The L2 motivational self system: Differences among learners

Due to globalization the English language has become the world's lingua franca and this has affected language policies. According to Graddol (2006), as an increasing number of countries have been implementing English as a mandatory subject in primary schools, English has come to be viewed as a basic educational skill. One of the areas of language research which has been influenced by these changes is second language (L2) motivation. Dörnyei (2005) has argued that research with regard to L2 motivation needs to adopt a two-tier approach, one for the study of English and another for the study of other languages. Dörnyei (2005, 2009) has suggested a new L2 motivation framework that takes into consideration the role of English as a world language, namely, the L2 Motivational Self System (L2MSS). The L2MSS includes the concepts of possible selves and future self-guides, and is comprised of the ideal L2 self and ought-to L2 self, as well as aspects of instrumentality.

The present study examined English language learning motivation among Croatian university students using this new framework (L2MSS) by taking into consideration various learner differences. The results indicated that length of studying English did not significantly affect the motivational disposition of students; however, higher levels of L2 motivation, a stronger ideal L2 self, and pragmatic motives related to career success were found among students with higher grade levels. Differences were also found among fields of study with biotechnical students showing the lowest levels of L2 motivation. While controlling for grade levels, gender differences were found on various motivation variables, including higher levels of intended effort and pragmatic motives related to avoidance of negative outcomes among females, while males showed higher levels on the ideal L2 self scale.

Key words: L2MSS; university students; differences in L2 motivation.
1. Introduction

In today’s globalized world language learning has become an important component of the educational process. Moreover, as a result of globalization, the English language has become the world’s lingua franca and this has affected language policies. Many countries, such as Chile, South Korea, Taiwan, Japan, and China, have changed their language policies and have introduced English into their curriculums. According to Graddol (2006), as an increasing number of countries have been implementing English as a mandatory subject in primary schools, English has come to be viewed as a basic educational skill. One of the areas of language research which has been influenced by these changes is second language (L2) motivation. Dörnyei (2005) has suggested that as a result of English’s status as a global language, learners may be more motivated to learn it. Consequently, he has suggested that research with regard to L2 motivation needs to embrace a two-level approach, one for the study of English and another for the study of other languages (Dörnyei 2005; Dörnyei & Ushioda 2011). Dörnyei further argues that the global status of English has resulted in the need to reconceptualise Gardners’ (1985) socioeducational model for researching L2 motivation, in particular, the integrative motive. Accordingly, he has introduced the L2 Motivational Self System (L2MSS) which is based on a ‘self’ framework consisting of possible selves acting as future self-guides (Dörnyei 2005). It may be assumed that learners will be motivated to learn English considering the status of global English. However, differences among learners may entail diverse levels of motivation in different contexts. The general aim of this study was to explore the motivational disposition of university students in the Croatian context using the L2MSS framework and to focus on learner differences which may account for varying motivation levels.

1.1. Context of the study

According to Vilke (2007), Croatia has a long history of language learning, with French and German being part of the educational curriculum at the beginning of the 20th century, and English being introduced in the middle of that century. Language learning, particularly English language learning, has continued to be an important part of elementary and high school curriculums. In 2006, the Croatian Ministry of Science, Education and Sport approved a curriculum for elementary schools (Nastavni plan i program za osnovnu školu 2006: 79), which explicitly states the necessity of learning at least two foreign languages in elementary schools. In particular, it stresses the importance of learning English at a young age and highlights the advantages that knowledge of English may bring, including educational benefits, as
well as future opportunities in the international job market. Learning English is also an obligatory subject in most Croatian high schools. At the university level, English studies have continued to be a popular choice among students. Moreover, entrance into the European Union and the introduction of the Bologna process to universities has been an additional impetus to continue language learning among non-language university studies. For example, many Croatian non-language university studies have compulsory language classes in their programmes with English language courses being the most common (Poljaković & Martinović 2009). However, according to Dörnyei (2005), even the highest quality curricula, teaching methods or even learner aptitude cannot override an important factor in L2 learner success, namely, L2 motivation. L2 motivation can be described as involving a learner’s choice of a particular action, the persistence in that action, and the amount of effort expended on it (Dörnyei 2001). Considering the emphasis on language learning in Croatia’s educational system, particularly English language learning, it is important to consider the role of L2 motivation among learners.

