Understanding the Relationship between Self-Construals, Self-Esteem, Social Support, and the Sociocultural Adaptation of African Students in Northern Cyprus

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ABSTRACT

In this study, we explored the relationship between self-construals, self-esteem, social support, and the sociocultural adaptation of African students in Northern Cyprus. Based on the responses received from 112 students from Sub-Saharan Africa studying in Northern Cyprus, the results indicated that only the interdependent self-construal and social support predicted sociocultural adaptation. This study highlights the importance of social support and relatedness for international students from Sub-Saharan Africa studying in Northern Cyprus.

Keywords: African students, International students, Northern Cyprus, self-construals, sociocultural adaptation

INTRODUCTION

International students are “individuals who have physically crossed an international border between two countries with the objective to participate in educational activities in the country of destination, where the country of
destination of a given student is different from their country of origin” (UNESCO, OECD, & EUROSTAT, 2017, p. 32). According to the UNESCO Institute of Statistic (UIS), in 2016 there were 4,854,346 international students worldwide, with approximately 239,192 of these students coming from Sub-Saharan Africa (UIS, 2018). In 2015, there were 907,251 international students in the United States, 72,178 in Turkey, and 6,516 in the Republic of Cyprus (UIS, 2018). In the 2014/2015 academic year, there were 58,318 international students in the Turkish Republic of Northern Cyprus (TRNC) (TRNC Ministry of Education, 2015). In the 2016/2017 academic year, the international student population increased to 79,673 representing a 36.6% increase in just two years (TRNC Ministry of Education, 2017).

TRNC which is sometimes referred to as Northern Cyprus has a population estimated at 313,626 (TRNC State Planning Organization, 2015). It encompasses the north-eastern part of the island of Cyprus. Only Turkey recognizes the TRNC as a country. It is considered by the international community as part of the Republic of Cyprus illegally occupied by Turkey and is subject to several severe embargoes. The main economic activities in Northern Cyprus are in the service sector. Northern Cyprus is a touristic destination and increasingly an educational destination as well (Katircioğlu, Fethi, & Caner, 2014). Because of the economic and intellectual benefits of having international students, the government of TRNC plans to make the TRNC an educational hub in the sub region. In recent years, many new universities have been established. These universities offer English-medium education in popular disciplines like health sciences, engineering, psychology, banking and finance, management and business administration. They offer quality education and have good campus facilities, equipment and scholarships and they actively advertise on social media and use remunerated referral programs. Students from Africa, the Middle East and Asia choose to come to TRNC for studies because of the relatively cheaper tuition fees and cost of living and less visa restrictions, as compared to countries like Britain, America and countries in the European Union.

LITERATURE REVIEW

Individuals choose to study abroad for various reasons some of which are the belief that an international education better prepares the student for the global job market, lack of quality education in countries of origin, to learn a
new language and to have an international experience which enhances communication skills (Di Pietro, 2015; Wintre, Kandasamy, Chavoshi, & Wright, 2015). Despite these benefits of studying abroad, international students also experience many difficulties (Wu, Garza, & Guzman, 2015). These difficulties can be in the academic, financial, social and psychological aspects of their lives. One major challenging experience lived by international students is culture shock. Culture shock can be conceptualized as feelings of strain, stress and anxiety as a result of contact with a new culture and the feelings of impotence and confusion resulting from the loss of the familiar cultural environment (Cullingford & Gunn, 2017; Oberg, 1960). Culture shock is generally considered to occur in four stages. (1) The honeymoon stage in which the individual, like a tourist is excited and fascinated by the new environment. (2) Then comes the crisis or the culture shock phase in which the individual becomes increasingly dissatisfied with his new environment, minor issues are blown out of proportion, cultural differences become annoying and the individual experiences many tensions and frustrations. (3) The third stage is the adjustment phase in which the individual learns how to settle in the new cultural environment. Some people adjust to the new environment but do not adapt on account of the fact that they choose to isolate themselves in an enclave with individuals of a similar ethnic background and so have limited experience of the new cultural environment. (4) In the fourth and final stage, the individual develops a stable adaptation and is able to solve problems encountered and manage his or her life in the new environment. Although full assimilation of the new culture is virtually impossible, the individual develops a bicultural identity by integrating the new culture through the process of acculturation.

