

Oral Health-Related Factors and Stress from Cultural Adaptation among Vietnamese Students in Korea

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Abstract

Although the recent rise in the number of foreign students in Korea may have positive cultural and economic effects, the negative effects of stress from cultural adaptation cannot be overlooked. This study investigates the relationship between oral health and stress from cultural adaptation in university life.

In this study, 100 copies of the survey were distributed to Korean and Vietnamese university students each, with response failure rates considered. The survey took place in October 2017 and lasted for 9 days. Excluding the incomplete responses, 80 and 99 survey responses were selected from Vietnamese and Korean students respectively. The results indicated similar levels of satisfaction for oral health care, which were $3.06 \pm .959$ for Vietnamese students and $3.09 \pm .771$ for Korean students. The satisfaction rates for their own oral health were $2.85 \pm .956$ for Vietnamese students and $3.07 \pm .961$ for Korean students. There was no statistically significant difference, but Korean students had about 1.425 times higher satisfaction rate for their own oral health than Vietnamese students. The statistics for oral health knowledge were 8.28 ± 1.091 for Vietnamese students and $9.18 \pm .774$ for Korean students. There was a statistically significant difference ($p < 0.00$), with the figure for Korean students being 3.488 times higher than Vietnamese students. The most stressful factor among Vietnamese students in the process of cultural adaptation was 'Feel the need to learn Korean' with 3.46 ± 1.31 and the least was 'Do not feel accepted by Koreans' with 1.95 ± 0.82 . Cultural adaptation stress scores were significantly lower in the group who brushed 3 times daily than in the group who did not. This was statistically significant ($p < .05$).

The results of this study suggest that it is important to give training on oral health to help Vietnamese students experience oral care services and be informed about it. The administrative support from students' respective universities will be needed as well.

Keywords: Vietnamese students, cultural adaptation stress, oral health factors, oral health-related characteristics, Oral health behavior

Introduction

Korea has paid closed attention to attracting foreign students, through adopting measures based on the 'Comprehensive plan for growth in the number of foreign students' in 2001, to open up its education market and increase the international reputation of its home universities [1]. According to Statistics Korea, the

rates of increase in the number of Vietnamese students and Chinese students are 91% and 12% respectively.

If the trend was to continue, our society could benefit from this inflow of foreign students not only economically but also through domestic students being able to learn the language, history, culture, arts, society and economics of foreign countries, which will pave a path for domestic students to become global citizens. Korea can build for itself a support through these foreign students developing an in-depth understanding of Korea as a nation [2].

However, this increasing number of foreign students faces problems such as language barriers, tuition fees as well as other financial difficulties, homesickness,

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personal problems and difficulties in carrying out daily activities^[3].

A cultural adaptation stress refers to such distress, confusion and negative behaviors that arise when one goes through the process of adapting to another culture^[4].

Its definition includes a source of tension or stress that one experiences when encountered with the values of the mainstream society accompanied with the resulting stress which is a series of physical, psychological and societal issues like mental health conditions - anxiety, depression, a sense of alienation and physical symptoms^[5].

Thus, it calls for a solution to the cultural adaptation stress of foreign students, of which the first is expanding the scope of social relations. Oberg identifies four stages of overcoming the cultural adaptation stress that a foreign student goes through^[6].

Social relations involve any activities that an individual does to fulfill his physical, emotional and instrumental needs through the relationships he maintains. They are defined as an instrumental, emotional, informational and appraisal support – assistance, advice, guidance, compliments, availability of comfort, help, and information^[7].

The concept of social relations attracted a lot of attention for its ability to strengthen problem-solving skills and has been used in a wide variety of contexts. It is obtained through meaningful interactions with other people, assisting the psychological adaptation of an individual^[8].

Cohen and Hoberma stated that the level of social relations can be the main cause of illness as well as an element that buffers stress and boosts health. In addition, it was found that people with higher level of education and occupational status participate in more social activities, which in turn has positive effects on the health^[9].

There would be another societal issue if foreign students were to hold back the sufferings they experience in Korea, a country that uses different language and has a different culture to its own^[10]. Their mental and physical health conditions should be prioritized so that they can concentrate on their studies. Implementing measures to solve this issue will necessitate investigating such conditions. Since a precedent study consisted of analysis of the entire body, this study investigates the oral health-related factors.

Oral health knowledge is necessary for oral hygiene and healthy oral conditions. It includes understanding the prevention, cure, and maintenance of oral health. It is generally gained through oral health education and is expected to have a correlation with the cultural adaptation stress, as it affects the oral health.

Cultural adaptation stress of foreign students is a type of stress caused by encountering a culture that is different from their own. The cultural adaptation stress can be defined as an accumulation of various types of problems in a day-to-day life. For this reason, we examine the relationship between cultural adaptation stress and oral health-related factors.

