

**Universiteit Utrecht**



**Psychological and Sociocultural Adaptation  
among Short-Stay and Long-Stay International Students  
in Utrecht, the Netherlands**

Bachelor thesis

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### **Abstract**

Moving to and studying in a new country requires adaptation skills for students to stay emotionally and socially healthy. The purpose of this research was to study psychological and sociocultural adaptation skills for short-stay and long-stay international students enrolled at Utrecht University, the Netherlands. The two research questions focused on how international students adapt psychologically and socioculturally to the Dutch culture, and what the differences in adaptation are between short-stay and long-stay international students. A quantitative survey was conducted with 154 participants from all around the world, with 89 participants identified as short-stay and 65 participants identified as long-stay international students. The analysis of the results shows overall good adaptation scores for both groups, but short-stay students score better than long-stay students on both the psychological adaptation scale and the sociocultural adaptation scale. No major significant differences were found between the groups on both scales, however, some of the separate items showed significant differences between the population groups. Additionally, both hypotheses that host country's language proficiency and English (academic) language proficiency positively contribute to sociocultural adaptation of international students were supported. The results may help universities or international student unions to offer additional support programs to incoming or long-stay students.

*Keywords: international students, study abroad, psychological adaptation, sociocultural adaptation, language proficiency*

## Introduction

Studying abroad is one of the most effective experiential learning opportunities, confirming personal, professional, and societal value for students (Mulvaney, 2017). According to the Netherlands Organization for International Cooperation (NUFFIC) in higher education, almost 86,000 international students were enrolled at higher education programs in the Netherlands in 2018-2019. The number of international students increased from 17.8% of all new enrollments in 2017-2018 in comparison to 20.4% in 2018-2019. Utrecht counted over four thousand international students in 2018-2019, of which 2954 were enrolled at Utrecht University (NUFFIC, 2019).

Research on international students in the Netherlands was performed by Dutch student unions Interstedelijk Studenten Overleg (ISO), Landelijk Studenten Vakbond (LSVb), and Erasmus Student Network (ESN). According to their Annual International Student Survey, international students experienced moderate to extreme psychological problems (40,2%) and stress (42%), but over 50% also experienced extreme happiness (n=1002) (ISO, LSVb & ESN, 2019). These variables regarding psychological problems were previously studied in Ireland and found to have higher scores for international students than for co-students from host universities. Potential stressors are, for example, the pressure of language- and academic difficulties and high perceived cultural distance (O'Reilly, Ryan & Hickey, 2010; Taušova, Bender, Dimitrova & van de Vijver, 2019).

In this research, short-stay will refer to international students that are currently studying at Utrecht University and have lived in the Netherlands for 0 – 12 months, whereas long-stay will refer to international students that are currently studying at Utrecht University and have lived in the Netherlands for 12 + months. According to O'Reilly et al (2010), both groups are likely to struggle with loneliness, homesickness, or feeling at home in a new country, but differences exist. For example, exchange programs for short-stay international

students often offer events or parties which make it easier to make new friends; something that is often not the case for long-stay students.

It was assumed by the researcher that international students are unproficient in the Dutch language verbally or in reading and writing before their arrival to the Netherlands. However, as the English Proficiency Index (EPI) of Education First (2019) concluded, the Netherlands is ranked number one on English language skills. Dutch research universities offer an increasing number of English courses in Bachelor programs (from 23% in 2017-2018 to 28% in 2018-2019) and Master's programs (from 74% in 2017-2018 to 76% in 2018-2019) (NUFFIC, 2019). In this research, students will be asked about their language skills in Dutch and English, as Dutch is the language needed for living daily life in the Netherlands and English is the language of most taught university programs for international students.

## Theoretical Framework

### Acculturation and Culture Shock

Universities around the world offer students to experience ‘internationalization abroad’, where education is offered to students who are not originally based in the same country as that university (Jackson, 2010). In 2017, 5.3 million students studied at a university outside their own country (UNESCO, 2019). As students move to other countries, they need to adjust to a new culture – also called cultural adaptation.

When cultural adaptation is not done properly, ‘Culture Shock’ can arise (see Figure 1). Culture Shock was first introduced by anthropologist Sverre Lysgaard (1955), describing it as a result of transferring to a new environment and causing social and emotional shifts. According to the ‘U-curve’ hypothesis, satisfaction is highest upon arrival, as everything is new and sounds, looks and feels better than back home. Over time, the excitement and satisfaction decrease as one experiences a feeling of rejection, anxiety, and discomfort. When finally having adapted to the new culture, the level of satisfaction increases again, making the process shape a U form (Hua, 2019).

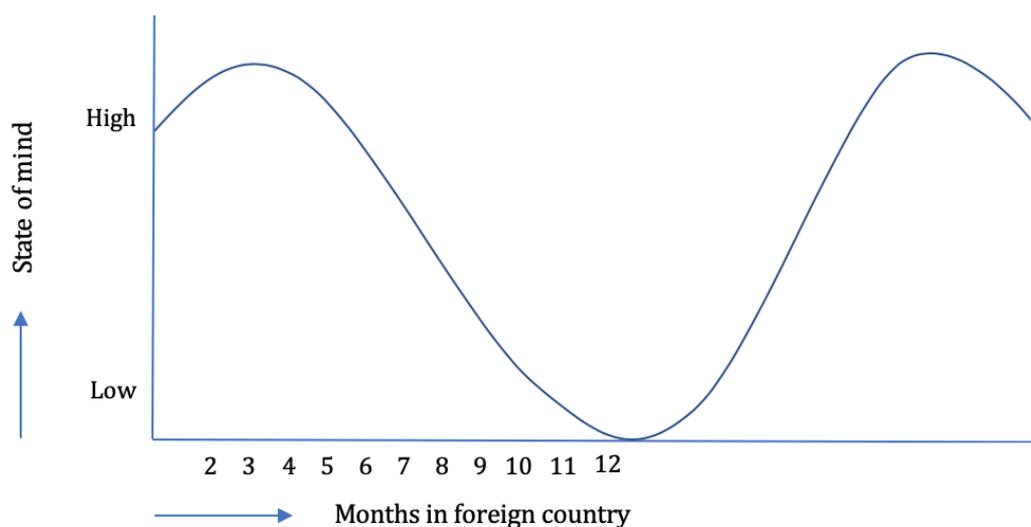


Figure 1. U-Curve of Culture Shock

The U-Curve hypothesis shows the flow in students' state of mind over the months, which possibly affects their process of adaptation to the new country. Adaptation refers to the cultural and psychological change one goes through when being in contact with people from a different culture (Berry, 1997). It is the ultimate goal of acculturation, and Berry (2006) defined it as "the relatively stable changes that take place in an individual or group in response to external demands." (p. 52).

