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Sojourners' second language learning and integration. The moderating effect of multicultural personality traits.

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Abstract

This study examines the role of trainable intercultural personality traits in the widely assumed link between immigrants' second language (L2) learning and their cultural integration in the host country. The research was based on data of temporary immigrants (sojourners), being international students who reside in the Netherlands and participants of a Dutch language course (total $N=163$). Questionnaires were used to collect data at two time points (time lag: 3 months). Findings from multiple regression analyses reveal that an increase in L2 proficiency is related to a positive change in two indicators of cultural integration: identification with the host society and attitudes towards the host culture. An increase in L2 proficiency appears to be related to a positive change in terms of identification, regardless of sojourners' personality traits. With respect to attitudes towards the host culture, however, we find that increasing L2 proficiency only goes together with a positive change in attitudes towards the host culture for sojourners with a high degree of social initiative. Another notable finding is that, in the time period that this study was conducted, sojourners with a high degree of openness became more positive in their attitudes towards the host culture, regardless of the progress they made in terms of L2 proficiency. Results from this study cautiously suggest the importance of social perceptual personality traits in the cultural integration of sojourners. In line with this,

institutional policies on the L2 learning of sojourners, including the training of social perceptual personality traits, could be recommendable.

Keywords: second language proficiency, multicultural personality, identification with the host society, outgroup attitudes, integration, migration, sojourners.

Introduction

Migration is an old phenomenon. Nowadays, on a yearly basis millions of people migrate permanently to other countries (OECD, 2016). This immense migration asks for effective policy which is directed at integrating these immigrants in the host society. In this context, throughout decades, many researchers have suggested that being proficient in the language of the host country is a key factor – or even a prerequisite - for immigrants' integration in the host society (Clement, Gardner, & Smythe, 1980; Edwards, 1994; Giles & Byrne, 1982; Gordon, 1964). To date, many politicians and policymakers embrace this claim; integration programs directed at permanent immigrants generally have a strong emphasis on fostering second language (L2) acquisition.

However, in recent decades not only permanent but also temporary migration numbers have grown (Bochner, 2006; OECD, 2016). Specifically this concerns '*people who travel internationally to achieve a particular goal or objective with the expectation that they will return to their country of origin after the purpose of their travel has been achieved*' (Safdar & Berno, 2016). Many of these so called sojourners are either expatriates (expats) who left their home country for reasons of work or international students¹. Attracting expats is seen as beneficial to institutions and countries as a whole because they can introduce technologies and knowledge (Linton, 2017). Similarly, international students are attracted because they are an important source of income and (cultural) knowledge (Chakma, 2012; Gardner, 2014; Kunin, 2012). However, the gains of these sojourners are not self-evident. Adjustment problems of expats can lead to failure which inflicts costs instead (Tung, 1987). Likewise, the socio economic benefits of international students for their host societies are dependent

¹ Tourists are also sojourners (Safdar & Berno, 2016). They are a large but quite distinct group. In the current study the term 'sojourners' is used to refer to international students and expats.

on the extent to which they are able to positively adjust in their new environment (Scott, Safdar, Desai Trilokekar, & El Masri, 2015).

An important assumption of this study is that successful adjustment of sojourners can be facilitated by L2 proficiency. In the case of students, for example, a language barrier is associated with few interactions with native students (Mori, 2000). This low contact with host students in turn, is associated with lack of belongingness and connectedness with the host culture (Scott et al., 2015), aka cultural integration. Presumably, similar processes occur in expats.

It thus seems that L2 learning is of similar importance to the cultural integration sojourners as it is to permanent immigrants. Earlier research stresses the importance of cultural integration in the concerning group. It shows that low adjustment in terms of connectedness to the host society predicts low psychological adjustment (e.g. Playford & Safdar, 2007). Thus, despite the fact that sojourners can be thought of as living in an international bubble with many co-sojourners to which they can relate, it also seems of importance that they relate to members of the host society and culturally integrate.

All in all, institutional policies on L2 learning of sojourners seem recommendable. However, before actually giving such recommendation, several questions need to be answered. Firstly, is an increase in L2 proficiency actually associated with a higher extent of cultural integration? Earlier research on international students and expats already found an association between L2 proficiency and indicators of cultural integration (e.g. Chen, Benet-Martínez, & Bond, 2008; Kang, 2006). These studies thus show evidence that enhancing L2 proficiency fosters sojourners' cultural integration in the host society. However, it is interesting to note that these studies only focused on one point in time.

Secondly, would increasing the cultural integration by means of L2 courses work for *all* sojourners? Is a focus on improving language proficiency really the most important tool for cultural integration? Or does this only benefit a few? It seems plausible to doubt that "one size fits all". Rather, based on earlier research revealing the importance of personality in integration (e.g. Leong, 2007; Suanet & Van de Vijver, 2009; Van Oudenhoven & Van der Zee, 2002), it can be assumed that the degree to which L2 proficiency is associated with cultural integration will differ between sojourners with different personality traits. A plausible reason for such an assumption is that some personality

traits may facilitate the actual *use* of the L2 and (thus) the extent to which sojourners are receptive for integration. An example is the ‘Big Five’ dimension openness-to-experience which reflects proactive seeking and appreciation of experience (Costa & McCrae, 1985; Dewaele, 2012). The degree of openness-to-experience is positively related to actual L2 use (Ożańska-Ponikwia & Dewaele, 2012), and might thus be essential for cultural integration. In this context, especially trainable personality traits are of interest, because these, if they indeed appear to be relevant, could be targeted in L2 courses.

The current study aimed to test the relevance of L2 learning for the cultural integration of sojourners. We did so by using data from sojourners, whose L2 proficiency could be expected to have changed over the time interval between our two measurements (three months). Specifically the present research concerned Dutch language course participants and international psychology students who just arrived in the Netherlands ($N=167$). Firstly, we studied whether, as correlational research suggests, in our sample an *increase* in Dutch language proficiency is indeed associated with an *increase* in cultural integration. In line with previous work (e.g. Hagendoorn, Veenman, & Vollebergh, 2003), we used attitudes towards the host culture and identification with the host society as indicators of cultural integration. Secondly, we investigated whether the positive relation between L2 proficiency and cultural integration was stronger for sojourners who score high on certain trainable personality traits.

