

Motivation, Self-Confidence, and Group Cohesion in the Foreign Language Classroom

Richard Clément
University of Ottawa

Zoltán Dörnyei
Eötvös University

Kimberly A. Noels
University of Ottawa

Defining the motivational basis of second and foreign language acquisition has been at the center of much research and controversy for many years. The present study applied social psychological constructs to the acquisition of English in the unicultural Hungarian setting. A total of 301 Grade 11 students from the region of Budapest answered a questionnaire assessing their attitude, anxiety, and motivation toward learning English, as well as their perception of classroom atmosphere and cohesion. In addition, their teachers rated each of the students on proficiency and a number of classroom behaviors and evaluated the relative cohesion of each class group. Factor

This research was supported in part by a grant from the Social Sciences and Humanities Research Council of Canada to R. Clément and by a grant from the Hungarian Scientific Foundation to Z. Dörnyei. We express our gratitude to the teachers and students of the Budapest schools who participated in this study, to Emese Koppány, Elena Mihai, Nelli Szakács, and Ildikó Szigeti for their assistance in collecting and analyzing the data, and to Peter MacIntyre for his comments on a previous version of this paper.

Correspondence regarding this article should be addressed to Richard Clément, School of Psychology, University of Ottawa, Ottawa, Ontario, K1N 6N5, Canada. E-mail: rxch@acadvm1.uottawa.ca

and correlational analyses of the results revealed that xenophilic ($M=4.22$ on a 1–6 scale), sociocultural ($M=3.96$), instrumental ($M=3.78$), and media-use reasons ($M=3.79$) were most strongly endorsed by the students whereas an identification orientation ($M=1.81$) was rejected. Factor analysis of the attitude, anxiety, and motivation scales confirmed the existence of attitude-based (integrative motive) and self-confidence motivational subprocesses and revealed the presence of a relatively independent classroom-based subprocess, characterized by classroom cohesion and evaluation. Correlational analyses of these clusters further revealed that, while all subprocesses were associated with achievement, self-confidence and anxiety showed no relationship to classroom atmosphere. We discuss these findings in the context of current theories of second and foreign language acquisition and with reference to their applied implications.

At the beginning of the 1990s, two reviews of the literature on the role of motivation in second language (L2) acquisition (Crookes & Schmidt, 1991; Skehan, 1991) called for a new approach that would be more pertinent to L2 teaching. In Crookes and Schmidt's concluding words, "we seek to encourage a program of research that will develop from, and be congruent with the concept of motivation that teachers are convinced are critical for SL success" (p. 502). Increasing the classroom relevance of motivation research is certainly a worthwhile objective; at the same time, we contend that achieving such a goal entails an awareness of the social correlates of pedagogical interventions.

The following study therefore seeks to reiterate the pertinence of a social psychological perspective to L2 learning (Gardner, 1985; Gardner & Clément, 1990) within the isolated context of the foreign language classroom in a unicultural context. Such a context can be found in Hungary, where in 1990, according to the official figures of the Hungarian Central Statistical Office (Kozponti Statisztikai Hivatal, 1992), 97.8% of the population were ethnic Hungarians and the proportion with Hungarian as their mother tongue was even higher (98.5%). Moreover, less than 9% of the

population claimed to speak any foreign language. Thus, person-to-person contact with native Anglophones was minimal and many students saw English as an ordinary school subject. At the same time, one must recognize that contact with English language and culture through the media and through the use of high-technology devices such as computers was significant and that English was widely recognized as the *lingua franca* of international communication.

A Social Psychological Perspective

The social psychological perspective applied to this particular context borrows from two research traditions. First, following the work of Gardner and Lambert (1972; Gardner, 1985), it considers the role of orientations and attitudes as affective correlates of L2 behavior and proficiency. Second, borrowing from Clément (1980, 1986), it assesses the role of linguistic self-confidence, including language anxiety. As a third and novel element, our study integrates aspects of group dynamics as applied to the classroom setting.

Orientations and Motivations

Following studies conducted in the United States and Canada, Gardner and Lambert (1972) suggested that motivation to learn a second language was grounded in positive attitudes toward the L2 community and in a desire to communicate with and become similar to valued members of that community. This latter desire became known as an integrative orientation, whereas attitudes became the cornerstone of the integrative motive. Although interrelated as socially bound processes, these two aspects were the objects of relatively independent research efforts (cf. Gardner & Clément, 1990).

As well as the integrative orientation, Gardner and Lambert (1972) defined an instrumental orientation associated with a desire to learn the L2 for pragmatic gains. Although the original

formulation and measurements may have looked at the two orientations as opposite ends of a continuum, researchers found (cf. Clément, Gardner, & Smythe, 1977; Gardner & Smythe, 1975) that both orientations correlated positively and, furthermore, related positively to a variety of other attitudinal measures. Thus, in spite of continued attempts to present them as antithetical (e.g., Soh, 1987), both orientations were shown very early to be positively related, affectively loaded goals that can sustain motivation.

Nevertheless, studies have observed much variation in the relationship between the two orientations and indices of motivation and L2 achievement (e.g., Gardner & MacIntyre, 1991; Samimy & Tabuse, 1992). Prompted by the controversy that developed around the usefulness of these constructs (Gardner 1980; Oller & Perkins, 1978), Clément and Kruidenier (1983) investigated the endorsement of reasons for learning second and foreign languages by various groups of learners differing in the degree of multiculturalism of their immediate environments. Their results, and those obtained in other similar studies (e.g., Moïse, Clément, & Noels, 1990; Noels & Clément, 1989), demonstrated that one cannot simply assume cross-cultural pervasiveness of the integrative and instrumental orientations (cf. Skehan, 1991). L2 learning goals, traditionally lumped together in a general "affective-identification" kind of integrative tendency, proved to break up into different orientation clusters, the definition of which varied depending upon the sociocultural setting in which the data were gathered (e.g., Fahmy & Bilton, 1992; Mihaljevic', 1990).

Most of the groups studied with Clément and Kruidenier's (1983) approach had at least a minimal amount of extracurricular contact with members of the target language group. In a further extension of Clément and Kruidenier's approach, Dörnyei (1990a) contended that "foreign language learning" in a classroom setting could not logically involve attitudes toward the L2 community, because learners have little or no contact with members of the L2 group. Hungarians would learn English as a *lingua franca* to link them with the rest of the world, facilitating trade and travel and conveying international knowledge and cultural products. Dörnyei

hypothesized that, in such contexts, the instrumental orientation may acquire a special importance, and the individual's L2-related affectively based motivation would be determined by a more general disposition toward language learning and the values the L2 conveys rather than ethnocultural attitudes toward the L2 community.

Dörnyei's (1990a) results, although generally supporting Clément and Kruidenier's (1983; see also Gardner, Day, & MacIntyre, 1992), showed that instrumental goals indeed played a prominent role in the learning of English up to an intermediate level. However, learners whose interest in learning English included sociocultural and nonprofessional reasons demonstrated the highest degree of desired proficiency; that is, they wished to master the English language rather than merely to acquire a minimal working knowledge of it. Furthermore, the desire to spend an extended period of time abroad was related to both instrumental and sociocultural orientations. More socioculturally based orientations, therefore, also appear to be important for motivation and, together with the instrumental orientation, are related to a desire for contact with Anglophones.