1.2. Second language motivation research in Croatia

Research that has been carried out in Croatia has focused on English language learning motivation mainly from the social psychological view with a particular emphasis on the importance of context. For example, in a study among elementary, high school, and adult learners, Mihaljević Djigunović (1997) found that the L2 motivation of learners in Croatia was different from the L2 motivation of learners in other contexts. The results of the study showed three major types of L2 learning motivation, including pragmatic-communicative motivation, affective motivation, and integrative motivation; in addition, two types of demotivation were found involving teaching setting and learning difficulties. Mihaljević Djigunović & Bagarić’s (2007) investigation focusing on a comparison of the motivation to learn English and German among Croatian elementary school and high school learners indicated higher motivation to learn English which researchers attributed to the greater amount of exposure to English in Croatian society, as well as its status as a global language. Balenović (2011) considered English learner motivation among working adults who were middle-aged in the context of globalization. Balenović suggested that learners’ belief in life-long learning formed the basis of their motivation to learn English, along with the belief that Croatia’s entrance in the European Union necessitated the need to learn English, as well as learners’ recognition of its global status. Using Mihaljević Djigunović’s motivation questionnaire (1998), Jakovac & Kamenov (2012) found correlations between motivation and learning
strategies and more motivation and use of learning strategies among successful learners. In addition, past learning experiences and motivation were also relevant factors among successful students in an English for Specific Purposes (ESP) university program. Martinović & Poljaković (2010) found that motivation to learn English at university among non-language students was affiliated with positive attitudes toward the teacher and evaluation methods, the English language and positive feelings toward English language learning. Pavičić Takač & Berka (2014) explored type of school environment as a contextual variable and the effect of gender and success in learning a foreign language among secondary school students. These authors also used Mihaljević Djugunović’s (1998) motivation questionnaire and found that the strongest types of motivation among students was communicative-pragmatic motivation followed by affective motivation; moreover, type of school and learning success had an effect on L2 learning, and teacher setting was the most prominent demotivator.

However, few studies in Croatia have focused on L2 motivation from the more recent L2 theoretical framework, namely, the L2MSS. Pavičić Takač & Bagarić Medve (2015) compared Mihaljević Djugunović’s questionnaire (1998) and a questionnaire based on Dörnyei’s L2MSS (2005). Both appear to entail different conceptualisations of L2 motivation; nevertheless, the results show that both measure the same underlying construct, although it appears that Dörnyei’s concept showed a somewhat higher level of predictive power with regard to L2 learning success. Martinović (2013) has validated a L2MSS questionnaire in the Croatian context; nonetheless, more research is needed to test this framework. In addition, although numerous investigations have been conducted focusing on English language motivation among university students, particularly in the Asian context (e.g., Chen et al. 2005; Falout et al. 2009; Ryan 2009a, 2009b; Taguchi et al. 2009; Tseng & Schmitt 2008), little research has been carried out focusing on this target learner group in Croatia, especially since the implementation of the Bologna process.

2. Theoretical background

In presenting the history of L2 motivation theory, Dörnyei (2005) distinguished three major phases: the social psychological period (1959-1990), the cognitive-situated period (through the 1990s), and the process-oriented period (the beginning of this century). Currently, L2 motivation research theory is in the socio-dynamic phase. The first period was dominated by Gardner and Lambert’s research (1972) which focused on affective variables and aptitude on L2 achievement, as well as identification with the target language community. Gardners’ (1985) socio-
educational model of L2 motivation was built around the integrative motive, which included the concept of integrativeness (integrative orientation, interest in foreign languages, attitudes towards the L2 community), attitudes towards the learning situation (attitudes or evaluations of the L2 teacher, and the L2 course), and motivation (desire to learn the L2, motivational intensity – effort, attitudes toward learning the L2). Structural equation modeling was used to test the model and the results indicated that integrativeness and attitudes toward the learning situation were antecedents of motivation, while motivation had an effect on both language achievement and language proficiency (Gardner 1985). Numerous factor analytical studies in different contexts substantiated Gardner’s theory of the integrative motive and showed its importance in L2 motivation (Dörnyei 2001). Other influential L2 research during this period included Richard Clément’s concept of linguistic self-confidence (Clément 1980, 1986).

Crookes & Schmidt (1991) were major researchers who instigated the cognitive-situated period by their calls for a wider theoretical notion of L2 motivation. Many researchers endeavoured to expand the social approach by including concepts which were part of the new cognitive movement in motivation research in psychology, including autonomy theory, self-determination theory, and attribution theory (Allwright 1990; Dickinson 1995; Dörnyei 1994; Noels et al. 2001; Ushioda 1996; Williams & Burden 1999). Some researchers explored the relationship between motivation and particular language learning tasks and behaviours in specific learning contexts (Julkunen 1989). There was also more attention put on learning contexts, that is, the effect of the classroom learning environment on L2 motivation (Dörnyei 1994; Williams & Burden 1997).

Research on learner autonomy and motivational self-regulation, which entailed a focus on the connection between motivation and particular learner behaviours, along with research on classroom processes steered researchers toward considering the dynamic and changing nature of motivation. Williams & Burden’s (1997) L2 motivation framework considered the temporal aspects of motivation and suggested that it be considered as a process on a continuum that involved various phases, such as reasons for doing something, deciding to do something, sustaining effort or persisting. Ushioda (1998) found individual and intra-individual differences in a temporal framework of students’ motivation. Dörnyei & Ottó (1998) proposed a process model of L2 motivation which was a comprehensive process-oriented perspective of motivation that took into consideration motivational temporal changes.

The process model of L2 motivation offered researchers a comprehensive framework that described various phases of motivation. Nevertheless, the complex
nature of classroom processes, the interfering effects of numerous learner goals, along with the problems connected with linear cause-effect relationships that are implied in the majority of motivational frameworks led researchers to consider other research perspectives such as the complex dynamic systems perspective. Changes in L2 motivation research also emanated from a re-evaluation of Gardner’s concept of integrativeness, particularly in foreign language learning contexts.