### **Psychological and sociocultural adaptation**

Adaptation has been extensively researched by dr. Colleen Ward. She found that factors such as host culture knowledge, duration of stay, and amount of interaction with people from the host culture, contribute to one's adaptation process (Ward, 1996). Ward and Kennedy (2001) were the first researchers to make a distinction between psychological adaptation and sociocultural adaptation.

Psychological adaptation refers to the emotional adaptation and feelings of well-being or satisfaction relating to the transition of moving to a new country. Although psychological adaptation is often researched through negative feelings such as homesickness and feeling tired, depressed, or anxious, it also refers to positive feelings such as happiness and comfortability someone feels (Ward et al., 1998, cited by Demes & Geeraert, 2014).

Sociocultural adaptation focuses more on practical and behavioral attitudes toward adaptation, and how people live their daily routines in new cultural surroundings (Demes & Geeraert, 2014). Sociocultural adaptation can be predicted by one's cultural identity, language ability, and cultural knowledge etc.(Ward & Kennedy, 1993), and it was found that younger students have better sociocultural adaptation scores (Poyrazli, Arbona, Bullington & Pisecco, 2001). The Sociocultural Adaptation Scale (SCAS) was the first comprehensive scale to measure the sociocultural wellbeing of immigrants (Zhou, Jindal-Snape, Topping & Todman, 2008).

However, all previous scales are between 30 to 40 items, so Demes and Geeraert (2014) used the SCAS as the foundation for their Brief Sociocultural Adaptation Scale (BSAS); a more concise version that eliminates the risk of tiring participants. Items on their Brief Psychological Adaptation Scale (BPAS) were designed based on the Culture Shock Questionnaire from Mumford (1998), the International Statistical Classification of Diseases and Related Health Problems (ICD-10) and Demes and Geeraert's pilot research (2014). See Appendix A for BSAS and BPAS.

Research on psychological and sociocultural adaptation regarding students was previously performed concerning different predictor variables, such as cultural distance, social support, and acculturative stress among Turkish students in Cyprus (Ladum, 2019), adjustment and attachment attitude, perceived stereotype image among international students in Malaysia (Shafaei & Razak, 2018), psychological distress among Vietnamese students in France (Brisset, Safdar, Lewis & Sabatier, 2010), program duration and intervention on sociocultural adaptation of U.S. students in Greece (Antonakopoulou, 2013), and discrimination and English proficiency as predictors of adjustment for international students in Denmark (Ozer, 2015). O'Reilly et al. (2010) researched the psychological well-being and sociocultural adaptation, comparing international short-stay students to host country students. International students indicated to experience better social support and less stress and distress than students who studied a full study-program, which suggests that short-stay students have fewer difficulties adapting psychologically than long-stay students.

### **Duration of stay**

Duration of stay in a host culture was found an influencing factor in research on immigrant adaptation (Ward, Okura, Kennedy, & Kojima, 1998). Research concerning duration of studying abroad concludes that results in multiple categories were best scored by students

who studied abroad for at least a full year (Dwyer, 2004). According to research concerning immigrants and duration of stay, the strongest psychological discomfort is experienced shortly after arriving in the host culture (Ward et al, 1990; 1998; 1999; 2001; Miglietta & Tartaglia, 2008). These findings contradict the U-Curve hypothesis (Hua, 2019), which claims the time after arriving is most satisfying and exciting for international students.

Additionally, short-stay students often enroll in foreign universities to take part in an exchange program for one semester or a full-year program, such as the Erasmus program that many European universities take part in. Exchange programs often include events organized by the university, for students to get used to the lifestyle in that particular city and to make it easier for them to make friends. This could contribute to better adaptation scores, as such events are usually not offered to international full program students (O'Reilly et al., 2010). Taušova et al. (2019) found that duration of stay is directly related to adjustment, and previous research found that a longer residence in a host country improves psychological adjustment (Wilton & Constantine, 2003; Kashima & Loh, 2006). Zheng, Sang and Wang (2004) came to a similar conclusion in research on Chinese students in Australia, stating that a longer time of residence in the host country reduces psychological stress. Furthermore, Anatakopoulou (2013) found that learning new skills and applying them in new surroundings takes time, and different levels of sociocultural adaptation depend on duration of stay in the host country, with the longer time spent abroad resulting in increasing sociocultural adaptation skills.

Overall, research with contradicting findings exist about psychological adaptation and duration of stay. Multiple researchers found duration of stay to be related to adjustment, and that longer residence in a host country improves psychological adjustment. Levels of sociocultural adaptation were, too, found to be predicted by longer residence of stay in the host country, as well as English and host country's language proficiency.

## **Language proficiency**

Language proficiency in the host country's language or the academic language affects sociocultural adaptation (Ward & Kennedy, 1993; Ozer, 2015), and language self-confidence of international students shows a positive relationship with satisfaction of life (Pak, Dion & Dion, 1985). Additionally, the inability to socially interact in the host language can lead to social isolation (Dao, Lee & Chang, 2007), and international students who are more proficient in the host country's language experience less sociocultural adaptation difficulties (Yeh & Inose, 2003). Interestingly, Ladum (2019) found that higher proficiency in the host language predicted worse psychological adaptation.

Previous research by Wang and Hannes (2014) on academic and sociocultural adjustment showed academic adjustment difficulties among Asian students in Belgium when differences exist between the language of study and the language used in the host country, despite how proficient students are in the language of study. Additionally, research by Smith and Khawaja (2011) found that language barrier affects acculturation during studying abroad. As Utrecht University offers many English courses for international students, having better English language proficiency prevents them from experiencing difficulties relating to academic success. English language proficiency was found to contribute to the adaptation level for international students (Ozer, 2015; Poyrazli et al, 2001; Yeh & Inose, 2003).

Overall, multiple studies found language proficiency to be a predictor of (either) psychological or sociocultural adaptation. Existing theories believe English language proficiency and the host country's language proficiency seem to positively affect sociocultural adaptation skills. Concurrently, the host language proficiency was found to negatively predict psychological adaptation.

## **Current study**

### **Purpose of the study**

Moving to a new culture can be problematic for students as they move away from their standard routine, friends, and family, and also need to get used to a new lifestyle, language, environment, and people. The purpose of the current study is to examine the psychological and sociocultural adaptation of international students at Utrecht University and research the distinctions between short-stay and long-stay international students. To the best knowledge of the author, this research was never before performed in the Netherlands with the same population and dependent variables. Demes and Geeraert's (2014) measurement scales for psychological and sociocultural adaptation were used and rather than reversing the scores for negative feelings, the differences between positive feelings and negative feelings for psychological adaptation were presented.