Language and integration

Gordon (1964) was one of the first scientists who identified L2 proficiency as a key factor in immigrants’ integration in the host-society. According to his ‘classical assimilation theory’, L2 proficiency is a form of integration which stimulates all other forms of integration. In a similar vein, the assumption of much contemporary integration policy directed at permanent immigrants is that learning a L2 will facilitate further orientation towards the host society. Although not all researchers agree about the exact causality between the factors involved, many indeed found support for a relation between L2 proficiency and indicators of cultural integration. In the concerning studies, of which majority is conducted among sojourners, high L2 proficiency has for example been found to be associated with a strong overall orientation towards the host society (Jiang, Green, Henley, & Masten,

2009; Kang, 2006), more favorable attitudes towards (members of) the host society (Rubinfeld, Clément, Lussier, Lebrun, & Auger, 2006) and stronger identification with the host society (Chen et al., 2008; Rubinfeld et al., 2006). Putting these correlational findings in a longer timeframe, it can be expected that an increase in sojourners L2 proficiency is associated with a higher extent of cultural integration. Specifically, in the present study, the first hypothesis is:

H1: Among sojourners, an increase in L2 proficiency is associated with a positive change in (a) *attitudes* towards the host culture, and (b) *identification* with the host society.

Multicultural personality

Personality appears to be an influential factor in the adjustment of permanent immigrants and sojourners in their host countries (Bakker, Van Oudenhoven, & Van der Zee, 2004; Galchenko & Van de Vijver, 2007; Van der Zee, Benet-Martínez, & Van Oudenhoven, 2016). Based on earlier research, Van der Zee and Van Oudenhoven (2000) propose the concept of a multicultural personality, that is, a personality that predisposes a person to successfully deal with the challenges that intercultural interaction and integration entail. They distinguish between five personality traits that characterize a multicultural personality. The first, the trait of *emotional stability*, is the ability to remain calm under new and stressful situations. *Flexibility* refers to interpreting new situations as a positive challenge and adapting to these situations accordingly. *Cultural empathy* implies empathizing with the feelings, thoughts and behaviors of members of other cultures. *Open-mindedness* reflects an open and nonjudgmental attitude towards members of different cultural groups. *Social initiative*, finally, is defined as actively approaching social situations and demonstrating initiative in these interactions (Van der Zee & Van Oudenhoven, 2000).

To assess the degree to which individuals possess a multicultural personality, the Multicultural Personality Questionnaire (MPQ; Van der Zee & Van Oudenhoven, 2000) was developed, which reliably assesses the proposed five multicultural personality traits. Research using this instrument has revealed that MPQ-scores are predictive of the ‘intercultural success’ of different groups. For example, in a study on 247 expatriate spouses it was shown that in particular the trait of open-mindedness was associated with better socio-cultural adjustment ($r=.35, p<.01$), higher intercultural interaction ($r=.39,$

$p < .01$), and higher satisfaction with life ($r = .39, p < .01$; Ali, Van der Zee, & Sanders, 2003). Also, in 126 international students, a high score on the trait of social initiative shortly before departure was found to be associated with less socio-cultural and psychological adjustment problems a few months after departure (respectively $r = -.38, p < .001$ and $r = -.30, p < .01$). Finally, in a meta-analysis the trait of cultural empathy appeared to be positively related to socio cultural adaptation ($N = 413$ from 4 studies, $r = .49$; Wilson, Ward, & Fischer, 2013).

Based on the results of several empirical studies that applied the MPQ (e.g. Hofhuis, Van der Zee, & Otten, 2012; Van der Zee & Van der Gang, 2007), Van der Zee and Van Oudenhoven (2013) recently argued that the five traits distinguished in the MPQ can be divided in stress-buffering and social-perceptual traits. Individuals scoring high on stress-buffering traits (emotional stability, flexibility) can be expected to perceive an intercultural situation as less threatening. Individuals scoring high on the social-perceptual traits (cultural empathy, open-mindedness, social initiative), perceive intercultural situations as challenging, explore the social and cognitive opportunities, and respond with more positive affect. Importantly, while the stress buffering traits are considered to be quite stable, the social-perceptual traits are more flexible and assumed to be trainable (Herfst, Van Oudenhoven, & Timmerman, 2008).

In line with the assumption that the social-perceptual traits are trainable, Van der Zee and Van Oudenhoven (2013) suggest that it would be worthwhile to train these traits at the start of or during L2 courses. After all, as described above, two different lines of research show the relevance of (a) L2 proficiency and (b) personality traits for various forms of integration. Additionally, there is research that shows an association between socio-perceptual personality traits and high proficiency in several languages (thus not only high proficiency in one L2, Dewaele & Stavans, 2014). However, to the best of our knowledge, no integrative research has been done so far to study L2 proficiency, personality traits and cultural integration simultaneously. This is remarkable, because it is very likely that the relation between progress in L2 proficiency and progress in terms of integration is stronger for sojourners, who score higher on social-perceptual personality traits. Stated otherwise, the social-perceptual personality traits are likely moderators of the relation between L2 proficiency and cultural integration (i.e. attitudes towards the host culture and identification with the host society).

Specifically, the personality trait of *social initiative* is a plausible moderator in the relation between L2 proficiency and cultural integration. This assumption is based on research suggesting that being proficient in the L2 facilitates contact with native speakers which, in turn, may lead to more positive attitudes towards the host culture (De Vroome, Coenders, Van Tubergen, & Verkuyten, 2011). Contact with members of the host society is also known to be related to a stronger identification with the host society (De Vroome et al., 2014; Nesdale, 2002). Thus, the relation between L2 proficiency and cultural integration can, at least partially, be explained by contact with members of the host society. However, although being proficient in the L2 might certainly *facilitate* contact, it does not necessarily *initiate* contact. That is, sojourners might know the language but may nonetheless still keep to themselves. Therefore, the extent to which an increase in L2 proficiency is related to an increase in cultural integration may depend on sojourners' social initiative; the trait that is most clearly linked to relation building (Van der Zee & Van Oudenhoven, 2000). Accordingly, we hypothesize that sojourners who are learning the L2 and who have a high degree of social initiative, are more prone to actually use the acquired language skills to engage in contact with member of the host society and, as a consequence, should experience more positive change in attitudes towards the host culture and identification with that society than those scoring low on social initiative.

Furthermore, the personality trait of *openness* is a plausible moderator in the relation between L2 proficiency and cultural integration. Openness is a higher order factor based on the traits of cultural empathy and open-mindedness, which are generally highly correlated (Van der Zee & Van Oudenhoven, 2013). Openness refers to being non-judgmental towards members of the host society and to being able to empathize with them (Van der Zee & Van Oudenhoven, 2000). Likely this trait is also essential for a positive change in terms of attitudes towards the host culture and identification with the host society. A sojourner who is judgmental towards members of the host society and not able to empathize with them will likely not experience any positive changes in attitudes towards the host culture and identification with the host society, despite acquiring the L2. Therefore, we expect that the extent to which an increase in L2 proficiency is related to an increase in sojourners' cultural integration depends on the degree of openness.

