Adaptation and Acculturation of International Students in Croatia

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ABSTRACT

Studying abroad provides intellectual and personal enrichment and offers a lot of positive experiences. But the confrontation with a foreign culture and educational system can sometimes lead to adaptation problems with negative emotional and physical symptoms. The objectives of this study were to investigate the acculturation, psychological and social symptoms of adaptation in a sample of international university students in Croatia. The research was carried out on a sample of 141 Erasmus students (106 females) who came from European countries to Croatia. With regards to acculturation orientation, participants in this research have significantly higher orientation to the host culture, indicating that they have a tendency to assimilate. In general, better psychological adaptation is observed in females, older students and those who are more satisfied with their social life in the host country. Participants who adapted socio-culturally better are also from an older age group, are more satisfied with their social situation, showed a higher orientation towards Croatia and perceived their host culture to be more similar to their home culture. Multiple regression results indicated that satisfaction with social situation seems to have a particular impact on adaptation, both psychological and sociocultural. The results provide an indication of those areas in which international students adapt well or need help and support, which can be useful for the work of universities and student counselling centres.

Key words: *acculturation, psychological and sociocultural adaptation, cultural distance, international students*

Introduction

In today's society, and in times of globalization, it becomes more and more important to collect international experiences. For students, one way of achieving this is to study abroad and more and more students are using this opportunity. According to the report of the European Commission[1], during the academic year 2011/2012, 33 countries took part in the Erasmus mobility programme, with 267 547 students spending a study period abroad under this programme at European level. Croatia joined the programme in 2009/2010, and in the academic year 2012/2013 there were 700 international students in Croatian universities, which was the highest annual growth amongst all the countries in this programme. Educational institutions in Croatia have established orientation and counselling programs for their international students that can be a source of social support and help in adaptation to a foreign country. Besides that, students can use a buddy system, friendship groups and student friendship networks. Although the practice of students travelling in Croatia was established a long time ago, it was not until recently that they became a focus of psychological research.

A student cross-cultural stay abroad provides intellectual and personal enrichment and can be connected with a lot of positive experiences: learning a new language, broadening one's horizon, making contact with people from different cultures, etc. Moving between cultures can be a great chance to improve self-esteem, develop new coping strategies and emotional resilience[2]. Nevertheless, during the acculturation process some problems can also arise. Being confronted with a foreign culture is an extreme situation which can lead to psychological conflicts.

For foreign students studying in education institutions abroad, the process of adaptation and acculturation is challenging and demanding in a different way from the same processes in other sojourners (migrants, refugees, tourists, working people, voluntary workers, aid workers etc). Compared with others, students as cross-cultural travellers are usually younger, well educated, highly motivated, more willing to learn, change and adapt. Additionally, they have to adapt to the new culture rapidly, since they usually spend a short time abroad – from just 6 months to one year. According to the specific life period

and challenges of cultural transition, it is more a process of learning and maturing than of stressful and unpleasant experience. Furnham[3] pointed out four main adaptation concerns faced by students. First, they are confronted with the same problems as any person living in a foreign country, such as different culture, language, accommodation, separation from home, financial problems, social relationships etc. Second, they have to deal with some common problems of this age, whether they are studying at home or abroad. In general, ages 18–25 are a demanding and vulnerable life stage in the human period with a lot of psychological and social tasks, such as independence, consolidating one's identity, establishing relationships, etc. In that sense, cultural transition can pose more additional questions and reassessments about one's own identity, about one's own family life habits, belonging to one's home community and one's own »place in the world«. Third, they have to deal with specific academic demands. They are expected to work hard, to adjust and reorganize to the new educational system, to establish successful social relationships. Although curiosity and enthusiasm are part of these new experiences, intense emotions in that period can be linked with exhaustion and failure. That is the moment to offer students social and psychological support and to teach them about ways of understanding and coping with the normal mood shifts that can arise from this overwhelming stress. Fourth, a cross-cultural journey brings a new role – that of newcomer, with all the changes acculturation brings with it.