### **Research Questions and Hypotheses**

This research aims to uncover distinctions between short-stay and long-stay students, and how their duration of stay is related to their psychological and sociocultural adaptation experiences. The following research questions were formulated based on the literature and its gap:

*How do international students adapt psychologically and socioculturally to life in Utrecht, the Netherlands?* Using Demes and Geeraert's (2014) BPAS and BSAS, adaptation is measured by indications of experienced difficulty (BSAS) in adapting to different aspects of the host country, such as using public transportation, social norms, making friends, and indications of perceived feelings (BPAS) regarding, for example, homesickness and being away from the home country. This measurement scale examines both negative feelings and positive feelings of living in the host country and being away from the home country.

*How do the psychological and sociocultural adaptation experiences of short-stay international students compare to those of long-stay international students?* Experiences and perceptions of short-stay international students need to be compared to those of long-stay international students, to understand what difficulties arise for either group and what difficulties are collective.

Existing research lead to the following hypotheses concerning the effects of predictor variables on the dependent variables:

- H<sub>1</sub>: International students that had an introduction upon arrival experience less psychological and sociocultural adaptation difficulties.
- H<sub>2a</sub>: International students with higher Dutch language proficiency experience more psychological adaptation difficulties.
- H<sub>2b</sub>: International students with higher Dutch language proficiency experience less sociocultural adaptation difficulties.
- H<sub>3</sub>: International students with higher English language proficiency experience less sociocultural adaptation difficulties.

Additionally, exiting research formed the foundation of the following hypotheses concerning duration of stay as predictors of the dependent variables:

- H<sub>4</sub>: Long-stay international students experience positive feelings of psychological adaptation more frequently than short-stay international students.
- H<sub>5</sub>: Long-stay international students experience negative feelings of psychological adaptation more frequently than short-stay international students.
- H<sub>6</sub>: Short-stay international students experience more sociocultural adaptation difficulties than long-stay international students.

**Assumptions**

It was assumed that international students generally adapt quite well to life in Utrecht as its research university is internationally-oriented and offers a great number of English courses designed for international students, allowing them to interact with other international students. Furthermore, it was assumed that duration of stay is a predictor of psychological and sociocultural adaptation, with long-stay students scoring better on both scales as over time they have gotten used to their new lifestyle in a new city and country. Finally, it was assumed that having an introduction upon arrival positively affects adaptation scores, and that language proficiency in the English and host country's language are predictors of psychological and sociocultural adaptation.

## Methods

A quantitative research approach was employed to make statistically substantiated conclusions regarding the psychological and sociocultural adaptation of international students and how adaptation is differentiated for short-stay and long-stay students. Data from international students was obtained through the online survey software Qualtrics. Data were analyzed using IBM SPSS 25 and results were considered significant at  $p < .05$ . See Appendix B for full survey.

### One-tailed independent samples $t$ test

The hypotheses included one-sided predictions and the two population groups are independent, meaning no participant could be placed in both groups (Kim, 2015). Therefore, one-tailed independent samples  $t$  tests were used to compare all items on the BPAS and BSAS between short-stay and long-stay students. Results will include  $t$  as degrees of freedom,  $p$  as significance value, and a 95% Confidence Interval that proposes an interval estimate (Sedgwick, 2014).

### One-way ANOVA

One-way between-subjects ANOVA tests were performed, as means of more groups had to be compared for all covariates: gender, age, level of education, type of abroad program, introduction upon arrival, and Dutch and English language proficiency. The aim was to find significant differences for each covariate on the dependent variables (psychological and sociocultural adaptation). Significant findings were followed with Tukey's post hoc comparison to investigate between which of the groups difference exist (Ostertagova & Ostertag, 2013). Additionally, Levene's homogeneity of variance was applied to test equal

variance between group means, as it is most powerful in comparison to other tests (Gastwirth, Gel & Miao, 2009; Ostertagova & Ostertag, 2013).

### Research participants

Participants included 154 international students enrolled at Utrecht University. Data was needed from both short-stay and long-stay students, meaning that the short-stay group were students that are currently living in the Netherlands for up until twelve months (n=89; 57.8%). The long-stay group were students that are currently living in the Netherlands for more than twelve months (n=65; 42.2%). Both groups were invited to participate in the research while being enrolled at Utrecht University.

Questions regarding the participants' demographic details were asked. This section contained questions regarding gender, age, country of origin, amount of time living in the Netherlands, level of education, and type of abroad program. See Figure 2 for descriptive statistics per covariate.