To sum up, in line with the nature of the social perceptual traits and earlier research revealing clear links between these trainable traits and various forms of integration, we expect the traits of social initiative and openness to be related to indicators of cultural integration (i.e. positive attitudes towards the host culture and identification with the host society). Specifically, our expectations are:

H2: The higher sojourners' degree of *social initiative* the more positive their change in (a) *attitudes* towards the host culture, and (b) *identification* with the host society.

H3: The higher sojourners' degree of *openness* the more positive their change in (a) *attitudes* towards the host culture, and (b) *identification* with the host society.

More importantly, we expect these social-perceptual personality traits to moderate the relation between L2 proficiency and sojourners' cultural integration:

H4: The higher sojourners' degree of *social initiative*, the stronger their association between an increase in L2 proficiency and a positive change in (a) *attitudes* towards the host culture, and (b) *identification* with the host society.

H5: The higher sojourners' degree of *openness*, the stronger their association between an increase in L2 proficiency and a positive change in (a) *attitudes* towards the host culture and (b) *identification* with the host society

Method

Participants

The data used for this study was collected in the Netherlands. Respondents were Dutch language course participants and newly arrived international psychology students. While the first group explicitly chose for learning the Dutch language, the second one started a study taught in English. Yet, though for their study knowing the Dutch language was not mandatory, it can well be assumed that during the first months in the Netherlands, L2 proficiency would be a relevant variable for predicting change in integration within the Dutch society. Furthermore, not only from the participants of the language course, but also from the international psychology students, progress in L2 proficiency can

be expected because they just arrived in the Netherlands and progress in L2 proficiency typically occurs shortly after arrival.

Data was gathered at two time points. Between September and the beginning of October 2011, respondents filled in our first questionnaire. The second questionnaire was filled in about three months afterwards. By conducting similar measures at two time point, possible changes can be observed. The Dutch language course participants were asked by their teachers to voluntarily participate in this paper and pencil survey. Participation by the international psychology students was also voluntary, with the difference that they earned student credits when they participated and that their questionnaires were conducted online. For both groups completion of the questionnaire took about 15 minutes. A total of 353 respondents participated in the first data collection. 52 % of them ($N=183$) also participated in the second data collection. The 16 respondents who intended to stay in the Netherlands permanently were removed from the dataset because for them the process of integration might develop differently compared to the (remaining) temporary immigrants. Merging the remaining data resulted in a total of 111 international psychology students and 56 language course participants who participated in both data collections. Due to missing data of four respondents (all language course participants), the data of 163 respondents was used for the final analysis.

The majority of the language course participants (also) came to the Netherlands to study (37 of them, which adds up to a total of 148 students in the dataset). They are thus similar to the international psychology students. From the remaining language course participants 10 were expats, three came to the Netherlands along with their partner, and two did not specify a reason of temporary migration. The latter three groups are also considered as similar to the students because the language course was given at a university and the expats were generally university staff (or their partners). Thus, both students and language course participants were part of a similar academic setting. Altogether, we therefore concluded that the two groups of respondents can be considered comparable. Moreover, exploratory statistical analyses revealed similar frequencies and descriptives for the psychology students and language course participants on the relevant measures (see Appendix A). Accordingly, the datasets were merged.

Out of all participants, 72% were female, and 64% were born in Germany (other participants came from 31 different countries, with a maximum of 5 respondents per country). All respondents finished secondary school. At least 25% of them also finished a higher educational level. The mean age was 23. The mean years of residence in the Netherlands was only 0.42 years, revealing that, as intended, the sample comprised of people that were still newcomers to the Netherlands.

Measures

Unless stated otherwise, all measures were the same at both time points (t1 and t2) for the language course participants and the international psychology students. Cronbach's Alpha's mentioned below are all based on the data collected for the current study.

L2 proficiency was measured with the commonly used 4 item self-assessment (e.g. Chiswick & Miller 1995, 2002; Van Tubergen 2010). Specifically, respondents were asked "How well can you understand Dutch?", "How well can you speak Dutch?", "How well can you read Dutch?" and finally "How well do you write Dutch?" (t1 $\alpha=.86$, t2 $\alpha=.88$). The seven-point Likert scale ranged from 1 "not at all", 3 "little", 5 "well" to 7 "very well". The values 2, 4, 6 were unlabeled subcategories.

Attitudes towards the Dutch culture were measured by asking respondents to what extent they liked (a) Dutch food, (b) Dutch clothing, (c) Dutch humor, (d) Dutch music, (e) traditional Dutch celebrations, (e) the way Dutch people treat each other (t1 $\alpha=.66$, t2 $\alpha=.72$). The five-point Likert scale ranged from 1 "not at all", 2 "a little", 3 "considerably", 4 "quite a lot", to 5 "very much"; higher scores on this scale indicate more positive attitudes.

Identification was measured by asking respondents to what extent they agreed to the following four statements: "I feel a strong attachment towards the Netherlands", "I'm happy to be living in the Netherlands", "I'm proud to be living in the Netherlands", "I feel similar to people from the Netherlands" (t1: $\alpha=.74$, t2: $\alpha=.78$). The five-point Likert scale ranged from 1 "strongly disagree", 2 "disagree", 3 "neither disagree nor agree", 4 "agree" to 5 "strongly agree". Higher scores on this scale indicate stronger identification.

Social initiative. An abbreviated form of the original Multicultural Personality Questionnaire (Van der Zee, Van Oudenhoven, Ponterotto, & Fietzer, 2013) was included in the first questionnaire to

measure multicultural personality traits. Again respondents were asked to indicate on a five-point scale to what extent they agreed with postulated statements. The scale (again) ranged from 1 “strongly disagree”, 2 “disagree”, 3 “neither disagree nor agree”, 4 “agree” to 5 “strongly agree”. Social initiative was measured with five statements, for example: “I take initiatives”, and “I keep to the background”; ($\alpha=.64$). For more information about the items and psychometric properties of this instrument see Van der Zee and colleagues (2013).

Openness is a higher order factor of the personality traits of cultural empathy and open-mindedness ($\alpha=.80$). In total 12 items were used to measure these two traits. Example items of *cultural empathy* items were “I understand other people’s feelings” and “I have insight into human nature”. Example items of open-mindedness are: “I am interested in other cultures” and “I am intrigued by differences”. Pearson’s correlation between the factors social initiative and openness was .39 ($p<.01$).

Statistical analyses

After exploring the descriptives and correlations (see Table 1 and 2), we conducted multiple regression analysis. In the first analysis (see Table 3), the hypotheses with respect to attitudes towards the Netherlands were tested. In the second analyses the hypotheses with respect to identification with the Netherlands were tested (see Table 4).

As is common, in our preliminary analyses we controlled for gender, educational level and age. In addition, we controlled for the English language proficiency and Germany as country of origin (yes or no). The English language proficiency was included because this language is spoken by many Dutch people and can therefore also be influential for sojourners’ cultural integration in the Netherlands. Germany as a country of origin was included as control variable because many respondents in this study originated from Germany. The German language and culture is relatively close to the Dutch language and culture compared to other countries of origin which are in the dataset. Thus the Dutch language proficiency, the cultural integration, and the relation between these two main variables might develop differently for German sojourners.

