

September 2020

Cultural Value Orientation, Social Networking Site (SNS) Use, and Homesickness in International Students

Senel Poyrazli

Olufunmike B. Devonish

Follow this and additional works at: <https://digitalcommons.northgeorgia.edu/issr>



Part of the [Anthropology Commons](#), [Communication Commons](#), [Economics Commons](#), [Geography Commons](#), [International and Area Studies Commons](#), [Political Science Commons](#), and the [Public Affairs, Public Policy and Public Administration Commons](#)

Recommended Citation

Poyrazli, Senel and Devonish, Olufunmike B. (2020) "Cultural Value Orientation, Social Networking Site (SNS) Use, and Homesickness in International Students," *International Social Science Review*. Vol. 96 : Iss. 3 , Article 2.

Available at: <https://digitalcommons.northgeorgia.edu/issr/vol96/iss3/2>

This Article is brought to you for free and open access by Nighthawks Open Institutional Repository. It has been accepted for inclusion in International Social Science Review by an authorized editor of Nighthawks Open Institutional Repository.

Cultural Value Orientation, Social Networking Site (SNS) Use, and Homesickness in International Students

Cover Page Footnote

Senel Poyrazli, Ph.D. is the chair of social sciences and psychology at Penn State Harrisburg. Olufunmike Banks Devonish Olufunmike is a clinical psychologist at Department of Social Development, Government of Anguilla.

Cultural Value Orientation, Social Networking Site (SNS) Use, and Homesickness in International Students

The global market has become more competitive, thereby increasing the demand for post-secondary education qualifications. Not surprisingly, then, the number of international students entering the United States (U.S.) has increased drastically in recent times, and continues to do so annually. According to the International Institute of Education, there were approximately 1.1 million international students enrolled in the United States during the 2018-2019 academic year—an increase from the previous year.¹ The U.S. economy benefits significantly from the contributions of international students, receiving approximately 30.8 billion dollars from this population in 2014-2015.² Consequently, most U.S. colleges and universities want to attract and better cater to this growing (and lucrative) student population and have developed support programs or offices that provide services specifically to meet their needs. These international student services aid foreign students by ensuring that they are well-adjusted, coping with the challenges of higher education (e.g., more independent learning compared to high school, the education system being unfamiliar, etc.), and being away from home.

This research study aims to examine the unique situation of international students and to frame information that higher education institutions can use to better serve this population. Specifically, it examines how cultural value orientations (collectivism, individualism, familism), intensity of social network usage in general, and social network usage with individuals back in the students' home country can predict the level of homesickness in international students. This study also examines how these variables correlate with each other. To provide context, this study begins with variable definitions and a literature review.

Homesickness

The pursuit of a tertiary education often involves leaving home, hence one of the major challenges faced by international students and domestic students alike is homesickness. In their 1987 work, Shirley Fisher and Bruce Hood define homesickness as “a complex cognitive-motivational-emotional state concerned with grieving for, yearning for and being preoccupied with thoughts of home.”³ In her theory of homesickness, Shirley Fisher states that a person’s level of homesickness is determined by their predispositional traits and adjustment to their new environment.⁴ Similarly, Christopher Thurber and Edward Walton define homesickness as “the distress or impairment caused by an actual or anticipated separation from home.”⁵ Margaret Stroebe, Henk Schut, and Maaïke Nauta, on the other hand, offer a more specific and detailed definition: Homesickness is a mini-grief where “a negative emotional state primarily due to separation from home and attachment persons, characterized by longing for and preoccupation with home, and often with difficulties adjusting to the new place.”⁶ In a different research paper, Stroebe, Schut, and Nauta indicate that while the theories of homesickness are relatively young, this phenomenon among college students needs studying.⁷ Although anybody may experience homesickness, it is worth noting that an individual’s personality characteristics, the circumstances preceding the departure from home, the relationship with people at home, support systems at the new place of residence, and other factors often cause persons to experience it in different intensities and durations.⁸ As a result, homesickness is not necessarily a negative phenomenon, but rather a normal experience that a person may need to deal with as they are going through different developmental stages. However, as the literature points out, if an individual is not able to successfully cope with this experience, some negative consequences may emerge.⁹

Specifically related to international students, Senel Poyrazli and Marcos Lopez note in their comparative study of international and American students that international students experience higher levels of homesickness.¹⁰ International students who were younger, who had lower levels of English language proficiency, and who reported higher levels of perceived discrimination also reported experiencing higher levels of homesickness.¹¹ According to Poyrazli and Lopez, older students may not have experienced such high levels of homesickness, despite higher levels of perceived discrimination, because of greater life experiences and higher levels of independence.¹² Thurber and Walton reach similar conclusions and provide information about how homesickness could have detrimental consequences.¹³ Their review of the literature indicates that for both domestic and international students, homesickness could be problematic in that it could contribute to the students feeling anxious and depressed, developing new mental health and physical health related problems, and withdrawing from their academic studying.