The history of studies on acculturation shows that in the beginning there was a tendency to »pathologize« this process: studies were focused primarily on negative experiences and psychosocial problems, due to the fact that these studies were mostly in psychiatry and clinical psychology. Since the 1980s, studies of international students' adaptation have turned from clinical orientation to sojourning as a learning experience[4]. Today, there are different theoretical models and frameworks for research and interpretation of acculturation in general, and in international students particularly, with the most-mentioned being Berry's stress and coping strategies model of acculturation[5,6], Furnham's[3] culture-shock theory, Arends-Toth and van de Vijver's[7] framework for acculturation research, and Marsella and Yamada's[8] »culture and psychopathology« research framework. Two main acculturation outcomes are conceptualized: sociocultural and psychological adaptation. The former is conceptualized in the culture-learning framework, and the latter in a stress-and-coping framework[9]. Both aspects, sociocultural and psychological, are related to each other, but they can be differentiated with regard to content and are not necessarily always correlated[10]. Additionally, it has been found that psychological problems usually increase in the beginning and then decrease over time, while sociocultural adaptation, on the other hand, improves linearly with the time spent abroad.

Sociocultural adaptation, or external adjustment, refers to »the ability to »fit in« or negotiate interactive aspects of the host culture«[9] and is important for dealing effectively with situations in day-to-day life[11]. The focus is on practical and behavioural aspects. It has been found that sociocultural adaptation is predicted by factors such as expected difficulty, cultural distance, quality of sojourner-host relations, language ability, cultural separation and psychological adaptation and depression[12,13].

Psychological aspects relate to internal adjustment and involve feelings of well-being and satisfaction[12]. This means »how comfortable and happy a person feels with respect to being in the new culture, or anxious and out of place«[11]. By the mid-1990s there was a lot of literature on the psychological needs and problems of international students with special focus on sense of loss, inferiority, uncertainty, communication problems, loss of social support, etc. Psychological adaptation can be predicted by social difficulty, life changes, extraversion, satisfaction with contacts with hosts, locus of control, homesickness and sociocultural adaptation[9,12].

An important factor in adjustment to a foreign milieu that relates to social-learning approaches to cross-cultural transitions is cultural distance. Usually, cultural distance is measured by comparing two cultures on a set of parameters reflecting daily living activities as well as local custom and environment, such as climate, language, religion, education system, food, family life etc. It is expected that the greater the distance between the home and host cultures, the greater the stress and demands for adaptation. It was found that cultural distance is related to metal-health indicators such as anxiety and medical conditions, but some authors found no support for the link between cultural distance and psychological problems[14].

Current study

The purpose of the present research was to examine the acculturation, psychological and sociocultural adaptation to cross-cultural transition in international students in Croatia. Since there are lots of measurements of these variables nowadays[7,11,15,16] and this was the first research of its kind in Croatia, we found it important to pay attention to the selection of measurement instruments. For the purposes of measuring psychological adaptation we included indicators for specific psychological reactions (positive and negative) connected with being in the host culture. Also, considering the fact that studying and university contexts play an important role in international students' lives, it was important to include factors like accommodation, prior international experience, language, and satisfaction with social and financial situations.

Methods

Participants

The research was carried out on a sample of 141 foreign students from the European countries who came to Croatia through the Erasmus programme during the academic years 2013/2014 and 2014/2015. The range of ages was

from 20 to 32 years ($M = 23.02$; SD=2.15) and 106 (75.2%) of the participants were female. The participants were students registered at the International Relations Offices of six different universities in Croatia.

Measures

For the purposes of this study we created a questionnaire for the sociodemographic information. Besides this, four questionnaires developed by Demes and Geeraert[11] were used. All instruments were in English.

BAOS – Brief Acculturation Orientation Scale

The BAOS uses existing scales as a basis and identifies the value of cultural friendship, traditions, characteristics and actions as central indicators of acculturation orientation. Acculturation to the host and home country are measured independently (BAOS-Home and BAOS-Host). For both countries, subjects were asked to rate their agreement with four statements about the above-mentioned indicators on a 7-point Likert scale from 1 = »strongly disagree« to 7 = »strongly agree«. The scale was tested on sojourners (N = 1929). Cronbach's alpha for the English version of BAOS-Home was .80 for native speakers and .72 for non-native speakers. For BAOS-Host, Cronbach's alpha was .62 for native speakers and .78 for non-native speakers. Correlation between the home and host dimensions of the BAOS was low. Also the two dimensions correlated with equivalent identification dimensions.

