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Psychological and sociocultural adaptation of medical university international students in Armenia

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Abstract

Moving from one academic environment to another and relocating in a new country to study is becoming an increasingly common occurrence. The article deals with the problem of socio-cultural adaptation of foreign students who come to study in Armenia at medical universities. Based on the results of a study conducted in 2021-2022, the degree of adaptability of Indian students to the new social, cultural and academic realities of Armenia was studied.

The object of the study was 140 students who arrived from India and study at the Mkhitar Gosh Armenian-Russian International University. It has been established that the most important factors for successful adaptation to new conditions for a foreign student are overcoming the language barrier, creating a favorable communication system of interaction, getting used to the conditions of the Armenian education system. Most of the respondents agreed that they like the Armenian culture and that there are linguistic similarities between the two peoples. This fact can serve as a basis for successful adaptation to the Armenian reality.

Conclusion: This study identifies to lighted critical issues in supporting international students with adaptation problems to university life in Armenia. It is on this basis that we can talk about symmetrical adaptation. The results of the study can be used in educational activities to optimize the process of adaptation of foreign medical students.

Keywords: Academic and sociocultural adaptation; Psychological distress; Foreign students; Educational mobility; Cultural identification and distance

1. Introduction

Adaptation of foreign students to new conditions is a fundamental factor determining the success of the further educational process. At the first stage it implies the formation of psychological mechanisms that ensure safety and adequate orientation. The leading problems hindering academic adaptation during this period are: - information overload (in the educational process and outside it) becomes the cause of information stress; -psycho-emotional congestion arising due to the language barrier and constant involvement in the communicative process; - educational and cognitive difficulties associated with insufficient language training; - insufficiency of language training, lack of terminological vocabulary in the active stock; - fulfillment of requirements related to knowledge control system; - low level of self-discipline.

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To overcome these problems, first of all, it is necessary to assess the level of psychological and socio-cultural adaptation of students. In the past few years, the problem of social and pedagogical adaptation of foreign students in medical universities in Armenia has become particularly relevant, due to the increase in the number of visitors, a large number of proposals, both in the public sector and in private medical universities. As you know, the flow of foreign students is an important criterion for a competitive education system that is in demand on the world market. Social mobility in the educational environment serves as a tool for creating a positive image of the country where they come to receive education, and in this regard, the image of the educational institution. At the personal level, the process of overcoming the framework of national educational systems entails the formation of a request for the creation of conditions for receiving high-quality educational services in different countries of the world. At the same time, the main factor in successful promotion in foreign markets is the preparation of graduates who are adapted to modern conditions and are in demand on the global labor market.

Modern Armenia strives to support and develop the policy of educational migration. Successful competition in the global market of educational services allows us to count on a significant economic effect.

The purpose of our work was to study the degree of adaptation of foreign students studying at a medical university. To do this, in October 2021, in Yerevan, a sociological study was conducted, the sample of which was 140 people - foreign students who entered and are being trained by Mkhitar Gosh Armenian-Russian International University with a degree in general medicine. It`s a higher educational institution, bearing status of an authorized teaching university. It carries higher academic education in accordance with the legislation and issues a document certifying the qualification recognized by the state .

Mkhitar Gosh (MGU) was founded in 1996. Currently, the Mkhitar Gosh is a modern university with a comprehensive infrastructure, and experienced faculty members that are nationally (and some of them worldwide) recognized specialists in different areas of medicine, professional health organizations and agencies.

Twenty Four years ago first 11 students were enrolled, whereas at present about 2500 students study in the University. Most of our students are citizens of foreign countries: India, USA, Great Britain, Russia, Ukraine, Jordan, Egypt and Sri Lanka.

2. Methods

2.1. Study design and participants

The study consisted of the 140 international students (n=140) from India, studying at Mkhitar Gosh Armenian - Russian International university. The mean age of the students was 18.2±2.6. 56.5% (n=79) of the students were male, 91.1% (n=127) were single, 62.1% (n=87) lived in dormitories. The average duration of study in medical school was 2.35±1.02 years.

Depending on the length of their stay in Armenia, the subjects were divided into four groups: I - n=38, stay in Armenia for 2 weeks, mean age ±18.2 years; II - n=46, residence in Armenia 1-year, mean age ±18.5 years; III - n=29, residence in Armenia up to 2 years, mean age ±19.8 years; IV - n=27, residence in Armenia up to 3 years, mean age ±19.9 years.

In general, all test groups can be considered equivalent in terms of age criteria. In the studied groups of students, there is also an equal representation by gender: 56.5% of male students, 43.5% - female.

