

Age-related differences in the motivation of learning English as a foreign language: Attitudes, selves and motivated learning behavior

Judit Kormos and Kata Csizér

Abstract

Our study describes the motivation for learning English as a foreign language in three distinct learner populations: secondary school pupils, university students and adult language learners. Questionnaire data were collected from 623 Hungarian students. The main factors affecting students' L2 motivation were language learning attitudes and the Ideal L2 self, which provides empirical support for the main construct of the theory of the L2 Motivational Self-System (Dörnyei, 2005). Models of motivated behavior varied across the three investigated learner groups. For the secondary school pupils, it was rather interest in English-language cultural products that affected their motivated behavior, whereas international posture as an important predictive variable was only present in the two older age groups.

Second and foreign language motivation has been researched in different paradigms and numerous language learning contexts in the past decades (for a recent overview, see Dörnyei, 2005). In most projects conducted until recently, researchers usually intended to find out how one could best describe the L2 motivation of a given group of students (e.g., the attitudinal and motivational dispositions of young Hungarian learners; Dörnyei, Csizér, & Németh, 2006), and validate and/or describe the workings and usefulness of a given theoretical concept (e.g., the role of integrativeness, see Gardner, 1985, 2001; or, the investigation of self-determination theory, Noels, 2001; or attribution theory, Ushioda, 1996; 1998; 2001). Recent work on motivation theory includes the process model of motivation devised by Dörnyei (Dörnyei, 2000; 2001a; Dörnyei & Ottó, 1998), which accounts for the dynamic and temporally changing nature of L2 motivation (for empirical studies see Chambers, 1999; Shoaib & Dörnyei, in press; Ushioda, 2001; Williams, Burden & Lanvers, 2002) and Dörnyei's (2005) theory of the Motivational Self-System. This theory tries to answer the challenge that the changing world of the 21st century poses for the Gardnerian concept of integrativeness (Gardner, 1985; 2001), the notion of the native speaker (Widdowson, 1993) and learners' identification with native speakers (Lamb, 2004; Yashima, 2000; Warden & Lin, 2000). Dörnyei's theory of the Motivational Self-System is based on the psychological theory of self-discrepancy (Higgins, 1987) and integrates important concepts such as learning experiences and intrinsic and extrinsic language learning goals previously identified in the L2 field by Ushioda (2001) and Noels (2003). Dörnyei's theory has been instrumental in advancing our understanding of L2 motivation in a wide range of learning contexts, but it has not been empirically tested yet.

Most of the research just cited highlights how learners' personal histories might change their views of L2 motivation and their motivated learning behavior, but little attention has been paid to the systematic investigation of age-related variations concerning attitudinal and motivational dispositions of language learners within a single language environment. Studies

involving non-language major university students are rare (see for example, Masgoret & Gardner, 2003), and to our knowledge, the motivation of adult language learners has not been investigated in large-scale quantitative research yet. In many parts of the world, especially in countries where foreign languages were not taught appropriately in school in the 1970s and 1980s, adults constitute an important language learner population, and most language teachers who work both in the public and private language teaching sectors would attest that adults and adolescents require different motivational strategies.

The aim of the investigation presented in this paper is two-fold. Firstly, we explore possible differences among three distinct learner groups who study English in a single context, Budapest, the capital city of Hungary. Using the same measurement scales, we compare how the motivational and attitudinal dispositions of secondary school pupils, university students and adult language learners differ. Second, we also intend to test empirically the two main constructs of Dörnyei's Motivational Self-System: the Ideal L2 Self and the Ought-to L2 self and explore the relationship of these two key variables with the traditional motivational and attitudinal dimensions such as integrativeness and instrumentality.

In the present paper we first provide a theoretical background to our study followed by the description of the data collection procedures. Next, we describe what latent dimensions emerge concerning the motivational and attitudinal dispositions of learners of various ages and what the relationships among these dimensions are. Finally, we report how and to what extent these latent dimensions influence students' motivated learning behavior in the various age groups.

Review of literature

The notion of integrative motivation, which was traditionally a key construct in L2 motivation research, was introduced by Robert Gardner and Wallace Lambert (1959; 1972). Integrative motivation became a pivotal part of Gardner's motivation theory, but as Gardner (2001) pointed

out, “it has slightly different meanings to many different individuals” (p. 1). The concept of integrative motivation implies varied psychological and emotional identification either with the language community (Gardner, 2001), or if no salient L2 community is present in the immediate learning environment, identification with values associated with the L2 community and the language or identification with the language itself (Dörnyei, 1990). In Gardner’s theory integrative orientation, integrativeness and the integrative motive are differentiated. In Gardner’s terminology, orientations are the reasons behind learning an L2, more precisely they “represent ultimate goals for achieving the more immediate goal of learning the second language” (Gardner, 1985, p.11). Gardner (1985, 2001) defined integrativeness as a latent construct made up of the following variables: interest in foreign languages, integrative orientation and attitudes toward the learning situation. The integrative motive is composed of attitudinal, goal-directed, and motivational variables. It subsumes integrativeness (as defined above), attitudes toward the learning situation (evaluation of the L2 teacher and course) and ‘motivation’, which is also frequently referred to as motivated learning behavior. According to Gardner, motivated learning behavior is assumed to be comprised of (a) the desire to learn the L2, (b) motivational intensity (or effort), and (c) attitudes towards learning the L2. In other studies the definition of motivated learning behavior might vary slightly, for example, in Dörnyei et al.’s (2006) research, motivated learning behavior was operationalised as a) effort and b) the intended choice of learning the given language. In a wide range of projects in a variety of learning environments, integrativeness has been found to be an important variable in predicting motivated behavior and ultimately success in language learning (e.g., Clément, Dörnyei & Noels, 1994; Dörnyei, 1990; Shaaban & Ghaith, 2000; Wen, 1997). This concept has occupied a central role in most models of L2 motivation proposed in the last 40 years (e.g., Clément, 1980; Dörnyei, 1994; MacIntyre, Clément, Dörnyei & Noels, 1998; Schumann, 1986).