International students may experience homesickness for a number of reasons, including exposure to a new culture, moving to a place with a different climate, facing a different political system and unfamiliar people, as well as having unfulfilled expectations of what life would be like in the U.S.¹⁴ Moreover, factors such as difference in physical appearance (e.g., race-ethnicity or wearing of cultural clothing) and language barriers are thought to impact the higher levels of discrimination and social isolation, and consequently, homesickness among international students.¹⁵ These findings are important as homesickness has been found to be detrimental to an individual's psychological and physical wellbeing and can result in depressive and/or destructive symptoms.¹⁶

The Importance of Social Support in Mitigating Homesickness

The majority of literature on adjustment and coping in a college/university environment emphasizes the critical role that friendship formation has on overall satisfaction and contentment in people, and has found this to be true for international students as well.¹⁷ When international students leave home, they often experience feelings of loneliness due to a real or perceived loss of social support.¹⁸ Thus, friendships provide a source of social support that aids in the reduction of stress among international students.¹⁹ However, research suggests that whereas forming friendships with host country individuals is correlated with higher levels of satisfaction and lower levels of homesickness, most international students form friendships with other students from the same or similar cultures.²⁰ This finding is important, because as Nicholas Geeraert, Stephanie Demoulin, and Kali A. Demes report, having friends from the same group of origin (co-national) in a student's closest friendship circle could be stress-inducing.²¹ Therefore, based on the literature, international students would benefit tremendously from social support, which could be established through social networking sites. Acknowledging that each international student is different, it may be important to explore how culture may play a role in the use of social networking sites and level of homesickness among international college students.

Cultural Value Orientation

Cultural value orientation is the beliefs and values that govern how an individual relates to others, and is an oft-studied concept.²² Earlier research exploring cultural value orientation focused upon the individualism-collectivism dichotomy and its impact on life choices and interpersonal interactions.²³ Individualism is the mentality of placing the needs of self before others, while collectivism is showing greater concern for the needs and wellbeing of others (generally in the community).²⁴ Collectivism is a communal social structure where the person

gives priority to the group goals over his or her individual goals, where a person's interdependence rather than independence is encouraged, and where harmonious relationships become the goal for group members.²⁵

Most studies on individualism and collectivism are cross-cultural comparisons, typically comparing the U.S. to other countries.²⁶ Cultural value orientation research consensus is that Western societies (most often referring to the U.S. society) encourage individualism, whereas Non-Western societies (for example, Japanese and Korean cultures) praise collectivism.²⁷ While these studies examined cultures based on groups, other research explored cultures and cultural value orientation on an individual level, recognizing the possibility of intra-cultural differences.²⁸ Furthermore, researchers have begun to refute the idea that individualism-collectivism is dichotomous, and have instead posited that the constructs are more orthogonal and continual, regardless of the cultural background.²⁹ Thus, this implies that classing international students from traditional cultures as collectivistic and students from western countries as individualistic may be an inaccurate generalization. In fact, Stanley O. Gaines and colleagues conducted a study demonstrating the complexity of cultural value orientation, suggesting that, although people's orientations toward their community and family may be similar, they are not necessarily the same depending on socialization factors.³⁰ An individual may be a member of a number of in-groups and interact distinctly with each, placing the needs of one in-group over another (e.g. family over friends) based on the strength of the relationship and other factors such as shared material and/or non-material resources.³¹ Also, considering that an individual's connection with their family and the group in which they function could be different, Gaines and colleagues posited that while studying collectivism, researchers should study familism as a separate construct.³² Familism, while similar to collectivism, refers specifically to a mindset of

considering the needs of the family as paramount over individual needs or those of others outside of the family unit.³³ As a result, this study includes familism in addition to the collectivist and individualist continuum.

Social Networking Sites (SNS)

In recent times, the Internet has become a significant component of human life and interaction. One of the most innovative modes of Internet interaction is Social Networking Sites (SNS).³⁴ Some SNS help people develop romantic relationships, some link persons with common hobbies or interests, and some encourage the creation of new friendships and the maintenance of existing friendships.³⁵ The latter type are referred to as “Friend Networking Sites” in the literature and includes sites such as the ubiquitous Facebook.³⁶

By joining an SNS, individuals can interact and share their thoughts, feelings, photographs, videos, and documents with other members of their choosing.³⁷ The proliferation of SNS has caused an increase in interest among researchers, and although the scientific literature on this topic is still relatively limited, researchers have shown that one of the main benefits of social networking is the ability to establish and maintain friendships.³⁸

Many international students have been using SNS prior to coming to the U.S. and continue to do so throughout their studies. In fact, Tiffany Pempek , Yevdokiya A. Yermolayeva, and Sandra L. Calvert identified the maintenance of existing friendships and relationships as the main reason college students use SNS.³⁹

Although no studies have directly explored the relation between SNS and homesickness, some studies have discovered its role in the overall adjustment and wellbeing of international students. Research has amplified the influence of SNS for emotional and social adjustment of international students, suggesting that the more often students use SNS, the more they report

feeling emotionally and socially adjusted in their new colleges.⁴⁰ Furthermore, this effect becomes even stronger when they mainly use SNS to interact with friends from the host country.⁴¹

However, intensive SNS use can have its drawbacks. For example, Xiaoli Ni, Hong Yan, Silu Chen and Zhengwen Liu explored the factors influencing Internet addictions among college students with a sample of 3,557 freshmen students in northwestern China.⁴² Of their sample, 6.44 percent of participants were characterized as having an Internet addiction, defined as dependency for or compulsivity related to Internet use. The researchers found that students with Internet addiction reported higher levels of depression and anxiety. In addition, they found that new students who chose to study abroad for college tend to be more prone to Internet addiction—a finding the researchers attribute to possible homesickness due to loneliness. In other words, students appear to turn to extensive Internet use as a means of coping with psychological symptoms and homesickness.