Thus, even in a context where foreign language learning is largely an academic matter, student motivation remains socially-grounded. In Dörnyei's (1990a) study, the students were adult learners who had voluntarily registered in and paid for English courses. Whether the orientation pattern obtained by Dörnyei—particularly the prominence of the instrumental orientation—was a function of this specific sample or of the more general foreign language learning environment remains to be seen. This is the first goal of our study.

An Integrative Motive

Dörnyei's (1990b) results concerning orientations could be interpreted to show the presence of a strong affective component because of the relationship to a desire for contact with foreigners and Anglophone culture. Gardner (1985; Gardner & Clément,

1990; also Skehan, 1989) summarized studies that underline the motivational effects of positive regard toward the L2 community (known as the *integrative motive*) not only on L2 achievement but also on a family of language-related phenomena: persistence in L2 study, level of parental encouragement, L2 maintenance, classroom participation and seeking contact with members of the L2 group. In fact, a follow-up to Dörnyei's initial study (Dörnyei, 1990b) showed that intended contact with target language speakers was significantly related to affectively based motivation. Neither study (i.e., Dörnyei, 1990a, 1990b), however, used a full-fledged attitudinal test battery of the type used in the North American studies. Identifying the components of and assessing the importance of the integrative motive for L2 proficiency in the present context is, therefore, the second goal of this study.

Self-Confidence and Anxiety

The above discussion presumes important contextual variations in the structure and importance of affective predispositions. Although not the only approach concerned with contextual effects (cf. Gardner, 1985, Ch. 8), Clément's model of second language acquisition may be particularly relevant to the present situation (Clément, 1978, 1980, 1984, 1986; Clément & Kruidenier, 1985). Following Gardner and Lambert (1972), Clément argued that attitudinal factors were an important motivational basis for L2 acquisition and behavior. Upon noting the results obtained with groups of students who were in more direct contact with the L2 group, however, he suggested that in such contexts a self-confidence process becomes the most important determinant of attitude and effort expended toward L2 learning.

In a multiethnic context, positive attitudes would orient the individual to seek contact with members of the L2 community. To the extent that this contact is relatively frequent and pleasant, self-confidence in using the L2, operationally defined in terms of low anxious affect and high self-perceptions of L2 competence¹ would develop. This being the case, the availability of extracur-

ricular contact provides the conditions for the development of a motivational process which is relatively independent of the attitudinal process delineated in previous research and theorizing. Because the Hungarian context is for the most part unilingual and unicultural, this self-confidence process would not be expected.

However, this prediction could be erroneous for two reasons. First, interethnic contact can also be made in a more remote manner, through the media or through travel outside the country. Second, even though self-confidence was related to qualitative and quantitative aspects of interethnic contact (Clément, 1986; Clément & Kruidenier, 1985; Labrie & Clément, 1986), research and theory have suggested that anxiety and self-perceptions of L2 competence may be determinants of L2 achievement even in contexts where opportunity to use the L2 with members of the L2 community is lacking. Horwitz, Horwitz, and Cope (1986) suggested, for example, that certain types of classroom activities may promote language anxiety, particularly those that expose the students to negative evaluations by the teacher or by peers. (See also Foss & Reitzel, 1988; Horwitz, 1986; Horwitz & Young, 1991; MacIntyre & Gardner, 1991a, 1991b; Phillips, 1992.) Similarly, Bailey's (1983) analysis of the diaries of L2 learners linked the type of rapport established with the teacher and other students to their experience of anxiety in the L2 classroom. (See also Cohen & Norst, 1989; Price, 1991; Young, 1986.) It is therefore possible that anxiety and, by extension, self-confidence in the L2 classroom are intimately linked to classroom processes.

The Role of Classroom Dynamics

The above discussion highlights the potential relevance of classroom-related factors, and research has indeed confirmed that situation-specific factors significantly contribute to L2 motivation in a foreign-language classroom context (Julkunen, 1989). But how can the complexity of the L2 classroom environment be operationalized for inclusion into a research paradigm; that is, on which classroom processes and variables should we focus? Gardner's

(1985) socioeducational model and his Attitude/Motivation Test Battery included the evaluation of the L2 teacher and the L2 course as key components of L2 instruction. Given Horwitz et al.'s (1986) results on the genesis of language anxiety, the social processes and dynamics of the classroom probably play an important motivational role.

Group dynamics has been a core area of social psychology for a number of years. (For a review, see Brown, 1988; Forsyth, 1990; Shaw, 1981.) It concerns the scientific analysis of the dynamics of small group behavior, focusing on issues such as group formation and development, group structure and group processes. Although group dynamics has considerable implications for education in general, for the obvious reason that most institutional teaching goes on with learners organized in small groups, it has particular relevance to L2 instruction. Current language teaching methodologies aim at developing the learners' communicative competence by promoting classroom interaction between learners as they participate in communicative events. The quality and quantity of such interaction is, to a large extent, a function of the social structure and milieu of the class (cf. Bar-Tal & Bar-Tal, 1986; Hadfield, 1992; Prabhu, 1992).

One concept central to the explanation of many group-related phenomena is group cohesion, or "the strength of the relationship linking the members to one another and to the group itself" (Forsyth, 1990, p. 10). It is taken an index of the level of group development, directly related to within-group cooperation and to both the quality and quantity of group interaction (cf. Greene, 1989; Shaw, 1981). Evans and Dion's (1991) meta-analysis of studies addressing the relationship between group cohesion and group performance found a significant positive relationship between the two variables, indicating that cohesive groups, on average, tend to be more productive than noncohesive groups.

Within the present context, we therefore assumed that cohesion would be closely related to the evaluation of the learning environment, and, by extension, to lower anxiety and higher self-confidence. Assessing these relationships is the fourth goal of our study.

In summary, we attempted to assess the relevance of social psychological factors, shown to be influential motivational aspects in other L2 learning contexts, to an emerging foreign-language teaching context marked by the virtual absence of the target language group. Of particular interest were (a) the emergence of orientations germane to this context, (b) the role and nature of affective predispositions in it, (c) the role and nature of self-confidence, and (d) the relative importance of classroom dynamics.

Method

Participants

The participants were 301 (117 males; 182 females; 2 with missing gender data) secondary-school pupils (in 21 groups) registered in 11 different schools in various parts of Budapest. Special care was taken to select a mixture of schools in terms of both prestige and location. The participating students were all in the third (second last) year of their secondary school instruction (*gimnazium*; ages 17–18) and all studied English as part of their official school curriculum, which was the same for all groups (i.e., no classes with specialized or intensive EFL syllabi were included). They evaluated the English proficiency of their mothers and fathers as virtually nil (median=2, on an 8-point scale, in both cases).