Recently, the Gardnerian construct of integrativeness has come under serious attack. The main reason for problems with integrativeness is that in the 21st century a high number of

students learn a second language in a foreign language setting with the purpose of being able to communicate with other non-native speakers in an international environment. This is especially true in the case of English, which has become an international language serving as a *lingua franca* in a globalized world (e.g., Crystal, 2003; Widdowson, 1993). Therefore the English language has become separated from its native speakers and their cultures (Skutnabb-Kangas, 2000). In a recent article, Sifakis (2004) even argued for using the term English as an Intercultural Language instead of English as an International Language, which would express that in our days English is most often used in inter-cultural encounters. Integrativeness in the sense as defined by Gardner involves the language learners' identification with native speakers of the L2, but for a large number of learners of a variety of languages such as English, German, French and Spanish, integrativeness has no relevance in today's world.

Therefore, it seems to be more appropriate to talk about some kind of cosmopolitan identity or "international posture" (Yashima, 2002), which includes "interest in foreign or international affairs, willingness to go overseas to study or work, readiness to interact with intercultural partners ... and a non-ethnocentric attitude toward different cultures" (ibid, p. 57). The lack of identification with native speakers of English as a significant motivating factor was demonstrated in a number of studies in a variety of settings (e.g., Lamb, 2004; Yashima, 2000; Warden & Lin, 2000). It was also shown that in the case of English, it is very difficult to distinguish instrumentality, that is, the utilitarian benefits associated with the knowledge of the language, from integrativeness (Kimura, Nakata & Okumura, 2001; Lamb, 2004). As Lamb (2004) argued, "meeting with westerners, using pop-songs, studying and traveling abroad, pursuing a desirable career – all these aspirations are associated with each other..." (p. 15).

To summarize, motivation research in the 21st century has to face two challenges. First, the traditional concept of integrativeness, as proposed in the work of Gardner (2001), involves identification with the L2 speaking community. In our globalized world, however, there is no salient L2 community to identify with in the case of English; moreover, for a high number of

learners, especially in a foreign language setting, identification with native speakers does not seem to be a relevant motivating factor. Second, as a consequence of English becoming a world language, the pragmatic benefits deriving from being able to speak this language and the attitudes to the “World English” community have become intricately linked, which has rendered the separation of integrativeness and instrumentality problematic. In an attempt to answer these challenges, Dörnyei (2005) and Csizér and Dörnyei (2005) proposed the model of the L2 Motivational Self-System, which consists of three main components: Ideal L2 self, Ought-to L2 Self and L2 Learning Experience. In this model integrativeness is included in the construct of the Ideal L2 Self, which is one’s ideal self-image expressing the wish to become a competent L2 speaker. The Ought-to L2 Self contains “attributes that one believes one ought to possess (i.e. various duties, obligations, or responsibilities) in order to avoid possible negative outcomes” (Dörnyei, 2005, p. 106). L2 Learning Experience covers “situation-specific motives related to the immediate learning environment and experience” (ibid, p. 106). The model of the L2 Motivational Self-System is based on Higgins’ self-discrepancy theory (1987), in which it is argued that motivation is the result of someone’s wish to reduce the discrepancy between one’s ideal self, that is, one’s image of what one would like to become, and one’s actual self, that is, one’s actual self-state. Motivation also comes about from the intention to lessen the gap between one’s actual self and one’s ought-to-self, that is, one’s perception of what significant others would like one to become. We should also note that Dörnyei’s theory is also based on the realization that “one feels like a different person when speaking a second language and often indeed acts very differently as well” (Guiora & Acton, 1979, p. 199), which was embodied in the concept of “language ego” in Guiora, Beit-Hallahmi, Brannon, Dull and Scovel’s (1972) study more than 30 years ago.

In Dörnyei’s (2005) model the Ideal L2 Self represents one’s view of oneself as a competent L2 speaker. Since the closest parallels to the idealized L2 self are the L2 speakers themselves, the Ideal L2 self subsumes integrativeness. Dörnyei argues that

our idealized L2-speaking self can be seen as a member of an imagined L2 community whose mental construction is partly based on our real-life experiences of members of the community/communities speaking the particular L2 in question and partly on our imagination. (p. 102).

As this quote also illustrates, Dörnyei tried to answer recent challenges to the notion of integrativeness by proposing that instead of an existing native speaker community, students regard an imagined cosmopolitan community of international L2 speakers as a group that they intend to become a member of. This conceptualization overcomes the problem of the lack of clearly identifiable native L2 speaker community and the decreased relevance of identification with L2 speakers for a large group of learners of a variety of languages.

Dörnyei's Ideal L2 Self also includes certain instrumental motives. Gardner (1985) conceptualized instrumental motivation as the utilitarian gains associated with the mastery of the L2 (better jobs and/or a higher salary). Noels (2003), however, proposed that perceived benefits can be both intrinsic, that is, internalized by the students, and extrinsic, that is, might be regarded as important only by the learners' environment. Drawing on Noels' (2003) work, Dörnyei (2005) also argued that internalized instrumental motives are part of the students' Ideal L2-Self, whereas those instrumental values that are "generated by a sense of duty or a fear of punishment" (p. 103) belong to the Ought-to L2 Self.

Although the importance of self-concept and identification in L2 motivation research seems to be evident, Dörnyei's (2005) model needs further elaboration and empirical testing. First of all, as pointed out by Higgins (1999), the attributes of self-discrepancies greatly influence both emotions and motivation, but in his model Dörnyei does not discuss how the various L2 self-concepts might contribute to motivated behavior. It is also debatable whether the Ideal L2 Self is able to replace integrativeness, since Dörnyei's construct primarily expresses one's image of a successful and competent L2 speaker and only indirectly includes attitudes to other L2 speakers and an identification element. The relationship of instrumentality and Ought-

to L2 Self is also somewhat ambiguous in the model, as Dörnyei argued that internalized instrumental motives might be part of the Ideal L2 Self, whereas extrinsic instrumental incentives are incorporated into one's Ought-to L2 self. The question is whether it is possible to separate intrinsic and extrinsic aspects of instrumentality.