2.1. The L2MS

Gardner’s (1985) socio-educational model continued to be a strong influence in L2 motivation research. However, growing research indicated that the integrative motive needed to be re-evaluated especially with regard to English language learning since English had become the world’s lingua franca. A major influence in the development of the L2MSS was a longitudinal study led by Dörnyei and his colleagues (Csizér & Dörnyei 2005; Dörnyei et al. 2006). The study extended over a 12-year period and encompassed over 13,000 Hungarian students. The results of structural equation modelling analysis indicated that integrativeness was a major factor in the motivational disposition of Hungarian learners and it mediated between all the other attitudinal/motivational variables and the criterion measure of intended effort. However, basic concepts of integrativeness, such as direct communication with members of the L2 community and integration with the L2 community, was not possible for the majority of students since they were learning languages in a school setting in a foreign language context with no direct contact with the L2 community. In addition, the results indicated that integrativeness was connected with pragmatic motives along with subjective attitudes toward the L2 community.

In order to address these seemingly conflicting results, Csizér & Dörnyei (2005) proposed that integrativeness needed a broader interpretation. Taking into consideration Gardner’s view of the concept of integrativeness, which entailed an emotional identification with another cultural group, Csizér & Dörnyei (2005) suggested that rather than considering the concept as related to an actual or metaphorical integration into the L2 community, it may be perceived as identification process within an individual’s self concept. By means of the possible selves theoretical framework, the researchers argued that the concept of integrativeness could be conceived of as the L2 representation of one’s ideal self. Namely, “if one’s ideal self is associated with the mastery of an L2, that is, if the person we would like to become is proficient in the L2, we can be described as having an integrative disposition” (Csizér & Dörnyei 2005: 29). In other words, the concept of integrativeness and integrative motivation could be interpreted as the Ideal L2 self. Moreover, pragmatic
motives or instrumentality can be related to one’s idealised image of being professionally successful, while positive attitudes toward the L2 community can be related to one’s idealised L2 speaking self.

Dörnyei (2005) argued that the re-interpretation of the re-interpretation of integrativeness as ideal L2 self can help explain L2 motivation in different learning environments despite the fact that little or no contact with L2 speakers is possible, particularly in foreign language contexts where the L2 is primarily learned as a school subject. In addition, it can also describe motivation with regard to language globalization whereby the national cultural base of international languages, specifically World English, is being diminished and is being replaced by a global culture. Dörnyei (2005) suggested that the ideal L2 self perspective provides a broad motivational framework which clarifies past motivational research data, but also augments traditional conceptions of L2 motivation.

The emergence of the L2MSS as a new L2 framework was influenced by several theories. In an effort to amalgamate the concepts of personal identity and integrativeness, Dörnyei (2005) turned to self and motivation theories in psychology. Recent developments in psychology, specifically self theories, endeavoured to consider the dynamic nature of the self-system, which led theorists to connect self-representation with behavioural characteristics. Dörnyei (2005) proposed Markus & Nurius’ (1986) theory of possible selves as a link between an individual’s self-perceptions and future action. According to Markus & Nurius (1986), possible selves are comprised of an individual’s notion of what one might become, what one would like to become, and what one is afraid of becoming; consequently, they denote future self states. In addition, the concept of possible selves deals with unrealised potential, and as a result refers to an individuals’ hopes, wishes, and fantasies. Basically this means that possible selves can be considered as ‘future self-guides’ which could describe the way an individual is prompted toward future action. Moreover, Higgins’ (1987, 1996) self-discrepancy theory, which proposes two types of possible selves, an ideal self and an ought self, also contributed to the new framework. This theory proposes that motivation involves the process of reducing the discrepancy between an individual’s actual self and ideal or ought selves. According to Higgins (1998), both ideal and ought selves can be considered desired end-states; however, ideal self-guides have a promotion focus which focus on hopes, aspirations, advancements, growth and accomplishments, while ought self-guides have a prevention focus, which regulate the absence or presence of negative outcomes, and are concerned with safety, responsibilities, and obligations.
The L2MSS contains three major components, including the ideal L2 self, the ought-to L2 self, and L2 learning experience (Dörnyei 2005). The ideal L2 self is an image of oneself as a proficient L2 speaker. Motivation to learn an L2 will be the result of efforts to reduce the disparity between one’s actual and ideal self. Ought-to L2 self is comprised of beliefs a person has about what is expected of us and avoidance of negative outcomes. It is similar to Higgin’s ought self in the sense that it refers to external, extrinsic types of instrumental motives. This type of motivation is related to a sense of duty, numerous obligations, or responsibilities. L2 learning experience is related to motives concerned with the influence of classroom experiences, such as the teacher, curriculum, learner group, or experience of success in the classroom. The first two elements are derived from possible selves theory, while the third element deals with the influence of the learning context which may affect L2 motivation.