Acculturation is defined by Berry (2005, p. 698) as, “the dual process of cultural and psychological change that takes place as a result of contact between two or more cultural groups and their individual members”. According to Berry, this process leads to the psychological and sociocultural adaptation of the incoming individuals to their host environment and the level of adaptation will depend on factors like the individuals’ personality, the response of the host nationals to the incoming individuals and the level of difference between the two cultures. Studies have explored the relationship between factors like gender (Chirkov, Safdar, De Guzman, & Playford, 2008), age (Misra & Castillo, 2004; Sullivan & Kashubeck-West, 2015), length of stay (Behrnd & Porzelt, 2012; Ward & Kennedy, 1996),
interaction with host nationals (Manguvo, Whitney, & Chareka, 2013; Zhou & Cole, 2017), and the adaptation of international students. Sociocultural adaptation refers to the behavioral aspect of adaptation which involves an individual learning the values of the new culture, integrating them, and later modifying his/her behavior to better fit in the new environment (Ward & Kennedy, 1999). It is different from psychological adaptation which relates to the emotional and affective aspects of adaption, i.e., the different emotional and affective feelings experienced during the transition process (Berry, 2005; Ward & Kennedy, 1999). Sociocultural adaptation happens through a process of cultural learning which involves the individual developing specific cultural skills which facilitate the negotiation of the interactive aspects of functioning in the new environment (Furnham & Bochner, 1986). Sociocultural adaptation might be related to other factors like self-construals, self-esteem and social support.

**Self-Construals**

Self-construals relate to how individuals understand their self in terms of being separate or being connected to others. Markus and Kitayama (1991) proposed two types of self-construals, the independent self-construal and the interdependent self-construal. The independent self-construal is conceptualized as being autonomous, having awareness of personal traits, relying on oneself, being distinct from others, and having personal freedom (Markus & Kitayama, 1991). Markus and Kitayama proposed that most individuals in the Western world would view themselves this way. On the other hand, the interdependent self-construal is conceptualized as functioning with limited interpersonal boundaries, high emotional exchange and connectedness with one’s main social group, and putting the group’s interests before personal interests (Markus & Kitayama, 1991). The interdependent self-construal is considered to be the dominant self-construal in African and Asian cultures (Beattie, 1980; Markus & Kitayama, 1991). Empirical studies have also concluded that countries of Sub-Saharan Africa have a collectivist culture, which is characteristic of cultures in which the dominant self-construal is the interdependent self-construal (Hofstede, 1991; Pirttila-Backman, Kassea, & Ikonen, 2004). The independent self-construal has been associated with individualistic cultures while the interdependent self-construal has been associated with collectivist cultures. It is worth noting that individuals possess both the independent self-construal and the interdependent self-construal in varying degrees according to the priming of
one of the self-construals to the detriment of the other by the individual’s culture of origin (Markus & Kitayama, 1991; Singelis, 1994). Markus and colleagues further developed their theory by suggesting that, the assimilated independent and interdependent self-construals create in individuals a pattern of behavior and ways of presenting themselves in their environment (Markus, Mullally, & Kitayama, 1997). They called this pattern of behavior ‘self-ways’. Self-ways or self-construals might become of importance when individuals move to a new cultural environment, as the predominant self-construal in the new environment might be different from that of the incoming individuals. The difference or similarity between the self-construals of the two groups might impede or facilitate the integration of the new culture by the incoming individuals and hence affect their sociocultural adaptation.

Ward, Leong, and Low (2004) talked of cultural-fit, which they defined as the fit between an individual’s internalized cultural framework (cognition, affect, personality) and the cultural norms and practices of the host society. The cultural fit theory proposes that, the better the fit between the incoming individual and the culture of the host society, the better the individual’s adaptation.

Most studies that considered the relationship between adaptation and self-construals reported a positive relationship between adaptation and the independent self-construal. Norasakkunkit and Kalick (2002) in a sample of European Americans students and students of Asian origin found that the independent self-construal correlated negatively with measures of social anxiety, depression and fear of negative evaluation by other, whereas, the interdependent self-construal correlated positive with these measures. Yang, Noels, and Saumure (2006) in their research on Asian international students in Canada found that the independent self-construal predicted better self-esteem and better sociocultural adjustment to life in Canada. These studies were both done in the western world, in which according to Markus and Kitayama (1991) the dominant self-construal is the independent self-construal.

Although there are no published studies that say if Northern Cyprus is a predominantly collectivist or individualistic society, a study reported high relatedness among the Turkish Cypriots. It is common to see large extended families living in the same building, but with each family in its own apartment (Mertan & Balleyguier, 2008).
Self-Esteem

