regulating the absence or presence of negative outcomes, concerned with safety, responsibilities, and obligations. This distinction, Higgins added, is in line with the age-old motivational principle that people approach pleasure and avoid pain.

Looking at integrativeness from this self perspective, the concept can be conceived as the L2 representation of one’s ideal self: If one’s ideal self is associated with the mastery of a L2, that is, if the person that we would like to become is proficient in the L2, we can be described as having an integrative disposition. This interpretation also explains why Instrumentality correlated highly with Integrativeness in our study: Because the ideal language self is a cognitive representation of all the incentives associated with L2 mastery, it is naturally also linked to professional competence. To put it broadly, in our idealized image of ourselves we may want to be not only personally agreeable but also professionally successful. We should note here, however, that from a self perspective the term *instrumentality* can be divided into two distinct types: Depending on the extent of internalization of the extrinsic motives that make up instrumentality, the concept can be related either to the ideal self or to the ought self. In the former case, instrumentality will be closely associated with the ideal L2 identity of integrativeness and will therefore contribute significantly to the learner’s effort expenditure. However, noninternalized instrumental motives associated with the ought self, that is, motives generated by a mere sense of duty or a fear of punishment, are more likely to be short-term, without providing the sustained commitment that the successful mastery of a L2 requires. This division is in accordance with Higgins’s (1998) distinction of a promotion versus prevention focus described previously: Instrumental motives with a promotion focus (e.g., to learn English for the sake of professional advancement) are related to the ideal self, whereas instrumental motives with a prevention focus (e.g., study in order not to fail the test) are part of the ought self.

The self interpretation of integrativeness is fully compatible with the direct relationship of the concept with the Attitudes toward Members of the L2 Community (which was the second antecedent of Integrativeness in our model): The actual L2 speakers are the closest parallels to the idealized L2-speaking self, which suggests that the more positive our disposition toward these L2 speakers, the more attractive our idealized L2 self. Or, to turn this equation around, it is difficult to imagine

that one's ideal self would often be associated with competence in a L2 that is spoken by a community we despise. Thus, instrumentality and the attitudes toward the L2 speakers concern two complementary aspects of the ideal language self: its general agreeableness and its achievement-related effectiveness/competence. Within this framework what has traditionally been called *integrativeness* refers to the overall driving force to approximate this idealized vision as much as possible.

We believe that, based on these considerations, the term *integrativeness* does not do justice to the broader interpretation of the concept described here; rather, we suggest that it be relabeled as the *Ideal L2 Self*. As noted earlier, this conception does not conflict with Gardner's original notion of integrativeness related to an identification process, yet it provides a broader frame of reference. Integrativeness seen as the Ideal L2 Self can be used to explain the motivational set-up in diverse learning contexts, even if they offer little or no contact with L2 speakers, and it would also be suitable for studying the motivational basis of language globalization: World English is turning into an increasingly international language, rapidly losing its national cultural base and becoming associated with a global culture (cf. Seidlhofer, 2001; Widdowson, 1994, 1997).

Because our data indicate that this Ideal L2 Self is at the heart of motivated L2 learning behaviors, we may redefine L2 motivation as the desire to achieve one's ideal language self by reducing the discrepancy between one's actual and ideal selves. It also follows from this argument that the strength of this motivation will be dependent on the learner's ability to develop a salient vision of the self as an agreeable, competent, and successful L2 user. For a more detailed analysis of L2 motivation from a self perspective, see Dörnyei (in press), where this approach is further elaborated into a theory describing the L2 Motivational Self System.

CONCLUSION

The structural model presented in this article offers some important insights into how the generalized, non-situation-specific dimension of the L2 motivation complex is internally structured, and how the various motives are related to learning behavioral measures. Our study confirmed that Robert Gardner's original concept of *integrativeness* is a central factor in the L2 motivation construct, because most of the impact of the other motivational variables was mediated through the direct and strong link between integrativeness and

the criterion measures. However, given our results and a review of the literature, we have suggested that in order to be able to achieve a better explanatory power for the concept of *Integrativeness* (e.g., to be able to interpret the central position of the variable in diverse contexts, or with regard to international languages such as English), we need to broaden the content domain of the term. Our proposed interpretation equates integrativeness with the Ideal L2 Self, referring to the L2-specific dimension of the learner's ideal self. Although this interpretation is conceptually different from Gardner's notion, it is in accordance with Gardner's original emphasis on the identification aspect of the concept.