Psychometric properties of the BAOS were tested in our sample of 141 participants. The results of factor analysis on the 4-item Home scale yielded one factor which accounted for 53.19% of the variance. Reliability results indicated good internal consistency, with Cronbach's alpha .83 and average inter-item correlation .558. The results of factor analysis on the 4-item Host/Croatia scale yielded one factor which accounted for 59.82% of the variance. Reliability results indicated internal consistency, with Cronbach's alpha .86 and average inter-item correlation .615. Association between home and host orientation was not significant.

BPAS – Brief Psychological Adaptation Scale

The BPAS is based on the Culture Shock Questionnaire by Mumford[17], symptoms of stress and adjustment difficulties which were extracted from ICD-10 and interviews with people who lived abroad. The result is a list of 10 items about positive and negative feelings relating to the host and home countries. Subjects are asked to »Think about living in [host country]. In the last 2 weeks, how often have you felt...?« and respond on a scale from 1 = »never« to 7 = »always«. The scale was tested on sojourners (N = 1929). Cronbach's alpha for the English version of the scale was .90 for native speakers and .84 for non-native speakers. Validity is given by moderate correlations with the Brief Sociocultural Adaptation Scale and the four well-being measures: stress (negative), anxiety (negative), self-esteem and satisfaction with life.

Psychometric properties of the BPAS were tested in our sample of 141 participants. The results of factor analysis yielded two factors. The first consisted of 6 negative-feelings items and accounted for 28.06% of the variance. Reliability results indicated good internal consistency, with Cronbach's alpha .82 and average inter-item correlation .442. The second factor consisted of 4 items describing positive feelings. This factor accounted for 15.56% of the variance. Reliability results indicated internal consistency, with Cronbach's alpha .68 and average inter-item correlation .378. According to the authors of the scale, a single total result could be arrived with reverse scoring of negative-feelings items. For the purposes of this research we found it more important to present positive and negative feelings separately.

BSAS – Brief Sociocultural Adaptation Scale

The BSAS is based on five scales: amongst others, the Cultural Distance Index[14], which measures various aspects of sociocultural adaptation and cultural distance, and which was based on interviews with people who lived abroad. The scale was tested on sojourners (N = 1929) and consists of 12 items. Subjects were asked to »Think about living in [host country]. How easy or difficult is it for you to adapt to...?« and then rate the items on a 7-point Likert scale from 1 = »very difficult« to 7 = »very easy«. Cronbach's alpha of the English version of the scale was .81 for both native and non-native speakers. Validity is given by moderate correlations with the Brief Psychological Adaptation Scale and the four well-being measures: stress (negative), anxiety (negative), self-esteem and satisfaction with life.

Psychometric properties of the BSAS scale were tested in our sample of 141 participants. The results of factor analysis on the 12-item BSAS scale yielded one factor which accounted for 40.94% of the variance. Reliability results indicated internal consistency, with Cronbach's alpha .88 and average inter-item correlation .399. Correlation with BPAS total score was $r = .60$; for positive feelings $r = .52$, and for negative feelings $r = .34$.

BPCDS – Brief Perceived Cultural Distance Scale

The BPCDS is equivalent to the BSAS with the difference that subjects were asked to »Think about [home country] and [host country]. In your opinion, how different or similar are these two countries in terms of...?« and then rate the items on a scale from 1 = »very similar« to 7 = »very different«. The scale was tested on sojourners (N = 1929). Cronbach's alpha for the English version of the BPCDS was .82 for native speakers and .87 for non-native speakers. Validation is given by negative correlations of the BPCDS with the BSAS and BPAS. Also supportive are correlations with well-being measures such that the

greater the perceived cultural distance is, the more subjects feel stressed and anxious and have lower self-esteem and satisfaction with life.

Psychometric properties of the BPCDS were tested in our sample of 141 participants. The results of factor analysis on the 12-item BPCDS scale yielded one factor which accounted for 41.98% of the variance. Reliability results indicated internal consistency, with Cronbach's alpha .89 and average inter-item correlation .414. Significant correlation was found only with BSAS ($r = - .19$), but not with BPAS.

Procedure

Data were collected using an on-line questionnaire that was e-mailed to international students registered at the Offices for International Students Affairs of universities in Croatia. The research took place at the end of the students' stay abroad, i.e. at the end of the semester. Participation was anonymous and voluntary.