2.2. Ethics, consent, and permissions

All participants were informed that their participation was voluntary. The study objective was explained to all participants, and verbal consent was obtained. All in person surveys were anonymized and untraceable. No individual subject identifiers were collected.

The study protocol was approved for exemption by the local institutional review board at the Mkhitar Gosh Armenian-Russian International University and was in accordance with the Helsinki Declaration and its later amendments.

2.3. Measures

All measures were administered in English. Participants first completed a short demographic questionnaire where they answered questions relating to their age, gender, nationality, degree level. Participants also completed a measure of

English language proficiency, which consisted of two questions designed by the researcher: "What is your present level of English fluency?", "How comfortable are you communicating in English?"

2.4. Survey

Students were invited to anonymously fill a standardized Acculturative Stress Scale for International Students (ASSIS) [17]. It is a 36-item scale adapted to a 5-point Likert scale (originally 7-point scale 1=strongly disagree to 7=strongly agree). ASSIS consists of 7 subscales; Perceived discrimination (eight items), Homesickness (four items), Perceived hate (five items), Fear (four items), Stress due to change/culture shock (three items), Guilt (two items), and Miscellaneous (10 items). The stress levels were compared between male and female students, and between different groups according on the length of their stay in Armenia (20-40 years old and 41 and above) using t-test.

2.5. Statistical analysis

Data was analyzed using the Statistical Package for Social Science (SPSS) Version 14 software. The association between categorical variables was performed using Chisquare test. All variables that were associated with the outcome on univariate analysis with a p-value ≤ 0.10, as well as variables of historical interest, were included in the logistic regression models. All pvalues were two-sided. A p-value < 0.05 was considered statistically significant.

3. Results

The 140 participants came from different regions of India. Participant characteristics are presented in Table 1. The distribution according to gender is reasonably homogenous: 79 male (56.4%) and 61 females (43.5%). 55% of the sample came from South and 25.7% from Central of India.

The participants were aged from 18 to 22 (M = 21:38, SD = 3:32). The median age was 19.9±0.3 years. Participants were from first to three years of study. Students were asked if they had friends, relatives, or colleagues among international students registered in the same university. Collected data showed that, of the students who reported having relatives/friends attending the same university, 13.6% of them have brothers/sisters, 12.1% have cousins, and 9.4% have other friends and 2.5% other relatives. The majority of the participants were single (90%), with fewer who were married (0.7%) and in a relationship (7.9%).

Most participants have a positive attitude towards religion in coping with the new environmental surroundings. This is supported by different literature data [1,2, 4] in which found a positive relationship between religion-solving problems and types of religion. The 62% of our respondents belonged to the Hindu faith, 27.1% - to the Punjabi or Sikhism. The present results indicate strong religious and spiritual beliefs among international students.

Since education at our university is conducted in English, which is a non-native language for our respondents, students must speak it fluently, well and accurately. It means ability to speak or express the language with sufficient structural accuracy and vocabulary to participate smoothly and effectively in most formal and informal conversations on practical, social, and professional topics. When it comes to pre-departure preparations, most students combined language (71.4%) and academic preparations (66.0%), and 12.4% reported cross-cultural preparations.

All participants indicated that they spoke and understood English before starting the course. According to the given data (tab.1), the majority of students spoke English at the level of Intermediate. As for Armenian, both first-year students and students who have lived in Armenia for more than 2 years speak Armenian at the beginner level, which greatly complicates the processes of their socio-cultural adaptation in the Armenian-speaking environment.

The level of comfort ability of international students is presented in Table 2. In the extremely comfortable category, the highest score was for speaking English (21.3%) and the lowest was for city transportation (2.5%). In the not comfortable category, the highest score was for speaking Armenian (45.9%) and the lowest was for country`s climate (4.9%) and communicating with the homeowner (6.4%).

The results for Acculturative Scale for International Students (total score for ASSIS and values for each subscale) are presented in Table 3; the highest scores were identified for nonspecific concerns and perceived discrimination, and the lowest scores for guilt, stress due to change/culture shock and fear.