Other studies have highlighted the general usefulness of SNS for students studying away from their families. For example, Keol Lim and Ellen B. Meier interviewed younger Korean students studying in the U.S. about their SNS usage. The students explained that using SNS was helpful for them to communicate with family and friends in Korea.⁴³

The Current Study

Therefore, although no research study has directly explored the relation between SNS usage and homesickness among international students, previous studies have outlined the SNS usage benefits on adjustment among the international student population.⁴⁴ Moreover, it has been suggested that students experiencing homesickness due to loneliness may use the Internet more intensively, possibly developing Internet addictions.⁴⁵ Also, some studies have shown that

international students may use SNS to communicate with family back in their country of origin,⁴⁶ although others recommend that these students benefit more when they use SNS to communicate with host country nationals.⁴⁷

Similarly, research has indicated that individual differences may exist both inter- and intra-culturally as it relates to cultural value orientation. Furthermore, cultural value orientation may be a good predictor of behavior and interpersonal reactions across a variety of situations. However, research has not yet examined how this factor may predict homesickness in international students.

Consequently, the main purpose of this study is to explore the relations between cultural value orientation, SNS usage, and homesickness among international students. More specifically, the aim is to answer the following main research questions:

1. Is there a relation between cultural value orientations, intensity of SNS usage, SNS usage with people back home, and homesickness?
2. Does intensity of SNS usage in general, SNS usage with people back home, and culture value orientation predict homesickness in international students?

Method

Participants

Ninety-one ($N = 91$) international students studying in the U.S. signed up to participate in the study. However, 19 participants provided no data beside their consent to participate, therefore the final sample consisted of 72 international students, 63.9 percent ($n = 46$) of which were female and 36.1 percent ($n = 26$) were male. Of the sample of participants, 73.61 percent ($n = 53$) were undergraduate students, 22.22 percent ($n = 16$) were freshmen, 19.44 percent ($n = 14$) were sophomores, 15.28 percent ($n = 11$) were juniors, and 16.67 percent ($n = 12$) of the sample

were seniors. The remaining 26.3 percent ($n = 19$) were in graduate programs. The average age of the sample was 22.7 years ($SD = 3.64$), with average number of years in the U.S. being 2.7 years ($SD = 1.36$).

The sample consisted of students from a variety of countries and regions across the world, but the Caribbean was most represented, making up almost half (42.25 percent) of the sample. China had the second largest representation in the study (12.68 percent), followed by India, (9.86 percent) then Africa (represented by Nigeria and Uganda; 5.63 percent). The other countries represented were Saudi Arabia, Sweden, Vietnam, Iraq, Nepal, England, Ecuador, Japan, Kazakhstan, Malaysia, and the Republic of Korea.

Procedure

Data collection started after receiving an approval from the institutional review board. The researchers contacted international students, characterized as those residing in the U.S. on a student visa, and provided a link to the online survey. Participant recruitment occurred through the psychology department's subject pool, collaborative outreach efforts by the Office of International Student Support Services (ISSS), and through social networking sites. The university campus, involved with data collection is situated in a small city. The campus has 5,000 students. When students started taking the survey, first they provided consent electronically and then proceeded to answer the items in the questionnaire packet. The researchers outlined the instructions for the study to the students and urged them to complete the surveys independently, with the ability to seek clarification from the researchers as needed. The students first completed a brief demographic survey before responding to the Intensity of Social Networking Usage Measure, the Homesickness Questionnaire, and the Cultural Value Orientation Scale. The questionnaires appeared randomly to control for order effects.

Measures

Demographic Survey

The demographic survey inquired about age, gender, country of origin, length of residence in the U.S., education year, and program of study. It included an independent item inquiring about the students' use of SNS and other forms of communication with persons specifically in their country of origin. The question asked, "*How often do you use SNS and phone applications (e.g. Viber, Tango, Skype, WhatsApp, Twitter, Instagram, etc.) to communicate with people back home?*" Participants responded to this separate item on a 5-point Likert-type scale (1 = "0 to 30 minutes a day"; 2 = "31 to 60 minutes a day"; 3 = "61 to 90 minutes a day"; 4 = "91 to 120 minutes a day" and 5 = "more than 120 minutes a day").