In our research, we submitted Dörnyei's (2005) model of the L2 motivational self-system to empirical testing on three different populations of learners of English in a foreign language setting. First we performed principal component analyses and reliability analyses to investigate whether the Ideal L2 self, Ought-to L2 self and International Posture can be identified as separate and meaningful constructs in these three groups of Hungarian learners. Next we were interested in the relationship of the Ideal L2 self and Ought-to L2 self with key traditional constructs of motivation: integrativeness, instrumentality and motivated behavior. Finally, we investigated how the motivational variables predict motivated behavior in the three sub-samples.

Method

Participants

Our research is a cross-sectional study that investigated three different cohorts of language learners from Budapest, the capital of Hungary, at a particular point of time. Budapest is the largest city in the country, where one fifth of the total Hungarian population resides. Budapest is in many respects similar to major metropolitan cities in Europe, with the exception that in Hungary most of the population is monolingual: according to the 2000 census, 92.3% of the Hungarian population claimed to be ethnic Hungarian and the proportion with Hungarian as their mother tongue was even higher, 98.2% (Central Statistical Office, 2004).

We selected three language learner populations that have not yet been extensively studied in the Hungarian context: secondary school and university students and adult language learners. In selecting students from these groups we used criterion-sampling. As for secondary school students, we included three schools that fell into the range of institutions with an average quality of teaching and average student population based on the rank order of schools in terms of the number of students admitted to university (Országos Közoktatási Intézet, 2004). Two of the schools were state schools, and in order to represent learners from the private sector of education, we also selected a church-owned school. The three schools were from different geographical locations in the city in order to represent students from various social backgrounds. All the students in the second and third year studying English were asked to fill in the questionnaires. All together 202 learners, 80 male and 122 female, responded to our questions in the secondary school sample. The average age of students was 16.5 years. Studying at least one foreign language is compulsory all through primary and secondary education. English is not a compulsory language in Hungarian secondary schools, but it is the most frequently studied language (Halász & Lannert, 2007). When enrolling in secondary school, students can choose

which foreign language they would like to study. According to the participants' self-reports and information from the students' teachers, the level of students' proficiency in the investigated sample was between A2 and B1 on the scale of the Common European Framework of Reference (CEF) (Council of Europe, 2001).

In selecting the university students, we paid attention to representing the various fields of study one can pursue in Budapest and to including learners both from colleges and universities (see Table 1). Altogether, 230 learners of English, 92 college students and 138 university students, responded to our questions. The students' average age was 21.5 years, and 157 of them were female and 72 male (for two learners gender data were missing). Studying foreign languages is voluntary at universities, and students are required to pay for foreign language instruction. Students in tertiary education, however, need to hold an intermediate and an elementary level language certificate in order to be able to graduate. Therefore, most students in the sample were preparing for one of the accredited intermediate level proficiency exams (B2 level of the CEF scale).

Adult language school learners consisted of two main groups: students taking company courses and students enrolled in a language school. 64 of the adult participants attended a language course organized by their companies, two of which were private enterprises and one was a state-owned company. In choosing the language schools, eight of the largest language schools in Budapest were approached to allow their students to fill in our questionnaires. Five schools responded positively to our request, from which 127 students answered our questions. These schools are well-established and high-quality language schools that have won accreditation from the Hungarian Chamber of Language Schools. Among the adult participants 67 were male and 124 female, and their average age was 33.7 years. The participants worked in all spheres of life including business, industry, tourism, health care, education and services. Their jobs were widely varied, ranging from housewife to bank manager. According to the students' self-reports and their results on the placement test administered by the language

school, adult language learners' proficiency ranged from pre-intermediate to advanced levels (A2-C1 on the CEF scale). Most of the participants enrolled in the language course voluntarily, both in the language schools and in the company courses.

Materials

Our questionnaire contained 76 questions for secondary school and university students and 72 questions for adult learners. The questions aimed to measure the most important factors in L2 learning motivation that were identified in previous research, and the instrument included three new variables that have not yet been empirically tested in survey studies: Ideal L2 Self, Ought-to L2 Self and International Posture.

For questions 1-20, participants had to indicate on a five-point scale to what extent they agree or disagree with statements. These questions intended to cover the following four variables:

1. *Integrativeness* (3 questions): language learners' attitude to L2 speakers and their cultures. Example: How much would you like to become similar to the people who speak English?
2. *Instrumentality* (4 questions): utilitarian benefits associated with being able to speak the L2 such as higher salary, better jobs. Example: How much do you think knowing English would help your future career?
3. *Cultural interest* (4 questions): attitudes to L2 cultural products (films, TV programs, magazines, pop-music). Questions relating to both British and American cultural products were asked, as both are widely available for Hungarian students through various forms of media. Example: How much do you like the films made in the United States?

4. *Vitality of the L2 community* (4 questions): students' views concerning the role of the USA and UK in today's world and the wealth of these countries. Example: How important a role do you think the United Kingdom plays in the world?