The results of the study carried out by Dörnyei and his colleagues (Csizér & Dörnyei 2005; Dörnyei et al. 2006) showed that pragmatic motives played an important role in the motivation disposition of learners. Thus, instrumentality, which is based on motives related to the utilitarian value of language learning, is a significant component of English language learning motivation. Taking into consideration Higgins’ (1987, 1998) distinction between ideal/ought selves in which ideal self guides have a promotion focus based on an approaching desired end-state, while ought-to self guides have a prevention focus founded on an avoidance of a feared end-state, Dörnyei (2005) has suggested that instrumentality can be separated into two different categories. For example, motives related to increasing job success are instrumental motives that have a promotion focus and are part of the ideal L2 self; conversely, motives such as studying not to fail a course or avoidance of parental disappointment have a prevention focus and are related to the ought-to self. Instrumentality, consequently, can be divided into instrumentality-promotion and instrumentality-prevention, according to Dörnyei (2005).

2.2. Motivational influences

Motivation research has traditionally been viewed from the perspective of individual differences which are traits or characteristics that distinguish individuals from one another (Dörnyei & Ushioda 2011). In an effort to determine why some language learners are more successful than others, researchers focusing on individual differences have studied the influence of language aptitude, motivation and personality on L2 learning. Research from this psychological view of second language acquisition (SLA) has also shown that many other learner factors may influence L2
learning success. For example, learning and cognitive styles, language learning strategies, self-regulation, as well as anxiety, self-esteem, creativity, willingness to communicate, and learner beliefs can play a strong role in the process of L2 learning (Dörnyei 2005). Moreover, age and gender can be considered overarching factors which can affect L2 learning. There are several influences which can affect each of these individual difference variables. Within L2 motivation research, variables which may influence learners’ L2 motivation that have commonly been considered include, context (where the learners are from), age, length of studying the L2, gender, and achievement grades, to name only a few. This study will consider several of these influences in an attempt to discern differences in L2 motivation among non-language university students.

3. Aim and method

3.1. Aim

Studies have found that many factors can influence L2 motivation, including the length of studying English, achievement levels, and gender. Field of study may also play a role. The general aim of this study was to investigate these factors in attempt to reveal differences in L2 motivation among non-language university majors, using the L2MSS framework.

3.2. Research questions

The following research questions will be investigated:

1. Is there a relationship between components of the L2MSS and the criterion variable (intended effort) with length of studying English and final English high school grades?

2. What are the differences and the effect of field of study and gender on the motivation of students after controlling for final English grades?

3.3. Method

3.3.1. Sample

Non-English majors from the University of Zadar, in Croatia, participated in the study, including 543 first year students. The sample consisted of a total of 204 males (37.6% of the total sample) and 339 females (62.4% of the total sample).
Students were taking an English course in their first year of studies.

Students who completed the questionnaire were studying in various fields, including: Biomedical and Health Sciences (6.8%), Biotechnical Sciences (5.9%), Humanities (23%), Social Sciences (46.2%), and Technical Sciences (17.9%). Specific areas of studies included: Nursing (Biomedical and Health Sciences); Ecology, Agronomy, and Aquaculture (Biotechnical Sciences); Art History, Archaeology, Classical Philology, Ethnology and Cultural Anthropology, History, Language Studies, Philosophy (Humanities); Economics, Geography, Information Sciences, Elementary School and Pre-School Teacher Training, Pedagogy, Psychology, Sociology, Tourism and Communication Sciences (Social Sciences); Maritime Studies (Technical Sciences). Students who had double majors were categorized into the area of study of their first major (A1). At the time of the study, English was an obligatory course in the first year for the majority of programmes with the exception of: Language studies (Croatian, French, German, Italian, etc.), Classical Philology, Pedagogy, and Sociology. In the Elementary School and Pre-School Teacher Training programme English was offered as an elective course in the first semester, while in the second and fourth semester it was an obligatory course. In addition, many programmes required English for four semesters, for example, Economics, Ethnology and Cultural Anthropology, Geography (Scientific Course), Information Sciences, Maritime Studies, Psychology, and Nursing; while History single majors were required to take English for six semesters.

Students had studied English before they enrolled in their university studies. The number of years of studying English ranged from 4 to 16 years. The average number of years of studying English was 10.3 (SD = 2.22). The average final grade in English in high school was 3.7 (SD = 0.93), on a scale of 1 to 5, with 5 being the highest grade.

3.3.2. Instruments and procedures

Data was gathered by means of a questionnaire. The first part introduced the purpose of the study, basic instructions, and elicited background information. The second part of the questionnaire measured motivational components of the L2MSS and intended effort which was the criterion variable. It consisted of five 6-point Likert rating scales adapted from the motivation questionnaire developed by Taguchi et al. (2009). The scales were subjected to factor analysis and showed good internal consistency. The scales that were used and their Cronbach alpha score include the following: Intended effort which consisted of 9 items (α = .83), Ideal L2 self had 10 items (α = .92), Ought-to L2 self contained 12 items (α = .87),
Instrumentality-promotion consisted of 13 items (α = .82), and Instrumentality-prevention had 8 items (α = .80). The questionnaire was administered to students at the beginning of their first year of university studies during their regular English class.