Intensity of Social Networking Usage Measure

The Social Networking Usage Measure (SNUM) measured the degree to which students use and rely upon social networking services.⁴⁸ Adapted from the Facebook Intensity Scale,⁴⁹ the SNUM had a Cronbach's alpha of 0.83. To create the SNUM, Kyung-Gook Park, Sehee Han, and Lynda Lee Kaid modified the words of the Facebook Intensity Scale to be more inclusive of different technologies and a wider variety of social networking services, such as Instagram and Snapchat.⁵⁰

The SNUM, similar to the Facebook Intensity Scale, consists of 7-items, two of which are open-ended questions geared toward measuring participants' active behavior on SNSs, determined by self-reported number of "friends" and "followings," and average time spent on social networking sites. The remaining five items assess emotional investment and daily commitment to SNS usage on a 5-point Likert-type scale (1 = "strongly disagree," 2 = "disagree," 3 = "neutral," 4 = "agree," and 5 = "strongly agree"). To calculate the intensity of

SNS usage, this study totaled the scores on the 5 Likert-type items, with higher scores representing more intense SNS usage. The SNUM achieved reliability with a Cronbach's alpha coefficient of 0.88.⁵¹ Furthermore, a factor analysis revealed one factor solution with an eigenvalue of 3.99. All seven items were loaded above 0.5 with the five standardized questions being loaded above 0.7.

Homesickness Questionnaire

This study measured the extent to which students experienced homesickness by using the 33-item Homesickness Questionnaire (HC).⁵² In this instrument, responses to each statement are solicited using a 5-point Likert-type scale (1 = "strongly disagree," 2 = "disagree," 3 = "neutral," 4 = "agree," and 5 = "strongly agree"), with overall scores ranging from 33 to 165, and higher scores indicating higher levels of homesickness. Seven of the 33 items are reverse scored, with lower scores reflecting higher levels of homesickness. This revealed a two-factor solution, with "disliking the university" and "attachment to home" emerging as factors.⁵³

Additionally, the HC was reliable with a Cronbach's alpha of 0.88.⁵⁴ Both factors of the scale were also found to have a fair correlation to the Single-Item Homesickness Measure⁵⁵ (SIHM; $r = 0.58$), although attachment to home had a higher correlation ($r = 0.62$) than disliking the university ($r = 0.44$). This suggests good convergent validity. Furthermore, the HC was able to discriminate between homesick and non-homesick individuals.⁵⁶

Cultural Value Orientations Scale

The individualism, collectivism, and familism subscales of Cultural Value Orientations Scale⁵⁷ (CVOS) aide in assessing the degree to which participant's individual needs or those of the family or community governed their thoughts and behaviors. The individualism subscale measures participants' orientation toward their own welfare, the collectivism subscale measures

participants' orientation toward their community, and the familism subscale measures orientation toward members of participants' immediate and extended families.

Each of the three subscales consists of 10 items on a 5-point Likert-type scale (1 = "strongly disagree," 2 = "disagree," 3 = "neutral," 4 = "agree" and 5 = "strongly agree"). The internal consistency of the individualism subscale was noticeably lower (Cronbach's alpha = 0.57) than that of the collectivism and familism subscales (Cronbach's alphas = 0.76 and 0.88, respectively) across a number of samples, although still acceptable.

Planned comparisons in the original study revealed the scales' effectiveness in identifying cultural differences in individualism, collectivism, and familism with Anglo-Americans scoring higher than individuals of color on the Individualism subscale, and significantly lower on the collectivism and familism subscales.⁵⁸ All three subscales measured distinct constructs, although the collectivism and familism subscales were positively correlated.⁵⁹

Data Analysis

A quantitative methodology of data analysis allowed this current study to obtain more standardized results to best answer to research questions. Specifically, bivariate correlational analyses explored the relations between scores on the homesickness, cultural value orientation, SNS usage intensity and the individual items of the demographics scale among the participants. Also, a multiple regression analysis helps to decipher whether and to what extent individualism, collectivism, familism, SNS usage intensity, and SNS usage intensity with people back home were predictive of homesickness.

Results

Descriptive Analyses

With a possible range of 33-165, in general, the average level of homesickness reported in the sample was low to moderate; none of the participants reported extremely high feelings of homesickness ($M= 85.93$, $SD= 18.47$, range: 44-138). In contrast, participants reported a generally high intensity of SNS usage with an average score of approximately 26 out of a possible 35 ($M = 26.43$, $SD = 6.17$). Regarding the single item assessing the SNS usage intensity with people from their countries of origin, participants generally reported spending between 61-91 or 91-120 minutes daily on these types of interactions.

With respect to cultural value orientations, the sample scored highest in the familism subscale ($M = 41.33$, $SD = 5.84$), suggesting that most participants in the study were primarily guided by and interested in their familial ties. Level of collectivism—the extent to which the individual is oriented toward their community—was the second highest reported cultural value orientation ($M=39.07$, $SD= 5.65$). Finally, while still above average, the sample reported lower in individualism than they did in the other two orientations ($M= 37.12$, $SD= 4.60$). That is, out of familism, collectivism, and individualism, the sample was relatively more oriented toward their families and communities than they were concerned with their own personal interest and gain, though the differences were minimal.

Bivariate Correlations

An analysis of the Pearson product-moment correlation between cultural value orientations and intensity of SNS usage revealed that collectivism and familism were both significantly related to the intensity of SNS usage ($r(58)= .357$, $p =.006$; $r(56) = .322$, $p = 0.015$),

with higher levels of collectivism and familism corresponding with greater intensity of SNS usage (Table 1.).