Materials

The materials consisted of a questionnaire addressed to the students and a questionnaire addressed to the teachers. The scales used in both questionnaires included some items adapted from scales used in previous studies of second language learning (e.g., Clément, 1986; Dörnyei, 1990a) and some items developed for the present study. Where necessary, we translated scales into Hungarian. A description of the scales contained in each section, along with the Cronbach alpha (α) index of internal consistency, where appropriate, follows.

Students' Questionnaire

Orientations, attitudes, motivation and anxiety. In the first section, a variety of orientations, attitudes, and anxiety constructs were assessed through randomly arranged items. Students indicated the extent to which they agreed or disagreed with the statement using a 6-point Likert-type scale. The scales were anchored at one end by *disagree strongly* and at the other end by *agree strongly*, such that a high score indicated strong endorsement of the item. We reversed negatively worded items prior to the calculation of the scale score.

1. *Orientations.* A total of 27 items adapted from relevant studies (Clément & Kruidenier, 1983; Dörnyei, 1990a) were used to assess students' reasons for learning English. They tapped instrumental, integrative, travel, knowledge, friendship, and sociocultural orientations.
2. *Attitude Toward Learning English.* Five items, two positively and three negatively worded, assessed the student's affective reaction toward learning the second language ($\alpha=.75$).
3. *Attitude Toward the British.* Five items evaluated the extent to which the student felt positively toward British citizens ($\alpha=.74$).
4. *Attitude Toward the Americans.* Five items evaluated the extent to which the student felt positively toward American citizens ($\alpha=.85$).
5. *English Use Anxiety.* Anxiety experienced while using the second language outside the classroom was assessed through four items, two positively and two negatively worded ($\alpha=.83$). For the purpose of our analyses, the scoring of this scale was reversed so that a high score means little anxiety.
6. *English Class Anxiety.* Five items assessed the extent to which the student felt anxious during English class ($\alpha=.86$). For the purpose of our analyses, the scoring of this scale was reversed so that a high score means little anxiety.
7. *Satisfaction.* The student's satisfaction with his/her work in English class and his/her level of proficiency in English was

assessed with two 6-point scales anchored at one end by *absolutely not* and at the other by *definitely yes* ($\alpha=.62$).

8. *Perceived Group Cohesion*. The student assessed the extent to which s/he felt that the language class was unified as a cohesive group using eight items, three positively worded and five negatively worded, that were based on measures developed by Evans, Jarvis, and Dawson (1986) and Rosenfeld and Gilbert (1989). Examples of these items include "I think that some people in this group feel left out" and "I am dissatisfied with my group" ($\alpha=.77$).
9. *Need for Achievement*. Four items, two negatively worded and two positively worded, assessed the extent to which the students desired to achieve or to perfect their skills in the second language ($\alpha=.63$).
10. *Motivational Intensity*. Four items, two negatively worded and two positively worded, were used to determine the degree of effort the student exerted when learning English ($\alpha=.68$).
11. *Desired English Proficiency*. The student's desired level of English proficiency was assessed on a 7-point scale, as follows:

elementary	intermediate	advanced
○	○	○
○	○	○
○	○	○

Answers to this scale were coded from 1 to 7, with 1 corresponding to the low end of the scale.

Frequency and quality of contact with members of the second language group. Considering nine different situations (e.g., at school, on holidays, when corresponding), the participant was asked to indicate, on two 9-point scales, first, the frequency, and, second, the quality, of contact with members of the English-speaking community. The scales ranged from very rare contact to very frequent contact, on one hand, and from very unpleasant contact to very pleasant contact, on the other hand. A high score on either scale indicates very frequent ($\alpha=.61$) and very pleasant ($\alpha=.67$) contact with English speakers.

English teacher evaluation. The student evaluated the En-

glish teacher using twelve 7-point, bipolar scales that assessed the teacher's competence (two items; $\alpha=.77$), rapport (three items; $\alpha=.84$), motivation (two items; $\alpha=.71$) and teaching style/personality (five items; $\alpha=.78$).

English course evaluation. The student evaluated the English course using seven 7-point, bipolar scales that assessed its attractiveness (three items; $\alpha=.82$), difficulty (one item, reversed scoring) and relevance/usefulness (two items; $\alpha=.83$).

Self-evaluation of English language ability. Using four 6-point scales, participants indicated how well they could use English, in terms of reading, writing, speaking, and comprehension. A high score suggests that the individual feels very competent in English ($\alpha=.79$).

Teachers' Questionnaire

We asked the students' teachers to use four 7-point scales to evaluate the quality of each student's homework in general, how active and how motivated the student was in class, as well as the student's status among his/her peers. As well, using two 5-point scales, the teachers assessed each student's current level of achievement in active communication and in passive, theoretical knowledge of English. The teachers also provided the student's English grade from the previous term.

In addition, to obtain an alternative index of the group dynamics of the classroom, we asked the teachers to rate the relative cohesion and cooperativeness of each class group on a 7-point scale.

Procedure

The administration of the questionnaire took place in the students' English classes. All participating students received a letter requesting their cooperation one week prior to the administration of the test. Because the questionnaire included sensitive information (e.g., the students' evaluation of their teachers), the confidentiality of the students' responses was ensured by sealing

the completed questionnaires in stamped envelopes. A Hungarian EFL student from Eötvös University in Budapest then collected the envelopes. In order to match the students' responses with the teachers' evaluations of the students, a coding-system was developed based on the students' seating arrangements.

Results and Discussion

In order to fulfill the stated goals of this study, we analyzed the data using correlational and factor analytic methods. We now report and discuss the results of these analyses in four subsections, one for each of the four goals: (a) factorial structure and level of endorsement of orientations, (b) the factorial structure of the correlations between attitudes, achievement and self-confidence, (c) the relationships between self-evaluation, anxiety, and aspects of proficiency and classroom behavior, and finally, (d) the interrelationship between the preceding constructs and aspects of class group dynamics.

Orientations

Following Clément and Kruidenier (1983) and Dörnyei (1990a), we first factor analyzed the orientation items in order to delineate clusters that would define orientations in this particular context. The ratio of observations to items was more than satisfactory (11.15:1; see Tabachnick & Fidell, 1989, p. 603). We used exploratory factor analysis (EFA) because the dual origin of the items did not permit the prediction of a factor structure and usage of confirmatory factor analysis (CFA). We therefore applied SPSSx Maximum-likelihood extraction, followed with Oblimin rotation, to the correlations between the responses to the orientation items.² Upon application of the Scree Test (Cattell, 1966), five factors were retained, which accounted for 41.5% of the variance. Although significant, the chi-square-to-degrees-of-freedom ratio ($^{442.88}/_{226}=1.96$) suggested that the solution provides an acceptable fit to the data (Carmines & McIver, 1981). The pattern matrix,

Table 1a
Factor Analysis Summary of Orientation Items:
Oblimin Rotated Factor Pattern Matrix, Communalities (h^2), and
Eigenvalues