3.3.3. Data analysis

In order to investigate the relationship between the criterion variable (intended effort), motivational variables (the L2MSS) with length of studying English and final English high school grades, correlation analyses were carried out. Differences among students regarding field of study, gender, and final grades as the controlling effect were analysed using a two-way analysis of covariance (ANCOVA).

4. Results

4.1. Correlations analysis

Correlation analyses were carried out to investigate the relationship between components of the L2MSS and length of studying English and final English high school grades. The results showed no significant correlations between intended effort and the motivation scales, and length of studying English. However, analysis of the Pearson’s coefficients indicated relationships among the motivation scales and English grades, as well as with intended effort. There was a moderate positive correlation between final English high school grades and ideal L2 self (r = .42, p<0.01), and intended effort (r = .35, <0.01). Students who had higher English grades also had a stronger ideal L2 self, specifically, they had a stronger image of themselves as proficient speakers of English, which may suggest a stronger motivation to learn English. Moreover, students who had higher grade levels intended to exert more effort in learning English in the future. In addition, the results pointed to a weak positive relationship between English grades and instrumentality-promotion (r = .16, p<0.01). It seems that students with higher English grades were motivated to learn English for instrumental motives associated with job success.

On the other hand, a weak negative correlation was found between English grades and ought-to L2 self (r = -.29, p<0.01) and between English grades and instrumentality-prevention (r = -.11, p<0.05). It would appear that students with higher grade levels were less motivated to learn English due to external factors related to pressure from significant others, like parental or peer pressure. In addition, fear of negative outcomes, such as bad grades, also played less of a role among
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students with higher English grades. In short, the results of the correlation analyses indicated positive relationships between higher English grades and ideal L2 self, intended effort, and instrumentality-promotion. Conversely, negative relationships were found between higher English grades and ought-to L2 self, and instrumentality-prevention. The results of the correlational analyses are given in Table 1.

Table 1. Correlations between intended effort, components of the L2MSS and length of studying English and final English high school grades – Pearson Correlation Coefficients (r)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Length of studying</th>
<th>English grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intended effort</td>
<td>0.00</td>
<td>0.35**</td>
</tr>
<tr>
<td>Ideal L2 Self</td>
<td>0.08</td>
<td>0.42**</td>
</tr>
<tr>
<td>Ought-to L2 Self</td>
<td>-0.02</td>
<td>-0.15**</td>
</tr>
<tr>
<td>Instru.-promotion</td>
<td>-0.03</td>
<td>0.16**</td>
</tr>
<tr>
<td>Instru.- prevention</td>
<td>-0.05</td>
<td>-0.11**</td>
</tr>
</tbody>
</table>

* p<0.05 **p<0.01

4.2. Results of the two-way analysis of covariance (ANCOVA)

In an effort to come to a better understanding of differences in the motivational variables among students, comparison analyses were carried out which included field of study, gender and English grades. Specifically, a two-way analysis of covariance (ANCOVA) was used to determine the effect of field of study and gender on motivation with English grades as the control variable. The results of the descriptive analyses for field of study and gender are given in Table 2.

The results of the ANCOVA analysis showed that there was a significant effect of field of study on the intended effort variable, F(4, 521) = 3.237, p<0.05. Pairwise comparisons showed differences among biomedical science students (M = 3.81, SD = .754) who intended to exert more effort in studying English compared to biotechnical science students (M = 3.19, SD = .855), while social science students (M = 3.90, SD = .846) intended to exert more effort in comparison with both biotechnical and humanities students (M = 3.58, SD = .881). In addition, gender also had a significant effect on the intended effort variable, F(1, 521) = 6.310, p<0.05. It would appear that females (M = 3.85, SD = .805) intended to exert more effort than males (M = 3.36, SD = .921). These effects are valid even after controlling for grade levels which were shown to be significant, F(1, 521) = 51.450, p<0.01. Students who had higher grade levels were more motivated as shown by Pearson’s r value (r = .35, p<0.01). However, with regard to the interaction between field of study and gender, the results indicate no significant difference, F(4, 521) =
This suggests that gender was not a factor in the differences among fields of study on the intended effort variable. In addition, a significant effect was found between field of study on the ideal L2 self-variable, $F(4, 517) = 3.961, p < 0.01$.

Table 2. Results of the descriptive analyses for field of study and gender: Intended effort, Ideal L2 self, Ought-to L2 self, instrumentality-promotion, instrumentality-prevention - Mean (M), Standard deviation (SD), Number (N)