Results

Preliminary data analysis consisted of testing the psychometric properties of each of the scales used. Most scales proved highly reliable, with Cronbach's alpha from .68, for positive feelings of psychological adaptation, to .89, for cultural-distance measure (See Table 1).

Analysis of variance

Gender. 35 (24.8%) of the participants were male and 106 (75.2%) female. The ANOVA showed significant differences for only one of the dependent variables: positive feelings of psychological adaptation ($F/1,139/ = 4.595$; $p = .033$), with females reporting more of these feelings than males.

Age. Two groups were constructed. Group 1 includes participants from 20 to 22 years ($N = 75$) and group 2 participants from 23 to 31 ($N = 66$). The ANOVA showed significant differences for three of the dependent variables between the two groups: acculturation to the home country ($F/1,139/ = 5.351$; $p = .022$), with younger participants having higher results ($M = 16.41$) than the older group ($M = 14.08$); negative feelings of psychological adaptation ($F/1,139/ = 5.91$, $p = .016$), with older students having less negative feelings ($M = 15.38$) than younger students ($M = 18.19$); and sociocultural adaptation ($F/1,139/ = 5.82$; $p = .017$), with the same direction, the older participants being better adapted ($M = 66.82$) than the younger ($M = 61.82$).

Degree of study. Of the participants, 67 were pursuing an undergraduate degree at their home university and 74 a graduate degree. The ANOVA showed significant differences for two dependent variables: cultural distance ($F/1,139/ = 4.227$; $p = .042$) and negative feelings of adaptation ($F/1,139/ = 5.184$; $p = .024$). Participants studying for an undergraduate degree perceived a higher cultural distance ($M = 48.36$) than those on a postgraduate course

TABLE 1.
DESCRIPTIVE STATISTICS FOR THE INSTRUMENTS USED IN THIS RESEARCH (N=141)

Abbreviations	Scale	No. of items	Range	M	SD	Cronbach's α
BAOS	Brief Acculturation Orientation Scale					
	Home orientation	4	4-28	15.32	6.08	.831
	Croatia orientation	4	4-28	19.28	5.77	.859
BPAS	Brief Psychological Adaptation Scale	10	24-70	52.91	8.77	.752
	Negative feelings	6	6-36	16.87	6.96	.818
	Positive feelings	4	9-28	21.79	4.47	.684
BSAS	Brief Sociocultural Adaptation Scale	12	23-84	64.15	12.49	.884
BPCDS	Brief Perceived Cultural Distance Scale	12	16-76	45.91	13.58	.892

The further analysis of the results consisted of three steps: first, we used univariate analyses of variance to find out if there are differences in each dependent variable (acculturation orientation, psychological and sociocultural adaptation and perceived cultural distance) according to the following independent variables: gender, age, degree of study, host-language skills, how many times the student has visited the host country before, duration of stay, student's prior experience of living abroad, accommodation, satisfaction with financial and social situation. Secondly, we analysed associations between these variables. Thirdly, multiple regression analyses were performed to determine which specific factors predicted adaptation in international students.

participants ($M = 43.71$). The same direction was found for negative feelings: undergraduates have more negative feelings ($M = 18.25$) than graduates ($M = 15.62$).

Language level. Four groups were constructed: participants who do not speak Croatian at all ($N = 41$), participants who have elementary language skills ($N = 59$) and participants who speak Croatian well ($N = 20$), very well or fluently ($N = 21$). The ANOVA showed significant differences for the dependent variable of orientation towards host country (Croatia) ($F/3,137/ = 4.724$; $p = .003$). Students with better knowledge of the Croatian language have more acculturation orientation towards the host country, with mean values as follows: participants who do not speak Croatian at all ($M = 16.76$), participants who

have elementary language skills ($M = 19.75$) and participants who speak Croatian well ($M = 20.35$), very well or fluently ($M = 21.86$).

Previous visits to Croatia. 66 of the participants had visited Croatia before, and 75 had not. The ANOVA showed significant differences for the dependent variable of orientation towards home country ($F/1,139/ = 8.455$; $p = .004$). Participants who had not visited Croatia before showed higher scores concerning their orientation towards the home country ($M = 16.68$) than those who had been here before ($M = 13.77$).