Questions 21-69 had to be answered on a five-point Likert-scale where students had to mark to what extent the statements characterized them. These questions measured the following constructs:

5. *Linguistic self-confidence* (3 questions): students' views on how easily and successfully they will be able to acquire English. Example: I am sure I will be able to learn a foreign language well.
6. *Language use anxiety* (3 questions): the level of anxiety felt when students use English in everyday life. Example: I would feel uneasy speaking English with a native speaker.
7. *Classroom anxiety* (3 questions): the level of anxiety felt in language classes. Example: It embarrasses me to volunteer answers in our English class.
8. *Milieu* (4 questions): the attitude of people in the students' immediate environment concerning the importance of learning English. Example: People around me tend to think that it is a good thing to know foreign languages.
9. *Parental encouragement* (4 questions): the extent to which parents encourage their children to study English. Example: My parents really encourage me to study English. This scale was not included in the questionnaire for adults.
10. *Language learning attitudes* (4 questions): the extent to which students like learning English. Example: I really enjoy learning English.
11. *International posture* (4 questions): students' attitudes to English as an international language. Example: Studying English will help me to understand people from all over the world.

12. *Ideal L2 self* (7 questions): students' views of themselves as successful L2 speakers. Example: I like to think of myself as someone who will be able to speak English.
13. *Ought-to L2 Self* (6 questions): students' perceptions of the various language learning related duties and obligations that are set by their immediate environment. Example: If I fail to learn English I'll be letting other people down.
14. *Motivated learning behavior* (9 questions): students' efforts and persistence in learning English. Example: I am willing to work hard at learning English.

In the last part of the questionnaire, we asked students background questions concerning what languages they would like to study in the future, when they started learning English, whether they were studying any other foreign language, what their age and gender was, where and what they were studying (in the case of university students) and what their job was (in the case of adults). The questions were adapted from two sources: a previous motivation questionnaire used by Dörnyei and Csizér in a variety of Hungarian research projects (for an overview see Dörnyei et al., 2006) and from a newly developed questionnaire by Ryan (2005).

Procedures

The English version of the questionnaire was first piloted by Ryan (2005). Gálik (2006) translated the questionnaire and piloted it by asking two secondary school students to think aloud while filling it in. Potentially problematic items were reworded, and the instrument was administered to 111 secondary school students (Gálik, 2006). Following the factor and reliability analysis of this pilot run, we omitted or reworded unreliable items.

The final version of the questionnaire was mailed or personally delivered to the secondary schools, universities, colleges and language schools, where a person who agreed to take charge

of the administration of the questionnaires distributed them among teachers and collected the completed questionnaires.

All the questionnaires were computer-coded and SPSS (Statistical Package for Social Sciences) 13.0 was used for analyzing the data. Because the data were normally distributed, we applied parametric procedures. The level of significance was set for $p < 0.05$, and where necessary, we used the Bonferroni correction procedure.

Results

The main dimensions of analysis

In order to identify broader dimensions underlying the attitudinal/motivational variables measured by the questionnaire, we submitted the items belonging to the specific scales to principal component analysis (conducting separate analyses for each age group). The statistical characteristics of the various factors in the different sub-samples were similar and sufficient to conclude that except for the scale of integrativeness, Hungarian language learners within the three age groups could be described with the same latent dimensions concerning their motivational dispositions. Next, based on the outcome of the principle component analysis, the items were divided into several multi-item scales, and the Cronbach Alpha internal consistency reliability coefficients were computed (Table 2).

As the list of variables in Table 3 indicates, some latent dimensions used in earlier Hungarian studies (e.g. Dörnyei, Csizér, & Németh, 2006) had to be excluded from the analysis because only two items loaded onto them, and the brevity of these scales did not seem to be justifiable. One of these factors was the vitality of different English speaking communities, and the other travel orientation, which emerged as a factor in analyzing the scale that originally intended to measure instrumentality. The other factor that could not be adequately described with the items of our questionnaire was linguistic self-confidence. Even though this variable

played an important role in previous studies conducted with young schoolchildren in Hungary (Clément et al, 1994; Csizér & Dörnyei, 2005) and in Canada (Clément & Kruidenier, 1985), we had to exclude it from the analysis. The reason for this might have been the low number of items originally intended to measure this construct and its partial overlap with language use anxiety. We were surprised to find that in our survey instrumentality could not be adequately identified as one single factor. Instrumentality was found to consist of two latent dimensions: knowledge orientation, that is, learners' wish to enhance their general knowledge about the world through mastering a foreign language, and travel orientation, which expresses the desire to learn English for the purpose of using it when traveling abroad. As just mentioned, this latter factor had to be excluded, due to the fact that only two items out of the originally intended four constituted the scale. Another related factor the existence of which was not supported by our data is the Ought-to L2 self, as the items supposedly covering the Ought-to L2 self dimension in fact loaded onto two latent dimensions with some items seemingly belonging to both factors.

On the other hand, among the adequate measurement scales we can find the cornerstone of Dörnyei's (2005) new motivational construct, Ideal L2 self, which emerged as a distinct latent dimension, although some items had to be dropped from the scale in order to gain a higher reliability coefficient. Three important dimensions that formed an integral part of L2 motivation in Dörnyei et. al's (2006) study could be identified in our research, namely, integrativeness, milieu and cultural interest. Integrativeness had unexpectedly low reliability for the adult sample, and therefore we did not include this scale when analyzing the motivational characteristics of adults. Additional factors that were hypothesized to play an important role in L2 motivation but were not included in previous Hungarian studies, namely Language learning attitudes, Classroom and Language use anxiety (e.g., Gardner & MacIntyre, 1993; Gardner, Tremblay & Masgoret, 1997; Tremblay & Gardner, 1995), Parental encouragement (e.g., Williams & Burden, 1997) and International posture (Yashima, 2002) could be adequately measured with our instruments and were thus used in further analyses.

Comparative analysis of the motivational scales

Table 4 presents descriptive statistics of the scales within the three subsamples and the comparison of three age groups' scores with the help of a one-way analysis of variance (ANOVA). In order to compensate for the effect of multiple testing, the level of significance was set for $p < 0.005$.