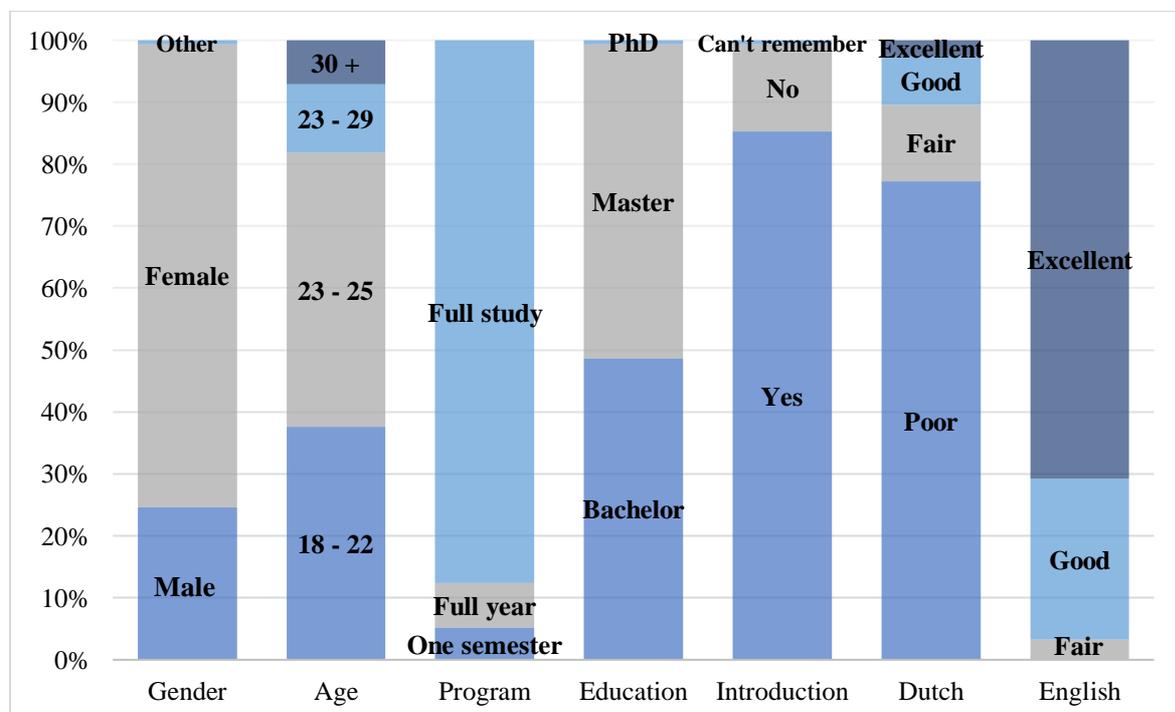


Figure 2. Descriptive statistics per covariate

Altogether, 67 (75.3%) female and 22 (24.7%) male short-stay students participated, with ages ranging between 18-21 (37.1%), 22-25 (48.3%), 26-29 (10.1%) and 30+ (4.5%). Forty-three (48.3%) short-stay students were studying at Utrecht University as part of their Bachelor program, 45 (50.6%) as part of a Master's program, and 1 (1.1%) as part of a PhD. Out of all short-stay students, 8 (9%) were enrolled at Utrecht University for a one-semester exchange program, 11 (12.4%) for a full-year exchange program, and 70 (78.7%) for a full-study program.

Of the 65 long-stay students, 48 (73.8%) were female, 16 (24.6%) were male, and 1 (1.5%) said 'other'. Ages of long-stay students ranged between 18-21 (38.5%), 22-25 (38.5%), 26-29 (12.3%) and 30+ (10.8%). Thirty-two (49.2%) long-stay students were studying at Utrecht University as part of their Bachelor program, and 33 (50.8%) as part of a Master's program. All 65 (100%) long-stay students were enrolled at Utrecht University for a full-study program. In total, short-stay and long-stay participants came from 50 different countries (see Table 5 – appendix C).

## **Procedures**

### *Sampling strategy*

Both groups were recruited in various ways. First, students were approached through Facebook, where they joined public groups to connect with other international students in their educational year or specific program and were asked to participate through a private message. Additionally, students from both groups were approached through their university email by sending a web link of the Qualtrics survey page to each student individually. The survey was sent out to 400 students in person. Multiple students reached out to the researcher, saying they had forwarded the survey to their international friends. Finally, multiple students

received an email with the invitation to participate in the research from one of their professors at Utrecht University.

Altogether, 165 students opened and started the survey. Participants were introduced to the topic and informed about the purpose of their participation. Consent to use the data for the research was asked. In total, 162 students said to have been well informed and gave consent. Two participants did not give consent for their answers to be used and wished to leave the survey. One person left the survey without ticking either box. Of the 162 remaining participants, 9 were excluded from the analysis due to missing responses ( $n=7$ ) and answering 'the Netherlands' as country of origin ( $n=2$ ), leaving a remaining 154 suitable participants.

## **Research materials**

### *Measures*

To make the distinction between short-stay and long-stay students, participants were asked to indicate how long they had been living in Utrecht at time of participation. The current duration of stay was determined with an ordinal question that offered six different options, to which the participants responded as follows: 1 = less than 3 months (2.6%), 2 = 3 – 6 months (7.8%), 3 = 7 – 12 months (47.4%), 4 = 1 – 2 years (30.5%), 5 = 2.1 – 3 years (5.8%), 6 = 3+ years (5.8%). For all analyses looking at differences between short-stay and long-stay international students, the first three groups (57.8%) were identified as short-stay and the last three groups (42.2%) as long-stay.

Next, participants were asked to indicate whether they had had an introduction to the city of Utrecht or Utrecht University upon their arrival. Answer options were 1 = yes (85.1%), 2 = no (14.3%), and 3 = I can't remember (0.6%). Finally, participants were asked about their self-reported Dutch and English language proficiency, to see whether this affected the participants' adaptation skills. This was assessed in two separate questions: "How well do you

believe your overall Dutch language proficiency is?” and “How well do you believe your overall English language proficiency is?”.

#### *Brief Psychological Adaptation Scale (BPAS)*

Using the BPAS (Demes & Geeraert, 2014), data concerning participants' psychological adaptation were collected. All survey questions on this topic utilized a 5-point Likert scale, determining the degree of frequency regarding participants' feelings toward studying and/or living in Utrecht. The list contained ten items, including four items regarding positive feelings and six items regarding negative feelings (see Appendix A). Participants were asked to think of studying and/or living in Utrecht, the Netherlands, and how often they had felt like the example that was given. Answers ranged from 1 = Never to 5 = Always. The reliability level of a scale can be tested through Cronbach's alpha and values between .6 and 1.0 are considered reliable (Nunnally & Bernstein, 1994). Demes and Geeraert's (2014) BPAS Cronbach's alpha was computed at .72. In this research, all items of the scale were tested on scale reliability. Results indicated moderate internal consistency reliability with Cronbach's alpha coefficient of .71.

#### *Brief Sociocultural Adaptation Scale (BSAS)*

Demes and Geeraert's (2014) BSAS was used to assess data concerning the participants' sociocultural adaptation to the Dutch culture. The BSAS is a revised list of questions, deriving from Ward and Kennedy's (1999) 29-item Sociocultural Adaptation Scale. The survey questions utilized a 5-point Likert scale. Participants were asked to determine the degree of difficulty regarding their adaptation to social and cultural differences in the Netherlands. The scale contained twelve items about Dutch customs and social and environmental situations. Participants were asked to think of their experiences for all items and to determine how

difficult it was to adapt to that situation. Answer options ranged from 1 = Extremely difficult to 5 = Not at all difficult. Higher values indicated less difficulty in sociocultural adaptation. Demes and Geeraert's (2014) BSAS Cronbach's alpha was computed at .85. In this research, all items of the scale were tested on scale reliability. Results indicated very good internal consistency reliability with Cronbach's alpha coefficient of .83.

## Results

Data analysis entailed testing of all scale items. Both scales proved to be reliable with Cronbach's alpha from .66 for negative feelings of psychological adaptation, to .83 for sociocultural adaptation. In Table 1, the Mean and Standard Deviation were added for negative and positive feelings and for short-stay and long-stay international students.

Table 1.