<table>
<thead>
<tr>
<th>Field of Study</th>
<th>Gender</th>
<th>M</th>
<th>SD</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomedical</td>
<td>Male</td>
<td>3.89</td>
<td>.969</td>
<td>5</td>
<td>4.58</td>
<td>1.60</td>
<td>5</td>
<td>2.82</td>
<td>.802</td>
<td>5</td>
<td>4.30</td>
<td>1.03</td>
<td>5</td>
<td>3.43</td>
<td>1.16</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>3.79</td>
<td>.733</td>
<td>31</td>
<td>4.24</td>
<td>1.01</td>
<td>31</td>
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<td>32</td>
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<td>4.29</td>
<td>1.09</td>
<td>36</td>
<td>2.93</td>
<td>.885</td>
<td>37</td>
<td>4.05</td>
<td>.818</td>
<td>37</td>
<td>3.90</td>
<td>1.17</td>
<td>37</td>
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<td>.981</td>
<td>16</td>
<td>3.94</td>
<td>1.18</td>
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<td>.654</td>
<td>15</td>
<td>3.28</td>
<td>.791</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>3.38</td>
<td>.678</td>
<td>15</td>
<td>3.33</td>
<td>1.25</td>
<td>15</td>
<td>2.88</td>
<td>1.09</td>
<td>15</td>
<td>4.14</td>
<td>.729</td>
<td>15</td>
<td>4.28</td>
<td>.984</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3.19</td>
<td>.855</td>
<td>31</td>
<td>3.65</td>
<td>1.23</td>
<td>31</td>
<td>2.54</td>
<td>1.01</td>
<td>29</td>
<td>3.89</td>
<td>.727</td>
<td>30</td>
<td>3.78</td>
<td>1.02</td>
<td>32</td>
</tr>
<tr>
<td>Humanities</td>
<td>Male</td>
<td>3.34</td>
<td>.937</td>
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It would appear that biotechnical science students (ecology and agriculture) ($M = 3.65, SD = 1.23$) had the weakest ideal L2 self compared to all the other fields of study, including biomedical science ($M = 4.29, SD = 1.09$), humanities ($M = 4.57, SD = .967$), social science ($M = 4.57, SD = .971$) and technical science ($M = 4.32, SD = .897$) students suggesting that they were significantly less motivated to learn English. Gender also had a significant effect on ideal L2 self, $(1, 517) = 6.787, p<0.01$. The descriptive results show that males ($M = 4.51, SD = .964$) had a stronger ideal L2 self compared to females ($M = 4.42, SD = 1.03$). The covariate (grade levels) was significant, $F(1, 517) = 98.039, p<0.01$, indicating that these effects are valid after controlling for this factor. In other words, students with higher grade levels also had a stronger ideal L2 self ($r= .42, p<0.01$). Nevertheless, no significant difference was found in the interaction between field of study and gender on this variable, $F(4, 517) = .523, p>0.05$. Gender did not play a significant role on students’ ideal L2 self when considering differences among fields of study.

A significant effect was also found between field of study and ought-to L2 self, $F(4, 509) = 3.358, p<0.05$. Biotechnical science students ($M = 2.54, SD = 1.01$) had significantly lower average mean levels on the ought-to L2 self scale compared to humanities ($M = 2.75, SD = .877$), social science ($M = 2.92, SD = .879$), and technical science students ($M = 3.03, SD = .810$). Gender did not have a significant effect on the ought-to L2 self variable, $F(1, 509) = 1.694, p>0.05$. The covariate of grade levels was statistically significant, $F(1, 509) = 12.695, p<0.01$. The correlations analysis indicated a negative relationship between ought-to L2 self and English grades indicating that students with higher grades levels had lower levels of motivation which were connected with external factors ($r= -.29, p<0.01$). Interestingly, a significant difference was found in the interaction between field of study and gender on the ought-to L2 self variable, $F(4, 509) = 2.458, p<0.05$ with grades as the covariate. Considering the descriptive results (see Table 2) it could be seen that females have higher levels of ought-to L2 self compared to males if they are biomedical, biotechnical or technical students. On the other hand, the ought-to L2 self is higher among males in the humanities and social science fields of studies compared to females. The interaction between field of study and gender are shown in Figure 1.
Figure 1. Interaction effects of field of study and gender on the ought-to L2 self variable with final grades as the covariate (1 = biomedical students, 2 = biotechnical students, 3 = humanities students, 4 = social science students, 5 = technical students).

With respect to the instrumentality scales, field of study had a significant effect on instrumentality-promotion, $F(1, 513) = 2.985, p<0.05$. Biotechnical science students ($M = 3.89, SD = .727$) had significantly lower scores on the instrumentality-promotion scale compared to humanities ($M = 4.28, SD = .723$), social science ($M = 4.40, SD = .731$), and technical science ($M = 4.28, SD = .701$) students. Gender
The L2 motivational self system: Differences among learners