Rosenberg (1965) defined self-esteem simply as positive or negative attitudes towards oneself. Baumeister (1998) extended Rosenberg’s definition of self-esteem by including feelings of pride, arrogance and superiority. It is logical to think that high self-esteem will lead to improved social relations. Battistich, Solomon, and Delucchi’s (1993) study, revealed that people with high self-esteem reported being more popular than people with lower self-esteem. This could be due to the fact that people prefer to interact with confident and enterprising individuals with high self-esteem and will be less willing to interact with individuals with low self-esteem and insecurities. But because most studies were correlational and hence a causal relationship cannot be implied, the reverse relationship might also seem plausible since the popularity of an individual and his/her good interpersonal relations might boost the individual’s self-esteem (Baumeister, Campbell, Krueger, & Vohs, 2003). Research has shown self-esteem to be related to social anxiety (Abdollahi & Abu Talib, 2015; Iancu, Bodner, & Ben-Zion, 2015) even though the mechanism of action is not yet understood (Nordstrom, Goguen, & Hiester, 2014). The relationship between self-esteem and social anxiety suggests that individuals with low self-esteem, coming into a new cultural environment will avoid social contact with host individuals (and even individuals of the same cultural origin) and hence receive less guidance in the adaptation process, which in turn will lead to poorer sociocultural adaptation. Self-esteem was observed to act as a mediator between social anxiety and academic, social, and institutional adjustment by attenuating the negative effects of social anxiety in undergraduate students (Nordstrom, Goguen, & Hiester, 2014). Self-esteem was also found to partly mediate the relationship between negative life events and social adaptation. In a sample of university students in the United States, self-esteem correlated positively with adaptation to university (Aspelmeier, Love, McGill, Elliott, & Pierce, 2012). It acted as a buffer against the negative effects of negative life events on social adaptation in a sample of Chinese students in China (Li, Zhang, Liu, & Cao, 2013). In a study with a sample of Asian students in Canada, self-esteem correlated positively with sociocultural adaptation (Yang, Noels, & Saumure, 2006).

Social Support

Social support was defined by Cohen and Syme (1985) as the resources (which can be in the form of information or tangible things) that
are provided by other persons. As literature suggests, international students usually experience difficulties as they learn to function in their new environment and achieve their academic goals. The social support network of international students helps them to better adapt both psychologically and socially and to cope with or overcome these difficulties (Baba & Hosoda, 2014; Ong & Ward, 2005). International students can receive social support from a variety of sources including friends, host nationals, their family back home, lecturers and university counselors. Ong and Ward (2005) found that international students relied on support from their home countries in the domain of emotional support, psychological support, and support related to more personal matters while they relied more on support from the host nationals for guidance on day to day activities in the new environment. The majority of studies on social support and cultural adjustment reviewed were in the stress and coping framework in which the effects of social support on the sojourners’ mental and physical health are considered. Most studies showed positive effects of social support for international students for both psychological and sociocultural adaptation. For example, in a sample of Turkish students in the United States, self-esteem and social support predicted better psychological adaptation (Bektaş, Demir, & Bowden, 2009). Yusoff (2012) in a sample of international students in Malaysia found social support from friends and significant others to predict better psychological adjustment. Hendrickson, Rosen, and Aune (2011) observed a positive correlation between sociocultural adaptation and social support in a sample of Vietnamese students in France.

The Present Study

The main aim of the present study was to explore the relationship between self-construals, self-esteem, social support, and the sociocultural adaptation of international students from Sub-Saharan Africa in Northern Cyprus. The relationship between international students’ interaction with co-nationals, multinationals, host nationals and sociocultural adaption was also explored in this study. Considering the rapidly increasing number of international students in Northern Cyprus, the need for a better understanding of their sociocultural adaption becomes more pressing. The following three hypotheses were developed to guide this study:

- H1: Sociocultural adaptation will be positively related with the interdependent self-construal and negatively related with the independent self-construal.
• H2: There will be a positive relationship between self-esteem and sociocultural adaptation.

• H3: There will be a positive relationship between social support and sociocultural adaptation.

RESEARCH METHOD

Participants

Participants of this study were 112 English speaking students from countries of Sub-Saharan Africa studying at a large university in Northern Cyprus. Ethical approval for this study was obtained from the Ethics and Research Committee of the Department of Psychology in Eastern Mediterranean University. The participants originated from Nigeria (77.7%), Zimbabwe (9.8%), Cameroon (7.1%), Tanzania (2.7%), Uganda (1.8%), and Namibia (0.9%). This sample was a good representation by ratio of the actual number of students from these countries in the university. English was the first formal language of 110 of the participants and French was the first formal language of two participants. The participants whose first formal language was French had completed at least one higher education degree entirely taught in English. Only students 18 years old and above and who had studied in Northern Cyprus for at least one semester could take part in the study. There were 64 (57.1%) male students and 48 (42.9%) female students. The participants’ age ranged from 18 to 31 years (M = 22.08, SD = 2.72). Their length of stay ranged from 9 months to 51 months (M = 24.71, SD = 12.73).

Materials

For this study, data was collected with the use of a questionnaire. The questionnaire was made up of a demographic section, Turkish proficiency measures, interaction with individuals measures and four scales which measured sociocultural adaptation, self-contruals, self-esteem, and perceived social support.