	Factor					h^2
	1	2	3	4	5	
Make friends with foreigners	.84	-	-	-	-	.67
Meet foreigners	.59	-	-	-	-	.48
Know new foreign people	.57	-	-	-	-	.46
Will help when traveling	.54	-	-	-	-	.36
Keep in touch with foreign friends	.48	-	-	-	-	.38
Would like to travel	.38	-	-	-	-	.41
Learn many foreign languages	.37	-	-	-	-	.27
Without English, less travel	-	-	-	-	-	.21
Think/ behave as UK/US people	-	.81	-	-	-	.71
Be similar to UK/US people	-	.78	-	-	-	.60
Know various cultures/peoples	-	-	.76	-	-	.71
Learn about English world	-	-	.76	-	-	.55
Understand English nations	-	-	.75	-	-	.61
Know cultures/world events	-	-	.72	-	-	.64
Know life of English nations	-	-	.56	-	-	.46
Is part of being educated	-	-	-	.70	-	.51
To be more knowledgeable	-	-	-	.55	-	.31
Without it-difficult to succeed	-	-	-	.48	-	.24
To broaden my outlook	-	-	.35	.38	-	.38
May need later/job, studies	-	-	-	.35	-	.18
It is expected of me	-	-	-	.32	-	.19
To take the State Language Exam	-	-	-	-	-	.15
To understand films/videos	-	-	-	-	.69	.53
To understand pop music	-	-	-	-	.54	.38
To read books/magazines	-	-	-	-	.42	.35
To spend time abroad	-	-	-	-	.35	.26
Do not want bad marks	-	-	-	-	.31	.19
Eigenvalue	5.97	1.53	1.62	1.17	0.92	

Factor 1=Xenophilic; Factor 2=Identification; Factor 3=Sociocultural; Factor 4=Instrumental-Knowledge; Factor 5=English Media

Table 1b
 Factor Analysis Summary of Orientation Items:
 Factor Correlation Matrix

Factor	Factor				
	1	2	3	4	5
1. Xenophilic	1.00				
2. Identification	.16	1.00			
3. Sociocultural	.51	.24	1.00		
4. Instrumental-Knowledge	.15	.07	.02	1.00	
5. English Media	.19	.11	.07	.23	1.00

sorted by factor, using a loading greater than .30 as a criterion of factor salience (cf. Tabachnick & Fidell, 1989), appears in Table 1a.

As can be seen, Factor 1 receives appreciable loadings from seven variables, the three most prominent of which relate learning English to making friends with foreigners. This factor therefore corresponds to a friendship orientation similar to that reported by Clément and Kruidenier (1983) with the difference that this tendency would concern foreigners in general rather than only Anglophones. Therefore, it seems best to label this factor as reflecting a *Xenophilic* orientation, similar to but more general than, the "active sociocultural" dimension reported by Dörnyei (1990a).

Factor 2 receives loadings from two variables which are comparatively more focused. Both concern identification and similarity with the American and the British. This factor is therefore best labeled as an *Identification* orientation.

The five variables loading on Factor 3 relate learning English to an interest in cultural aspects of the English world. Factor 3 is similar to the sociocultural orientations described by both Clément and Kruidenier (1983) and Dörnyei (1990a) and for that reason we also label it as a *Sociocultural* dimension.

Factor 4 is defined by six items suggesting that being more educated and knowledgeable is related to success in work and studies. It is therefore similar to the instrumental orientations

found by Clément and Kruidenier (1983) and Dörnyei (1990a), with the provision that knowledge is an important component of pragmatic attainment. Therefore we label this factor as an *Instrumental-Knowledge* dimension.

Finally, Factor 5 is mostly defined by variables relating to the use of English in the media. It is therefore labeled as an *English Media* factor. Factor 5 is similar to, although more general than, the "reading for nonprofessional purposes" and the "passive socio-cultural" dimensions identified by Dörnyei (1990a).

The results show similarities and differences with those reported previously. The factor pattern collapses, on the one hand, the instrumental and knowledge orientations and, on the other hand, the friendship and travel orientations obtained by Clément and Kruidenier (1983). This solution reflects the particular constraints and context of English acquisition for these Hungarian students. As a major language of trade in the New Europe, English as knowledge is perceived to have pragmatic consequences. For these Hungarian secondary-school students, pragmatic rewards may appear quite remote; the wish to prepare for a bright career is related to getting higher qualifications, and thus to obtaining knowledge. Similarly, the unicultural Hungarian context only permits crosscultural friendships in the context of travel. Finally, the relative isolation of Hungarians may also be the reason for the emergence of a sociocultural orientation. As it was for Clément and Kruidenier's (1983) students of Spanish, the English culture may be different enough to our Hungarian students to justify an interest for its distinctive culture and people.

One striking difference from the solution obtained by Dörnyei (1990a) is the emergence here of an "identification" orientation. We originally included the two items defining this factor in an integrative orientation scale together with friendship items. Apparently, respondents did not concur with the theoretical composition of this orientation and isolated the identification from the affective component.

Two additional analyses contribute to the interpretation of the identification factor. First, because we used an oblique rota-

tion to rotate the factors, the correlation between them may be indicative of relationships between the corresponding orientations. As can be seen in Table 1b, the xenophilic orientation appears to be positively correlated to the sociocultural orientation, which is itself related to a lesser degree with the identification orientation. Thus, the cultural, friendship, and identification components are related, as would be expected under the definition of an integrative orientation. A modest relation also obtains between the instrumental-knowledge and the English media orientations.

The second analysis considers the level of endorsement of each orientation. We computed these by taking the average endorsement (minimum=1; maximum=6) for those items shown to load on each factor (Gorsuch, 1983). We included items that cross-loaded onto two factors in the index of the factor that they defined most highly. The results show a relatively strong endorsement of all orientations except one. The xenophilic ($M=4.22$), media ($M=3.79$), sociocultural ($M=3.96$) and instrumental ($M=3.78$) orientations are endorsed strongly whereas identification ($M=1.81$) receives only minimal support. Thus, despite its relation to endorsed orientations, identification as a goal for learning English is rejected here. This may be a symptom of perceived profound cultural divergence. The English language and the Anglophones may appear culturally and amicably interesting, but there is a definite limit to the extent of the desired rapprochement. This limit may be related to how foreign the English language and culture are considered. Even though English may evidence considerable vitality as a new European language of trade (viz., our instrumental orientation), the Hungarian cultural context may still foster less-than-permeable intergroup boundaries (cf. Giles & Byrne, 1982; Giles & Johnson, 1987) so that identification is simply not perceived as possible.

In summary, the results show that the Hungarian situation is peculiar in terms of the orientations it promotes. The absence of Anglophones from the immediate environment would appear to sustain distal friendships (through travel), an interest in English

culture as a foreign phenomenon, and an instrumental orientation based on the acquisition of knowledge and media usage rather than on the achievement of pragmatic outcomes. This relative isolation may be common to many foreign language learning situations but, in this case, it is coupled with rather strong cultural and linguistic traditions which would result in the rejection of identification as an outcome of language learning.