Table 1. Bivariate Correlations for Variables Explored

Measure	1	2	3	4	5	6	7	8	9	10
1. HSQ	—									
2. SNSTOTAL	-.076	—								
3. CVO-I	-.361**	.173	—							
4. CVO-C	1.185	.357**	.586**	—						
5. CVO-F	.122	.322*	.358**	.441**	—					
6. SNSTOTAL-Home	.053	.542**	.058	.221	.171	—				
7. GENDER	.178	.025	.020	-.167	-.125	.025	—			
8. AGE	-.070	.175	.112	.271*	.179	.175	.006	—		
9. EDULevel	-.162	.275*	.118	.163	-.100	.275*	-.098	.606**	—	
10. YEARSUS	-.140	.108	.023	.098	.020	.108	-.071	.239	.380**	—

Note. CVO-I = Individualism; CVO-C = Collectivism; CVO-F = Familism; SNSTOTAL = SNS usage intensity; SNS TOTAL-Home = SNS usage intensity with people back home; GENDER = Gender of participants; AGE = Age of participants; EDULevel = Level of education; YEARSUS = Number of years living in the U.S. * $p < .05$, two tailed. ** $p < .01$, two-tailed.

Other results indicated that intensity of SNS usage and homesickness did not significantly correlate. However, there was positive correlation between intensity of SNS usage with people back home and homesickness ($r(56) = .53, p = .70$; see Table 1). Students with higher levels of homesickness communicated more with the people at their home country.

Bivariate correlational analyses ascertained whether cultural value orientations were correlated to homesickness. The only subscale found to be significantly correlated to homesickness in international students was individualism. The higher an individual scored on the individualism subscale, the less he or she reported feelings of homesickness, $r(53) = -.36, p = .008$ (see Table 1).

Finally, results in this study identified that the collectivism subscale was positively correlated with the age of participants, such that the older the participant was, the higher he or she rated in collectivism ($r(56) = .27, p = .044$). SNS usage intensity was, too, positively related to both level of education and the number of years participants have been studying in their declared major, with higher levels of SNS usage intensity being indicative of both ($r[63] = .28, p = .029$; $r[53] = .31, p = .025$, respectively).

Multiple Regression Analysis

Multiple regression analysis further determined if homesickness could be predicted by SNS usage intensity, SNS usage intensity with people back home, individualism, collectivism, and familism. The results revealed that a significant amount of total variation in homesickness could be predicted by these variables, $R^2 = .22, F(4,45) = 3.13, p = .024$. Nonetheless, whereas familism approached significance with a positive correlation (Beta = .28, $p = .061$), individualism was the only significant predictor of homesickness, after controlling for the other variables (Beta = -.43, $t(45) = -2.79, p = .008$), with higher levels of individualism being predictive of lower levels of homesickness (see Table 2).

Table 2. Regression Analysis Examining the Independent Effects of Individual Variables on Homesickness

Level of Homesickness in International Students

Predictor	β	t	p
			$R^2 = .22$
			$F(4,45) = 3.13$
CVO – I	-.43	-2.79	.008*
CVO – C	-.06	-.35	.732
CVO – F	.28	1.92	.061
SNSTOTAL	.07	.51	.614
SNSTOTAL-Home	.40	.22	.83

Note.

CVO-I = Individualism; CVO-C = Collectivism; CVO-F = Familism; SNSTOTAL = SNS usage intensity; SNS TOTAL-Home = SNS usage intensity with people back home. * $p < .05$

Discussion

The current study was exploratory in nature and examined the possible links between homesickness, cultural value orientations, SNS usage intensity in general, and SNS usage with people back home among international students. The main finding in this study was that individualism as a culture value orientation significantly predicted homesickness. The more individualistic a person was, the less homesickness they experienced. Considering that the definition of homesickness provided by Christopher A. Thurber and Edward Walton included the importance of degree of attachment to one's home,⁶⁰ students with a higher level of individualism may be experiencing a lower level of attachment to their home they left behind. In addition, an international student primarily concerned with his/her own success and growth while away at university could possibly be more preoccupied with achieving these goals than with their

community and familial ties back at home.⁶¹ Moreover, it is also possible that others may have met the student's need for social support within the host country, reducing the experiences of missing home.

This study also identified that the students who had higher levels of collectivism and familism showed higher usage levels of SNS. This result is in line with Tiffany A. Pempek, Yevdokiya A. Yermolayeva, and Sandra L. Calvert's findings in that SNS usage may be implicit of the participants' desire to remain in contact with important people in their lives.⁶² As Patti M. Valkenburg, Jochen Peter, and Alexander P. Schouten point out, using SNS more frequently tends to increase an individual's wellbeing.⁶³ As such, our observed correlations between collectivism and familism with SNS usage intensity (and lack of significant findings between these two orientations and homesickness) could imply that SNS usage helps to mitigate the intensity of homesickness in international students who rate high in collectivism and familism. Therefore, taken at face value, these results imply that despite the increase in SNS usage in recent times, its impact on homesickness in international students appears to be minimal.