*Descriptive statistics for the instruments used in this research (n = 154)*

<b>Abbr.</b>	<b>Scale</b>	<b># items</b>	<b>Range</b>	<b>Mean</b>	<b>SD</b>	<b>Cronbach's <math>\alpha</math></b>
<b>BPAS</b>	<b>Brief Psychological Adaptation Scale</b>	<b>10</b>	<b>14 - 41</b>	<b>30.94</b>	<b>4.20</b>	<b>.707</b>
	Negative feelings	6	6 - 26	15.68	4.02	.658
	Positive feelings	4	6 - 20	15.26	2.63	.757
	<b>Short-stay students</b>	10	14 - 41	30.75	4.21	-
	Negative feelings	6	6 - 26	15.25	3.90	-
	Positive feelings	4	6 - 20	15.51	2.52	-
	<b>Long-stay students</b>	10	21 - 40	31.20	4.21	-
	Negative feelings	6	9 - 25	16.28	2.75	-
	Positive feelings	4	6 - 20	14.92	4.14	-
<b>BSAS</b>	<b>Brief Sociocultural Adaptation Scale</b>	<b>12</b>	<b>23 - 60</b>	<b>46.82</b>	<b>7.75</b>	<b>.833</b>
	<b>Short-stay students</b>	12	28 - 60	48.01	7.06	-
	<b>Long-stay students</b>	12	23 - 59	45.20	8.38	-

### Covariate analysis

The covariates gender, level of education, type of abroad program, and having an introduction upon arrival were no predictors of either psychological or sociocultural adaptation. Although one-semester exchange students had more positive feelings (M = 16.75) and less negative feelings of psychological adaptation (M = 12.50) than full-year exchange students (M = 15.45; M = 16.73) and full-program students (M = 15.16; M = 15.79), the ANOVA found no significant difference for this dependent variable. Even though one-semester exchange students had fewer difficulties adapting socioculturally (M = 51.50) than full-year exchange

students ( $M = 45.18$ ) and full-program students ( $M = 46.68$ ), the ANOVA found no significant difference for this dependent variable.

Groups were created to test Age through ANOVA, separating younger participants (18-25 years old,  $n = 126$ ) and older participants (26+,  $n = 28$ ). Homogeneity of variance was satisfied with  $F(3,150) = 1.28$ ,  $p = .284$ , and showed a significant effect on positive feelings of psychological adaptation at the  $p < .05$  level for the different age groups ( $F/3,150/ = 3.98$ ,  $p = .009$ ), with Tukey post hoc test showing younger participants having more positive feelings ( $M = 15.44$ ) than older participants ( $M = 14.07$ ) with the harmonic mean of group sizes used as groups were unequal.

### Between-group analysis

#### *Descriptive statistics for independent variables per Group*

Table 2 shows the descriptive statistics for the demographic study variables per Group.

Table 2.

*Mean, SD, t and P for demographic variables by Group (s-stay  $n=89$ ; l-stay  $n=65$ )*

	Mean		SD		<i>t</i>	<i>P</i>
	<i>Short-stay</i>	<i>Long-stay</i>	<i>Short-stay</i>	<i>Long-stay</i>		
Age	1.82	1.95	.79	.96	-0,94	.35
Gender	1.75	1.77	.43	.46	-0,23	.82
Education	1.53	1.51	.52	.50	0,24	.81
Abroad program	2.70	3.00	.63	.00	-3,89	.00**
Introduction	1.09	1.25	.33	.43	-0,56	.01*
Dutch prof.	1.28	1.46	.64	.85	-1,51	.13
English prof.	3.69	3.66	.54	.54	0,72	.79

\* $p < .5$ , \*\*  $p < .01$

Most participants reported to study at Utrecht University for a full-study program and indicated to have had an introduction upon arrival to Utrecht University (85.1%). An independent *t* test (one-tailed) found the difference between long-stay ( $M = 1.25$ ;  $SD = .43$ )

and short-stay students ( $M = 1.09$ ;  $SD = .33$ ) to be significant,  $t(152) = -2.56$ ,  $p = .001$ , 95% CI,  $-.277 - -.035$ . Students that had an introduction upon arrival ( $M = 15.37$ ;  $SD = 2.48$ ) reported to have more positive feelings of psychological adaptation than students who did not ( $M = 14.64$ ;  $SD = 3.43$ ). Negative feelings of psychological adaptation were similar for students that had an introduction upon arrival ( $M = 15.64$   $SD = 4.03$ ) and students who did not ( $M = 15.68$ ;  $SD = 4.04$ ). The ANOVA showed no significant differences for positive and negative feelings of psychological adaptation between the groups. Students that had an introduction upon arrival ( $M = 47.23$ ;  $SD = 7.61$ ) reported to experience less sociocultural adaptation difficulties than students that did not ( $M = 45.14$ ;  $SD = 7.91$ ). The ANOVA showed no significant differences for sociocultural adaptation between the groups.

As was assumed, both short-stay ( $M = 1.28$ ;  $SD = 0.64$ ) and long-stay students' ( $M = 1.46$ ;  $SD = 0.85$ ) Dutch language proficiency was rather poor. The ANOVA, after homogeneity of variance was satisfied with  $F(3,150) = .859$ ,  $p = .565$ , found a significant difference for only the dependent variable of sociocultural adaptation ( $F/3,150/ = 3.21$ ,  $p = .025$ ), with Tukey post hoc test showing that students with good Dutch language proficiency have significantly less difficulties adapting socioculturally ( $M = 51.08$ ) than students with fair Dutch language proficiency ( $M = 42.84$ ).

Contradicting, English language proficiency of short-stay ( $M = 3.69$ ;  $SD = 0.54$ ) and long-stay ( $M = 3.66$ ;  $SD = 0.54$ ) students was rather high. The ANOVA, after homogeneity of variance was satisfied with  $F(2,151) = .99$ ,  $p = .373$ , found a significant difference for only the dependent variable of sociocultural adaptation ( $F/2,151/ = 4.09$ ,  $p = .019$ ), with Tukey post hoc test of multiple comparisons showing that students with excellent English proficiency have significantly less difficulties adapting socioculturally ( $M = 47.89$ ) than students with good English proficiency ( $M = 43.88$ ).

*Psychological and sociocultural adaptation per Group*

Positive and negative feelings of psychological adaptation were tested for short-stay and long-stay students through an independent sample *t* test (one-tailed). Table 3 shows the Mean and Standard Deviation for all items on the BPAS per group.

Table 3.