International experience. Of the participants, 95 had not lived for an extended period in a foreign country before, and 46 had. The ANOVA showed a significant difference for the dependent variable of acculturation orientation towards the home ($F/1,139/ = 11.051$; $p = .001$). Participants without international experience showed higher scores concerning their orientation towards the home country ($M = 16.43$) than those with it ($M = 12.96$).

Duration of stay. Two groups were constructed: participants who had stayed in Croatia for up to 4.5 months ($N = 73$) and participants who had stayed between 5 and 12 months ($N = 68$). The ANOVA showed no significant differences for the dependent variables.

Accommodation. Three groups were constructed: participants who lived in a Student Dormitory ($N = 44$), participants who lived alone in a rented flat ($N = 61$) and participants who lived in a rented flat shared with one or more people ($N = 36$). The ANOVA showed no significant differences for the dependent variables.

Satisfaction with financial situation. Satisfaction with financial situation was measured on a scale from 1 = »not satisfied at all« to 5 = »very satisfied«. On the basis of the results, four groups were constructed: participants whose answer was 1 or 2 ($N = 18$), participants whose answer was 3 ($N = 47$), 4 ($N = 43$) and 5 ($N = 33$). The ANOVA showed significant differences for the dependent variable of cultural distance ($F/3,137/ = 2.911$; $p = .037$). More cultural distance was found in the group of students who were not satisfied with their financial situation and in those who were very satisfied with it. Mean values are as follows: participants answering 1 or 2 ($M = 49.44$), those answering 3 ($M = 42.36$), 4 ($M = 44.84$) and 5 ($M = 50.45$).

Satisfaction with social situation. For satisfaction with their social situation, subjects were asked to indicate how satisfied they were with their social situation in Croatia (social contacts, quality of friendships, etc.) and rate their answers on a scale from 1 = »not satisfied at all« to 5 = »very satisfied«. On the basis of the results, three groups were constructed: participants who answered between 1 and 3 ($N = 36$) – since only 4 participants gave answer 1, and 6 participants gave answer 2 – participants who answered 4 ($N = 47$) and participants who answered 5 ($N = 58$). The ANOVA showed significant differences for the dependent variables of orientation towards host country ($F/2,138/ = 4.291$; $p = .015$), positive feelings of psychological adaptation ($F/2,138/ = 16.175$; $p = .000$) and negative feelings ($F/2,138/ = 5.756$; $p = .003$), as well as socio-

cultural adaptation ($F/2,138/ = 20.952$; $p = .000$). Participants who were more satisfied with their social situation in the host country had greater orientation towards their host country, and more positive feelings, and they were better psychologically and socially adapted.

Correlations

Acculturation orientation towards home country is significantly associated with five independent variables: positively with previous visits to Croatia ($r = .24$), and negatively with age ($r = -.23$), duration of stay ($r = -.17$) and international experience ($r = -.27$). Participants with a higher orientation towards their home country were younger, they stayed in Croatia for a shorter time, and they had not visited Croatia before and had not lived in a foreign country for an extended period before. For dependent variables, association with negative feelings of psychological adaptation was significant ($r = .28$). Participants with a higher orientation towards their home country were less psychologically adapted than participants with a lower orientation towards their home country.

Acculturation orientation towards host country is significantly associated with three independent variables: age ($r = .17$), language level ($r = .27$) and satisfaction with social situation ($r = .19$). Participants with a higher orientation towards Croatia were older, spoke Croatian better and were more satisfied with their social situation in Croatia than participants with a lower orientation towards Croatia. For dependent variables, two associations were significant: acculturation orientation towards Croatia correlated positively with positive feelings of psychological adaptation ($r = .38$) and sociocultural adaptation ($r = .33$). Participants with a higher orientation towards Croatia adapted psychologically and socioculturally more successfully than participants with a lower orientation towards Croatia.

Psychological adaptation – Negative feelings correlate negatively with two independent variables: age ($r = -.24$) and degree of study ($r = -.19$). Participants who reported more negative feelings in their process of adaptation were younger and pursuing an undergraduate degree. Negative feelings correlate significantly with two dependent variables: positively with acculturation orientation to the home country ($r = .28$) and negatively with social adaptation ($r = -.34$) This means that participants who have more negative feelings during their adaptation also showed higher orientation towards their home country, and adapted socially less successfully, than participants who did not report these feelings.