In contrast to general SNS usage, other results determined that international students with higher levels of homesickness communicated more with the people at their home country. Students may be using SNS to connect and receive social support from their family and friends back home in order to deal with the feelings of homesickness. Finally, our results showed that older students scored higher on collectivism. One possible explanation for this finding is that as students get older, they may be moving away from a self-centered approach in life to a more group-oriented perspective.

The findings of the current study have some important implications for the U.S. universities housing international students. All findings in this study contribute to the

understanding of international students' emotions and communication behaviors, and will potentially lead to further, more directive research so that the complexities and correlations identified can be clarified. The international student population, as mentioned previously, continues to grow, and contribute to the economy of the U.S., therefore any effort made to increase their levels of comfort, and make their experiences more pleasant is essential.

These findings call for different intervention strategies for homesickness in relation to international students. Students who are higher on the individualism scale may not be at risk for homesickness, so this group requires minimal attention from college personnel when it comes to dealing with and preventing against the negative effects of homesickness.

The correlations between collectivism, familism, and individualism reiterate the point Stanely O. Gaines and his colleagues make that an individual can identify with more than one cultural value orientation.⁶⁴ As stated earlier, this might also point to individual changes in cultural value orientation due possibly to acculturation, experiences, age, or other factors. Therefore, it is important for universities not to assume or group international students from certain countries and regions under one umbrella of culture value orientation.

The high prevalence of familism reported in this study could point counselors and international student staff to possible topics to discuss with international students going through adjustment difficulties and to a point of intervention. This could mean, for example, simply informing students about the benefits of communication with family members back home.

Furthermore, the results of this study emphasize the high intensity of SNS usage in international students, especially those who score high in collectivism and familism. This information can be used as both a way for universities to reach out to international students, and as a way of possibly mitigating the debilitating effects of maladjustment in the host country.

Limitations and Suggestions for Future Research

One limitation of our study is that the sample size may not have allowed the detection of significance in some of the findings. For example, while the results were not statistically significant, collectivism and familism showed a subtle correlation with homesickness. Studies with larger samples should be carried out to determine additional important implications for our understanding of the complexity of the different cultural value orientations and their relations to homesickness.

This research only studied international students in the U.S. Future research could look at cross-sectional analyses between international students studying in the U.S. and other countries like the United Kingdom and Canada to determine inter- and intra-group differences. The findings from such research could provide evidence of trends, thereby making the results more generalizable, in addition to pointing out critical differences to encourage more customized programs and supports for international students studying in different countries.

ENDNOTES

¹ International Institute of Education, “Number of International Students in the United States Hits All-Time High.” Last modified December 12, 2019. <https://www.iie.org/Why-IIE/Announcements/2019/11/Number-of-International-Students-in-the-United-States-Hits-All-Time-High>

² International Institute of Education, “*Open Doors Report on International Educational Exchange*.” Last modified November 2016. <http://www.iie.org/opendoors>

³ Shirley Fisher and Bruce M. Hood, “The Stress of the Transition to University: A Longitudinal Study of Psychological Disturbance, Absent-Mindedness and Vulnerability to Homesickness,” *British Journal of Psychology* 78, no. 4 (1987): 425-441, 426.

⁴ Shirley Fisher, *Homesickness, Cognition and Health* (Hove: Erlbaum, 1989), 64.

⁵ Christopher A. Thurber and Edward A. Walton, “Homesickness and Adjustment in University Students,” *Journal of American College Health* 60, no. 5 (2012): 415-419, 415.

⁶ Margaret Stroebe, Henk Schut, and Maaïke H. Nauta, “Is Homesickness a Mini-Grief? Development of a Dual Process Model,” *Clinical Psychological Science* 4, no. 2 (2015b), 344-358, 350.

⁷ Margaret Stroebe, Henk Schut, and Maaïke Nauta, "Homesickness: A Systematic Review of the Scientific Literature," *Review of General Psychology* 19, (2015a): 157-171, 157.

⁸ Andrew Denovan, and Ann Macaskill, "An Interpretative Phenomenological Analysis of Stress and Coping in First Year Undergraduates," *British Educational Research Journal* 39, no. 6 (2013): 1002-1024, 1017; Christopher A. Thurber and Edward Walton, "Preventing and Treating Homesickness," *Pediatrics* 119, no. 1 (2007): 192-201, 192, & Thurber & Walton, "Homesickness," 415.

⁹ *Ibid.* 416.

¹⁰ Senel Poyrazli and Marcos Damian Lopez, "An Exploratory Study of Perceived Discrimination and Homesickness: A Comparison of International Students and American Students," *The Journal of Psychology: Interdisciplinary and Applied* 141, no. 3 (2007): 263-280, 270.

¹¹ Poyrazli & Lopez, 270.

¹² *Ibid.*, 275.

¹³ Thurber & Walton, "Homesickness," 416.

¹⁴ *Ibid.*, 418, & Pratyusha Tummala-Narra and Milena Claudius, "A Qualitative Examination of Muslim Graduate International Students' Experiences in the United States," *International Perspectives in Psychology: Research, Practice, Consultation* 2, no. 2 (2013): 132-147, 138.