With regard to possible future research directions, one obvious line would be looking into questions related to the self in more detail. Four unresolved issues that are particularly relevant to L2 studies are: (a) How do the effects of the ideal and ought selves differ? (b) How is the desire to reduce the discrepancy between the actual and ideal self translated into action? (c) How can we promote or "prime" the ideal L2 self, and (d) How do processes known from the self literature (such as activating or reinforcing possible selves) relate to traditionally conceived motivational practices?

LIMITATIONS OF THE STUDY

The study presented here is particularly large-scale, but we need to point out that it concerns only 13- to 14-year-old schoolchildren in Hungary, who primarily learned foreign languages as school subjects. It is entirely possible that different age groups and different learning environments would produce somewhat differing structural patterns, although it was reassuring to see that the proposed construct was relatively stable across languages and over time. A second limiting factor in our study was, as pointed out earlier, that the selection of the various motivational variables examined was confined to relatively stable and generalized motives, and, due to the nature of the survey, no attempt was made to cover more dynamic and situation-specific factors. A final limitation of the study is related to the general issue of using self-report measures. Although questionnaire theory has developed effective ways of improving the psychometric properties of survey data, such data have inherent weaknesses (for an overview, see Dörnyei, 2003b; Krosnick, 1999). This limitation is augmented in this study by two further shortcomings: the relatively short scales (due to practical considerations) and the fact that the criterion

variables *Language Choice* and *Intended Effort* were not measured objectively but only through self-report. However, the study was based on a well-established research tradition, and most of the items in the instrument had proved to work in previous research conducted in similar environments. If we also consider the large sample size and the fact that the proposed model showed stability across target languages and time, we believe it is fair to conclude that the results of this study are valid.

NOTES

¹ Hungary is one of the rather rare examples of a national context in which there are no significant ethnolinguistic minorities. According to the official figures of the Hungarian Central Statistical Office (Központi Statisztikai Hivatal, 1992), in 1990, 97.8% of the population were ethnic Hungarians, and the proportion with Hungarian as their mother tongue was even higher (98.5%).

² The investigated sample represented 3% of the total Grade 8 learner population in both 1993 and 1999. The participating learners had been involved in learning a L2 for at least 4 years, since Grade 5. The table below presents the student percentages learning different languages in the investigated sample. These figures reflect the national trends. (The total percentages exceed 100% because some students were learning more than one language.)

Student Percentages Learning Different Languages in the Sample

Languages	Students (%)	
	1993 (<i>N</i> = 4,765)	1999 (<i>N</i> = 3,828)
Russian	52.8	0
English	26.5	53.5
German	24.0	49.6
Other	4.4	4.8
Total	107.7	107.9

³ The following table provides descriptive background information about the investigated learners' language choices. In the questionnaires, the students were asked to name three languages they were intending to learn in the next school year. The preference scores in the table were obtained in the following way: If a language was marked as the student's first choice, it was assigned 3 points, if it was the second choice, 2 points, and if it was the third choice, 1 point. Nonranked languages received a score of 0. Because of the different sample sizes, the raw scores obtained from the two phases of the survey are not directly comparable; therefore the 1999 scores have been adjusted to present the score that would have been obtained if the sample sizes had been equal.

Language Choice Scores

	Score	
	1993	1999
English	11,352	11,306
German	8,466	8,012
French	3,921	4,056
Italian	2,485	2,613
Russian	684	451
Spanish	369	608
Latin	229	295
Japanese	94	108
Chinese	49	56
Portuguese	21	26
Dutch	17	20
Greek	15	42
Arabic	9	17
Romanian	9	15
Slovakian	0	16
Romany	0	12
Croatian	0	12