Both in the preliminary correlations and regression models the control variables were not significant (except for gender in two models). In the regression models, the main results did not

change and the adjusted R^2 either remained the same or decreased when the control variables were included. Given these results and the fact that there are no further theoretical reasons for including these control variables in our analyses, the control variables were omitted from the final analyses.

Results

Descriptives

Descriptive statistics of the original data are shown in Table 1. A paired samples t-test indicated that at t2 the mean L2 proficiency was significantly higher than at t1. Thus overall, as expected, the respondents made progress in terms of L2 proficiency ($t(162)=9.65, p<.001$). Also, in between data collections, a slight increase can be seen in the mean identification with the Netherlands and a slight decrease in attitudes towards the Netherlands. Both changes, however, are not significant (identification, $t(162)=1.24, p=.11$; attitudes, $t(162)=-.58, p=.28$).

The correlations given in Table 2 show a strong and significant relation between attitudes towards the Netherlands and identification with the Netherlands. This corresponds with the fact that these variables are both considered as indicators of the cultural integration. At the same time, the correlation coefficients are not extremely high, which implies that the two indicators are distinctive.

At t2, L2 proficiency appears to be significantly, but weakly, correlated to identification with the Netherlands. No significant correlation is found between L2 proficiency and attitudes towards the Netherlands at any time point.

With respect to multicultural personality traits, social initiative appears to be positively and moderately correlated with identification with the Netherlands. Openness correlates positively and moderately with attitudes towards the Netherlands. Openness is also weakly, but negatively, related to L2 proficiency at t1, which is in the opposite direction as one would intuitively expect.

Table 1 Descriptive statistics of independent and dependent variables (N=163)

	Min	Max	Mean	SD
Attitudes t1	1.33	4.5	3.10	.60
Attitudes t2	1.17	4.83	3.08	.65
Identification t1	1.5	4.75	3.31	.61
Identification t2	1.5	4.75	3.36	.65
Dutch t1	1	6.5	2.79	1.11
Dutch t2	1	6.25	3.42	1.09
Social initiative	1.8	4.8	3.22	.54
Openness	2.75	5	3.85	.42

Table 2 Correlations for dependent and independent variables (N=163)

	1.	2.	3.	4.	5.	6.	7.
1. Attitudes t1							
2. Attitudes t2	.71 **						
3. Identification t1	.54 **	.50 **					
4. Identification t2	.49 **	.59 **	.73 **				
5. Dutch t1	-.05	.00	-.02	.02			
6. Dutch t2	-.05	.05	.13 *	.20 **	.72 **		
7. Social initiative	.10	.06	.32 **	.24 **	-.03	.04	
8. Openness	.18 *	.24 **	.16 *	.13	-.15 *	-.12	.11

* $p < .05$ ** $p < .01$ (one tailed).

Main results

Table 3 shows the multiple regression results with *attitudes towards the Netherlands* at t2 as dependent variable. Attitudes at t1 is consistently included as predictor, causing all other predictors to be concerned with the (possible) change in attitudes in-between the two data collections.

The first model shows that change in the Dutch language proficiency (Dutch t2-t1) is not significantly related to change in attitudes towards the Netherlands. Hypothesis 1a can therefore be rejected.

Results of the next model which is concerned with the influence of the two social-perceptual personality traits show that whereas social initiative is not significantly related to change in attitudes towards the Netherlands, openness is. The higher the degree of openness, the more positive the change in attitudes towards the host culture. In line with this it can be concluded that hypothesis 2a is not supported by the data while hypothesis 3a is.

The third model shows a significant relation between the dependent variable and the interaction of change in L2 proficiency and social initiative. Simple slopes analysis was done to be able to interpret this interaction effect (see Figure 1). For ease of interpretation change in attitudes (t2 minus t1) was used as dependent variable. This shows that whereas for sojourners with a high degree of social initiative high progress in terms of L2 proficiency is accompanied by a positive change in attitudes towards the host culture, for sojourners with a low degree of social initiative, this is not the case. This is in line with hypothesis 4a. Even more, the former results indicate that the relation between increase in L2 proficiency and a more positive attitude towards the host country is not just stronger for sojourners high in social initiative; being high in social initiative even appears to be crucial for the relation to exist. After all, no main effect between progress in L2 and change in attitudes was found.

In contrast with the results on social initiative, the interaction effect of change in L2 proficiency and openness is not significant. Therefore hypothesis 5a is rejected.

Table 4 shows the multiple regression results with *identification towards the Netherlands* at t2 as dependent variable. Identification at t1 is consistently included as predictor, causing all other predictors to be concerned with the (possible) change in identification in-between the two data collections.

The first model shows that the change in Dutch language proficiency is significantly related to a change in terms of identification with the Netherlands. Hypotheses 1b which states that sojourners' increase in L2 proficiency is associated with an increasing identification with the host society is thus supported by the data.

The next model shows that the degrees of social initiative and openness are not related to the extent of change in identification with the Netherlands. This applies both to the possible main and to the assumed interaction effects in combination with an increase in L2 proficiency. All remaining hypotheses are therefore rejected.

Table 3 Regression results with attitudes at time point 2 as dependent variable (N=163)

	Model H1a				Model H2a/3a				Model H4a/5a				
	B	SE	Beta	Sig.	B	SE	Beta	Sig.	B	SE	Beta	Sig.	
(Constant)	.68	.19		***	.75	.19		***	.73	.19		***	
Attitudes t1	.77	.06	.71	***	.75	.06	.69	***	.75	.06	.69	***	
Dutch t2-t1	.06	.04	.07						.05	.04	.07		
Social initiative					.02	.07	-.02		-.05	.07	-.04		
Dutch t2-t1 * Social initiative									.17	.08	.11	*	
Openness					.19	.09	.12	*	.19	.09	.12	*	
Dutch t2-t1 * Openness									-.04	.10	-.02		
Adjusted R ²				.50	***			.51	***			.52	***

* $p < .05$ ** $p < .01$ *** $p < .001$ (one tailed).

Table 4 Regression results with identification at time point 2 as dependent variable (N=163)

	Model H1b				Model H2b/3b				Model H4b/5b				
	B	SE	Beta	Sig.	B	SE	Beta	Sig.	B	SE	Beta	Sig.	
(Constant)	.86	.20		***	.81	.21		***	.89	.21		***	
Identification t1	.76	.06	.71	***	.77	.06	.72	***	.74	.06	.70	***	
Dutch t2-t1	.08	.04	.10	*					.08	.04	.10	*	
Social initiative					.02	.07	.01		.01	.07	.01		
Dutch t2-t1 * Social initiative									.12	.08	.08		
Openness					.01	.09	.01		.01	.09	.00		
Dutch t2-t1 * Openness									.09	.10	.05		
Adjusted R ²				.54	***			.52	***			.53	***

* $p < .05$ ** $p < .01$ *** $p < .001$ (one tailed).