Attitudes, Self-Confidence, and Achievement

We now turn to the examination of the role of attitudes and self-confidence in the present context. In order to remain methodologically consistent with previous work (e.g., Gardner, 1985; Clément & Kruidenier, 1985), we entered indices of effort, attitudes, anxiety, self-evaluation, course and teacher evaluation, and English achievement into a factor analysis.³ We also included the orientation indices, as derived in the previous analysis. Again, the ratio of observations to items was more than satisfactory (11.15:1; see Tabachnick & Fidell, 1989, p. 603). Following the Scree test, we extracted five factors, using the maximum-likelihood procedure and rotated them via Varimax. The resulting matrix accounted for 48.9% of the variance. Although the chi-square is statistically significant, the chi-square-to-degrees of freedom ratio ($647.45/271=2.39$) suggests that this represents an acceptable fit (Carmines & McIver, 1981).

The solution appears in Table 2. Using a cutoff criterion of .30 (Tabachnick & Fidell, 1989, p. 639), Factor 1 is defined by six variables all pertaining to the student's evaluation of the English teacher and course. It therefore seems best labeled as an *Evaluation of the Learning Environment* dimension.

Factor 2 receives appreciable loadings from nine variables, including indices of contact, anxiety, self-evaluation of competence, and motivation. Students who show little anxiety when using English evaluate their own proficiency relatively positively, are satisfied with their current level of English proficiency and report positive and frequent contact with English. They are also

Table 2
*Attitude, Achievement, and Motivation Indices: Varimax Rotated
 Factor Matrix, Communalities (h^2), and Eigenvalues*

	Factors					h^2
	1	2	3	4	5	
Teacher's style	.94	—	—	—	—	.89
Teacher's competence	.80	—	—	—	—	.64
Course attractiveness	.79	—	—	—	—	.66
Teacher's motivation	.72	—	—	—	—	.55
Course usefulness	.64	—	—	—	—	.47
Teacher's rapport	.61	—	—	—	—	.42
Anxiety in class (reversed)	—	.81	—	—	—	.73
English use anxiety (reversed)	—	.77	—	—	—	.63
Self-eval. of proficiency	—	.66	—	—	—	.52
Frequency of contact	—	.50	—	—	—	.30
Attitudes t/w learning English	—	.49	—	.46	—	.53
Quality of contact	—	.46	—	.39	—	.43
Satisfaction with competence	—	.41	—	—	—	.32
Course difficulty (reversed)	—	.37	—	—	—	.23
Desired English proficiency	—	.35	—	—	—	.22
Student's motivation	—	—	.87	—	—	.83
Student's homework	—	—	.75	—	—	.61
Student's activity	—	—	.73	—	—	.72
English achievement	—	—	.69	—	—	.66
Student's status	—	—	.50	—	—	.39
Attitudes toward the British	—	—	—	.71	—	.55
Motivational intensity	—	—	—	.59	—	.44
Attitudes toward Americans	—	—	—	.51	—	.31
Student's need to achieve	—	—	—	.39	—	.18
Identification orientation	—	—	—	.36	—	.15
Xenophilic orientation	—	—	—	—	.68	.77
English media orientation	—	—	—	—	.55	.31
Sociocultural orientation	—	—	—	—	.51	.51
Instrumental-knowledge	—	—	—	—	.38	.18
Eigenvalue	6.32	3.35	2.16	1.48	0.84	

Factor 1=Xenophilic; Factor 2=Identification; Factor 3=Sociocultural; Factor 4=Instrumental-Knowledge; Factor 5=English Media

motivated to learn English and find the course easy. In keeping with previous research and theorizing where similar factors were obtained (e.g. Clément, 1978, 1986), this factor seems best labeled as a *Self-Confidence with English* dimension.

Factor 3 evidences appreciable loadings from five variables, all concerned with the student's English achievement and the teacher's rating of the student's classroom performance. It therefore seems appropriately labeled as a *Student Achievement and Performance* factor.

Factor 4 receives appreciable loadings from five variables, including indices of attitudes toward Anglophones, motivation (motivational intensity and need to achieve), and identification. In the light of previous research and theorizing (Gardner, 1985), particularly regarding the co-occurrence of attitude and identification indices, this factor would correspond to an *Integrative Motive*.

Finally, Factor 5 is defined by four of the five orientation scales and therefore seems best labeled as an *Orientation* dimension, with the provision that it does *not* include the identification orientation which, as seen above, was associated with the integrative motive.

In spite of a markedly different context, the results obtained here are similar to those obtained in North American studies. The integrative motive emerged with a definition which indeed corresponds closely to Gardner's (1985) discussion of the construct. The self-confidence-with-English cluster was also composed of variables typically associated with the construct (e.g., Clément, 1980, 1986; Clément, Gardner & Smythe, 1977, 1980). It should be noted that contrary to Au's (1987) critique, self-evaluations of proficiency are here associated with self-confidence (Factor 2) and not achievement as reported by teachers (Factor 3).⁴ Furthermore, English-class anxiety and course difficulty, which are associated in Gardner's (1985) socioeducational model with the learning environment, are here associated with self-confidence. However, our factorial structure did not show crossloadings of variables defining the teaching environment (Factor 1) with those defining self-confidence (Factor 2). We now turn to a more detailed examination of these relationships.

Anxiety, Self-Confidence, and the Classroom

Because of the unexpected absence of a substantial relation between self-confidence and the student's evaluation of the teaching environment, we conducted a more detailed examination of correlations in order to delineate the relation between the components of these constructs. Focusing on the anxiety indices also provides a more common basis for comparing these results and

Table 3
Correlations Between Components of Self-Confidence and Classroom Variables

	EUA ^a	ECA ^a	SEP	SC
Student's evaluation of:				
Teacher style	.09	.02	.08	.11
Teacher rapport	.12*	.11	.10	.15*
Teacher competence	.06	-.05	.02	.02
Teacher motivation	.12*	-.02	.10	.11
Course attractiveness	.14*	.08	.11	.15*
Course difficulty	.26**	.34**	.28**	.35**
Course usefulness	.08	.07	.13*	.12*
Teacher's rating of student's:				
Communicative skills	.36**	.45**	.49**	.52**
Passive skills	.22**	.32**	.33**	.35**
Last grade	.30**	.33**	.43**	.43**
Quality of homework	.11	.20**	.16*	.18*
Activity in classroom	.37**	.46**	.43**	.48**
Apparent motivation	.33**	.38**	.36**	.41**
Student status	.30**	.42**	.33**	.41**
Attitude and effort index	.36**	.37**	.37**	.45**
Frequency of contact	.46**	.33**	.39**	.45**
Quality of contact	.45**	.37**	.40**	.48**

^areversed

EUA=English Use Anxiety; ECA=English Class Anxiety; SEP=Self-Evaluation of Proficiency; SC=Self-Confidence

n=301

p*<.05, two-tailed. *p*<.001, two-tailed.

those of other studies. Table 3 therefore presents selected correlations between the anxiety indices, self-evaluation and a composite self-confidence index aggregating anxiety and self-evaluation,⁵ and different aspects of the evaluation of the teacher, the course, student's attitude and effort toward learning English, inter-group contact and a teacher's ratings of the student. We obtained the attitude and effort index by first standardizing and then averaging the motivational intensity and attitude toward learning English scales.