REFERENCES

- Arbuckle, L. J., & Wothke, W. (1999). *Amos 4.0 user's guide*. Chicago: SmallWaters Corporation.
- Belmechri, F., & Hummel, K. (1998). Orientations and motivation in the acquisition of English as a second language and high school students in Quebec City. *Language Learning*, 48, 219–244.
- Bentler, P. M., & Bonett, D. G. (1980). Significant tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88, 588–606.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural models* (pp. 136–162). Newbury Park, CA: Sage.
- Byrne, B. M. (1989). *A primer of LISREL: Basic applications and programming for confirmatory factor analytic model*. New York: Springer-Verlag.
- Byrne, B. M. (2001). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. Mahwah, NJ: Erlbaum.
- Clément, R. (1980). Ethnicity, contact and communicative competence in a second language. In H. M. Giles, W. P. Robinson, & P. M. Smith (Eds.), *Language: Social psychological perspectives* (pp. 147–154). Oxford, UK: Pergamon.
- Clément, R. (1986). Second language proficiency and acculturation: An investigation of the effects of language status and individual characteristics. *Journal of Language and Social Psychology*, 5, 271–290.
- Clément, R., Dörnyei, Z., & Noels, K. (1994). Motivation, self-confidence and group cohesion in the foreign language classroom. *Language Learning*, 44, 417–448.

- Clément, R., Gardner, R. C., & Smythe, P. C. (1977). Motivational variables in second language acquisition: A study of francophones learning English. *Canadian Journal of Behavioral Science*, 9, 123–133.
- Clément, R., & Kruidenier, G. B. (1983). Orientations on second language acquisition: The effects of ethnicity, milieu and their target language on their emergence. *Language Learning*, 33, 273–291.
- Clément, R., & Kruidenier, G. B. (1985). Aptitude, attitude and motivation in second language proficiency: A test of Clément's model. *Journal of Language and Social Psychology*, 4, 21–37.
- Colletta, S. P., Clément, R., & Edwards, H. P. (1983). *Community and parental influence: Effects on student motivation and French second language proficiency*. Québec, Canada: International Center for Research on Bilingualism.
- Dörnyei, Z. (1990). Conceptualizing motivation in foreign language learning. *Language Learning*, 40, 46–78.
- Dörnyei, Z. (1994a). Motivation and motivating in the foreign language classroom. *Modern Language Journal*, 78, 273–284.
- Dörnyei, Z. (1994b). Understanding L2 motivation: On with the challenge! *Modern Language Journal*, 78, 515–523.
- Dörnyei, Z. (2000). Motivation in action: Toward a process-oriented conceptualisation of student motivation. *British Journal of Educational Psychology*, 70, 519–538.
- Dörnyei, Z. (2001). *Teaching and researching motivation*. London: Longman.
- Dörnyei, Z. (2002). The motivational basis of language learning tasks. In Z. Dörnyei & P. Skehan (Eds.), *Individual differences in second language acquisition* (pp. 137–158). Amsterdam: John Benjamins.
- Dörnyei, Z. (2003a). Attitudes, orientations, and motivations in language learning: Advances in theory, research, and applications. In Z. Dörnyei (Ed.), *Attitudes, orientations, and motivations in language learning: Advances in theory, research, and applications* (pp. 3–32). Oxford, UK: Blackwell.
- Dörnyei, Z. (2003b). *Questionnaires in second language research: Construction, administration, and processing*. Mahwah, NJ: Erlbaum.
- Dörnyei, Z. (in press). *The psychology of the language learner: Individual differences in second language acquisition*. Mahwah, NJ: Erlbaum.
- Dörnyei, Z., & Clément, R. (2001). Motivational characteristics of learning different target languages: Results of a nationwide survey. In Z. Dörnyei & R. Schmidt (Eds.), *Motivation and second language acquisition* (Tech. Rep. No. 23, pp. 391–424). Honolulu, HI: The University of Hawai'i, Second Language Teaching and Curriculum Center.
- Dörnyei, Z., & Csizér, K. (2002). Motivational dynamics in second language acquisition: Results of a longitudinal nationwide survey. *Applied Linguistics*, 23, 421–462.
- Dörnyei, Z., & Kormos, J. (2000). The role of individual and social variables in oral task performance. *Language Teaching Research*, 4, 275–300.
- Fan, X., Thompson, B., & Wang, L. (1999). The effects of sample size, estimation methods, and model specification on SEM fit indices. *Structural Equation Modeling*, 6, 56–83.
- Gardner, R. C. (1985). *Social psychology and second language learning: The role of attitudes and motivation*. London: Edward Arnold.
- Gardner, R. C. (2001). Integrative motivation and second language acquisition. In Z. Dörnyei & R. Schmidt (Eds.), *Motivation and second language acquisition* (Tech. Rep. No. 23, pp. 1–19). Honolulu, HI: University of Hawai'i, Second Language Teaching and Curriculum Center.
- Gardner, R. C., Day, J. B., & MacIntyre, P. D. (1992). Integrative motivation, induced anxiety, and language learning in a controlled environment. *Studies in Second Language Learning*, 14, 197–214.
- Gardner, R. C., Lalonde, R. N., & Moorcroft, R. (1985). The role of attitudes and motivation in second language learning: Correlational and experimental considerations. *Language Learning*, 35, 207–227.
- Gardner, R. C., & Lambert, W. E. (1959). Motivational variables in second language acquisition. *Canadian Journal of Psychology*, 13, 266–272.
- Gardner, R. C., & Lambert, W. E. (1972). *Attitudes and motivation in second language learning*. Rowley, MA: Newbury House.
- Gardner, R. C., & MacIntyre, P. D. (1991). An instrumental motivation language study: Who says it isn't effective? *Studies in Second Language Acquisition*, 13, 57–72.
- Gardner, R. C., Masgoret, A.-M., & Tremblay, P. F. (1999). Home background characteristics and second language learning. *Journal of Language and Social Psychology*, 18, 419–437.
- Gardner, R. C., & Tremblay, P. F. (1994). On motivation, research agendas and theoretical frameworks. *Modern Language Journal*, 78, 359–368.
- Gardner, R. C., Tremblay, P. F., & Masgoret, A.-M. (1997). Toward a full model of second language learning: An empirical investigation. *Modern Language Journal*, 81, 344–362.
- Giles, H., & Byrne, J. L. (1982). An intergroup approach to second language acquisition. *Journal of Multilingual and Multicultural Development*, 1, 17–40.
- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, 94, 319–340.
- Higgins, E. T. (1996). The 'self-digest': Self-knowledge serving self-regulatory functions. *Journal of Personality and Social Psychology*, 71, 1062–1083.
- Higgins, E. T. (1998). Promotion and prevention: Regulatory focus as a motivational principle. *Advances in Experimental Social Psychology*, 30, 1–46.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1–55.
- Jöreskog, K. G. (1969). A general approach to confirmatory maximum likelihood factor analysis. *Psychometrika*, 34, 183–202.
- Keeves, J. P. (1994). Longitudinal research methods. In T. Husén & T. N. Postlethwaite (Eds.), *The*