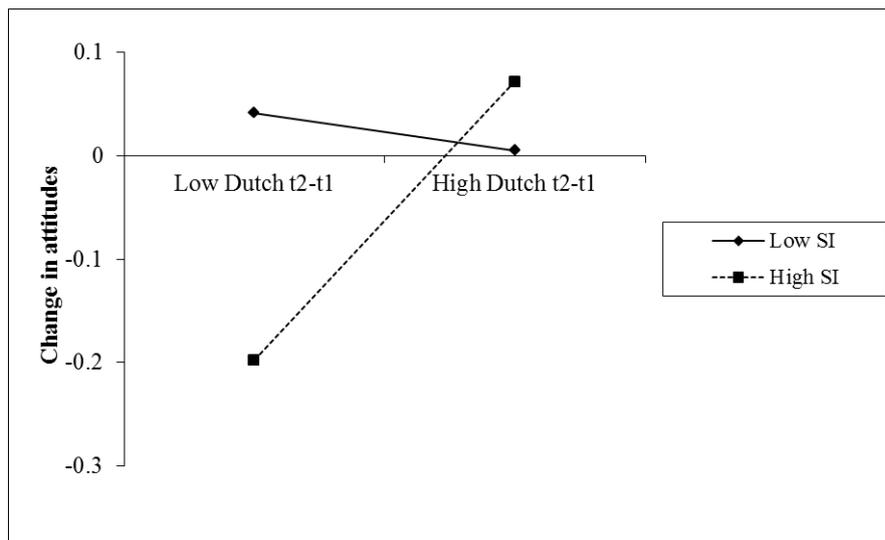


Figure 1 Simple slopes analysis of change in attitudes taking into account progress in Dutch and degree of social initiative. Note: Change in L2 proficiency is depicted on the X-axis. Low Dutch t1-t2 is small progress in L2, High Dutch t2-t1 is strong progress in L2.

Discussion and conclusions

In this study we examined whether an increase in sojourners' L2 proficiency is associated with an increasing positive orientation towards the host society, aka cultural integration. Also, we investigated whether the degree to which an increase in L2 proficiency is associated with an increase in cultural integration differs between sojourners with different (trainable) personality traits.

To test our hypotheses, we used data (two time points) from sojourners who just arrived in the Netherlands and/or followed a Dutch language course at the time of the data collection. The analyses provided evidence for both the role of L2 proficiency and personality traits in the cultural integration of sojourners. At the same time, findings differed for the two indicators of cultural integration; attitudes towards and identification with the Netherlands.

Whereas progress in L2 proficiency (Dutch) was not directly related to a positive change in attitudes towards the host culture, it was associated with a positive change in identification with the host society. These results are partially in line with hypothesis 1. Sojourners who learn a L2 do not necessarily become more positive in their attitudes in terms of their appreciation for specific attributes of the host culture, but do experience a positive change in identification with that society. Thus, although we found no significant change on the mean level of either indicator of cultural integration, implying that some participants have improved while others have declined, a visible link was found between progress in L2 proficiency and a positive change in identification.

A possible explanation for these differing findings for the two cultural integration indicators is that sojourners who learn the L2 might increasingly feel at home in the host society and are happy to be part of it (identification), while they are not actually willing to adopt specific aspects of the Dutch culture into their own daily lives (attitudes). Despite the diverging content of these two measures, based on earlier literature and on the reliable high correlations of the present study, both are legitimately perceived as indicators of cultural integration.

Another possible explanation for the different results regarding our two indicators of cultural integration relates to our hypotheses regarding the possible role of individual differences. Specifically, social perceptual personality traits (traits of social initiative and openness; Van der Zee & Van Oudenhoven, 2013) may differentially affect the two aspects of cultural integration. More specifically,

in our examination of the direct relation between these social-perceptual traits and cultural integration (hypotheses 2 and 3) we found that the social perceptual trait of *openness*, but not of *social initiative*, was significantly related to a positive change in attitudes towards the host culture. This indicates that sojourners who are less judgmental towards members of the host society and better able to empathize with them are also more willing to adopt aspects of the host society's culture in their daily life. With respect to our second indicator of cultural integration, identification with the host society, neither the degree of openness nor social initiative were relevant predictors of positive change. This overall low impact of the social-perceptual personality traits is not in line with earlier research on the predictive value of multicultural personality traits (including social-perceptual traits) for a wide range of indicators of integration (e. g. Hofhuis et al., 2012; Van der Zee et al., 2004; Van der Zee & Van der Gang, 2007). Especially the absence of a relation with identification with the host society is surprising, since social-perceptual traits are assumed to enable individuals to see connections between different identities and, thus, to facilitate the formation of a complex identity that encompasses identification with both the home and host society (Van der Zee & Van Oudenhoven, 2013). However, previous research did not simultaneously investigate the impact of multicultural personality traits and progress in L2 proficiency on cultural integration, nor did it consider a possible interaction effect of multicultural personality traits and language proficiency, which could explain the lack of main effects between these traits and cultural integration. In fact, we found at least partial support for such interaction effects.

Testing our hypothesis regarding a possible moderating impact of sojourners' degree of social initiative (hypothesis 4), we indeed found that progress in L2 proficiency in combination with a high degree of *social initiative* was related to a more positive change in *attitudes* towards the host culture. Thus, only for sojourners high in social initiative a positive change in L2 proficiency is accompanied by a positive change in attitudes, that is, a higher willingness to appreciate and adopt aspects of the Dutch culture in daily life. A possible explanation for this finding is provided by Intergroup Contact Theory, which assumes that positive contact between members of different groups leads to improved attitudes towards each other's group (Allport, 1954; Pettigrew & Tropp, 2006). Plausibly, sojourners who learn the L2, but are weak on social initiative will not easily use this language to initiate any

cross-group interaction, such as by asking questions, starting a conversation or responding to invitations to common activities with members of the host society. Accordingly, irrespective of language proficiency, these sojourners have a lower probability to substantially increase their contact with (members of) the host society, nor get to know their customs and traditions, and, thus, they are also less likely to improve their attitude towards that society as a whole. Likewise, sojourners who are not very proficient in speaking the L2, but who do have a high degree of social initiative, will have a hard time to get in contact with the host society, and thus are also not prone to change their attitudes towards that society. However, sojourners who *both* make progress in their L2 proficiency and have a high degree of social initiative have a high chance to get in contact with (members of) the host society and, thus, to develop more positive attitudes towards the host culture and adopt aspects of that society. For the second indicator of cultural integration, identification with the host society, the positive link between L2 proficiency was not moderated by social initiative, but was equally strong irrespective of this personality trait. This may imply that for the mere feeling to be at home in the host society and to be happy about being part of the host society, the actual contact with host society members is less important than for actually having a positive attitude towards specific aspects of that culture and the willingness to adopt them.