Table 1 Selected characteristics of the study sample

Characteristic	I group (n=38)	II group (n=46)	III group (n=29)	IV group (n=27)
Length of their stay in Armenia	2 weeks	1 year	1-2 year	2-3 year
Regions of India, n (%)				
North	-	4 (8.7)	4 (13.8)	10 (37.1)
West	-	-	2 (6.9)	-
South	24 (63.2)	34 (73.9)	6 (20.7)	13 (48.1)
East	-	-	1 (3.4)	-
Central	14 (36.8)	8 (17.4)	10 (34.5)	4 (14.8)
Northeast	-	-	6 (20.7)	-
Age (in years)	18.6±0.2	19.2±0.3	20.8±0.3	21.1±0.2
Marital status, n (%)				
Single	37 (97.4)	43 (93.5)	27 (93.1)	19 (70.4)
Committed Relationship	1 (2.6)	2 (4.3)	2 (6.9)	6 (22.2)
Married	-	1 (2.2)	-	-
Religion, n (%)				
None	3 (7.9)	-	-	-
Christian	-	7 (15.2)	-	-
Muslim	21 (55.3)	35 (76.1)	16 (55.2)	15 (55.5)
Buddhist/Hindu	14 (36.8)	4 (8.7)	10 (34.5)	10 (37.1)
Other (Punjabi, sikhism)	-	-	3 (10.3)	2 (7.4)
Level of English fluency				
Beginner	2 (5.2)	10 (21.7)	3 (10.3)	1 (3.7)
Intermediate	36 (94.8)	32 (69.6)	26 (89.7)	16 (59.3)
Advanced	-	4(8.7)	-	10 (37.0)
Level of Armenian fluency				
Beginner	38 (100)	10 (21.7)	9 (31.0)	4 (14.8)
Intermediate	-	36 (78.3)	20 (69.0)	19 (70.4)
Advanced	-	-	-	4 (14.8)
Native language				
Hindi	28 (73.7)	4 (8.7)	18	10 (37.0)
Tamil	10 (26.3)	10 (21.7)	-	-
Kannada	-	3	7	-
Malayalam	-	5	-	-
Gujarati	-	-	2	-
Kashmiri	-	-	2	15 (55.6)
Punjabi	-	-	-	2 (7.4)

Table 2 The distribution of answers to items regarding students' comfortability with some aspects of life in the university

How comfortable are you with…	Not comfortable	Somewhat comfortable	Comfortable	Very comfortable	Extremely comfortable	M (SD)
Speaking Armenian	45.9	34.5	18.4	7.9	6.9	2.10(1.10)
Speaking English	4.6	17.1	31.3	25.7	21.3	2.86(0.81)
Country's climate	4.9	12.6	47.7	20.5	14.2	1.56(1.02)
City transportation	11.2	32.4	45.1	8.8	2.5	2.61(1.03)
Neighbors	6.1	19.7	45.8	20.8	7.6	2.00(1.09)
Local food	12.6	18.6	27.9	10.2	8.5	2.83(1.16)
Communicating with the homeowner	6.4	15.1	39.2	21.9	17.4	1.69(1.12)

∗Percentages (%), means (M) and standard deviations (SD).

Table 3 Total score and scores for each subscale of ASSIS

Total score and subscales	I group (n=38)	II group (n=46)	III group (n=29)	IV group (n=27)
ASSIS (total score)	131.52±18.2	137.32±11.1	138.79±14.2	136.54±10.6
Perceived discrimination	31.12±9.7	31.0±8.6	30.78±7.1	29.7±4.5
Homesickness	11.98±1.2	12.6±1.8	13.95±2.2	12.39±3.4
Perceived hate/rejection	19.79±3.5	20.04±2.1	18.87±2.1	18.19±3.4
Fear	15.48±2.8	16.11±4.5	16.47±1.7	15.42±2.1
Stress due to change/culture shock	10.07±1.1	9.55±2.3	10.22±0.8	11.63±0.9
Guilt	7.12±0.8	7.64±1.1	8.1±1.3	7.75±0.6
Nonspecific concerns	38.89±12.3	39.40±11.9	38.44±10.6	36.68±11.4

When comparing different groups students on the total score of ASSIS and each of its dimensions, some statistically significant differences emerged concerning. Students from I and IV groups were more prone to experience homesickness (11.98±1.2 and 12.39±3.4, $p \leq 0.01$) and fear (15.48±2.8 and 15.42±2.1, respectively) compared to students from II and III groups (12.6±1.8; 13.95±2.2 and 16.11±4.5; 16.47±1.7, respectively). It is noteworthy that in a comparative analysis it was revealed that the lowest / worsts scores in almost all parameters were noted by students from the fourth group.

It is more expressive in case of perceived discrimination (29.7±4.5), perceived hate/rejection (18.19±3.4) and fear (15.42±2.1) compared to other groups. The fourth group consisted of III-year students, some of whom were recruited from other universities during the last year, and the other part arrived late in the first year of the entrance exams, and without receiving permission from the Armenian Ministry of Science and Education, instead of the first year, they spent a year participating in preparatory courses.