For the all three samples, there were two scales, Ideal L2 self and Milieu, that consistently showed the highest mean values (above 4 on a 5-point scale). Similarly, students' scores on the International posture scale were also high (around 4), which highlights Hungarian learners' positive attitudes toward the international role of the English language and that they regard the knowledge of this language highly useful in today's globalized world. We can also observe that none of the scales had mean values lower than 3, which indicates that all three groups possess favorable attitudinal and motivational dispositions. As evidenced by the high mean values for language learning attitudes and knowledge orientation, the investigated groups of learners think that foreign language learning is important and its process is enjoyable, which is reinforced by their milieu and, for younger learners, their parents (see the values around 4 on a 5-point scale for milieu and parental encouragement). The descriptive statistics also revealed that on average learners were not particularly anxious about classroom learning and using the language outside the classroom, as the reversed anxiety scales showed values higher than 3. Examining the standard deviation figures, however, we find that the language use anxiety scale showed the largest variation in the study, which indicates that participants experience varying degrees of anxiety in L2 communication. The percentage of students suffering from high levels of language use anxiety (values lower than 2) is 10.4% and that of students having negative emotional experiences in the language classroom (values lower than 2) is 5.9%. This indicates that the

anxiety of our participants can be primarily characterized as communication apprehension (for a review of this issue see Horwitz, 2001; MacIntyre, 2002)

As for the age-related variations concerning the distinct scales (see Table 4), university students studying English showed the highest mean values in the case of Ideal L2 self and international posture, whereas other adults' and secondary school students' scores on these scales are consistently lower. Additional age-related differences were also reflected in the fact that our criterion measure of students' motivated learning behavior indicated significant differences: university and adult language learners showed significantly higher scores on the motivated learning behavior scale, that is, they were willing to invest more effort in language learning, they persisted longer and language learning itself was more important in their lives than in that of the secondary school students.

The relationships among the motivational scales

In order to answer the question of what relationships might describe the obtained motivational scales, we carried out correlational analyses. Table 5 presents the significant correlations among the scales within each sub-sample (due to the application of the Bonferroni correction procedure, only correlations where $p < .001$ are reported).

As can be seen in Table 5, the correlation between the Ideal L2 self and integrativeness indicates that the two latent dimensions tap into similar domains but share only 20.34% variance for secondary school students and 12.53% for university students. For these two populations, integrativeness showed a higher correlation with language learning attitudes than with the Ideal L2 self, and for university students integrativeness also seemed to be more closely related to cultural interest than to the Ideal L2 self. Except for secondary school students, we could also see remarkably high correlations between the Ideal L2 dimension and international posture. The relationship of integrativeness and international posture for secondary school and university

students was also strong. International posture as well as the Ideal L2 self and integrativeness were found to be all closely related to the factor called knowledge orientation, which as described above was a sub-scale measuring the traditional construct of instrumentality.

The relationships between the motivational scales and the criterion measure

In order to find out which attitudinal and motivational scales act as predictor variables of students' motivated learning behavior, we carried out multiple regression analyses with a stepwise approach. In order to adjust the significance level to multiple testing, the Bonferroni procedure was used, and the level of significance was set for $p < 0.01$. The results are summarized in Tables 6a-c. For all three samples, the results concerning motivated behavior were consistent and showed only minor age-related variations. Out of the ten dimensions investigated, four contributed significantly to learners' motivated behavior: Language learning attitudes, Ideal L2 self, Cultural interest and International posture, with Language learning attitudes and Ideal L2 self being the most important predictor variables. As regards age-related differences, the Ideal L2 self was a stronger predictor of motivated behavior of adult learners compared to secondary school and university students. Cultural interest was present as a significant predictor variable in the secondary school sample, whereas international posture was found to be a contributor only in the university years and adulthood.

In order to further our understanding of the structure of L2 motivation, we also carried out regression analyses for the criterion variable of Ideal L2 self. Tables 7a-c indicate that the Ideal L2 self was related to different factors in the various age groups. What all three groups of students had in common is that the best predictor of the Ideal L2 self is international posture. For the Ideal L2 self of secondary school and university students, language learning attitudes was a contributor, but it was not present in the model for adults. In the case of secondary school

students as well as adults, the Ideal L2 self was related to the importance students' milieu attaches to language learning. For adults cultural interest also constituted part of the model.

Discussion

As the results of the reliability assessments and factor analyses of our questionnaire indicate, Dörnyei's (2005) theory of the Motivational Self-System only gained partial support. The scale measuring Ideal L2 self could clearly be identified as a valid and reliable one, whereas the existence of a factor called L2 Ought-to Self could not be ascertained. Related to this, we found that in our questionnaire instrumentality did not emerge as a single dimension either, and only the scale measuring the knowledge orientation facet of instrumentality showed acceptable statistical characteristics. Our results in this respect suggest that for the population we examined, the construct of instrumentality needs to be reconsidered. While some Hungarian studies could clearly identify an instrumental dimension for primary school children (e.g., Dörnyei et al., 2006), in some other research where participants were secondary school learners no clear utilitarian dimension emerged (Clément et al., 1994; Dörnyei, 2002; Dörnyei & Kormos, 2000). In the latter projects, items measuring utilitarian values traditionally attached to the instrumental dimension of L2 learning (e.g., obtaining better jobs, higher salary) loaded on a factor with variables measuring other incentives (e.g., traveling, making foreign friends). In their classic study of motivational orientations, Clément and Kruidenier (1983) also identified four orientation dimensions across a number of different learning contexts in Canada; the traditionally conceived instrumental orientation was one of these four, together with travel, friendship and knowledge orientations. It seems that depending on the relative salience of the latter three incentive aspects, these utilitarian values can form different combinations of the meaning of 'instrumentality' for L2 learners. The results of the principal component analysis might also suggest that in countries like Hungary, where the national economy is largely

dependent on foreign companies and international relations, the role of instrumental incentives might be partly covered by international posture since most of the instrumental values of knowing English are related to the role of English as an international language.