- international encyclopedia of education* (pp. 3512–3524). Oxford, UK: Pergamon.
- Központi Statisztikai Hivatal [Central Statistical Office]. (1992). *Az 1990. évi népszámlálás; 3. kötet; összefoglaló adatok* [The 1990 census: Vol. 3. Summary data]. Budapest, Hungary: Author.
- Kraemer, R. (1993). Social psychological factors related to the study of Arabic among Israeli high school students: A test of Gardner's socioeducational model. *Studies in Second Language Acquisition*, 15, 83–105.
- Krosnick, J. A. (1999). Survey research. *Annual Review of Psychology*, 50, 537–567.
- Laine, E. J. (1995). *Learning second national languages: A research report*. Frankfurt, Germany: Peter Lang.
- Lambert, W. E. (1980). The social psychology of language: A perspective for the 1980s. In H. Giles, W. P. Robinson, & P. M. Smith (Eds.), *Language: Social psychological perspectives* (pp. 415–424). Oxford, UK: Pergamon.
- Lukmani, Y. M. (1972). Motivation to learn and language proficiency. *Language Learning*, 22, 261–273.
- MacIntyre, P. D., MacMaster, K., & Baker, S. C. (2001). The convergence of multiple models of motivation for second language learning: Gardner, Pintrich, Kuhl, and McCroskey. In Z. Dörnyei & R. Schmidt (Eds.), *Motivation and second language acquisition* (Tech. Rep. No. 23, pp. 461–492). Honolulu, HI: The University of Hawai'i, Second Language Teaching and Curriculum Center.
- Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist*, 41, 954–969.
- Menard, S. (1991). *Longitudinal research*. Newbury Park, CA: Sage.
- Oyserman, D., Bybee, D., Terry, K., & Hart-Johnson, T. (2004). Possible selves as roadmaps. *Journal of Research in Personality*, 38, 130–149.
- Ruvolo, A. P., & Markus, H. R. (1992). Possible selves and performance: The power of self-relevant imagery. *Social Cognition*, 10, 95–124.
- Schumann, H. J. (1986). Research on the acculturation model for second language acquisition. *Journal of Multilingual and Multicultural Development*, 7, 379–392.
- Seidlhofer, B. (2001). Closing a conceptual gap: The case for a description of English as a lingua franca. *International Journal of Applied Linguistics*, 11, 133–157.
- Shaaban, K., & Ghaith, G. M. (2000). Effect of gender, proficiency level, first foreign language, and university major on students' motivation to learn English as a foreign language. *Foreign Language Annals*, 33, 632–644.
- Spolsky, B. (1969). Attitudinal aspects of second language learning. *Language Learning*, 19, 271–283.
- Spolsky, B. (2000). Language motivation revisited. *Applied Linguistics*, 21, 157–169.
- Thompson, B. (2000). Ten commandments of structural equation modeling. In L. G. Grimm & P. R. Yarnold (Eds.), *Reading and understanding more multivariate statistics* (pp. 261–283). Washington, DC: American Psychological Association.
- Tremblay, P. F., & Gardner, R. C. (1995). Expanding the motivation construct in language learning. *Modern Language Journal*, 79, 505–518.
- Warden, C., & Lin, H. J. (2000). Existence of integrative motivation in Asian EFL setting. *Foreign Language Annals*, 33, 535–547.
- Wen, X. (1997). Motivation and language learning with students of Chinese. *Foreign Language Annals*, 30, 235–251.
- Widdowson, H. G. (1994). The ownership of English. *TESOL Quarterly*, 28, 377–389.
- Widdowson, H. G. (1997). EIL, ESL, EFL: Global issues and local interests. *World Englishes*, 16, 135–146.
- Yamashiro, A. D., & McLaughlin, J. (2000). Relationships among attitudes, motivation, anxiety, and English language proficiency in Japanese college students. In S. Cornwell & P. Robinson (Eds.), *Individual differences in foreign language learning: Effects of aptitude, intelligence, and motivation* (pp. 9–26). Tokyo: Aoyama Gakuin University.
- Yashima, T., Zenuk-Nishide, L., & Shimizu, K. (2004). The influence of attitudes and affect on willingness to communicate and second language communication. *Language Learning*, 54, 119–152.