As can be seen, very few of the students' evaluations of the teacher and the course correlate consistently and highly ($p < .01$) with anxiety or self-evaluation. However, a notable exception is the evaluation of course difficulty which, (as was shown in the factor analysis) was related to the self-confidence factor. As for the teachers' rating of the students, both indices of proficiency (communicative and passive skills) are significantly related to anxiety and self-evaluation, with indices of communication proficiency showing the strongest relationships. Furthermore, all aspects of classroom participation and involvement in learning English (with the single exception of quality of homework) are related to the anxiety indices. Finally, all indices are correlated with the attitude and effort index and aspects of interethnic contact. For the latter, similarly to the proficiency and classroom-behavior indices, the aggregation of anxiety and self-evaluation into a single self-confidence index produces relatively enhanced relationships.

These results therefore buttress previous hypotheses linking anxiety and self-evaluation with extracurricular contact (e.g., Clément & Kruidenier, 1985). They also support Phillips' (1992) conclusion regarding the relation between anxiety, attitudes, and motivation towards learning the second language. Not only is anxiety related to motivation, but it is also related to indices of proficiency and more so to communication proficiency, as suggested by Young (1991) and Horwitz et al. (1986). It is also related to what Crookes and Schmidt (1991) might consider teacher-recognized symptoms of motivation and engagement: quality of homework, apparent motivation, activity, and status in the classroom.

Our results, however, fail to support current suggestions that the source of anxiety lies in the student's perception of certain aspects of the classroom situation. Within the limits of the measures used here, anxiety is linked neither to perceptions of the teacher nor to the course (with the exception of course difficulty). Following our theoretical conjecture regarding the role of group dynamics, that relationship may, however, be established through class group cohesion. We now turn to an examination of that aspect within the context of the relationship between the major constructs.

Motivation and Group Dynamics

To assess the relation between the constructs defined through the previous analyses, we calculated aggregated indices, using the results of the previous factor solution (Table 2). Thus we calculated indices for English Achievement, Evaluation of the Learning Environment, Integrative Motive, Self-Confidence with English, and Orientations by first standardizing and then summing the variables defining the corresponding factors (Gorsuch, 1983). We did not include the two motivational indices, Motivational Intensity and Attitude Toward Learning English in the scores derived from their respective factors but, as for the previous analysis, aggregated them to constitute a single Attitude and Effort index. In addition to these six variables, two cohesion scores were considered: one derived from the student's perception of classroom cohesion and one corresponding to the teacher's evaluation of the cooperation and cohesion of each class group. Thus, we calculated correlations among eight variables.

The matrix resulting from this operation is appears in Table 4. Focusing on the most important relations (i.e., those with $p < .01$), English achievement is related significantly to self-confidence, the evaluation of the learning environment and the motivational indices. In turn, the attitude and effort index is also related to self-confidence, the learning environment, and a cluster of affectively based attitudes and motivation. Following our conjecture, cohe-

Table 4
Correlations Between Attitudes, Motivation, Self-Confidence, and
Aspects of the Classroom

	EA	LE	OR	SC	IM	CS	CT
Attitude & Effort Index	.38**	.32**	.24*	.47**	.40**	.11	.09
English Achievement		.32**	.18*	.53**	.17*	.00	.26**
Learning Environment			.03	.12*	.08	.30**	.62**
Orientations				.23*	.40**	-.04	.02
Self-Confidence					.21*	.02	.10
Integrative Motive						.07	-.11
Cohesion (Student's)							.20*
Cohesion (Teacher's)							1.00

EA=English Achievement; LE=Learning Environment; OR=Orientation; SC=Self-Confidence; IM=Integrative Motive; CS=Cohesion (student's rating) CT=Cohesion (teacher's rating)

$n=301$

* $p < .05$, two-tailed. ** $p < .01$, two-tailed.

sion was associated to a positive perception of the learning environment. Contrary to expectations, however, self-confidence was associated neither with evaluation of the learning environment nor with the cohesion indices.

There appears to be a close association between the evaluation of the environment, the teacher's appraisal of the group, and the students' evaluation of their own learner group. Thus the tasks, the teacher, and the learner group are perceived as interdependent aspects of classroom reality, significantly affecting student L2 learning behavior. Gardner's (1983) socioeducational model has already incorporated attitudes toward the learning situation (evaluation of the teacher and the course) as a component of the integrative motive. Whereas our results do support the presence of a learning environment cluster and its relationship to student behavior and achievement, they show it to be distinct from the integrative motive.

Conceptualizing Foreign Language Classroom Motivation

Together with the factor analytic solutions, the results support the existence of a tricomponent motivational complex (see Figure 1) in L2 learning within a foreign language classroom environment. The first component, the integrative motive, is associated with a number of orientations, including the instrumental-knowledge orientation. It is to be hoped that this latter result, coupled with Gardner's (1985) extensive discussion, will put an end to the misleading use of a simplistic integrative-instrumental dichotomy.

Even though the integrative motive emerged here as a well-defined cluster, unlike the results in North American studies (Gardner, 1983), it showed little relationship to the evaluation of the teaching environment. Such results suggest that in this context the language teacher and the L2 course are not perceived as linked to the L2 group and its members. The more obvious impact of the present situation on the social determinants of L2 acquisition appears to be the relative independence of social-psychological processes, which in a multicultural context, have been more closely associated with one another.

The second major component of L2 motivation is self-confidence. Self-confidence influences L2 proficiency both directly and indirectly through the students' attitude toward and effort expended on learning English. The indirect course of influence was the one Clément and Kruidenier (1985) hypothesized and tested.

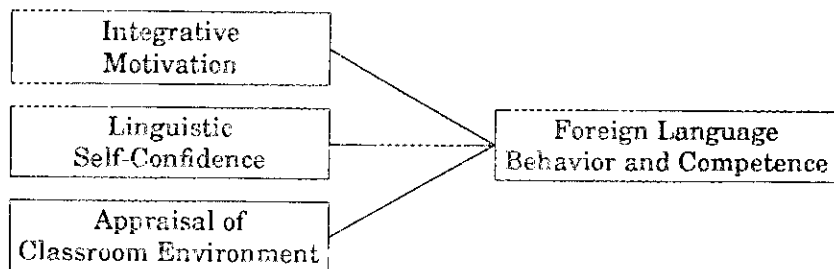


Figure 1. Schematic representation of a tricomponential approach.

The direct course indicates, in addition, that aspects of contact with the L2 and its users provide the student with skills readily applicable in the classroom.

The third component corresponds to the classroom environment. Group cohesion is associated with a positive evaluation of the learning environment, thus forming a broader "perceived classroom situation" cluster. As has been seen, this motivational dimension emerges as a motivational subsystem independent of integrative motivation and self-confidence.