Psychological adaptation – Positive feelings are significantly associated with two independent variables: gender ($r = .18$) and satisfaction with social situation ($r = .46$). Participants who adapted psychologically more positively were female, and they were more satisfied with their social situation than participants who adapted less positively. For dependent variables, two associations were signifi-

cant: positive feelings of adaptation correlated positively with acculturation orientation towards Croatia (*r* = .37) and sociocultural adaptation (*r* = .48). Participants who adapted psychologically more positively, showed a higher acculturation orientation towards Croatia and adapted socioculturally better.

Sociocultural adaptation correlates positively with one independent variable, satisfaction with social situation (*r* = .49), and four dependent variables: positively with acculturation orientation to the host country (*r* = .33) and positive feelings of adaptation (*r* = .48), and negatively with perceived cultural distance (*r* = - .19), negative feelings of adaptation (*r* = - .34). This means that participants who adapted better in sociocultural terms showed a higher orientation towards Croatia and adapted psychologically more successfully, than participants who adapted less.

Cultural distance correlates with only one independent variable, study degree, and this correlation is negative (*r* = - .17), meaning that participants who were pursuing a graduate degree indicated less cultural distance than participants who were pursuing an undergraduate degree. Cultural distance was significantly correlated with one dependent variable - sociocultural adaptation (*r* = - .19). Participants who indicated more cultural distance adapted socioculturally less.

Regression analyses

Finally, stepwise regression analyses were used for establishing predictive factors of psychological and sociocultural adaptation. We included the following variables as predictors: age, degree, host-language skills, how many times the student had visited the host country before, duration of stay, student's prior experience of living abroad, accommodation, satisfaction with financial and social situation, orientation to home and host country and perceived cultural distance. The dependent variables were psychological and sociocultural adaptation.

After multiple regression analysis was performed, results indicated that satisfaction with social situation seems to have a particular impact on both psychological and sociocultural adaptation. Together with acculturation orientation, it accounted for 33.2% of the variance of the positive feelings, and for 26.4% of the negative feelings of psychological adaptation. Significant predictors of sociocultural adaptation included satisfaction with social situation, orientation to host country and perceived cultural distance. A total of 37.8% of the variance in sociocultural adjustment was accounted for by these three variables (See Table 2).

Discussion

The aim of this study was to examine psychological and sociocultural adaptation in international students at Croatian universities. Since it was the first study of this kind, special attention was paid to the psychometric properties of the chosen instruments. Also, we tried to include more sociodemographic and contextual factors to gain insight into the characteristics of the international students in Croatia, as well as directions for future research.

Acculturation. For acculturation, participants indicated their preference for home and host culture separately, across the same four indicators: the value of friendships, traditions, characteristics and actions. According to Berry's theory of acculturation strategies, four main categories are conceptualized: integration, assimilation, separation and marginalization. But some authors, such as Arends-Toth and van de Vijver[7] and Demes & Geeraert[11], have found it more appropriate to measure home and host orientation independently, as we did in this research. The results of different correlations of home and host orientation with other variables in our research support this way of measuring acculturation in students. It was found that orientation towards home country, meaning having a preference for maintaining one's own cultural heritage and identity, was reported more in younger

TABLE 2.
SUMMARY OF MULTIPLE REGRESSION ANALYSIS FOR INDEPENDENT VARIABLES *(PREDICTORS)* PREDICTING PSYCHOLOGICAL AND SOCIOCULTURAL ADAPTATION *(DEPENDENT VARIABLE)* (FINAL STEP)

Dependent variable	Predictors	R2	F	df	Beta	t	p
Psychological adaptation - Positive feelings	Satisfaction with social situation	.332	4.869	13,127	.396	5.151	.000
	Orientation to host country				.309	3.895	.000
Psychological adaptation – Negative feelings	Satisfaction with social situation	.264	3.512	13,127	-.340	-4.215	.000
	Orientation to home country				.280	3.297	.001
Sociocultural adaptation	Satisfaction with social situation	.378	5.944	13,127	.443	5.980	.000
	Orientation to host country				.188	2.464	.015
	Cultural distance				-.220	-3.024	.003

students with less international experience. This acculturation orientation is important for experiencing negative feelings during adaptation. On the other hand, students who reported more orientation towards their host country, meaning having a preference for contact with and participation in host society and culture, were older, they spoke the Croatian language better, they were more satisfied with their social situation in the host country, and they were better psychologically and socioculturally adapted.