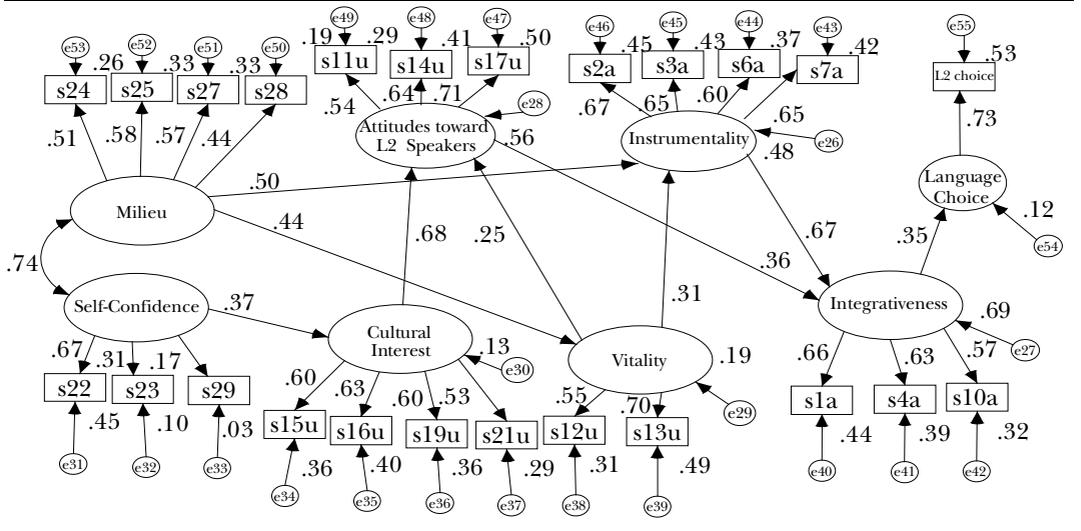
APPENDIX A

Pattern Matrix of Factor Analysis of the Attitudinal/Motivational Items for English/UK
(Maximum-Likelihood Extraction, Oblique Rotation)