Anna Martinović

5. Discussion

One of the differences that was expected to be found regarding the motivational variables and intended effort was the factor relating to length of studying English. The results showed no relationships between intended effort, ideal L2 self, ought-to L2 self, instrumentality-promotion, instrumentality-prevention and years of studying English. However, with regard to final English grade levels, the results indicated several relationships. Specifically, significant positive relationships were shown between the ideal L2 self, intended effort, instrumentality-promotion and final English high school grades. In other words, students with higher English grades had a stronger ideal L2 self, intended to apply more effort in learning English at university, and were more motivated to learn English for reasons related to job success. These results suggest higher motivation among students with higher achievement or proficiency levels. A number of early L2 motivation studies (Gardner 1985; Gardner 2010; Tremblay et al. 1995) have also demonstrated links between L2 motivation and achievement and proficiency levels. In educational contexts, Schunk et al. (2010) have argued that motivation can influence both learning and performance...
outcomes. In the Croatian context, Mihaljević Djigunović (1998) found higher motivation among more successful learners as did Pavičić Takač & Berka (2014). The results of this study confirm a relationship between higher language achievement levels and aspects of the L2MSS, namely, a stronger ideal L2 self and higher levels of motivation associated with the instrumentality-promotion variable. Conversely, the results of the correlation analyses demonstrated a negative relationship between English grades and externally associated motives, that is, the ought-to L2 self and instrumentality-prevention. These results seem to imply that motivation associated with external motives play less of a role among students with higher achievement levels. In particular, it appears that students who were learning English to please their parents, to gain approval from their peers, or to avoid negative outcomes such as a receiving a bad grade were less efficacious English language learners. In short, these results imply that motivational factors that are more internally related, as opposed to externally, are better indicators of English language achievement. Internally motivated factors were also found to be a stronger influence on L2 learner behaviour compared to external factors in a study carried out by Noels et al. (2001). The results also confirm the studies conducted by Dörnyei and his colleagues (Csizér & Dörnyei 2005; Dörnyei et al. 2006) which showed the importance of pragmatic motives with a promotion focus as an important component of learners learning English in a foreign language context.

Differences among fields of study were considered regarding students’ intended effort in learning English at university. It was found that biomedical (nursing) students intended to exert more effort in learning English compared to biotechnical science (ecology and agriculture) students; in addition, intended effort was higher among social science students compared to biotechnical and humanities students. Variables that were considered which might have helped to explain these differences were gender and grade levels. Indeed, the results showed that gender was a significant factor on the intended effort scale even when controlling for the effects of grade levels. Accordingly, females showed higher levels of intended effort compared to males indicating that they were more motivated to learn English. Numerous studies have shown that females are more motivated to learn English compared to males (Dörnyei et al. 2006; Dörnyei & Clément 2001). Nevertheless, when the interaction between field of study and gender were analyzed, with grade levels acting as a controlling variable, the results failed to show significant differences indicating that gender cannot explain the differences among fields of study on the intended effort variable.

With regard to the ideal L2 self variable, the results indicated that biotechnical (ecology and agriculture) students displayed the weakest ideal L2 self in compari-
son with all the other fields of study. Numerous studies have shown that the ideal L2 self is related to more intended effort. For example, the ideal L2 self had a strong effect on the criterion measure in the Japanese, Chinese, and Iranian contexts (Taguchi et al. 2009), as well as the Hungarian context (Csizér & Kormos 2009). The results of a study carried out by Martinović (2014) in the Croatian context also showed strong correlations between ideal L2 self and intended effort. Thus, biotechnical students appeared to be the least motivated students, that is, the least intrinsically motivated students. In particular, their self-concept was not linked to an image of themselves as proficient L2 speakers. The analyses focusing on gender showed that this independent variable had a significant effect on the ideal L2 self with males displaying higher levels compared to females with grades as the controlling variable. This result is in contrast to many studies which have focused on gender and the L2MSS. Namely, in a study conducted by Ryan (2009b) in the Japanese context, the results show higher scores among females on the ideal L2 self variable. In addition, Azarnoosh & Birjandi (2012) found higher means among females on the ideal L2 self variable in the Iranian context. The results of the present study showed higher L2 motivation (intended effort) among females and hence the lower levels of ideal L2 self seem somewhat contradictory considering the link between ideal L2 self and intended effort. The ideal L2 self is characterised as a possible self that entails a vision of oneself as a proficient L2 speaker. It is perhaps conceivable that males have more confidence in themselves as L2 users, or perhaps a more vivid vision, and hence have a stronger ideal L2 self. More follow-up qualitative analyses might help clarify this result. The findings also showed that gender was not a factor which might explain differences among fields of study on the ideal L2 self variable.

It also appears that biotechnical students were not motivated to learn English based on extrinsic reasons as shown by the lower average means on the ought-to L2 self variable compared to other fields of study. Gender did not appear to have an effect on this variable, with grades as the controlling variable. What is more, the results showed a relationship between gender and field of study while controlling for grade levels on the ought-to L2 self scale. Biomedical (nursing), biotechnical (ecology and agriculture), and technical (maritime) female students had higher levels on the ought-to L2 self variable than males, while the situation was reversed for the humanities and social science fields of studies whereby males showed higher levels than females. Boyatzis & Akrivou (2006) have argued that differences between the ideal L2 self and ought-to L2 self can be considered from the viewpoint of the internalization of external motives. Namely, each individual is affected to a certain extent by group norms and there is pressure to internalize extrinsic types of
motivation, such as our ought-to selves. Ideal L2 self can be considered as composed of more internalised instrumental motives, while the ought-to L2 self consists of less internalised and more extrinsic types of instrumental motives (Dörnyei 2009). Thus, it may be conjectured that the differences among gender and field of study on the ought-to scale were the result of varying degrees of internalization of societal norms among students, that is, parental and peer influences, with regard to both gender and field of study.