¹⁵ Yoko Baba, and Megumi Hosoda, "Home Away Home: Better Understanding of the Role of Social Support in Predicting Cross-Cultural Adjustment among International Students," *College Student Journal* 48, no. 1 (2014): 1-15, 8; Susan Boafo-Arthur, "Acculturative Experiences of Black-African International Students," *International Journal for the Advancement of Counselling* 36, no. 2 (2014): 115-124, 121; Erdinc Duru, and Senel Poyrazli, "Perceived Discrimination, Social Connectedness, and Other Predictors of Adjustment Difficulties Among Turkish International Students," *International Journal of Psychology* 46, no. 6 (2011): 446-454, 451; Poyrazli & Lopez, 275, & Tummala-Narra & Claudius, 139.

¹⁶ Baba & Hosoda, 9; Poyrazli & Lopez, 275; Thurber & Walton, "Preventing," 196, & Thurber & Walton, "Homesickness," 416.

¹⁷ Baba & Hosoda, 12 & Blake Hendrickson, Devan Rosen, and R. Kelly Aune, "An Analysis of Friendship Networks, Social Connectedness, Homesickness, and Satisfaction Levels of International Students," *International Journal of Intercultural Relations* 35, no. 3 (2011): 281-295, 288.

¹⁸ Baba & Hosoda, 12 & Poyrazli & Lopez, 272.

¹⁹ Baba & Hosoda, 13.

²⁰ Hendrickson, Rosen, & Aune, 288.

²¹ Nicholas Geeraert, Stephanie Demoulin, and Kali A. Demes. "Choose Your (International) Contacts Wisely: A Multilevel Analysis on the Impact of Intergroup Contact While Living Abroad," *International Journal of Intercultural Relations* 38, (2014): 86-96, 94.

²² Stanley O. Gaines, Jr., William D. Marelich, Katrina L. Bledsoe, W. Neil Steers, Michael C. Henderson, Cherlyn S. Granrose, Lisa Barajas, Diana Hicks, Michael Lyde, Yumi Takahashi, Nancy Yum, Diana I. Rios, Ben F. Garcia, Karlyn R. Farris, and Mary S. Page, "Links Between Race/Ethnicity and Cultural Values as Mediated by Racial/Ethnic Identity and Moderated by Gender," *Journal of Personality and Social Psychology* 72, no. 6 (1997): 1460-1476, 1460 & Susumu Yamaguchi, David M. Kuhlman, and Shinkichi Sugimori. "Personality Correlates of Allocentric Tendencies in Individualist and Collectivist Cultures," *Journal of Cross-Cultural Psychology* 26, no. 6 (1995): 658-672, 658.

- ²³ Harry C. Triandis, Robert Bontempo, Hector Betancourt, Michael Bond, Kwok Leung, Abelando Brenes, James Georgas, C. Harry Hui, Gerardo Marin, Bernadette Setiadi, Jai B. P. Sinha, Jyoti Verma, John Spangenberg, Hubert Touzard, and Germaine de Montmollin, "The Measurement of the Etic Aspects of Individualism and Collectivism Across Cultures," *Australian Journal of Psychology* 38, no. 3 (1986): 257–267, 260; Harry C. Triandis, Robert Bontempo, Marcelo J. Villareal, Masaaki Asai, and Nydia Lucca, "Individualism and Collectivism: Cross-Cultural perspectives on Self-ingroup Relationships," *Journal of Personality and Social Psychology* 54, no. 2 (1988): 323–338, 323, & Shalom H. Schwartz, "Individualism-Collectivism: Critique and Proposed Refinements," *Journal of Cross-Cultural Psychology* 21, no. 2 (1990): 139–157, 151.
- ²⁴ C. Harry Hui and Harry C. Triandis, "Individualism-Collectivism a Study of Cross-Cultural Researchers," *Journal of Cross-Cultural Psychology* 17, no. 2 (1986): 225–248, 240 & Triandis, Bontempo, Villareal, Asai, & Lucca, 329.
- ²⁵ Triandis, Bontempo, Betancourt, Bond, Leung, Brenes, Georgas, Hui, Marin, Setiadi, Sinha, Verma, Spangenberg, Touzard, & Montmollin, 260 & Triandis, Bontempo, Villareal, Asai, & Lucca, 329.
- ²⁶ Hui & Triandis, 232.
- ²⁷ Yamaguchi, Kuhlman, & Sugimori, 659.
- ²⁸ Harry C. Triandis, Kwok Leung, Marcelo J. Villareal, and Felicia L. Clack, "Allocentric versus Idiocentric Tendencies: Convergent and Discriminant Validation," *Journal of Research in Personality* 19, no. 4 (1985): 395–415, 397 & Triandis, Bontempo, Villareal, Asai, & Lucca, 323.
- ²⁹ Gaines, Marelick, Bledsoe, Steers, Henderson, Granrose, Barajas, Hicks, Lyde, Takahaski, Yum, Rios, Garcia, Farris, & Page, 1473 & Schwartz, 151.
- ³⁰ Gaines, Marelick, Bledsoe, Steers, Henderson, Granrose, Barajas, Hicks, Lyde, Takahaski, Yum, Rios, Garcia, Farris, & Page, 1463.
- ³¹ Hui & Triandis, 229 & Yamaguchi, Kuhlman, & Sugimori, 668.
- ³² Gaines, Marelick, Bledsoe, Steers, Henderson, Granrose, Barajas, Hicks, Lyde, Takahaski, Yum, Rios, Garcia, Farris, & Page, 1463.
- ³³ Andrew Freeberg and Catherine H. Stein, "Felt Obligation Towards Parents in Mexican-American and Anglo-American Young Adults," *Journal of Social and Personal Relationships* 13, no. 3 (1996): 457–471, 468.
- ³⁴ Tiffany Pempek, Yevdokiya A. Yermolayeva, and Sandra L. Calvert, "College Students' Social Networking Experiences on Facebook," *Journal of Applied Developmental Psychology* 30, no. 3 (2009): 227–238, 231 & John Raacke and Jennifer Bonds-Raacke, "MySpace and Facebook: Applying the Uses and Gratifications Theory to Exploring Friend-Networking Sites," *CyberPsychology and Behavior* 11, no. 2 (2008): 169–174, 170
- ³⁵ Patti M. Valkenburg, Jochen Peter, and Alexander P. Schouten, "Friend Networking Sites and Their Relationship to Adolescents' Well-Being and Social Self-Esteem," *Cyber Psychology and Behavior* 9, no. 5 (2006): 585–590, 585.
- ³⁶ Valkenburg, Peter, & Schouten, 585.
- ³⁷ Pembek, Yermolayeva, & Calvert, 231; Raacke & Bonds-Raache, 170 & Valkenburg, Peter, & Schouten, 585.
- ³⁸ Raacke & Bonds-Raache, 173 & Valkenburg, Peter, & Schouten, 585.
- ³⁹ Pembek, Yermolayeva, & Calvert, 236.