ENGLISH (UK) Variables	1993 Factor					1999 Factor				
	1	2	3	4	5	1	2	3	4	5
14. Meet L2 Speakers	.78	.04	-.01	.02	-.02	.64	.00	.04	-.02	.13
17. Like L2 Speakers	.40	-.05	.02	.31	.14	.65	.07	.00	.11	.01
11. Travel to Country	.34	.00	.22	.01	.13	.35	-.04	.24	.06	.12
3. L2 Important in World	.01	.66	.02	-.00	-.05	.04	.72	-.01	-.03	-.09
2. Become Knowledgeable	-.02	.61	-.03	.04	.05	-.04	.66	-.01	.06	.03
6. Useful for Travel	.01	.46	.09	.00	.06	-.01	.57	.01	-.03	.08
7. Useful for Career	.10	.37	-.00	-.01	.24	-.01	.50	.07	.01	.15
12. Country: Developed	.02	-.01	.72	-.02	.05	-.05	-.01	.84	-.03	.01
13. Country: Important	.07	.11	.44	.13	-.08	.09	.07	.50	.08	-.04
16. Like TV Programs	-.02	.01	-.04	.72	.00	.00	.02	-.01	.75	.03
15. Like Films	-.03	-.04	.05	.61	-.03	-.04	-.03	.02	.74	.01
19. Like Magazines	.13	.02	.01	.48	.03	.33	.04	.03	.30	-.01
21. Like Pop Music	-.03	.03	.02	.46	.02	.18	.04	.05	.35	-.01
10. Similar to L2 Speakers	.00	-.06	.04	.03	.64	.07	.00	-.01	-.02	.58
4. Get to Know the Culture	-.02	.15	.01	.05	.50	-.08	.03	.02	.06	.72
1. Like L2	.10	.15	-.04	.00	.47	.10	.07	-.02	.00	.56

APPENDIX B

The Full SEM Model of the Relationships between Language-Specific, Country-Specific, and Non-Language-Specific Variables with Language Choice (Standardized Parameter Estimates, English/US, 1993)



APPENDIX C

Typically Significant Relationships in the Structural Models across Target Languages and over Time, with Language Choice (Standardized Estimates Based on Separate Group Analyses and Model-Data Fit Measures)

	English/UK		English/US		German		French		Italian		Russian	
	1993	1999	1993	1999	1993	1999	1993	1999	1993	1999	1993	1999
Milieu ↔ Self-Confidence	.84	.76	.74	.75	.67	.63	.64	.62	.63	.63	.60	.59
Milieu → Vitality	.52	.49	.44	.49	.39	.33	.43	.35	.14	.23	.30	.01
Milieu → Instrumentality	.48	.54	.50	.51	.25	.22	.05	.11	.06	.07	.05	.09
Self-Confidence → Cultural Interest	.54	.53	.37	.47	.26	.29	.21	.27	.20	.27	.001	.11
Cultural Interest → Attitude toward L2 Speakers	.64	.68	.68	.75	.68	.66	.62	.62	.67	.59	.57	.60
Vitality → Attitude toward L2 Speakers	.40	.42	.25	.21	.35	.32	.51	.48	.40	.55	.71	.59
Vitality → Instrumentality	.30	.19	.31	.25	.46	.45	.71	.55	.66	.65	.74	.68
Attitude toward L2 Speakers → Integrativeness	.36	.34	.36	.34	.56	.58	.64	.59	.59	.51	.36	.40
Instrumentality → Integrativeness	.61	.62	.67	.65	.44	.52	.40	.49	.50	.57	.57	.67
Integrativeness → L2 Choice	.35	.30	.35	.30	.45	.44	.33	.34	.31	.33	.12	.11
Selected Fit Measures												
chi sq/df	19.7	14.5	19.4	14.0	19.2	14.7	21.8	17.1	23.9	20.5	36.5	38.1
NFI	.987	.988	.988	.989	.986	.986	.982	.982	.980	.978	.961	.949
NNFI	.984	.986	.986	.988	.984	.984	.979	.979	.976	.974	.953	.939
CFI	.987	.989	.988	.990	.987	.987	.983	.983	.981	.979	.962	.950
PCFI	.803	.804	.804	.805	.803	.803	.800	.800	.798	.796	.782	.773
RMSEA	.063	.059	.062	.058	.062	.060	.066	.065	.069	.071	.086	.099