The analyses with respect to the possible impact of *openness* (hypothesis 5), yielded no significant interaction effects: neither for attitudes towards nor for the identification with the host society the positive association between an increase in L2 proficiency and cultural integration was moderated by sojourners' degree of openness.

Limitations and future research

The current study took earlier cross sectional research on L2 proficiency and cultural integration one step further by examining this topic over time. However, due to the limited number of respondents, no test of causality was done; therefore, we cannot straightforwardly argue that progress in L2 proficiency actually *leads to* a higher extent of cultural integration. Future research on this topic would benefit from performing research over time with a substantial representation of sojourners. Instead of a three

month period, this future research should be conducted in a longer time frame to allow for more reliable inferences about L2 acquisition and changes in cultural integration.

As noted in the literature, sojourners might differ from permanent immigrants. Sojourners are often considered as ‘internationally mobile third culture individuals’, who on the one hand easily learn about new cultures, but on the other hand might not actually internalize these cultures (Barker, 2015 based on Dewaele & Van Oudenhoven, 2009; Greenholtz & Kim, 2009; Lyttle, Barker, & Cornwell, 2011; Moore & Barker, 2012). Therefore, conducting similar research in permanent immigrants might yield different results. In order to test the underlying assumptions of integration programs for permanent immigrants which generally have a strong focus on L2 learning, we encourage researchers to test the hypotheses of the current paper in permanent immigrants.

Given that for neither the international students nor the participants of the language courses multicultural personality traits were discussed or actively trained, we felt safe to assume that these traits have remained stable during the period in which our study was conducted, and that it would therefore be sufficient to measure them at one time point only. This is in line with findings from earlier research on the stability of the personality traits included in our study (Tracy-Ventura, Dewaele, Köylü, & McManus, 2016). However, in order to definitely rule out that during the time frame of the study respondents may have fluctuated in their scores on the relevant personality traits, it seems recommendable for future research to measure these traits at all time points.

In order to measure these traits, we suggest the use of the 40 instead of the 30 item MPQ short form (Van der Zee et al., 2013). This longer version has higher reliability indicators ($\alpha=.81$, compared with $\alpha=.64$ of the trait of social initiative in the current study) and thus enables researchers to make stronger inferences. Another point that might need consideration in future research is that change in L2 proficiency can take place from different starting points, and may, therefore, bear different meanings. Therefore, future research should either only include respondents who, at the first point of measurement, are highly similar in L2 proficiency, or should have such large samples that it is possible to include initial language proficiency as a predictor variable (see Davidson, 2007).

Finally, as is common, in the current study respondents’ self-assessments were used to measure L2 proficiency. However, a recent study shows that this subjective way of measuring L2

proficiency can differ substantially from more objective measures of L2 proficiency (like test scores, see Van Niejenhuis, Van der Werf, & Otten, 2015). Therefore, future research urged to use more objective measures of L2 proficiency.

Implications for sojourners' cross cultural training

We are aware that our study is based on a relatively small sample. At the same time, this is to our knowledge the first study examining L2 proficiency, integration and personality traits simultaneously over time. Future research should aim to test our results with larger samples. To show that it would be worthwhile to do so, we discuss here what could be practical implications for sojourners' cross cultural training given our results.

The present study indicated that, within a relatively short time frame, an increase in sojourners' L2 proficiency is related to a positive change in terms of identification with the host society and attitudes towards the host culture. In line with this, in order to stimulate the positive adjustment of sojourners, institutional policies on L2 learning of sojourners seem recommendable. However, our findings also suggest that such focus on L2 acquisition is not a "one size fits all"-approach. This conclusion is based on the finding that increasing L2 proficiency only went together with a positive change in attitudes towards the host culture if sojourners also had a high degree of social initiative. Another notable finding is that sojourners with a high degree of openness became more positive in their attitudes towards the host culture, regardless of the progress they made in terms of L2 proficiency. Thus, next to L2 learning, results from this study seem to point to the importance of social perceptual personality traits in cultural integration. Given that these traits are considered as trainable, our study cautiously suggests that cross cultural trainings of sojourners should include attention for social perceptual personality traits as well as L2 teaching.

References

- Ali, A., Van der Zee, K., & Sanders, G. (2003). Determinants of intercultural adjustment among expatriate spouses. *International Journal of Intercultural Relations*, 27(5), 563-580.
doi:10.1016/S0147-1767(03)00054-3
- Allport, G. W. (1954). *The nature of prejudice*. Cambridge: Addison-Wesley.
- Bakker, W., Van Oudenhoven, J., & Van der Zee, K. (2004). Attachment styles, personality, and Dutch emigrants' intercultural adjustment. *European Journal of Personality*, 18(5), 387-404.
doi:10.1002/per.515
- Barker, G. G. (2015). Choosing the best of both worlds: The acculturation process revisited. *International Journal of Intercultural Relations*, 45, 56-69. doi:10.1016/j.ijintrel.2015.01.001
- Chakma, A. (2012, September 25). International students are an opportunity, not a cost. *Globe and mail*. Retrieved from <https://www.theglobeandmail.com/opinion/international-students-are-an-opportunity-not-a-cost/article4508542/?arc404=true>.
- Chen, S. X., Benet-Martínez, V., & Bond, M. H. (2008). Bicultural identity, bilingualism, and psychological adjustment in multicultural societies: Immigration-based and globalization-based acculturation. *Journal of Personality*, 76(4), 803-837. doi:10.1111/j.1467-6494.2008.00505.x
- Clement, R., Gardner, R. C., & Smythe, P. C. (1980). Social and individual factors in 2nd language-acquisition. *Canadian Journal of Behavioural Science-Revue Canadienne Des Sciences Du Comportement*, 12(4), 293-302.
- Clement, R., Noels, K. A., & Deneault, B. (2001). Interethnic contact, identity, and psychological adjustment: The mediating and moderating roles of communication. *Journal of Social Issues*, 57(3), 559-577.