Demographic Data

The demographic section of the questionnaire was built to collect information such as the participants’ gender, age, country of origin, length of stay, and level of education.
Turkish Proficiency

The participants’ Turkish reading, writing, speaking, and listening abilities were measured with 4 items. The participants rated their abilities on a 6-point Likert scale which ranged from (1) No ability to (6) very good. The four items had a Cronbach’s alpha reliability of .89.

Level of Interaction

The participants’ level of interaction with four different groups of individuals was measured. The four groups were: individuals from the participants’ country of origin (co-nationals), individuals from other Sub-Saharan African countries, Turkish Cypriots, and other international individuals in Northern Cyprus. Interaction with each group of individuals was measured in three different setting: at home, on campus and other places (e.g. markets, restaurants, banks, etc.). The participants rated their level of interaction using a 5-point Likert scale which ranged from (1) not at all to (5) very high degree. The Cronbach’s alpha reliability coefficient for the interaction with co-nationals subscale was .85, that for the interaction with individuals from Sub-Saharan Africa subscale was .87, that for the interaction with Turkish Cypriots subscale was .73 and that for the interaction with other international individuals subscale was .87.

Sociocultural Adaptation

The Sociocultural Adaptation Scale (SCAS) measures the sociocultural adaption of sojourners to their host environment. The current version of the SCAS which is made up of 29 items was developed by Ward and Kennedy (1999). A modified version of the scale was used, with item 20 which measures difficulty related to worshiping removed from the scale. The participants responded by rating the amount of difficulty they experienced in different areas of adaptation using a 5-point Likert scale which ranged from (1) no difficulty to (5) extreme difficulty. The SCAS was used in a sample of Singaporean students studying abroad and showed good reliability with a Cronbach’s alpha value of .89 (Ward & Kennedy, 1999). In this study, the Cronbach’s alpha for the SCAS was also .89.

Self-Contruals

The Singelis Self-Construal Scale (SSCS) (Singelis, 1994) was used to measure the independent and interdependent self-related concepts of the participants. The SSCS is made up of two subscales, one measuring the
strength of the independent self and the other measuring the strength of the interdependent self. Each subscale has 15 items. All participants received two scores, one for the strength of his/her independent self and another for the strength of his/her interdependent self. Responses were provided on a 7-point Likert scale which ranged from (1) strongly disagree to (7) strongly agree. The Cronbach’s alpha reliabilities of the subscales usually range from the high .60’s to the middle .70’s (Singelis, 1994; Ryder, Alden, & Paulhus, 2000). In the present study, the independent self-construal subscale had a Cronbach’s alpha reliability of .56 and the interdependent self-construal subscale had a Cronbach’s alpha reliability of .72.

Self-Esteem

The Rosenberg Self-Esteem Scale (RSES) developed by Rosenberg (1965) was used in this study to measure global self-esteem. It uses a 4-point Likert scale which ranges from (1) strongly agree to (4) strongly disagree. It is a widely used scale and has shown good reliability. Yorra (2014) had a reliability of .89 in a sample of American university students. In this study the RSES had a Cronbach’s alpha reliability of .65.

Social Support

The short version of the Interpersonal Support Evaluation List (ISEL) developed by Cohen (Cohen & Syme, 1985) was used to measure the participants’ perceived social support. The scale uses a 4-point Likert scale that ranges from (1) definitely true to (4) definitely false. Good reliability of the scale in different norming samples was observed, with Cronbach’s alpha values greater than .80 (Merz et al., 2014). The Cronbach’s alpha value of the ISEL scale in this study was .73.

RESULTS

Guided by the hypotheses of this study, the collected data were statistically analyzed using the Statistical Package for the Social Sciences (SPSS version 20) computer software. The statistical techniques used were t-tests, correlation, ANOVA, and regression.

**t-tests**

Before any analysis was conducted, the data were checked to ensure they were normally distributed. The means and standard deviations of the study variables are presented in Table 1 below. Higher mean values of self-
construals, social support, Turkish proficiency, and level of interaction represent higher endorsement of the construct whereas, lower values of sociocultural adaptation and self-esteem represent higher endorsement of the constructs. t-tests were performed to check for any gender differences in the main study variables. As can be seen in table 1 below, there was a significant gender difference only in the level of interaction with individuals from Sub-Saharan Africa and the level of interaction with other international individuals.