The authors of the measurement used in this research[11] hypothesized low correlation between the two orientations. In their research the correlation was low ($r = -.11$, p<.001). In our research correlation was low and nonsignificant, meaning that participants did not orient themselves less towards one culture if they were more oriented to the other. From the mean values of these two variables (See Table 1), it could be noticed that participants in this research have significantly higher orientation to the host culture (t=-5.795; $p = .000$), indicating that they have a tendency to assimilate, and probably that was one reason, but a very important one, for their good psychological and sociocultural adaptation.

Psychological adaptation. The average number of positive and negative feelings, reported by international students in Croatia indicated good adaptation, in general. About 80% of students reported feelings of excitement about being in Croatia, happiness with everyday life and feeling part of the place and fitting in to Croatian culture. On the level of average symptoms scoring on both scales, it was found that there are significantly more positive than negative feelings (t=-2.054; $p = .042$). Better psychological adaptation is observed in females, older students, graduates and those who are satisfied with their social life in the host country, Croatia. Findings from this study are in line with those indicating that acculturative stress is not a universal construct of acculturation, and that different populations are likely to react differently to cultural transition.

The participants did not perceive significant cultural distance between home and host cultures. It appears, therefore, that the acculturative experience for the students in our sample may not have been stressful, or they had had enough time to adjust well. It should be remembered that the investigation was performed at the end of their period of stay in Croatia. Stress decays over time, and towards the end of the sojourn most of the participants were well adapted to their host culture. According to Berry[5], at the end of an acculturation process there usually stands a positive adaptation to the new culture, but during the acculturation process adaptation can also have a negative character. In the case of our sample, the students had a short stay in the foreign country, and they usually experienced acculturative stress immediately at the beginning of their sojourn. More than 80% of the international students in this research reported the first months as the hardest period for adaptation. (For 65% of the participants it was the first month, for 18% it was the second and third, for 15% it was the fourth and fifth, and for 2% of the international students the last month was the hardest period.) Cemalcilar and Falbo[18]

found that, for about 3 months of their first year abroad, most students experienced significant declines in their psychological well-being and increased their identification with the host culture while retaining consistent levels of identification with their home culture. But, in a longitudinal study of sojourners' stress and adaptation, Demes and Geeraert[19] warn that there is no universal temporal pattern to describe cultural stress and adjustment, and thus a single description of adjustment over time may be inadequate. Their results revealed 5 distinct patterns of change in stress over the course of sojourners' exchanges: a reverse 'J' curve, inverse 'U' curve, mild stress, minor relief and resilience pattern. This finding is important for researchers because reactions to intercultural relocations are not uniform, and a single, standard temporal pattern may ignore important variability within different samples and contexts.

In this research, satisfaction with social situation was the most significant predictor of all the adaptation outcome variables. This variable included amount of social contact and quality of friendships, and this finding is in line with all those showing that social factors, such as social network, number of friends and relatives with whom the student had regular contact, social support etc., are significantly associated with the experience of adaptation difficulties[20].

Sociocultural adaptation. Participants who adapted socioculturally better were from the older age group, they were more satisfied with their social situation, showed a higher orientation towards Croatia and perceived their host culture to be more similar to their home culture. According to the cultural distance scores (See Table 1), it can be concluded that most of the participants in this sample perceived low cultural distance between their home and host countries, or that relatively few students came from culturally distant backgrounds. Broad similarity to the host culture was found in the area of living (hygiene, sleeping practices, how safe they feel) and friends (making friends, amount of social interaction, what people do to have fun and relax). Marked distance was found in social environment (size of the community, pace of life, noise) and food and eating (what food is eaten, how food is eaten, time of meals). Cultural distance, as it was measured in this study, is more about the student's immediate context, which is not always common to the rest of the country, and probably is more indicative of their social adaptation than cultural. On this point it is worth noting that this is one of the reasons why we prefer calculating cultural distance as it is perceived by the participants, and not using objective indicators about differences between countries.

Correlational results show that students who adapted socioculturally better also adapted psychologically more successfully than participants who adapted less.