The key construct of Dörnyei's (2005) model, however, was not only found to be a valid and reliable factor but also an important dimension of L2 motivation. Among all the components of motivation, the Ideal L2 Self scale showed the highest mean values (along with milieu) for all three populations we investigated. This finding indicates that Hungarian learners of English who are above the age of 14 and who live in the capital city of Budapest view themselves as competent foreign language users in the future. The Ideal L2 Self was found to have the highest mean value for the university student population. The somewhat lower values for the secondary school students might be explained with reference to the fact that students' self-image goes through considerable changes in the period of adolescence (Carlson, 1965), and therefore their Ideal L2 Self is also under transformation at this age. On the other hand, adults' self-image is relatively stable, and because they have to acquire the L2 in adulthood, the L2 self needs to be adjusted to their already crystallized self-image. University students are in a period of their lives when they have a fairly stable self-image, but it is still flexible (Carlson, 1965); therefore the L2 self can easily form part of their self-image. The significant differences in students' future image of themselves as competent speakers of English might also be due to the fact that secondary school students experience a limited amount of contact with speakers of English, and thus they do not yet perceive the high importance of being able to use English in the future.

When we examine the differences in the regression models for motivated behavior, we can see that the models of motivated behavior show considerable variation across age groups. Although the key predictor variable is the Ideal L2 self for all three groups, for adolescent language learners it is rather interest in English-language cultural products that affects their motivated behavior, and international posture as an important predictive variable is only present in the two older age groups. It is likely that the above-mentioned age-related difference in the

amount of contact with speakers of the target language explains the fact that for adult learners, language-related attitudes and Ideal L2 self variables play almost equal roles, explaining around 40% of the variation in motivated behavior, whereas for the two younger sub-samples, language learning attitudes are slightly more important than the Ideal L2 self. This finding might also be explained with reference to the fact that the language learning attitudes of younger students are primarily based on classroom experience and are largely shaped by teachers (see e.g., Nikolov, 1999), whereas older students have clear goals with language learning, which are already incorporated in their Ideal L2 self and are less dependent on their teacher and classroom experiences.

In line with Lamb's (2004) qualitative study conducted in Indonesia, we also found that integrativeness and the Ideal L2 self are distinct constructs in the Hungarian population investigated. The correlation of integrativeness and Ideal L2 Self can only be considered moderate for secondary school students, whereas in the sub-sample of university students, it falls in the range generally considered as a weak relationship. Our results, then, indicate that for our participants the Ideal L2 self cannot replace the construct of integrativeness, that is, learners' attitudes to L2 speakers as suggested by Dörnyei (2005). The regression analyses reveal that the Ideal L2 self is best predicted by the variable of international posture, and integrativeness is not present in the regression models. From this we might conclude that it is rather one's attitude to English as an international language that affects one's image as a successful user of L2 in the future, a finding that is very similar to the one presented in Lamb's (2004) interview study. If we examine the models of Ideal L2 self, we can see that for secondary students and university students, attitudes to language learning are among the predictor variables. This suggests that enjoyment derived from language learning, an important motivational factor identified by Ushioda (2001), is related to secondary and university students' views of themselves as successful language users. In Dörnyei's (2005) model this motivational factor is assumed to belong to the component of L2 learning experience. Our regression models, however, raise the

question of whether it is possible to separate language learning experiences from one's Ideal L2 self. In addition, both the correlational and regression analyses show that there is a strong relationship between adult and secondary school learners' milieu and their Ideal L2 self, which indicates that students' environment plays an important role in shaping their views of themselves.

Our study also brings to light inherent problems with the construct of integrativeness. The reliability analyses across the three sub-samples show that as students get older, the concept of integrativeness seems to be less consistent for learners: the reliability coefficient for adults is unacceptably low. The role of integrativeness in influencing motivated behavior seems to be taken over by the Ideal L2 self. As opposed to earlier studies conducted with Hungarian primary school children (for an overview see Dörnyei et al., 2006), integrativeness does not even meet the entry criteria. We cannot unequivocally claim either that international posture or integrativeness are interchangeable concepts in the investigated setting, as for secondary students integrativeness is only moderately strongly related to attitudes to English as an international language, and it is only for university students that these two scales share 25% of the variance. Due to the fact that secondary school students have a limited amount of contact opportunities with users of English outside the classroom and that most coursebooks still focus on L2 native speakers and their cultures, their attitudes to native speakers and the global English user community show smaller overlaps than that of university students, who might meet foreign exchange students and read international books and journals in English (see Kormos, Csizér, Menyhárt & Török, submitted).

If we examine the models of motivated behavior and the mean values of the scales across all three age groups, we can see that the two key dimensions that emerge as important in the motivational profile of the sample investigated are the Ideal L2 self and international posture. This indicates that although Dörnyei's (2005) theory of the Motivational Self System needs to be refined, it rightly claims that one's image as a competent L2 user is a significant driving force

in L2 learning. Our study also lends support to previous investigations that have so far shown, in an Asian setting (e.g. Lamb, 2004; Warden & Lin, 2000; Yashima, 2000, 2002), that students' attitudes to the role of English in our globalized world are highly important in L2 learning.

The largest difference between the three age groups can be seen in the case of language learning attitudes and motivated behavior. This might be explained with reference to the compulsory nature of learning English. Although secondary school students might have a choice of what language they would like to learn at the onset of their studies, they have to continue studying this language until the end of their secondary school career. For university students, there is also a compulsory factor in language learning, as they cannot receive their diploma until they obtain the prerequisite language certificates. On the other hand, the adult learners surveyed, most of whom attend a language school, might learn English in their free time for their own pleasure, although they might also experience pressure from the job market to have a high L2 competence. Nevertheless, we can conclude that despite the fact that the mean values for motivated behavior and language learning attitudes are lower in the case of secondary school students than in the two older populations, they are still reasonably high. This indicates that all three investigated samples have favorable motivational characteristics as far as learning English is concerned. We have to note, however, that this does not necessarily mean that in general Hungarian learners find learning foreign languages important. Comparative data on the motivational profile of primary school students of English and German indicate that students show considerably more positive attitudes toward and invest more energy in studying English than German, which is also a regionally important language in Hungary (Csizér & Kormos, submitted).