**Table 1. Means and standard deviations of study variables by gender**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Male</th>
<th>Female</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sociocultural adaptation</td>
<td>2.28 .59</td>
<td>2.32 .62</td>
<td>-.20</td>
</tr>
<tr>
<td>Independent self-construal</td>
<td>5.33 .57</td>
<td>5.53 .59</td>
<td>-1.80</td>
</tr>
<tr>
<td>Interdependent self-construal</td>
<td>5.22 .65</td>
<td>5.06 .76</td>
<td>1.17</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>1.73 .36</td>
<td>1.67 .36</td>
<td>.82</td>
</tr>
<tr>
<td>Social support</td>
<td>3.12 .46</td>
<td>3.19 .49</td>
<td>-.74</td>
</tr>
<tr>
<td>Turkish proficiency</td>
<td>3.44 .95</td>
<td>3.36 1.07</td>
<td>.01</td>
</tr>
<tr>
<td>Interaction with co-nationals</td>
<td>3.94 .85</td>
<td>3.89 .97</td>
<td>.51</td>
</tr>
<tr>
<td>Interaction with Sub-Saharan Africans</td>
<td>3.18 .95</td>
<td>2.70 .97</td>
<td>2.21*</td>
</tr>
<tr>
<td>Interaction with Turkish Cypriots</td>
<td>2.58 .74</td>
<td>2.44 .74</td>
<td>.76</td>
</tr>
<tr>
<td>Interaction with other international individuals</td>
<td>3.02 .81</td>
<td>2.40 .89</td>
<td>3.42***</td>
</tr>
</tbody>
</table>

Note. *p < .05, ***p < .005

**Correlations**

Pearson correlation was used to test the relationship between the main variables in this study (the independent self-construal, the interdependent self-construal, self-esteem, social support, and sociocultural adaptation). Correlation analysis permitted the test of the hypotheses. The correlation coefficients among the variables can be seen in Table 2 below.
Table 2. Correlation amongst variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Independent self-construal</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. Interdependent self-construal</td>
<td>.25**</td>
<td>-</td>
<td></td>
<td></td>
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<tr>
<td>3. Self-esteem</td>
<td>.17</td>
<td>-.07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Social support</td>
<td>.00</td>
<td>.13</td>
<td>.21*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Sociocultural adaptation</td>
<td>.03</td>
<td>.28***</td>
<td>.05</td>
<td>.35****</td>
<td>-</td>
</tr>
</tbody>
</table>

Note. *p < .05, **p < .01, ***p < .005, ****p < .001.

The correlation between the independent self-construal and sociocultural adaptation was non-significant, r(110) = .03, p = .78, while on the other hand, the weak and positive correlation between the interdependent self-construal and sociocultural adaptation was significant, r(110) = .28, p = .003. The correlation between self-esteem and sociocultural adaptation was non-significant, r(110) = .05, p = .64. There was a significant, weak, and positive correlation between social support and sociocultural adaptation, r(110) = .35, p < .001. Also present was a weak and positive correlation between social support and self-esteem, r(110) = .21, p = .03.

ANOVA

A repeated measures ANOVA was used to test for differences in the level of interaction of the participants with co-national, individuals from Sub-Saharan Africa, Turkish Cypriots, and other international individuals. There was a significant main effect of interaction group, F(3, 327) = 69.46, p < .001. Post-hoc Bonferroni analysis showed that, the participants reported significantly (p < .001) more interaction with co-nationals (M = 3.92, SD = .89) than with Turkish Cypriots (M = 2.54, SD = .74), individuals from Sub-Saharan Africa (M = 2.99, SD = .98), and with other international individuals (M = 2.79, SD = .92). Also, interaction with Turkish Cypriots (M = 2.54, SD = .74) was significantly less than interaction with individuals from Sub-Saharan Africa (M = 2.99, SD = .98) (p < .001) and other international individuals (M = 2.79, SD = .92) (p = .03). There was no significant difference (p = .39) in the level of interaction with individuals from Sub-Saharan Africa (M = 2.99, SD = .98) and other international individuals (M = 2.79, SD = .92).
Table 3. Summary of hierarchical multiple regression of variables predicting sociocultural adaptation