Although it is possible to conceptualize these components as independent contributors to proficiency, the present results also suggest that the classroom context and extracurricular contact activities may jointly affect language self-confidence—as would be expected from an interactive model of language learning. On the one hand, good classroom atmosphere promotes student involvement and activity while moderating anxiety and promoting self-confidence. On the other hand, the student brings into the classroom a level of self-confidence and anxiety related to extracurricular experiences with the language, the quality and quantity of which would then influence classroom behavior, achievement and anxiety. Accordingly, being active in class means believing that one is able to use English outside the classroom. Even in the present case, where there is minimal contact with the second language community, this "real" world would therefore be an important source of "bad" experiences with actual consequences, which challenge the students and generate anxiety (MacIntyre & Gardner, 1989).

Obviously, given the impossibility of making strong causal inferences from correlational results,⁶ this interactive interpretation would need to be tested for its causal sequence and its generality. It is, however, in line with previous results and would theoretically extend Clément's (1980) model of the language learning process.

Pedagogical Implications

Our results confirm the relevance of a social psychological approach to the understanding of L2 motivation: even in the Hungarian situation, where contact with L2 speakers was restricted, socially grounded factors were related to the students' attitude and effort, classroom behavior and achievement. Furthermore, application of the social psychological constructs of group dynamics proved useful in describing the L2 classroom environment. Thus, our results give empirical grounding to a recent development in L2 methodology, whereby group dynamic activities are incorporated into the L2 syllabus in order to foster various aspects of group development and enhance group cohesion, with the aim of creating an environment more conducive to learning (Hadfield, 1992). Our results suggest, in addition, that the task of the foreign language teacher and researcher is also to curb and use influences which extend beyond the school context. While recognizing the necessity of looking at the student through the eyes of the teacher as we have done here, it seems imperative that we all look at the task of learning another language through the eyes of the student. That, we suggest reveals foreign language acquisition to be a complex social process.

Revised version accepted 13 May 1994

Notes

¹Defined operationally, the self-confidence construct includes two components (Clément & Kruidenier, 1985): anxiety as the affective aspect and self-evaluation of proficiency as the cognitive component. Although the functional relationship between the two components and behavior would seem to be complex (Noels & Clément, 1994), their high intercorrelation justifies treating the two aspects as feeding into the same construct.

²The maximum-likelihood procedure was chosen here because of its superiority over other methods (e.g., principal component, principal axis) for providing an index of the goodness of fit of the solution to the data. It should be noted that, in this case, because of the impossibility of correlating error variances between the items, the goodness-of-fit index should not be expected to reflect as good a fit as with CFA techniques where this is possible. The Oblimin rotation procedure was chosen because it does not assume the independence

of factors. In this case, rotation of the factors following the Varimax procedure did, however, produce virtually identical results. We reported the obliquely rotated solution here because of the rather high correlation between Factors 1 and 3. Finally, for both analyses, we computed multiple solutions, extracting different numbers of factors and using different rotation techniques. We decided upon the solution presented in this paper by considering the eigenvalues associated with and the percentage of variance accounted for by each factor, an examination of the Scree plot, and evidence of simple structure.

³As for the factor analysis of the orientations, the solution generated here was achieved via maximum-likelihood EFA. In this case, however, to be consistent with previous studies, we applied Varimax rotation. The matter of the relationship between the major constructs studied here is dealt with in a subsequent section of this paper.

⁴In fact, before Au's (1987) article, the question of whether the self-evaluation component belongs more readily with anxiety or achievement was tested by Clément and Kruidenier (1985) as a feature of the measurement model of their LISREL study. In none of the groups studied was there any indication that associating self-evaluation measures to indices of proficiency would provide a better fit to the model.

⁵The correlation between the two anxiety indices was .69 ($p < .001$) and both correlated .56 ($p < .001$) with the self-evaluation score.

⁶Application of multiple-regression or causal-modeling techniques to these data would not have permitted stronger causal inferences (cf. Cliff, 1983; Muliak, 1987). These approaches would, in this case, entail only mathematical transformations of the correlation matrices presented here.

References

- Au, S. Y. (1987). A critical appraisal of Gardner's social-psychological theory of second-language (L2) learning. *Language Learning*, 38, 75-100.
- Bailey, K. M. (1983). Competitiveness and anxiety in adult second language learning: Looking at and through the diary studies. In H. W. Seliger & M. H. Long (Eds.), *Classroom oriented research in second language acquisition* (pp. 67-102). Rowley, MA: Newbury House.
- Bar-Tal, Y., & Bar-Tal, D. (1986). Social psychological analysis of classroom interaction. In R. S. Feldman (Ed.), *The social psychology of education: Current research and theory* (pp. 132-149). Cambridge: Cambridge University Press.
- Brown, R. (1988). *Group processes; Dynamics within and between groups*. Oxford: Blackwell.
- Carmines, E. G., & McIver, S. P. (1981). Analyzing models with unobserved variables: Analysis of covariance structures. In G. W. Bohrnstedt & E. F. Borgatta (Eds.), *Social measurement: Current issues* (pp. 65-115). Beverly Hills, CA: Sage.

- Cattell, R. B. (1966). The scree test for the number of factors. *Multivariate Behavioral Research*, 1, 245-276.
- Clément, R. (1978). *Motivational characteristics of Francophones learning English*. Quebec: Université Laval, International Centre for Research on Bilingualism.
- Clément, R. (1980). Ethnicity, contact and communicative competence in a second language. In H. Giles, W. P. Robinson, & P. M. Smith (Eds.), *Language: Social psychological perspectives: Selected papers from the first International Conference on Social Psychology and Language held at the University of Bristol, England, July 1979* (pp. 147-154). Oxford: Pergamon.
- Clément, R. (1984). Aspects socio-psychologiques de la communication inter-ethnique et de l'identité sociale [Social psychological aspects of interethnic communication and social identity]. *Recherches sociologiques*, 15, 293-312.
- Clément, R. (1986). Second language proficiency and acculturation: An investigation of the effects of language status and individual characteristics. *Journal of Language & Social Psychology*, 5, 271-290.
- Clément, R., Gardner, R. C., & Smythe, P. C. (1977). Motivational variables in second language acquisition: A study of Francophones learning English. *Canadian Journal of Behavioural Science*, 9, 123-133.
- Clément, R., Gardner, R. C., & Smythe, P. C. (1980). Social and individual factors in second language acquisition. *Canadian Journal of Behavioural Science*, 12, 293-302.
- Clément, R., & Kruidenier, B. G. (1983). Orientations in second language acquisition: I. The effects of ethnicity, milieu, and target language on their emergence. *Language Learning*, 33, 273-291.
- Clément, R., & Kruidenier, B. G. (1985). Aptitude, attitude and motivation in second language proficiency: A test of Clément's model. *Journal of Language & Social Psychology*, 4, 21-37.
- Cliff, N. (1983). Some cautions concerning the application of causal modelling methods. *Multivariate Behavioral Research*, 18, 115-126.
- Cohen, Y., & Norst, M. J. (1989). Fear, dependence, and loss of self-esteem: Affective barriers in second language learning among adults. *RECL Journal*, 20, 61-77.
- Crookes, G., & Schmidt, R. W. (1991). Motivation: Reopening the research agenda. *Language Learning*, 41, 469-512.
- Dörnyei, Z. (1990a). Conceptualizing motivation in foreign-language learning. *Language Learning*, 40, 45-78.
- Dörnyei, Z. (1990b, April). *Analysis of motivation components in foreign language learning*. Paper presented at the 9th World Congress of Applied Linguistics, Thessaloniki, Greece. (ERIC Document Reproduction Service No. ED 323 810)