Implications and directions for future research

In this paper we investigated two important issues in the field of L2 motivation: the age-related differences among Hungarian learners of English in the capital of Hungary and the

validity of the two main constructs of Dörnyei's Motivational Self-System: the Ideal L2-Self and the Ought-to L2 self in a Hungarian context. In our study we found considerable variation in the models of motivated behavior, which suggests that theories of L2 motivation do not only have to take into account the setting in which students acquire the language but also the age of the learners. From this it also follows that it is probably an impossible task to devise a universally applicable theory of motivation, since, as our research suggests, it is not only the case that a fixed set of factors play a different role in L2 motivation at different ages, but also that certain factors are not even meaningful in a particular setting or for a specific age group.

Dörnyei's (2005) theory of the Motivational Self-System only gained partial support in our context since the dimension of Ought-to L2 self could not be identified. The existence of the construct of the Ideal L2 self, however, was verified, and the Ideal L2 Self played a highly important role in language learning motivation for all the investigated age groups. Our results also suggest that the Ideal L2 self is more closely related to international posture than to attitudes to native speakers, and that therefore, in a Hungarian context, Ideal L2 self and integrativeness are not interchangeable concepts.

From our results we can conclude that all three investigated samples are highly motivated to learn English and have very favorable motivational characteristics. The high willingness of students to learn the language seems to contrast the actual language competence of the Hungarian population (TNS Hungary, Press Release, 17 November, 2005), which points to the frequently discussed problems with foreign language teaching in Hungary (e.g. Lukács, 2002). Our results indicate that the effort students are willing to invest in language learning is determined by two important factors: attitudes to language learning and Ideal L2 self. From studies on motivational strategies (Dörnyei, 2001b), it is evident that teachers, materials and activities are instrumental in shaping attitudes to learning. Therefore, it is highly important for all the age groups that teachers employ a wide variety of motivational strategies. The significant role of students' self-image should also be taken into consideration in the language teaching

process. Teachers can ask their students to talk about how they see themselves as language users in the future and should explicitly discuss the important role English plays in today's world. Both of these techniques might have a positive effect on students' Ideal L2 Self. Our findings concerning the discrepancy of the positive motivational characteristics and the low level of the proficiency of students do not only highlight that changes in the overall quality of instruction are needed, but also that positive attitudes and reportedly highly motivated behavior do not necessarily mean that students in fact invest a sufficient amount of energy in language learning. Learning an L2 differs from the acquisition of other skills in life in requiring intensive practice and increased effort. In a foreign language setting such as Hungary, the number of language classes provided in most instructional programs is not sufficient for becoming a successful L2 speaker if the student does not invest sufficient energy in studying outside the class. Consequently, students have to learn how to study on their own and how to exploit the available opportunities for using the L2. Therefore language teaching in Hungary should also involve training students to become autonomous learners. We also have to note that it is not only the responsibility of schools to help students to learn how to study on their own, but that of parents. Language teachers should not only show the importance of language learning to their students but should also communicate this to the parents and ask for their support in the teaching process.

The main limitation of our study is that our participants were only from one region of the country: the capital city, which is thought to be much more cosmopolitan than other settlements in Hungary. Therefore, it is expected that certain scales such as English as an international language might show different values if other parts of the country were surveyed. One further possible extension of our study could be the investigation of language learning motivation in settlements where students experience little contact with English-speakers and their cultural products. As mentioned above, models of motivation might not only differ across age-groups but in different geographical settings, thus our study could be replicated in different parts of the world, where potentially very different conclusions might be drawn. It is also possible that

reformulation of the items in the scale of Ought-to L2 self might result in the emergence of this construct as a separate motivational factor. Thus, future studies might not only consider choosing different populations but also extending and modifying the questions of our survey instrument. Another possible direction for future research could be the longitudinal study of the motivational evolution of language learners, which could reveal within one group of students how the interplay of motivational characteristics changes with age and language learning experience and by entering a new language learning environment.

Author note

Judit Kormos and Kata Csizér

Department of English Applied Linguistics,
Eötvös Loránd University, Budapest, Hungary

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Contact address:

Corresponding author: Judit Kormos

Email: kormos.j@chello.hu

Address: Department of English Applied Linguistics, Eötvös Loránd University

5 Rákóczi út

Budapest

Hungary

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Table 1. The distribution of university and college students according to fields of study

	N	%
Economics	66	28.5
Humanities	20	8.7
Natural sciences	27	11.7
Law	17	7.4
Engineering	30	13.0
Medicine	29	12.6
Tourism and catering	42	18.1

Table 2. The reliability coefficients in the three sub-samples for the scales included in further analyses

Scales	Secondary school students	University students	Adult language learners
Integrativeness	.64	.51	.38
Ideal L2 self	.83	.75	.85
Classroom anxiety	.87	.87	.87
Language use anxiety	.80	.86	.83
Knowledge orientation	.77	.81	.80
Cultural interest	.65	.74	.78
International posture	.73	.63	.65
Milieu	.61	.67	.54
Language learning	.87	.85	.85
Parental encouragement	.86	.89	not measured
Motivated learning behavior	.82	.81	.81

Table 3 The reliability coefficients in the three sub-samples for the scales excluded from further analyses

Scales	Secondary school students	University students	Adult language learners
Ought-to L2 self	.31	.33	.33
Instrumentality	.56	.42	.42
Vitality ÚK (2 items)	.43	.53	.63
Vitality US (2 items)	.63	.49	.62
Linguistic self-confidence	-.04	.04	.01
Tourism (2 items)	.55	.44	.43

Table 4. Descriptive statistics concerning the results of the three sub-samples and the comparison of the three age groups' scores