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
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<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>β</td>
<td>B</td>
<td>SE</td>
<td>β</td>
<td>B</td>
<td>SE</td>
<td>β</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.03</td>
<td>0.12</td>
<td>-0.02</td>
<td>0.03</td>
<td>0.13</td>
<td>0.02</td>
<td>-0.01</td>
<td>0.12</td>
<td>0.01</td>
</tr>
<tr>
<td>Age</td>
<td>0.00</td>
<td>0.01</td>
<td>0.00</td>
<td>0.06</td>
<td>0.12</td>
<td>-0.02</td>
<td>0.06</td>
<td>-0.04</td>
<td></td>
</tr>
<tr>
<td>Length of stay</td>
<td>0.00</td>
<td>0.01</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>-0.02</td>
</tr>
<tr>
<td>Turkish proficiency</td>
<td>-0.07</td>
<td>0.06</td>
<td>-0.12</td>
<td>-0.02</td>
<td>0.06</td>
<td>-0.04</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Interaction with co-nationals</td>
<td>0.10</td>
<td>0.07</td>
<td>0.15</td>
<td>0.16</td>
<td>0.07</td>
<td>-0.25*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction with individuals from Sub-Saharan Africa</td>
<td>-0.10</td>
<td>0.07</td>
<td>-0.15</td>
<td>-0.16</td>
<td>0.07</td>
<td>-0.25*</td>
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<tr>
<td>Interaction With Turkish Cypriots</td>
<td>0.11</td>
<td>0.09</td>
<td>0.14</td>
<td>0.04</td>
<td>0.08</td>
<td>0.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interaction with Other international individuals</td>
<td>0.11</td>
<td>0.08</td>
<td>0.18</td>
<td>0.09</td>
<td>0.07</td>
<td>0.14</td>
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<tr>
<td>Independent self-construals</td>
<td>0.00</td>
<td>0.11</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interdependent self-construals</td>
<td>0.22</td>
<td>0.08</td>
<td>0.26*</td>
<td></td>
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<td></td>
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<tr>
<td>Self-Esteem</td>
<td>0.08</td>
<td>0.16</td>
<td>0.05</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Social support</td>
<td>0.41</td>
<td>0.13</td>
<td>0.33**</td>
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<tr>
<td>R²</td>
<td>0.01</td>
<td>0.09</td>
<td>0.26</td>
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<tr>
<td>F for change in R</td>
<td>0.32</td>
<td>1.58</td>
<td>5.25*</td>
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Note. *p < .05, **p < .005.
Regression
Hierarchical multiple regression was used to assess the ability of self-construals, self-esteem, and social support to predict the level of sociocultural adaptation after controlling for gender, age, length of stay, Turkish proficiency, interaction with co-nationals, interaction with individuals from Sub-Saharan Africa, interaction with Turkish Cypriots, and interaction with other international individuals. Preliminary analyses were conducted to ensure no violations of assumptions of normality, linearity, multicollinearity and homoscedasticity. Because the participants varied in terms of gender, age, and length of stay, these variables were entered in step 1 to account for any prediction they might have on sociocultural adaptation. The first step did not significantly contribute to variations in sociocultural adaptation. Turkish proficiency, interaction with co-nationals, individuals from Sub-Saharan Africa, Turkish Cypriots, and other international individuals were entered in step 2. This step also did not significantly predict sociocultural adaptation. The independent self-construal, interdependent self-construal, self-esteem, and social support were entered in step 3. The total variance of the model as a whole was 26.2%, \( F(12, 89) = 2.63, p = .005 \). The variables added in step 3 explained an additional 17.4% of the variance in sociocultural adaptation, \( \Delta R^2 = .174, F(4, 89) = 5.25, p = .001 \). In the final model, the only variables that significantly predicted sociocultural adaptation were, the interdependent self-construal (\( \beta = .26, p < .05 \)), social support (\( \beta = .33, p < .005 \)), and interaction with co-nationals (\( \beta = -.25, p < .05 \)). The result of the hierarchical multiple regression analysis is shown in Table 3.

DISCUSSION
This study explores the relationship between the independent self-construal, the interdependent self-construal, self-esteem, social support, and the sociocultural adaptation of students from Sub-Saharan Africa in Northern Cyprus. Correlation analysis revealed no relationship between the independent self-construal and sociocultural adaptation, whereas a positive relationship between the interdependent self-construal and sociocultural adaptation was observed. This was taken to indicate that students who reported higher levels of the interdependent self-construal also reported higher levels of sociocultural adaptation. These findings partly confirmed our first hypothesis as it was hypothesized that sociocultural adaptation will
correlate positively with the interdependent self-construal and negatively with the independent self-construal. Studies in literature (e.g., Duncan, Ornaghi, & Grazzani, 2012; Norasakkunkit & Kalick, 2002; Yang, Noels, & Saumure, 2006) that found the independent self-construal to correlate positively with sociocultural adaptation and with indicators of psychological wellbeing were done in the United States and in Canada which are considered to be typical individualistic societies (Markus & Kitayama, 1991). Considering the cultural fit theory, the contrary was hypothesized here because, although there are no empirical studies that say if Northern Cyprus has an individualistic or collectivistic culture, Northern Cyprus was considered to be more collectivistic than individualistic considering the close knitted family structure of the host nationals. There is also a strong presence of Turkish citizens in Northern Cyprus (Hatay, 2007) and the Turkish society although changing, can be considered to be more collectivistic than individualistic or characterized by more interdependence than independence (Kagitçibaşı, 2005, 2014; Phalet & Schönpfleg, 2001). Attesting to the influence of Turkish culture in Northern Cyprus is the fact that there are more than three times more tertiary level students from Turkey in Northern Cyprus than Turkish Cypriot students (TRNC Ministry of Education, 2017). Also, Turkish is the official language of Northern Cyprus and this facilitates cultural exchange between the two countries. We posit that students from Sub-Saharan Africa and the Turkish Cypriots have similar interdependent self-ways or self-construals due to their collectivistic cultures and according to the cultural fit theory (Ward, Leong, & Low, 2004), this explains why the interdependent self-construal correlated positively with sociocultural adaptation. The Turkish Cypriots—and the Turkish citizens—might interact with international students in a less formal and less superficial way similar to the type of interaction in the collectivist Sub-Saharan African society.