- ⁴⁰ Jih-Hsuan Lin, Wei Peng, Mijung Kim, Sung Yeun Kim, and Robert LaRose, "Social Networking and Adjustments Among International Students," *New Media and Society* 14, no. 3 (2012): 421-440, 11.
- ⁴¹ Lin, Peng, Kim, Kim, & LaRose, 11.
- ⁴² Xiaoli Ni, Hong Yan, Silu Chen, and Zhengwen Liu, "Factors Influencing Internet Addiction in a Sample of Freshman University Students in China," *CyberPsychology and Behavior* 12, no. 3 (2009): 327-330, 327.
- ⁴³ Keol Lim and Ellen B. Meier, "International Students' Use of Social Network Services in the New Culture: A Case Study with Korean Youths in the United States," *Asia Pacific Education Review* 13, no. 1 (2012): 113-120, 116.
- ⁴⁴ Lin, Peng, Kim, Kim, & LaRose, 11.
- ⁴⁵ Ni, Yan, Chen, & Liu, 329.
- ⁴⁶ Lim & Meier, 116.
- ⁴⁷ Lin, Peng, Kim, Kim, & LaRose, 15.
- ⁴⁸ Kyung-Gook Park, Sehee Han, and Lynda Lee Kaid, "Does Social Networking Service Usage Mediate the Association Between Smartphone Usage and Social Capital?" *New Media and Society* 15, no. 7 (2013): 1077-1093.
- ⁴⁹ Nicole B. Ellison, Charles W. Steinfield, and Cliff Lampe, "The Benefits of Facebook "Friends:": Social Capital and College Students' Use of Online Social Network Sites," *Journal of Computer-Mediated Communication* 12, no. 4 (2007): 1143-1168.
- ⁵⁰ Park, Han, & Kaid, 1084.
- ⁵¹ Ibid., 1085.
- ⁵² John Archer, Jane Ireland, Su-Ling Amos, Helen Broad, and Lisa Currid, "Derivation of Homesickness Scale," *British Journal of Psychology* 89, no. 2 (1998): 205-221.
- ⁵³ Archer, Ireland, Amos, Broad, & Currid, 211.
- ⁵⁴ Ibid., 213.
- ⁵⁵ Fisher & Hood, 429.
- ⁵⁶ Archer, Ireland, Amos, Broad, & Currid, 214.
- ⁵⁷ Gaines, Marelick, Bledsoe, Steers, Henderson, Granrose, Barajas, Hicks, Lyde, Takahaski, Yum, Rios, Garcia, Farris, & Page, 1460.
- ⁵⁸ Ibid., 1465.
- ⁵⁹ Ibid., 1466.
- ⁶⁰ Thurber & Walton, "Homesickness," 415.
- ⁶¹ Hui & Triandis, 240 & Triandis, Bontempo, Villareal, Asai, & Lucca, 331.
- ⁶² Pembek, Yermolayeva, & Calvert, 227.
- ⁶⁴ Valkenburg, Peter, & Schouten, 588.
- ⁶⁴ Gaines, Marelick, Bledsoe, Steers, Henderson, Granrose, Barajas, Hicks, Lyde, Takahaski, Yum, Rios, Garcia, Farris, & Page, 1472.