Regarding the instrumentality scales, the results showed that, once again, biotechnical science students had the lowest scores on the instrumentality-promotion scale in comparison with all the other fields of study, except for biomedical students suggesting that ecology and agricultural students were not motivated to learn English due to job success. The following are some examples of the statements on the instrumentality-promotion scale: “Studying English can be important to me because I think it will someday be useful in getting a good job”; “Studying English is important to me because with English I can work globally”; “Studying English is important because with a high level of English proficiency I will be able to make a lot of money”; “Studying English can be important to me because I think I’ll need it for further studies on my major,” and so on. Clearly, biotechnical students could not relate to these reasons for studying English. What is more, anecdotal evidence has suggested that ecology and agricultural students might not be motivated to learn English for career reasons because many of them plan to own their own farms and, as a result, they fail to see the need to learn it for their future career. Interestingly, gender differences did not have an effect on this scale. Descriptive analysis on the total sample showed moderately high mean levels for both males and females on this scale suggesting that both genders valued the importance of English for their careers. In terms of the relationship between field of study and gender, with grades as the controlling factor, the effect was insignificant.

On the other hand, field of study was not a significant difference on the instrumentality-prevention scale. Nevertheless, it appears that females were more motivated than males to learn English due to a fear of negative outcomes, such as not passing a course or obtaining bad grades. Oyserman & Markus (1990) have argued that a possible self that is counterbalanced by a feared self will have a stronger motivational effect. In motivational psychology, focusing on the negative consequences of failing to achieve goals has been shown to be a strong basis for continued effort in engaging in an activity (Dörnyei 2001). This is confirmed by results of this study which showed higher levels of intended effort to learn English among females. The analysis focusing on the interaction between field of study and gender
while controlling for grade levels showed that this relationship was not significant.

6. Conclusion

The results of this study, which focused on the relationship between the L2MSS and learner differences, revealed several interesting results. Firstly, length of studying English was not a significant factor in explaining differences in levels of L2 motivation among non-language university majors. Most Croatian students begin learning English at a relatively young age as shown by the high average length of studying English and this could account for the lack of significance of this factor. Moreover, the findings showed that students with higher grade levels not only intended to exert more effort in learning English, but also had a more internalised type of motivation (a stronger ideal L2 self) and more internalised instrumental motivation. This result substantiates the importance of the ideal L2 self in understanding L2 motivated learner behaviour as well as the close relationship with pragmatic motives that are related to future career success in the Croatian context.

Furthermore, the results regarding field of study show that biotechnical students were the least motivated students showing lower motivation levels on almost all the components of the L2MSS. Although it was expected that gender or grade levels might have accounted for the difference in L2 motivation levels, the results revealed that no interactions between field of study and gender, with grades as the controlling variable, were significant except for the ought-to L2 self variable. However, several fields of study showed differences on this scale, as well as variations among gender. A coherent explanation for these differences which has been suggested refers to the varying degrees of internalization of external motives among students regardless of field of study or gender. Accordingly, the low L2 motivation levels among biotechnical students may be due to insufficiently developed ideal L2 selves, and the lack of significance of learning English for their future jobs since many intended to have their own farms. In addition, controlling for the effect of English grades, the results pertaining to gender differences showed that females intended to exert more effort in learning English at university and this motivation was supported by motives related to fear of not being able to graduate and the possibility of obtaining bad grades at university. Surprisingly, males showed higher levels of ideal L2 self which suggests that they have a better vision of themselves as proficient users of English.

The significance of the findings may point towards several implications for teaching. A basic element of the L2MSS is the learner’s vision of one’s self in a fu-
ture state. Dörnyei (Dörnyei 2009; Dörnyei & Ushioda 2011) has suggested that learners can be encouraged to develop their ideal L2 self through the use of motivational strategies. According to Dörnyei (2009), the ideal L2 self can effectively motivate learners if the learner has a desired future self-image which is elaborate and vivid. Teachers can stimulate learners to create a language learning vision, that is, help them generate and maintain an ideal L2 self. Dörnyei (2009: 33) has stated that “...igniting the vision involves, in effect, increasing the students’ mindfulness about the significance of ideal selves, guiding them through a number of possible selves that they have entertained in their minds in the past, and presenting powerful role models”. Moreover, this self-image needs to be clear and detailed enough in order for it to be an effective motivator. The use of the method of imagery enhancement involving techniques of creative or guided imagery may help encourage ideal L2 self images which will help to strengthen the learners’ vision (Dörnyei 2009). By encouraging biotechnical students to develop these strategies, teachers could help them create a stronger ideal L2 self resulting in more motivated English language learners. In addition, females might also benefit from imagery enhancement techniques which would support the development of a stronger ideal L2 self.

References


Crookes, Graham & Schmidt, Richard W. 1991. Motivation: Reopening the research agen-
The L2 motivational self system: Differences among learners


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236. Zagreb: Hrvatsko društvo za primijenjenu lingvistiku – HDPL.


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**Ključne riječi:** inojezični motivacijski sustav pojmovi o sebi; sveučilišni studenti; područja studija.