*Mean (Standard Deviation) for BPAS by Group*

<b>Scale question</b>	<b>Short-stay</b>	<b>Long-stay</b>
P: How often are you excited about being in Utrecht?	3.97 (0,76)	3.71 (0.91)
P: How often do you feel freedom being away from your home country?	3.74 (1.08)	3.75 (0.97)
P: How often have you felt curious about things that are different in the Netherlands?	3.88 (0.99)	3.75 (1.03)
P: How often do you feel happy with your day to day life in the Netherlands?	3.92 (0.76)	3.71 (0.96)
N: How often do you feel out of place like you don't fit into the Dutch culture?	2.76 (0.99) *	3.14 (0.98) *
N: How often do you feel sad to be away from your home country?	2.51 (0.91)	2.57 (0.85)
N: How often do you feel nervous about how to behave in certain situations?	2.53 (0.96)	2.55 (0.87)
N: How often do you feel lonely without your friends and family from back home?	2.69 (1.02)	2.66 (0.96)
N: How often do you feel homesick when thinking of your home country?	2.40 (1.04)	2.65 (1.07)
N: How often do you feel frustrated by having difficulties adapting to the Dutch culture?	2.36 (1.11)	2.71 (1.09)

*1 = never – 5 = always, \* =  $p < .05$*

*P: items of Positive feelings, N: items of Negative feelings*

Long-stay international students ( $M = 14.92$ ;  $SD = 2.75$ ) scored lower than short-stay international students ( $M = 15.51$ ;  $SD = 2.52$ ) on all four items of positive feelings of psychological adaptation, meaning short-stay students experience positive feelings of psychological adaptation more frequently than long-stay students. No significant difference was found.

Long-stay students experience negative feelings of psychological adaptation more often on five out of six scale items. Even though long-stay international students ( $M = 16.28$ ;

SD = 4.14) reported to have negative feelings of psychological adaptation more often than short-stay international students (M = 15.25; SD = 3.91), this was not statistically significant,  $t(152) = -1.58, p = .059, 95\% \text{ CI}, -2.32 - .26$ .

Table 4 shows the Mean and Standard Deviation for all items on the BSAS per group.

Table 4.

*Mean (Standard Deviation) for BSAS by Group*

<b>Scale question</b>	<b>Short-stay</b>	<b>Long-stay</b>
How difficult is it for you to adapt to the Dutch weather and climate? (temperature, rainfall)	3.51 (1.24)	3.45 (1.32)
How difficult is it for you to adapt to the natural environment? (plants and animals, pollution, scenery)	4.75 (0.59)	4.54 (0.94)
How difficult is it for you to adapt to the social environment? (size of community, pace of life, noise)	4.20 (0.93)	3.94 (1.17)
How difficult is it for you to adapt to the quality of life? (hygiene, sleeping practices, how safe you feel)	4.70 (0.65)	4.51 (0.89)
How difficult is it for you to adapt to practicalities? (getting around, public transport, shopping)	4.21 (0.86)	4.29 (0.86)
How difficult is it for you to adapt to food and eating? (how and what food is eaten, time of meals)	3.79 (1.15)	3.60 (1.27)
How difficult is it for you to adapt to family life? (how close family members are, how much time families spend together)	4.09 (1.06)	3.72 (1.28)
How difficult is it for you to adapt to social norms? (how to behave in public, style of clothes, what people think is funny)	4.11 (0.95)	3.78 (1.21)
How difficult is it for you to adapt to the Dutch values and beliefs? (religion and politics, what is right and wrong)	4.02 (0.93)	3.85 (1.25)
How difficult is it for you to adapt to the Dutch people? (how friendly, stressed or relaxed people are, attitudes toward foreigners)	3.73 (1.19)	3.34 (1.29)
How difficult is it for you to adapt to friends? (making friends, amount of social interaction, what people do to have fun and relax)	3.84 (1.09) *	3.45 (1.28) *
How difficult is it for you to adapt to language? (learning the language, understanding people, making yourself understood)	3.06 (1.24)	2.74 (1.20)

*1 = extremely difficult – 5 = not at all difficult, \* =  $p < .05$*

Short-stay students seem to have fewer adaptation difficulties than long-stay students on all but one item of the BSAS, indicated by the higher score. The difference in sociocultural

adaptation scores for short-stay ( $M = 48.01$ ;  $SD = 7.06$ ) and long-stay ( $M = 45.20$ ;  $SD = 8.38$ ) students was not found significant.

Additionally, significant differences between duration of stay were reported for adapting to Friends as measured by the BSAS,  $t(152) = 2.08$ ,  $p = .02$ , 95% CI, .020 – .773. Short-stay students reported to have less difficulties adapting to Friends ( $M = 3.84$ ;  $SD = 1.09$ ), compared to long-stay students ( $M = 3.45$ ;  $SD = 1.28$ ); and feeling out of place in the Dutch culture as measured by the BPAS,  $t(152) = -2.33$ ,  $p = .01$ , 95% CI, -.692 – -.057. Long-stay students indicated to feel out of place like they do not fit into the Dutch culture ( $M = 3.14$ ;  $SD = 0.98$ ) more often than short-stay students ( $M = 2.76$ ;  $SD = 0.99$ ).

## Discussion

The current research examined psychological and sociocultural adaptation for the international student population at Utrecht University, the Netherlands. The population was divided into two subgroups: short-stay international students having lived and/or studied in Utrecht for up until twelve months, and long-stay international students having lived and/or studied in Utrecht for over a year. Based on the literature, four hypotheses were constructed regarding independent variables.

First, it was hypothesized that having had an introduction upon arrival predicted better psychological and sociocultural adaptation scores ( $H_1$ ). Although students that indicated to have had an introduction upon arrival reported less sociocultural adaptation difficulties and reported to experience positive feelings of psychological adaptation more frequently than students who did not, which supports claims by O'Reilly et al (2010), unfortunately, due to the number of participants that did not have an introduction upon arrival ( $n = 22$ ) or could not remember if they had ( $n = 1$ ) no evident difference was found to support this hypothesis.

Dutch language proficiency was hypothesized to positively affect psychological adaptation ( $H_{2a}$ ) and sociocultural adaptation ( $H_{2b}$ ). Of the two, only hypothesis  $H_{2b}$  was accepted, as Dutch language proficiency was found to affect sociocultural adaptation. Students with good proficiency indicated to have less sociocultural adaptation difficulties than students with poor or fair proficiency. This confirms prior findings about host language experience resulting in fewer adaptation difficulties (Yeh & Inose., 2003), and can be explained by the fact that it is an ongoing circle of progress. Speaking the language can simplify, for example, using public transportation, but this, in turn, can improve language proficiency as well.