Scales	Sample	Mean	St. dev.	F	p	Sequence ^a
Integrativeness	Sec. sch.	3.49	.82	.83	.43	--
	Univ.	3.57	.66			
	Adult	---	---			
Ideal L2 self	Sec. sch.	4.30	.69	12.02	.001	1,3 < 2
	Univ.	4.57	.48			
	Adult	4.33	.73			
Classroom anxiety ^b	Sec. sch.	3.81	.91	2.52	.08	--
	Univ.	3.62	.99			
	Adult	3.65	.91			
Language use anxiety ^b	Sec. sch.	3.48	1.11	4.79	.01	--
	Univ.	3.71	1.06			
	Adult	3.38	1.12			
Knowledge orientation	Sec. sch.	3.78	.82	0.97	.37	--
	Univ.	3.89	.79			
	Adult	3.81	.79			
Cultural interest	Sec. sch.	3.13	.75	1.91	.15	--
	Univ.	3.20	.73			
	Adult	3.05	.75			
International posture	Sec. sch.	3.86	.79	6.95	.001	1,3 < 2
	Univ.	4.11	.63			
	Adult	3.97	.67			
Milieu	Sec. sch.	4.44	.57	1.8	1.66	--
	Univ.	4.47	.61			
	Adult	4.36	.57			
Language learning attitudes	Sec. sch.	3.39	.99	41.02	.001	1 < 2 < 3
	Univ.	3.93	.78			
	Adult	4.13	.71			
Parental encouragement	Sec. sch.	4.15	.91	3.23	.073	--
	Univ.	3.99	1.02			
Motivated learning behavior	Sec. sch.	3.50	.76	18.76	.001	1 < 2,3
	Univ.	3.88	.66			
	Adult	3.82	.66			

^a Numbers refer to the sub-samples: 1=secondary school students; 2= university students; 3= adult language learners. '<' and '>' indicate significant difference, while ',' denotes non-significant difference

^b Items comprising this scale were worded negatively but recoded positively, therefore, higher mean scores indicate anxiety free behavior and language use.

Table 5. Significant correlations ($p < .001$) among the attitudinal and motivational scales for each sub-sample

	1	2	3	4	5	6	7	8	9
<i>Secondary School</i>									
1. Ideal L2 self	--								
2. Integrativeness	.451	--							
3. Language learning attitudes	.448	.619	--						
4. Knowledge orientation	.413	.413	.369	--					
5. Parental encouragement	.384	.251	.325	.253	--				
6. Cultural interest	.227	.422	.281			--			
7. International posture	.595	.386	.353	.455	.290		--		
8. Classroom anxiety		.258						--	
9. Language use anxiety		.366	.257					.651	--
10. Milieu	.397				.548		.319		
<i>University</i>									
1. Ideal L2 self	--								
2. Integrativeness	.354	--							
3. Language learning attitudes	.437	.577	--						
4. Knowledge orientation	.371	.354	.416	--					
5. Parental encouragement			.305		--				
6. Cultural interest		.366				--			
7. International posture	.507	.504	.469	.495			--		
8. Classroom anxiety			.274					--	
9. Language use anxiety		.231	.237				.226	.675	--
10. Milieu		.216	.306		.620				
<i>Adult</i>									
1. Ideal L2 self	--				--				
3. Language learning attitudes		.401	--		--				
4. Knowledge orientation	.315	.382	.275	--	--				
5. Parental encouragement	--	--	--	--	--	--	--	--	--
6. Cultural interest	.268	.467			--	--			
7. International posture	.501	.270	.242	.517	--		--		
8. Classroom anxiety					--			--	
9. Language use anxiety					--			.684	--
10. Milieu	.408				--			.243	

Table 6a. Results of the regression analysis of the attitudinal and motivational scales with motivated learning behavior as the criterion variable for secondary school students

Variable	Final model		
	B	SE B	β
Language learning attitudes	.37	.04	.49*
Ideal L2 self	.35	.06	.32*
Cultural interest	.13	.05	.15*
R^2		.55	
F for change in R^2		6.26*	

* $p < .01$

Table 6b. Results of the regression analysis of the attitudinal and motivational scales with motivated learning behavior as the criterion variable for university students

Variable	Final model		
	B	SE B	β
Language learning attitudes	.40	.04	.48*
Ideal L2 self	.40	.07	.29*
International posture	.14	.06	.15*
R^2		.56	
F for change in R^2		6.66*	

* $p < .01$

Table 6c. Results of the regression analysis of the attitudinal and motivational scales with motivated learning behavior as the criterion variable for adult language learners

Variable	Final model		
	B	SE B	β
Ideal L2 self	.34	.06	.37*
Language learning attitudes	.36	.05	.39*
International posture	.17	.06	.18*
R^2		.46	
F for change in R^2		6.72*	

* $p < .01$

Table 7a. Results of the regression analysis of the attitudinal and motivational scales with Ideal L2 self as the criterion variable for secondary school students

Variable	Final model		
	B	SE B	β
International posture	.39	.05	.44*
Language learning attitudes	.17	.04	.25*
Milieu	.25	.07	.20*
R^2		.46	
F for change in R^2		13.14*	

* $p < .01$

Table 7b. Results of the regression analysis of the attitudinal and motivational scales with Ideal L2 self as the criterion variable for university students

Variable	Final model		
	B	SE B	β
International posture	.29	.05	.38*
Language learning attitudes	.16	.04	.26*
R^2	.31		
F for change in R^2	16.74*		

* $p < .01$

Table 7c. Results of the regression analysis of the attitudinal and motivational scales with Ideal L2 self as the criterion variable for adult language learners

Variable	Final model		
	B	SE B	β
International posture	.48	.06	.46*
Milieu	.42	.07	.34*
Cultural interest	.17	.05	.18*
R^2	.45		
F for change in R^2	10.74*		

* $p < .01$