Materials and Methodology

Subjects of Experiments: The study was conducted after the participants had been informed of the objectives, anonymity, and confidentiality of the experiment and that the results would be used for the sole purpose of research. After receiving a written consent from the participants on this matter, the Vietnamese translated self-administered questionnaire was distributed. The recommended sample size was 67 which was obtained using the G * power 3.14 program, with an effect size of 0.05 and power of 0.05 and 0.8. 100 copies of the survey were distributed to Korean and Vietnamese university students each, with response failure rates considered. The survey took place in October 2017 and lasted for 9 days. Excluding the incomplete responses, 80 and 99 survey responses were selected from Vietnamese and Korean students respectively.

Methodology: The survey consisted of 4 general, 12 oral health-related and 11 cultural adaptation stress questions. The survey given to Korean students excluded the cultural adaptation stress questions.

Statistical Analysis

The samples were analyzed using SPSS 23.0 (SPSS Inc, Chicago, IL, USA) with the statistical significance level of $p < 0.05$. Frequency and comparative analysis were used for country-specific characteristics and difference between the respondents. A t-test was used for country-specific oral hygiene-related characteristics. The cultural adaptation stress of Vietnamese students was examined by looking at the average and standard deviation. Oral health behavior frequency analysis and the relevant cultural adaptation stress was tested with t-test and ANOVA test.

Results and Discussion

Differences in the Country-specific General Background of Respondents: There were 42 male Vietnamese students (52.5%) and 70 female Korean students (70.7%) as shown in table 1. The number of respondents who did have a religion was 61 (76.3%) for

Vietnamese group and 63 (63.4%) for Korean group. Vietnamese students had monthly spending average higher than 250,000 won while 79(79.8%) Korean students belonged to this category. 33 Vietnamese students received an oral treatment in the home country while 92 Korean students received the same (p <0.00).

Table 1: Differences in the Country-Specific General Background of Respondents

Characterization	Division	Vietnam		Korea		x ²	p
		N	%	N	%		
Gender	Male	42	52.5	29	29.3	9.957	0.002*
	Female	38	47.5	70	70.7		
Religious	No	61	76.3	63	63.4	3.307	0.067
	Yes	19	23.8	36	63.4		
Monthly spending	<25	28	35.0	20	20.2	4.937	0.020*
	25≤	52	65.0	79	79.8		
Whether or not received an oral treatment in the home country	Yes	33	41.3	92	92.9	56.093	0.000**
	No	47	58.8	7	7.1		

Differences in Country-Specific Oral Health-Related Characteristics: The results of the difference between oral health-related characteristics are as follows in table 2. The satisfaction score for oral treatment of home country was 3.06 ± .959 for Vietnamese students and 3.09 ± .771 for Korean students, with no statistically significant difference. The satisfaction scores for their own oral health was 2.85 ± .956 and 3.07 ± .961 for Vietnamese

and Korean students each. Although the results showed no statistically significant difference between the two groups, Korean students had 1.424 times higher score than Vietnamese students. The oral health knowledge score was 8.28 ± 1.091 for Vietnamese students and 9.18 ± .774 for Korean students. There was a statistically significant difference (p <0.00) with the score for Korean students being 3.488 times higher than Vietnamese students.

Table 2: Differences in Country-Specific Oral Health-Related Characteristics

Characterization	Vietnam		Korea		OR	95%	t	p
	Mean	SD	Mean	SD				
Home country oral treatment satisfaction rate	.06	± 0.959	3.09	± 0.771	0.718	0.425-1.203	-0.220	0.826
Own oral health satisfaction rate	.85	± 0.956	3.07	± 0.961	1.425	0.922-2.200	-1.531	0.127
oral health knowledge score	.28	± 1.091	9.18	± 0.774	3.488	1.977-6.152	-6.495	0.000**

Cultural Adaptation Stress of Vietnamese Students: The responses of Vietnamese students to cultural adaptation stress questionnaire are as follows in table 3. The problems with the language barrier appeared to have the strongest influence on the cultural adaptation stress.

The most stressful factor was ‘I feel like I need to learn Korean’ with a score of 3.46 ± 1.31, followed by ‘I do not speak Korean fluently’ with 3.36 ± 0.983. The least stressful factor, marked 1.95 ± 0.82, was ‘I do not feel accepted by Koreans’.

Table 3: Score on the Cultural Adaptation Stress Factors of Vietnamese Students

Questionnaire			
1. I am not fluent in Korean	3.36	± 0.983	2
2. I feel uncomfortable around people who can speak only Korean	2.93	± 1.05	5

Conted...