- Evans, N. J., & Jarvis, P. A., Dawson, C. (1986). The group attitude scale: A measure of attraction to groups. *Small Group Behavior*, 17, 203–216.
- Evans, C. R., & Dion, K. L. (1991). Group cohesion and performance: A meta-analysis. *Small Group Research*, 22, 175–186.
- Fahmy, J. J., & Bilton, L. (1992). The sociocultural dimension of TEFL education. *Journal of Multilingual and Multicultural Development*, 13, 269–289.
- Forsyth, D. R. (1990). *Group dynamics* (2nd ed.). Pacific Grove, CA: Brooks/Cole.
- Foss, K. A., & Reitzel, A. C. (1988). A relational model for managing second language anxiety. *TESOL Quarterly*, 20, 559–562.
- Gardner, R. C. (1980). On the validity of affective variables in second language acquisition: Conceptual, contextual, and statistical considerations. *Language Learning*, 30, 255–270.
- Gardner, R. C. (1983). Learning another language: A true social psychological experiment. *Journal of Language & Social Psychology*, 2, 219–239.
- Gardner, R. C. (1985). *Social psychology and second language learning: The role of attitudes and motivation*. London: Arnold.
- Gardner, R. C., & Clément, R. (1990). Social psychological perspectives on second language acquisition. In H. Giles & W. P. Robinson (Eds.), *Handbook of language and social psychology* (pp. 495–517). Chichester: John Wiley & Sons.
- 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 Acquisition*, 14, 197–214.
- 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 in language study: Who says it isn't effective? *Studies in Second Language Acquisition*, 13, 57–72.
- Gardner, R. C., & Smythe, P. C. (1975). *Second language acquisition: A social psychological approach* (Research Bulletin No. 332). London, Ontario: The University of Western Ontario, Department of Psychology.
- Giles, H., & Byrne, J. L. (1982). An intergroup approach to second language acquisition. *Journal of Multilingual and Multicultural Development*, 1, 17–40.
- Giles, H., & Johnson, P. (1987). Ethnolinguistic identity theory: A social psychological approach to language maintenance. *International Journal of the Sociology of Language*, 68, 69–99.
- Gorsuch, R. L. (1983). *Factor analysis* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Greene, C. N. (1989). Cohesion and productivity in work groups. *Small Group Behavior*, 20, 70–86.
- Hadfield, J. (1992). *Classroom dynamics*. Oxford: Oxford University Press.

- Horwitz, E. K. (1986). Preliminary evidence for the reliability and validity of a foreign language anxiety scale. *TESOL Quarterly*, 20, 559-562.
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70, 125-132.
- Horwitz, E. K., & Young, D. J. (1991). *Language anxiety: From theory and research to classroom implications*. Englewood Cliffs, NJ: Prentice Hall.
- Julkunen, K. (1989). Situation- and task-specific motivation in foreign-language learning and teaching (University of Joensuu Publications in Education, No. 6). Joensuu, Finland: University of Joensuu.
- Kozponti Statisztikai Hivatal (Central Statistical Office). (1992). Az 1990. évi népszámlálás; 3. kötet; összefoglaló adatok [The 1990 census: Vol. 3. Summary data]. Budapest: Author.
- Labrie, N., & Clément, R. (1986). Ethnolinguistic vitality, self confidence and second language proficiency: An investigation. *Journal of Multilingual and Multicultural Development*, 7, 269-282.
- MacIntyre, P. D., & Gardner, R. C. (1989). Anxiety and second-language learning: Toward a theoretical clarification. *Language Learning*, 39, 251-275.
- MacIntyre, P. D., & Gardner, R. C. (1991a). Investigating language class anxiety using the focused essay technique. *The Modern Language Journal*, 75, 296-304.
- MacIntyre, P. D., & Gardner, R. C. (1991b). Methods and results in the study of anxiety and language learning: A review of the literature. *Language Learning*, 41, 85-117.
- Mihaljević, J. (1990). Research on motivation for learning English as a foreign language: A project in progress. *Studia Romanica et Angelica Zagrabienisa*, 25, 151-160.
- Moïse, L. C., Clément, R., & Noels, K. A. (1990). Aspects motivationnels de l'apprentissage de l'espagnol au niveau universitaire [Motivational aspects of learning Spanish at the university level]. *Canadian Modern Language Review*, 46, 689-705.
- Mulaik, S. A. (1987). Toward a conceptualisation of causality applicable to experimentation and causal modelling. *Child Development*, 58, 18-32.
- Noels, K. A., & Clément, R. (1989). Orientations to learning German: The effects of language heritage on second language acquisition. *Canadian Modern Language Review*, 45, 245-257.
- Noels, K. A., & Clément, R. (1994). *Second language anxiety: A socio-communicative model of affect, cognition and behaviour*. Unpublished manuscript.
- Oller, J. W., Jr., & Perkins, K. (1978). Intelligence and language proficiency as sources of variance in self-reported affective variables. *Language Learning*, 28, 85-97.

- Phillips, E. M. (1992). The effects of language anxiety on students' oral test performance and attitudes. *The Modern Language Journal*, 76, 14–26.
- Prabhu, N. S. (1992). The dynamics of the language lesson. *TESOL Quarterly*, 26, 225–241.
- Price, M. L. (1991). The subjective experience of foreign language anxiety: Interviews with highly anxious students. In E. K. Horwitz & D. J. Young (Eds.), *Language anxiety: From theory and research to classroom implications* (pp. 101–108). Englewood Cliffs, NJ: Prentice Hall.
- Rosenfeld, L. B., & Gilbert, J. R. (1989). The measurement of cohesion and its relationship to dimensions of self-disclosure in classroom settings. *Small Group Behavior*, 20, 291–301.
- Samimy, K. K., & Tabuse M. (1992). Affective variables and a less commonly taught language: A study in beginning Japanese classes. *Language Learning*, 42, 377–398.
- Shaw, M. E. (1981). *Group dynamics: The psychology of small group behavior* (3rd ed.). New York: McGraw-Hill.
- Skehan, P. (1989). *Individual differences in second-language learning*. London: Arnold.
- Skehan, P. (1991). Individual difference in second language learning. *Studies in Second Language Acquisition*, 13, 275–298.
- Soh, K. (1987). Language use: A missing link? *Journal of Multilingual and Multicultural Education*, 8, 443–449.
- Tabachnick, B. G., & Fidell, L. S. (1989). *Using multivariate statistics* (2nd ed.). Philadelphia, PA: Harper & Row.
- Young, D. J. (1986). The relationship between anxiety and foreign language oral proficiency ratings. *Foreign Language Annals*, 12, 439–448.
- Young, D. J. (1991). Creating a low-anxiety classroom environment: What does language anxiety research suggest? *The Modern Language Journal*, 75, 426–437.