- Costa, P. T., & McCrae, R. R. (1985). *The NEO Personality Inventory manual*. Odessa, FL: Psychological Assessment Resources.
- De Vroome, T., Coenders, M., Van Tubergen, F., & Verkuyten, M. (2011). Economic participation and national self-identification of refugees in the Netherlands. *International Migration Review*, 45(3), 615-638. doi:10.1111/j.1747-7379.2011.00860.x
- De Vroome, T., Verkuyten, M., & Martinovic, B. (2014). Host national identification of immigrants in the Netherlands. *International Migration Review*, 48(1), 76-102. doi:10.1111/imre.12063
- Davidson, D. E. (2007). Study abroad and outcomes measurements: The case of Russian. *Modern Language Journal*, 91, 276-280.
- Dewaele, J. M. (2012) Personality. Personality traits as independent and dependent variables. In S. Mercer, S. Ryan, & M. Williams (Eds.), *Psychology For Language Learning: Insights from Research, Theory and Practice*. Basingstoke: Palgrave Macmillan, pp. 42-58.
- Dewaele, J. M. & Stavans, A. (2014) The effect of immigration, acculturation and multicompetence on personality profiles of Israeli multilinguals. *The International Journal of Bilingualism*, 18 (3), 203-221.
- Dewaele, J. M., & Van Oudenhoven, J. P. (2009). The effect of multilingualism/multiculturalism on personality: No gain without pain for third culture kids? *International Journal of Multilingualism*, 6(4), 443-459. Edwards, J. (1994). *Multilingualism*. London: Routledge.
- Galchenko, I., & Van de Vijver (2007). The role of perceived cultural distance in the acculturation of exchange students in Russia. *International Journal of Intercultural Relations*, 31(2), 181-197. doi:10.1016/j.ijintrel.2006.03.004

- Gardner, M. (2014, January 16). Multiple benefits of international students – Survey. *University world news*. Retrieved from <http://www.universityworldnews.com/article.php?story=20140116132626661>.
- Giles, H., & Byrne, J. L. (1982). The intergroup model of second language acquisition. *Journal of Multilingual and Multicultural Development*, 3, 17-40.
- Gordon, M. M. (1964). *Assimilation in American life: The role of race, religion, and national origins*. New York: Oxford University Press.
- Greenholtz, J., & Kim, J. (2009). The cultural hybridity of lena: A multi-method case study of a third culture kid. *International Journal of Intercultural Relations*, 33(5), 391-398.
doi:10.1016/j.ijintrel.2009.05.004
- Hagendoorn, L., Veenman, J., & Vollebergh, W. (2003). *Integrating immigrants in the Netherlands. Cultural versus socio-economic integration*. England: Ashgate Publishing Limited.
- Herfst, S. L., Van Oudenhoven, J. P., & Timmerman, M. E. (2008). Intercultural effectiveness training in three western immigrant countries: A cross-cultural evaluation of critical incidents. *International Journal of Intercultural Relations*, 32(1), 67-80. doi:10.1016/j.ijintrel.2007.10.001
- Hochman, O., & Davidov, E. (2014). Relations between second-language proficiency and national identification: The case of immigrants in Germany. *European Sociological Review*, 30(3), 344-359. doi:10.1093/esr/jcu043
- Hofhuis, J., Van der Zee, K. I., & Otten, S. (2012). Social identity patterns in culturally diverse organizations: The role of diversity climate. *Journal of Applied Social Psychology*, 42(4), 964-989. doi:10.1111/j.1559-1816.2011.00848.x

- Jiang, M., Green, R. J., Henley, T. B., & Masten, W. G. (2009). Acculturation in relation to the acquisition of a second language. *Journal of Multilingual and Multicultural Development*, 30(6), 481-492. doi:10.1080/01434630903147898
- Kang, S. (2006). Measurement of acculturation, scale formats, and language competence - their implications for adjustment. *Journal of Cross-Cultural Psychology*, 37(6), 669-693. doi:10.1177/0022022106292077
- Kunin, R. (2012). Economic Impact of International Education in Canada. *Global affairs Canada*. Retrieved from <http://www.international.gc.ca/education/report-rapport/economic-impact-economique/index.aspx?lang=eng>.
- Leong, C. (2007). Predictive validity of the multicultural personality questionnaire: A longitudinal study on the socio-psychological adaptation of Asian undergraduates who took part in a study-abroad program. *International Journal of Intercultural Relations*, 31(5), 545-559. doi:10.1016/j.ijintrel.2007.01.004
- Linton, I. (2017, September 26). The importance of expatriates in organizations. *Bizfluent*. Retrieved from <https://bizfluent.com/info-12072421-importance-expatriates-organizations.html>
- Lyttle, A. D., Barker, G. G., & Cornwell, T. L. (2011). Adept through adaptation: Third culture individuals' interpersonal sensitivity. *International Journal of Intercultural Relations*, 35(5), 686-694. doi:10.1016/j.ijintrel.2011.02.015
- Moore, A. M., & Barker, G. G. (2012). Confused or multicultural: Third culture individuals' cultural identity. *International Journal of Intercultural Relations*, 36(4), 553-562. doi:10.1016/j.ijintrel.2011.11.002
- Mori, S. (2000). Addressing the mental health concerns of international students. *Journal of Counselling and Development*, 78(2), 137-144.

- Nesdale, D. (2002). Acculturation attitudes and the ethnic and host-country identification of immigrants. *Journal of Applied Social Psychology, 32*(7), 1488-1507. doi:10.1111/j.1559-1816.2002.tb01448.x
- OECD (2016). *International migration outlook 2015*. Paris: OECD Publishing.
- Ożańska-Ponikwia, K., & Dewaele, J. M. (2012) Personality and L2 use. The advantage of being openminded and self-confident in an immigration context. *Eurosla Yearbook 12*, 112-134.
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology, 90*(5), 751-783.
- Playford, K.& Safdar, S. (2007). A Comparison of Various Conceptualizations of Acculturation and the Prediction of Adaptation of International Students. In A. Chybicka, & M. Kazmierczak (Eds.). *Appreciating diversity: Cultural and gender issues*. Cracow, Poland: Impuls. Retrieved from https://atrium.lib.uoguelph.ca/xmlui/bitstream/handle/10214/4065/Playford_Safdar.pdf?sequence=3&isAllowed=y
- Rubinfeld, S., Clément, R., Lussier, D., Lebrun, M., & Auger, R. (2006). Second language learning and cultural representations: Beyond competence and identity. *Language Learning, 56*(4), 609-631. doi:10.1111/j.1467-9922.2006.00390.x
- Safdar, S., & Berno, T. (2016) Sojourners. In D. L. Sam, & J.W. Berry (Eds.), *Cambridge Handbook of acculturation psychology*. (pp. 173-195). Cambridge: Cambridge University Press.
- Scott, C., Safdar, S., Desai Trilokekar, R., & El Masri, A (2015). International Students as ‘Ideal immigrants’ in Canada: A disconnect between policy makers’ assumptions and the lived experiences of international students. *Comparative and international education, 43*(3), Article 5. Retrieved from: <http://ir.lib.uwo.ca/cie-eci/vol43/iss3/5>