According to the item responses about sociocultural adaptation, for 24.11% of the participants, the most difficult was to adapt to the language (learning the language, understanding people, making yourself understood). This finding is expected and the same in all similar studies in the field. On the one hand, knowing the language of the host culture facilitates daily communication and conversa-

tion with teachers and public authorities; on the other, inability to speak the host language can make students excessively dependent on their compatriots, or make them feel isolated. Among other item responses it was found that, for 19.85% of the participants, it was difficult to adapt to family life (how close family members are, how much time the family spends together), and, for 19.16% of the participants, to values and beliefs (what people think about religion and politics, what people think is right or wrong).

Limitations and future directions

There are some limitations of this study that could be used as directions for planning future investigation in the field. Namely, findings from this study should be interpreted in regard of the specific population and context of the cross-cultural transition. As we mentioned in the introduction, students are a different kind of travellers from migrants, refugees, tourists and others. First, students are at an age when assimilation of new experiences is part of their developmental stage; they are usually very motivated to find out more about the host culture, and they chose the particular country for their study abroad. Second, student mobility programmes are temporary, and some students approached the whole experience as a holiday. Third, students from our sample spent their sojourn in a well-controlled environment: exchange students in this programme typically stay in student dormitories or in rented flats (like their host peers) and are enrolled in educational programmes at the university with people of the same age, same study group, very often same interests, etc. Also, they receive financial support from the exchange organization throughout their stay. Fourth, students are mostly from European countries, and their perception of cultural differences is generally low, and it seems that their adaptation during this study period abroad is more about their specific group level than a cultural level.

Another limitation, the most obvious of the present study, is its cross-sectional design, and in future it will be necessary to longitudinally measure how the adaptation changes with time. Additionally, to test the finding about specific group-level more than cultural-level adaptation, it would be interesting to compare the adaptation of international students with the adaptation of students from our country who change their place of living when coming to study.

A further limitation lies in the specificity of the conceptualization of the student adaptation. In future research, due to the specifics of the sample, it would be important to include the educational aspect of this experience: academic adaptation, learning-related issues and problems, satisfaction with relations with teachers, not only peers, etc.

Additionally, since interaction with home and host peers is crucial for psychological and social adjustment, it is important to include more information from this area, especially because this interaction is very easy nowadays. According to Bochner's functional model of friendship networks, foreign students tend to belong to three distinct social networks, each serving a particular psychological function: monocultural, bicultural and multicultural[21]. So, in future research, the quality of these on-line communications should be included.

Finally, the findings from this study can have implications on the work of the student counselling centres and the ways how international students can be helped in general (with organizing language courses, language tandems, offering social activities, discussing the support counselling centres can give to students who don't adapt so well, etc.).

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PRILAGODBA I AKULTURACIJA INTERNACIONALNIH STUDENATA U HRVATSKOJ

S A Ž E T A K

Studiranje u inozemstvu omogućuje intelektualno i osobno usavršavanje te pruža brojna pozitivna iskustva. Međutim, susret sa stranom kulturom i obrazovnim sustavom može ponekad dovesti do problema u prilagodbi s negativnim emocionalnim i fizičkim simptomima. Cilj ovoga rada je istražiti akulturacijski proces i psihosocijalne simptome prilagodbe studenata porijeklom iz drugih zemalja u Hrvatskoj. Istraživanje je provedeno na uzorku od 141 studenta (od toga 106 studentica) koji su kroz program Erasmus došli u Hrvatsku iz drugih europskih zemalja. S obzirom na smjer akulturacije, rezultati pokazuju da ispitanici u velikoj mjeri prihvaćaju lokalnu kulturu i pokazuju sklonost asimilaciji. Općenito uzevši, bolja psihološka prilagodba primijećena je u djevojaka, starijih studenata i studenata koji su zadovoljniji sa društvenim životom u Hrvatskoj. Bolju društvenu prilagodbu pokazali su studenti starije dobi, oni koji su zadovoljniji sa svojom društvenom situacijom, imaju pozitivniji stav prema Hrvatskoj i koji uočavaju veće sličnosti između hrvatske kulture i svoje vlastite. Višestruka regresijska analiza pokazala je da zadovoljstvo sa društvenom situacijom ima značajan utjecaj kako na psihološku tako i na sociokulturnu prilagodbu. S obzirom da pokazuju područja u kojima se studenti bolje prilagođavaju i ona u kojima im je potrebna pomoć i podrška, ovi rezultati mogu biti korisni sveučilištima uključenima u međunarodnu razmjenu i studentskim savjetodavnim centrima.