3. I feel like I need to learn Korean	3.46	± 1.31	1
4. I find it difficult to understand if it is in Korean	3.26	± 1.25	3
5. People treat me unfairly or disrespectfully because I do not speak fluent Korean	2.58	± 1.27	8
6. I feel irritated when people think that I will naturally speak fluent Korean	2.46	± 1.01	10
7. I have been discriminated because I do not speak Korean fluently	2.86	± 1.30	6
8. I find it difficult to understand when people speak in Korean	3.20	± 1.15	4
9. I feel irritated when people ask me to follow the Korean way	2.58	± 1.18	8
10. It's difficult to socialize with Koreans because of cultural background	2.85	± 1.15	7
11. I do not feel accepted by Koreans	1.95	± 0.82	11
Total	2.86	± 0.67	

Cultural Adaptation Stress According to Oral Health Behavior Characteristics of Vietnamese Students:

According to the result in table 4, 63 Vietnamese students (78.8%) brushed 1-2 times and 11 of them (13.8%) did not brush at all. In terms of the amount of toothpaste usage per brushing, 50 students answered that they use an amount equal to the 2/3 of the toothbrush head and 24 students said they use length equal to the full toothbrush head. Furthermore, 38 Vietnamese students responded that they change toothbrush every 3 months

and 31 responded that they change every month. 25 students (31.3%) answered that they do carry portable oral products and 55 students (68.8%) answered they do not. In the question about the opinion on the necessity of carrying oral hygiene products, 41 respondents (51.3%) answered that it is necessary while 39 (48.8%) answered it is unnecessary. Among Vietnamese students, the cultural adaptation stress score was significantly lower in the group who brushed 3 times daily than in the group who did not. This was statistically significant (p <.05).

Table 4: Cultural Adaptation Stress According to the Oral Health Behavior Characteristics of Vietnamese Students

Characterization	Division	N	%	Mean	SD	F/t	p
Number of brushings per day	0	11	13.8	3.16	± 0.58	3.138 a>c	0.049*
	1-2	63	78.8	2.86	± 0.60		
	3-4	6	7.5	2.33	± 1.17		
Toothpaste usage (per each brushing)	toothbrush head 1/3	6	7.5	3.34	± 0.78	1.730	0.184
	2/3	50	62.5	2.81	± 0.53		
	full head	24	30.0	2.85	± 0.86		
Frequency of toothbrush replacement	1 month	31	38.8	2.73	± 0.69	0.901	0.411
	3 months	38	47.5	2.94	± 0.70		
	6 months	11	13.8	2.95	± 0.46		
Carries portable oral products	Yes	25	31.3	2.72	± 0.76	-1.28	0.204
	No	55	68.8	2.93	± 0.62		
Portable oral products necessity	Necessary	39	48.8	2.79	± 0.73	-0.891	0.376
	Not necessary	41	51.3	2.93	± 0.60		

Conclusion

This study was conducted to investigate the cultural adaptation stress that foreign students go through and the factors affecting oral health of both Korean and foreign students.

According to the results, the satisfaction score for oral treatment of home country was 3.06 ± .959 for Vietnamese students and 3.09 ± .771 for Korean students, with no statistically significant difference. It is considered that the higher satisfaction score for Korean students comes Korean students having a better

understanding of oral health. The satisfaction score for one's own oral health was $2.85 \pm .956$ and $3.07 \pm .961$ for Vietnamese and Korean students each. Although the results showed no statistically significant difference between two groups, Korean students had 1.424 times higher score than Vietnamese students. The oral health knowledge score was 8.28 ± 1.091 for Vietnamese students and $9.18 \pm .774$ for Korean students. There was a statistically significant difference ($p < 0.00$), with the score for Korean students being 3.488 times higher than Vietnamese students.

The statement describing the most stressful factor among Vietnamese students in the process of cultural adaptation was 'I feel the need to learn Korean' with 3.46 ± 1.31 and the least was 'I do not feel accepted by Koreans' with 1.95 ± 0.82 . Cultural adaptation stress scores were significantly lower in the group who brushed 3 times daily than in the group who did not. This was statistically significant ($p < .05$). The cultural adaptation stress of Vietnamese students indicated a low correlation with oral health-related factors. The results of this study suggest that it is important to educate Vietnamese students to raise oral health awareness. There is also a need for multi-perspective efforts to solve the oral health problem of foreign students and to smoothen the cultural adaptation process relating to oral health. The administrative support from students' universities will be required as well.

This study emphasizes the importance of researching the oral health behavior characteristics of foreign students in Korea before taking the measures to improve the oral health problems of such students. In addition, the oral health behavior of domestic students should be analyzed along with that of foreign students to compare and observe the difference between these behaviors and factors causing such differences. This also demands administrative support from oral health care services for foreign students.

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Conflict of Interest: Nil

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