English language proficiency was hypothesized to positively affect sociocultural adaptation ( $H_3$ ). This hypothesis was accepted as students with excellent English language

proficiency experience less sociocultural adaptation difficulties than students with good English language proficiency, which confirms prior research about how English language proficiency contributes to the adaptation level of international students (Poyrazli et al., 2001), and is explicable as the Netherlands is very internationally oriented, making it easier for proficient English speakers to adapt.

Next, three hypotheses were made concerning differences between short-stay and long-stay international students for the dependent variables. First, it was hypothesized that both negative and positive feelings of psychological adaptation were experienced more frequently by long-stay rather than short-stay students ( $H_4$  &  $H_5$ ). Scores on negative feelings of psychological adaptation were higher for long-stay students than for short-stay international students, indicating that long-stay students experience negative feelings of psychological adaptation more frequently than short-stay students. Short-stay students feel lonely without their friends and family from back home just a little more often than long-stay students, which is explicable by the fact that being in a new country with so many new impressions, they want to share this with their loved ones who are far away from them. Short-stay students indicated to feel least often frustrated by potentially having difficulties adapting to a new culture, whereas long-stay students indicated to feel least often nervous about how to behave in certain situations. The latter may be explicable as after some time spent in a new country, having overcome many new and difficult situations, it has become a force of habit. This finding confirms the adjustment phase of the U-Curve hypothesis (Hua, 2019).

Scores on positive feelings were lower for long-stay students than for short-stay students, indicating that short-stay students experience positive feelings of psychological adaptation more frequently than long-stay students. No significant difference was found as was expected. These results contradict the finding that longer residence improves psychological adjustment (Wilton & Constantine, 2003; Zheng, Sang & Wang, 2004;

Kashima & Loh, 2006) and the strongest psychological discomfort is experienced shortly after arriving in a host culture (Ward et al, 1990; 1993; 1998; 1999; 2001; Miglietta & Tartaglia, 2008). However, it confirms the U-Curve hypothesis (Hua, 2019), that satisfaction is highest upon arrival and decreases over time resulting in feeling rejected, anxious, or discomforted. Short-stay students are excited about being in Utrecht, have felt curious about things that are different, and feel happy with their day to day life in Utrecht more often than long-stay students. These differences could be explained by the fact that short-stay students still feel excited to be in a new place, experiencing the ‘honeymoon phase’ of studying abroad.

Finally, it was hypothesized that short-stay students experience more difficulties in sociocultural adaptation than long-stay students, indicated by a lower sociocultural adaptation score ( $H_6$ ). This hypothesis was not supported, as interestingly, short-stay students scored higher than long-stay students, indicating they had fewer difficulties adapting socioculturally. This finding contradicts previous findings (Ward et al, 1990; 1998; 1999; 2001; Miglietta & Tartaglia, 2008). Students indicate to have the least difficulties adapting to the Dutch natural environment and the quality of life. They feel positive about hygiene, sleeping facilities, and safety in Utrecht. The difference between groups is significant for just one item on the scale, namely Friends: making friends, the amount of social interaction, what people do to have fun and relax. This could be explained by their participation in the Erasmus bubble or their self-evaluated higher English language proficiency, making it easier to communicate with other international students.

## Conclusion

Overall, the results indicate that international students adapt psychologically and socioculturally reasonably well to life in Utrecht. Scores seemed rather good for all students on both adaptation scales, possibly influenced by internal strengths such as English language ability, and external influences such as having a proper introduction to the city and university upon arrival.

It seems that short-stay students score better psychologically than long-stay students. Short-stay students experience positive feelings of psychological adaptation more frequently than long-stay students on three out of four items. Long-stay students experience negative feelings of psychological adaptation more frequently than short-stay students. Even though scores for negative feelings of psychological adaptation for long-stay students are not generally high, they do feel out of place like they do not fit into the Dutch culture, feel sad to be away from their home country, feel nervous about how to behave in certain situations, feel homesick when thinking of their home country, and feel frustrated by having difficulties adapting to the Dutch culture, all more frequently than short-stay students.

As well as psychologically, this research shows that short-stay students seem to have less difficulties adapting socioculturally than long-stay students. Even though both short-stay and long-stay students seem to have few difficulties adapting to practicalities: getting around, using public transport, shopping, it is the only BSAS scale item that long-stay students score better on than short-stay students. This could be explained by long-stay students having had more time to get used to the practicalities than short-stay students and, therefore, understand the systems better.

### **Limitations and suggestions for further research**

Several limitations can be noted in this research. First, students self-selected to participate in the quantitative survey based on their personal motivations. Therefore, it should be taken into account that students who feel psychologically unstable felt less motivated to participate in a study, indicating a possible explanation for the generally high adaptation scores. Moreover, participants were asked questions about their home country, meaning their country of origin. However, participants may have a different home country than their country of origin, which could have confused the participants and possibly affected the results. Finally, this research was conducted during COVID-19 restrictions, which possibly affected international students' general well-being and feelings toward living and studying far away from family and friends in times of uncertainty.

The fact that participants were indicating their current thoughts and feelings rather than after they finished studying at Utrecht University makes this research valid and relevant, as their input is contemporary. However, it would be interesting to compare the results of current students to those who have gone back home after their time abroad, to see whether difficulties arise for relocation adaptation. Additionally, as the results are yet inconclusive about what causes differences in adaptation between short-stay and long-stay international students, further research should look into additional independent variables such as accommodation or living situation, previous international experience, satisfaction regarding financial situations, and satisfaction regarding academic situations.

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## Appendices

### Appendix A

#### Items for the Brief Psychological Adaptation Scale (BPAS)

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Excited about being in [host country]?

A sense of freedom being away from [home country]?

Curious about things that are different in [host country]?

Happy with your day to day life in [host country]?

Out of place like you don't fit into the [host country] culture?

Sad to be away from [home country]?

Nervous about how to behave in certain situations?

Lonely without your friends and family from [home country]?

Homesick when thinking of [home country]?

Frustrated by having difficulties adapting to the [host country] culture?