- Suanet, I., & Van de Vijver, F. J. R. (2009). Perceived cultural distance and acculturation among exchange students in Russia. *Journal of Community & Applied Social Psychology, 19*(3), 182-197. doi:10.1002/casp.989
- Tracy-Ventura, N., Dewaele, J.M., Köylü, Z., & McManus, K. (2016) Personality changes after a year abroad? A mixed-methods study. *Study Abroad Research in Second Language Acquisition and International Education 1* (1), 107-126.
- Tung, R. (1987). Expatriate assignment: Enhancing success and minimizing failure. *Academy of Management Executive, 1*(2), 117-126.
- Van der Zee, K., Benet-Martínez, V., & Van Oudenhoven, J.P. (2016) Personality and acculturation. In D. L. Sam, & J.W. Berry (Eds.), *Cambridge Handbook of acculturation psychology*. (pp. 50-70). Cambridge: Cambridge University Press.
- Van der Zee, K., & Van der Gang, I. (2007). Personality, threat and affective responses to cultural diversity. *European Journal of Personality, 21*(4), 453-470. doi:10.1002/per.619
- Van der Zee, K., & Van Oudenhoven, J. P. (2013). Culture shock or challenge? The role of personality as a determinant of intercultural competence. *Journal of Cross-Cultural Psychology, 44*(6), 928-940. doi:10.1177/0022022113493138
- Van der Zee, K., & Van Oudenhoven, J. (2000). The multicultural personality questionnaire: A multidimensional instrument of multicultural effectiveness. *European Journal of Personality, 14*(4), 291-309. doi:10.1002/1099-0984(200007/08)14:4<291::AID-PER377>3.3.CO;2-Y
- Van der Zee, K., Van Oudenhoven, J. P., Ponterotto, J. G., & Fietzer, A. W. (2013). Multicultural Personality Questionnaire: Development of a Short Form. *Journal of Personality Assessment, 95*(1), 118-124. DOI: 10.1080/00223891.2012.718302

Van Niejenhuis, C., Van der Werf, M. P. C., & Otten, S. (2015). Predictors of immigrants' second-language proficiency: A Dutch study of immigrants with a low level of societal participation and second-language proficiency. *International Journal of the Sociology of Language*, (236), 75-100. doi:<http://dx.doi.org/10.1515/ijsl-2015-0022>

Van Oudenhoven, J., & Van der Zee, K. (2002). Predicting multicultural effectiveness of international students: The multicultural personality questionnaire. *International Journal of Intercultural Relations*, 26(6), 679-694. doi:10.1016/S0147-1767(02)00041-X

Wilson, J., Ward, C., & Fischer, R. (2013). Beyond culture learning theory: What can personality tell us about cultural competence? *Journal of Cross-Cultural Psychology*, 44(6), 900-927. doi:10.1177/0022022113492889

APPENDIX A FREQUENCIES AND DESCRIPTIVES

Table frequencies country of origin psychology students (N=111)

	Frequency	%
Bulgaria	1	.9
Canada	1	.9
China	1	.9
Colombia	1	.9
Cyprus	1	.9
Germany	93	83.8
Greece	1	.9
Hungary	3	2.7
India	1	.9
Italy	1	.9
Kazakhstan	1	.9
Lithuania	1	.9
Poland	1	.9
Portugal	1	.9
Romania	1	.9
Spain	1	.9
Sweden	1	.9

APPENDIX CONTINUES ON NEXT PAGE

Table frequencies country of origin participants Language course (N=56)

	Frequency	%
China	2	3.6
Colombia	1	1.8
Czech	1	1.8
Finland	1	1.8
Germany	14	25.0
Greece	1	1.8
India	1	1.8
Indonesia	5	8.9
Iran	1	1.8
Ireland	1	1.8
Italy	1	1.8
Japan	1	1.8
Mexico	1	1.8
Morocco	1	1.8
Pakistan	1	1.8
Poland	3	5.4
Puerto Rico	1	1.8
Romania	3	5.4
Saudi Arabia	1	1.8
Serbia	2	3.6
Spain	3	5.4
Ukraine	3	5.4
Unite Kingdom	2	3.6
Unkraine	1	1.8
USA	4	7.1

APPENDIX CONTINUES ON NEXT PAGE

Table frequencies mother tongue psychology students (N=111)

	Frequency	%
Bulgarian	1	.9
Chinese	1	.9
Farsi	1	.9
German	90	81.1
German Spanish	1	.9
German, English	1	.9
German, Russian	1	.9
German/Russian	1	.9
Greek	2	1.8
Hungarian	2	1.8
Italian	1	.9
Lithuanian	1	.9
Polish	1	.9
Punjabi	1	.9
Romanian	1	.9
Spanish	2	1.8
Swedish	1	.9
Turkish	1	.9
<i>Missing</i>	1	.9

Table frequencies mother tongue language course participants (N=56)

	Frequency	%
Arabic	2	3.6
Catalan	1	1.8
Chinese	2	3.6
Czech	1	1.8
English	7	12.5
Farsi	1	1.8
Finnish	1	1.8
German	14	25.0
Greek	1	1.8
Hungarian	1	1.8
Indonesian	5	8.9
Italian	1	1.8
Japanese	1	1.8
Marathi	1	1.8
Polish	3	5.4
Romanian	2	3.6
Serbian	2	3.6
Spanish	5	8.9
Ukrainian	4	7.1
Urdu	1	1.8

APPENDIX CONTINUES ON NEXT PAGE

Table descriptives background and main variables per group

	International psychology students					Language course participants				
	N	Min	Max	Mean	SD	N	Min	Max	Mean	SD
<i>Background variables</i>										
Gender (1=female)	111	0	1	0.75	0.44	56	0	1	0.66	0.48
Age	111	18	33	20.66	1.83	56	19	52	26.57	6.80
Years of residence in NL	105	0	1	0.01	0.10	49	0	8	1.31	1.76
Educational level	111	1	6			52	3	6	5.25	1.19
<i>Main variables</i>										
Dutch t1	111	1	6.5	2.68	1.10	56	1	5	2.99	1.11
Dutch t2	111	1	6	3.11	1.03	56	2.25	6.25	4.04	0.93
Identification t1	111	1.75	4.75	3.30	0.62	56	1.5	4.5	3.31	0.57
Identification t2	111	1.5	4.75	3.32	0.66	56	1.75	4.75	3.42	0.60
Attitudes t1	111	1.5	4.5	3.18	0.55	55	1.33	4.5	2.96	0.67
Attitudes t2	111	1.17	4.67	3.13	0.61	54	1.5	5	3.01	0.77
Social initiative	111	1.8	4.4	3.17	0.51	56	2.2	4.8	3.32	0.56
Openness	111	2.92	4.83	3.91	0.38	56	2.75	5	3.73	0.47