The factor with the strongest prediction of sociocultural adaptation was perceived social support. Social support has consistently been found to facilitate adaption to university (Chavajay, 2013; Mesidor & Sly, 2016) and the adaptation of international students (Ong & Ward, 2005; Wang, Hong, & Pi, 2015). Although not reaching significance, perceived social support also positively correlated with the interdependent self-construal but had no correlation with the independent self-construal. This correlation trend hints that the more one perceives him/herself as being related to others, the more social support he/she will perceive. Results from the repeated measures
ANOVA showed that the interaction with co-nationals was significantly higher than the interaction with other groups of individuals. International students tend to get social support which includes guidance in the adaptation process from co-nationals and members of their ethnic group (Hendrickson, Rosen, & Aune, 2011; Sullivan & Kashubeck-West, 2015). Interaction with co-nationals is very likely to be high in relatedness according to the self-construal primed by their common culture which in this case is the interdependent self-construal. Interestingly, interaction with co-nationals negatively predicted sociocultural adaptation. This suggests that although interaction with co-nationals is beneficial for social support, it is detrimental to sociocultural adaptation because the co-nationals are also in the process of adaptation and compared to host nationals—with whom the participants in this study had least interaction—the co-nationals have much less ability to navigate the interactive aspects of the society and hence provide limited support for adaptation. According to Kim (2001), relationship with co-nationals provides just short-term support and impedes long-term adaptation. This might lead to adjustment without adaptation as previously discussed in the literature review section. International students might interact more with co-nationals because they isolate themselves in a cultural enclave with individuals with a similar cultural and ethnic background. This is very likely the case in this sample considering the fact that the students that interacted more with co-nationals were also the ones that reported less sociocultural adaptation. Most students from Sub-Saharan Africa lack basic Turkish language proficiency and hence would interact more with their co-nationals and so limit their experience of the Northern Cyprus society. The international students will have a poor international experience since they isolate themselves from many aspects of the host society and the host society too will not benefit from the knowledge and ideas that the international students bring.

It was hypothesized that self-esteem would positively correlate with sociocultural adaptation. However, a non-significant correlation was observed in this sample. There was a positive correlation between self-esteem and sociocultural adaptation in the study by Yang, Noels, and Samure (2006) with a sample of Asian students in Canada. In the same study, self-esteem also correlated positively with the independent self-construal and psychological adaptation. In the present study, self-esteem positively correlated with the independent self-construal and negatively correlated with the interdependent self-construal, but both correlations did
not reach significance. This is not surprising considering that awareness of personal traits and uniqueness and relying on oneself are characteristics of the self in the independent self-construal. The fact that perceiving oneself as being separate from others (the independent self-construal) did not predict sociocultural adaptation in this sample might explain why self-esteem also did not predict sociocultural adaptation as hypothesized.

Neither gender, age, length of stay, and Turkish proficiency were significant predictors of sociocultural adaptation. Host language proficiency has been shown to predict better adaptation (Poyrazli, Arbona, Bullington, & Pisecco, 2001; Zhang & Brunton, 2007). In this sample, the participants were all taught in English, which is not the official language of Northern Cyprus, unlike in other studies in which the hosts’ national language is the same as the language of instruction in the universities. The participants in this study were not obliged to learn the official language of the host country (Turkish) and hence many students might prefer not to go through the strain of learning a new language and so find other ways to navigate the daily hassles of life in the new cultural environment.

Implications

The pattern of findings from this study could be potentially useful to lecturers, student counselors, university authorities, government authorities and researchers in the field of intercultural contact (Kagitcibasi, Kisbusakarya, & Aydogdu, 2017; Lillyman & Bennett, 2014). These practical implications from the findings of this study on a specific group of students in a society in which sociocultural adaptation has never been studied before are not entirely new to the field of international students’ adaptation but they show that international students from various backgrounds in different societies face similar difficulties and have similar needs but their adaptation depends on the fit of the characteristics of both the students and the host nationals.