#### Items for the Brief Sociocultural Adaptation Scale (BSAS)

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Climate (temperature, rainfall, humidity)

Natural environment (plants and animals, pollution, scenery)

Social environment (size of the community, pace of life, noise)

Living (hygiene, sleeping practices, how safe you feel)

Practicalities (getting around, using public transport, shopping)

Food and eating (what food is eaten, how food is eaten, time of meals)

Family life (how close family members are, how much time family spend together)

Social norms (how to behave in public, style of clothes, what people think is funny)

Values and beliefs (what people think about religion and politics, what people think is right or wrong)

People (how friendly people are, how stressed or relaxed people are, attitudes toward foreigners)

Friends (making friends, amount of social interaction, what people do to have fun and relax)

Language (learning the language, understanding people, making yourself understood)

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## Appendix B

### Quantitative Survey

Thank you for participating in my research! This survey is part of a Pre Master thesis for Intercultural Communication at Utrecht University. This research paper aims to uncover how short-stay and long-stay international students adapt to the Dutch culture psychologically and socioculturally, and how their duration of stay is related to the adaptation experiences. The survey will take about 5-10 minutes of your time. To ensure your privacy the questionnaire will be anonymous and confidential. Your answers cannot be traced back to you and will be stored safely by Utrecht University. The data can be viewed by the researcher, supervisor and possibly other researchers at Utrecht University. If you have any further questions you can send an email to [b.c.levert@students.uu.nl](mailto:b.c.levert@students.uu.nl) (researcher).

- *I have been well informed and hereby voluntarily consent to my data being used for the purpose of this research.*
  - *I do not give consent and wish to leave this survey.*
- 

1. What is your gender?

- *Male*
- *Female*
- *Other*

2. What is your age?

- *18 – 21*
- *22 – 25*
- *26 – 29*

- 30 +

3. What is your country of origin?

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4. What type of program are you enrolled in at Utrecht University?

- *Exchange program (one semester)*
- *Exchange program (full-year program)*
- *Full study program*

5. What level of education are you currently on?

- *Bachelor program*
- *Master program*
- *PhD*

6. How long have you been in Utrecht, the Netherlands, for?

- *Less than 3 months*
- *3 – 6 months*
- *7 – 12 months*
- *1 – 2 years*
- *2.1 – 3 years*
- *3 + years*

7. Did you have any kind of introduction to the city of Utrecht, Utrecht University, or other international students upon arrival?

- *Yes*
- *No*
- *I can't remember*

8. How well do you believe your overall Dutch language proficiency is?

- *Poor*
- *Fair*
- *Good*
- *Excellent*

9. How well do you believe your overall English language proficiency is?

- *Poor*
- *Fair*
- *Good*
- *Excellent*

10. Think about living and / or studying in Utrecht, the Netherlands. How often have you felt..

- Excited about being in Utrecht?
  - *Never – seldom – sometimes – often – always*
- A sense of freedom being away from your home country?
  - *Never – seldom – sometimes – often – always*
- Curious about things that are different in the Netherlands?
  - *Never – seldom – sometimes – often – always*
- Happy with your day to day life in Utrecht?
  - *Never – seldom – sometimes – often – always*
- Out of place, like you don't fit into the Dutch culture?

- *Never – seldom – sometimes – often – always*
- Sad to be away from your home country?
  - *Never – seldom – sometimes – often – always*
- Nervous about how to behave in certain situations?
  - *Never – seldom – sometimes – often – always*
- Lonely without your friends and family from back home?
  - *Never – seldom – sometimes – often – always*
- Homesick when you think of your home country?
  - *Never – seldom – sometimes – often – always*
- Frustrated by having difficulties adapting to the Dutch culture?
  - *Never – seldom – sometimes – often – always*

11. Think about living and / or studying in Utrecht, the Netherlands. How difficult is it for you to adapt to...

- The Dutch weather and climate? (temperature, rainfall)
  - *Extremely difficult – difficult – moderately difficult – slightly difficult, not at all difficult*
- The natural environment? (plants and animals, pollution, scenery)
  - *Extremely difficult – difficult – moderately difficult – slightly difficult – not at all difficult*
- The social environment? (size of the community, pace of life, noise)
  - *Extremely difficult – difficult – moderately difficult – slightly difficult - not at all difficult*
- The quality of life? (hygiene, sleeping practices, how safe you feel)

- *Extremely difficult – difficult – moderately difficult – slightly difficult - not at all difficult*
- Practicalities? (getting around, using public transport, shopping)
  - *Extremely difficult – difficult – moderately difficult – slightly difficult - not at all difficult*
- Food and eating? (what food is eaten, how food is eaten, time of meals)
  - *Extremely difficult – difficult – moderately difficult – slightly difficult - not at all difficult*
- Family life? (how close family members are, how much time family spend together)
  - *Extremely difficult – difficult – moderately difficult – slightly difficult - not at all difficult*
- Social norms? (how to behave in public, style of clothes, what people think is funny)
  - *Extremely difficult – difficult – moderately difficult – slightly difficult - not at all difficult*
- The Dutch values and beliefs? (what people think about religion and politics, what people think is right or wrong)
  - *Extremely difficult – difficult – moderately difficult – slightly difficult - not at all difficult*
- The Dutch people? (how friendly people are, how stressed or relaxed people are, attitudes toward foreigners)
  - *Extremely difficult – difficult – moderately difficult – slightly difficult - not at all difficult*
- Friends (making friends, amount of social interaction, what people do to have fun and relax)

- *Extremely difficult – difficult – moderately difficult – slightly difficult - not at all difficult*
- Language (learning the language, understanding people, making yourself understood)
  - *Extremely difficult – difficult – moderately difficult – slightly difficult - not at all difficult*

**Appendix C**

Table 5.

*Country of Origin (n=154)*

<b>Nationality</b>	<b>Frequency</b>	<b>Percentage (%)</b>	<b>Nationality</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Albania	1	0,6	Lebanon	1	0,6
Belgium	2	1,3	Lithuania	1	0,6
Brazil	2	1,3	Luxembourg	2	1,3
Bulgaria	3	1,9	Malaysia	1	0,6
Canada	3	1,9	Mexico	2	1,3
Chile	2	1,3	New Zealand	1	0,6
China	6	3,9	Poland	5	3,2
Cyprus	2	1,3	Portugal	2	1,3
Czech Republic	1	0,6	Romania	4	2,6
Denmark	1	0,6	Russia	2	1,3
Ecuador	1	0,6	Saudi Arabia	1	0,6
El Salvador	1	0,6	Scotland	1	0,6
Finland	4	2,6	Serbia	2	1,3
France	4	2,6	South Africa	1	0,6
Germany	18	11,7	Spain	4	2,6
Ghana	1	0,6	Suriname	1	0,6
Greece	10	6,5	Sweden	1	0,6
Hungary	4	2,6	Taiwan	1	0,6
India	2	1,3	Thailand	1	0,6
Indonesia	7	4,5	Turkey	6	3,9
Iran	1	0,6	United Kingdom	8	5,2
Ireland	3	1,9	U.S. of America	7	4,5
Italy	14	9,1	USA	1	0,6
Japan	3	1,9	Vietnam	1	0,6
Kosovo	1	0,6			
			<b>Total</b>	<b>154</b>	<b>100</b>