APPENDIX D

Typically Significant Relationships in the Structural Models across Target Languages and over Time, with Intended Effort (Standardized Estimates Based on Separate Group Analyses and Model-Data Fit Measures)

	English/UK		English/US		German		French		Italian		Russian	
	1993	1999	1993	1999	1993	1999	1993	1999	1993	1999	1993	1999
Milieu ↔ Self-Confidence	.85	.76	.74	.76	.68	.63	.65	.62	.63	.62	.60	.59
Milieu → Vitality	.52	.49	.44	.49	.39	.33	.43	.35	.14	.24	.30	.01
Milieu → Instrumentality	.49	.54	.50	.52	.25	.23	-.05	.11	.07	.07	.05	.09
Self-Confidence → Cultural Interest	.54	.53	.37	.47	.26	.29	.21	.28	.20	.27	.001	.11
Cultural Interest → Attitude toward L2 Speakers	.65	.68	.68	.75	.68	.66	.62	.62	.67	.60	.57	.60
Vitality → Attitude toward L2 Speakers	.40	.42	.25	.21	.35	.32	.51	.48	.40	.55	.71	.59
Vitality → Instrumentality	.30	.18	.30	.25	.46	.44	.71	.54	.66	.64	.74	.68
Attitude toward L2 Speakers → Integrativeness	.36	.34	.35	.33	.55	.57	.63	.58	.58	.51	.35	.39
Instrumentality → Integrativeness	.62	.63	.68	.66	.46	.53	.42	.50	.51	.57	.68	.68
Integrativeness → Effort	.53	.55	.52	.55	.58	.63	.60	.65	.62	.68	.57	.54
Selected Fit Measures												
chi sq/df	23.2	21.0	22.9	20.5	22.4	18.8	21.5	17.6	21.4	19.4	21.0	19.5
NFI	.984	.983	.986	.984	.984	.983	.983	.982	.983	.980	.978	.975
NNFI	.982	.980	.983	.982	.981	.980	.980	.979	.980	.977	.975	.971
CFI	.985	.983	.986	.985	.985	.984	.984	.983	.983	.981	.979	.979
PCFI	.801	.800	.802	.801	.801	.800	.800	.800	.800	.798	.797	.794
RMSEA	.068	.072	.068	.071	.067	.068	.066	.066	.065	.069	.065	.070

Forthcoming in *The Modern Language Journal*

James N. Davis. "Power, Politics, and Pecking Order: Technological Innovation as a Site of Collaboration, Resistance, and Accommodation"

Paul Stapleton. "Using the Web as a Research Source: Implications for L2 Academic Writing"

Paige D. Ware & Claire Kramsch. "Toward an Intercultural Stance: Teaching German and English through Telecollaboration"

Hussein Elkhafaifi. "Listening Comprehension and Anxiety in the Arabic Language Classroom"

Tine Greidanus, Bianca Beks, & Richard Wakely. "Testing the Development of French Word Knowledge by Advanced Dutch- and English-Speaking Learners and Native Speakers"

CMLR Exchange Article: Grit Liebscher & Jennifer Dailey-O'Cain. "Learner Code-Switching in the Content-Based Foreign Language Classroom" (reprinted from *The Canadian Modern Language Review*, 60, 4, 2004, pp. 501–525)

Perspectives

The Issue: "The 'No Child Left Behind' Act and Teaching and Learning Languages in U.S. Schools" by Marcia Harmon Rosenbusch. Commentaries by Margaret Bussone, Donald Freeman & Kathryn Riley, Eileen W. Glisan, Lisa Cox, Christine Brown, and Heidi Byrnes.