University lecturers, professors and the administrative staff can promote a sense of togetherness among students by promoting the idea that the students and the teaching and administrative staff of the university form one body and everyone has to lookout for the successful acculturation of the others (Hill, 2012; Huang, 2012; Nambiar, Ibrahim, & Meerah, 2012). Encouraging such relatedness like that found in collectivist societies might enhance the students’ interdependent self which might result in better sociocultural adaptation as suggested by the findings of this study.
It was observed that interaction with the Turkish Cypriots (host nationals) was significantly less than interaction with all the other groups of individuals. Studies have shown that international students are more satisfied with their academic program and their international experience when they have more interactions with host nationals (Williams & Johnson, 2011; Zhou & Cole, 2017). Lecturers who are aware of the low level of contact between host nationals and international students could specifically promote contact between these two groups in their classrooms with activities like academic projects in which local students and international students are put in the same group. University housing directors can do same by pairing international students with local students in joint accommodation facilities. Universities can create a pairing program in which international students are assigned a ‘buddy’ who is from the host country to facilitate the incoming students’ transition into the new cultural environment (Westwood & Barker, 1990). These measures create opportunities for contact between international students and local students during which knowledge based on experience and not on stereotypes about the individuals of both groups is acquired. According to Allport’s (1952) contact theory, the more knowledge an individual has about another person, the less social distance from that person the individual perceives.

Social support had the highest correlation with sociocultural adaptations and hence university authorities have to help ensure that all international students have a strong social support network because one of the most difficult experiences of international students is the loss or weakening of their home social support network. Social support intervention programs can be organized by universities in which social support networks with other students, lecturers, staff and even family back home can be build, strengthen and maintained (Fontaine, 1986).

**Limitations**

Several limitations can be considered for this study. Firstly, because of the sample size and composition, the results can only be cautiously generalized to African students from Sub-Saharan Africa studying in Northern Cyprus. Secondly, self-report measures were used so the truthfulness of the responses could not be verified. Thirdly, the study was cross-sectional and correlational, hence causal relationships could not be derived from it. Lastly, acculturation being a process involving host nationals and sojourners, this study lacked a measure of host nationals’
characteristics like self-construals or acculturative attitudes which could permit a better understanding of the sociocultural adaptation of the international students.

**Future Directions for Research**

Future studies could consider and measure not only self-construals but also other factors like acculturative attitudes of both the host nationals and the international students and explore how these factors relate to the adaptation of international students in Northern Cyprus. Psychological adaptation, the other facet of adaptation could also be studied in order to understand how the variables of this study relate to the affective part of the adaptation process. Also, future research can use sociocultural adaptation as a predictor variable and with a longitudinal research design study, its effects on outcome variables such as academic performance, depression and academic and international experience satisfaction.

**CONCLUSION**

To the best knowledge of the authors, this study is the first known report that addresses the issue of the sociocultural adaptation of students from Sub-Saharan Africa in Northern Cyprus. The population under study is a specific racial group often ignored in other research or considered together with other racial groups. The present study tested the hypotheses that there will be a positive relationship between the interdependent self-construal, self-esteem, social support and sociocultural adaptation; and that there will be a negative relationship between the independent self-construal and sociocultural adaptation. After controlling for time spent in Northern Cyprus, language proficiency and interaction with different groups—which are factors that are known to influence the adaptation of international students—the results showed that only the interdependent self-construal and social support positively predicted sociocultural adaptation as hypothesized. This study provided some support for the cultural fit theory (although more empiric verification is necessary) because the interdependent self-construal which we considered to be the dominant self-construal in Northern Cyprus positively predicted sociocultural adaptation. This study suggests that considering oneself as being more related to others and perceiving more social support might lead to having better sociocultural adaptation in Northern Cyprus.
Furthermore, it was observed that the international students interacted least with host nationals and interacted most with co-nationals. Interaction with co-nationals negatively predicted sociocultural adaptation suggesting that the students are finding ways to adjust in Northern Cyprus in a familiar cultural enclave without adapting to the Northern Cyprus society. Studies have shown that international students are more satisfied with their academic program and their international experience when they have more interactions with host nationals. The finding that the international students from Sub-Saharan Africa interacted least with Turkish Cypriots shows the need for student counselors, university authorities, and government authorities to devise strategic plans to promote the interaction of foreign students with host nationals.

This study emphasizes the need of relatedness and social support and hence international students can be encouraged to have positive attitudes towards interaction with co-nationals and host nationals from whom they can get adequate assistance in the sociocultural adaptation process.

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REFERENCES


Yusoff, Y. M. (2012). Self-efficacy, perceived social support, and psychological adjustment in international undergraduate students in a public higher


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