When taking into account the existence of other relatives enrolled in the same university, the results showed several statistically significant differences between international students in terms of acculturative stress ($p \leq 0.001$), perceived discrimination ($p \leq 0.001$), perceived hate/rejection ($p \leq 0.01$), and nonspecific concerns ($p \leq 0.001$). Students with relatives enrolled in the same university had significantly lower levels of acculturative stress and of the above indicators compared to those who did not have relatives enrolled in the same university ($p \leq 0.001$, respectively).

Also, there was a difference between participants whose parents visited them every year compared to those who did not visit them as often on the homesickness subscale.

The results of our study indicated that acculturative stress and perceived discrimination correlated negatively with the degree of comfort regarding: communication in English, climate, neighbors, communication with the homeowner and food in the host country; perceived discrimination correlated with local transport and acculturative stress was found to correlate with age.

The statistical analysis revealed that homesickness was significantly correlated with age, year of study, the degree of comfort communicating in English, and climate of the host country.

Perceived hate/rejection and fear were found to be correlated significantly and negatively with the degree of comfort with English communication, climate, neighbors, and food.

Correlational analyses also showed stress due to change/-culture shock correlated negatively with age, year of study, and with the degree of comfort with communication in English, communication in Armenian, climate, neighbors.

The results suggested that guilt correlated significantly with age, year of study, and with the degree of comfort with communication in English, climate, and food in Armenia.

According to the results, general/nonspecific concerns correlated significantly with age and with the degree of comfort studied by the research (communication in English, climate, neighbors, communication with the homeowner, and food).

Finally, the degree of satisfaction with colleagues was negatively correlated with the ASSIS and all its subscales. The degrees of both satisfactions with administrative staff and with teachers were correlated negatively with the total score of ASSIS and with its subscales, except homesickness.

4. Discussion

Previous studies have shown that there are a considerable number of factors associated with acculturative stress. Some of these factors include personality, social inclusiveness, language barriers, and cultural differences. Gender, age, and language competence are the well-documented [1, 3-9, 12-21].

The results of our study showed that newly admitted and first course students are more prone to higher levels of homesickness and stress due to change/culture shock; a fact that is congruent with another research. If we compare the results of our research with the research of other authors, then the acculturative stress indicators of foreign students, especially Indian students, are better in Armenia. There are no conditions for the formation of a big cultural shock for Indians in Armenia. Armenians and Indians have lived in peace and harmony for centuries. Armenian and Hindi have a close origin; Armenian and Sanskrit belong to the same Indo-European family of languages. The cultural wealth of Armenians is not very foreign to Indians [11,12].

Our study also indicated that friends and family presence decreased the rate of acculturative stress, perceived discrimination, perceived hate/rejection, and nonspecific concerns and might indicate their influence on the choice to study in a certain country.

Students who decide to study in another country might experience practical or lifestyle acculturative stressors. When transitioning from their home country to their host country, international college students face various perceived threats and challenges. Among them are the lack of knowledge of the students who decide to study in another country might experience practical or lifestyle acculturative stressors. When transitioning from their home country to their host country, international college students face various perceived threats and challenges. Among them are the lack of knowledge of the host culture, difficulty in adapting to the host country customs and lifestyle, and maladjustment to the physical environment [6]. The present study took into consideration some of these aspects: food, climate, transportation, neighbors, and communication with the homeowner. The results showed negative correlations between these variables and acculturative stress and some of its subscales. The students' transition from their country to the country where they will study brings the need to adopt and assimilate the customs and culture of their host country. Adjusting to food, weather, accommodation, and local language represents an important challenge for international students [13]. Ideally, international students should gather information regarding geographical and social aspects, food, and transportation in their targeted country. However, documentation does not provide the same experience as personal experience and the students must be aware of this aspect.

International student satisfaction is an in important factor in strengthening support services for this community [2]. Our study showed that higher levels of satisfaction regarding the relationship with colleagues, teachers, and administrative staff were related to lower levels of acculturative stress (and most of the subscales of the ASSIS).

5. Conclusion

The existence of risk factors for acculturative stress demands institutional, social, and psychological support for international students. Multicultural environments must be provided with resources to maintain a sustainability development of international students during their process of education.

Apart from their psychological characteristics and inner motivation, the support from family members, peers, academic community, social media, or professional staff working in the university field can also provide support for students during their academic trajectory and career.

Compliance with ethical standards

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Data Availability

The data used to support the findings of this study are available from the corresponding author upon request.

Disclosure of conflict of interest

The authors declare that there is no conflict of interest regarding the publication of this paper.

Authors' Contributions

All authors contributed equally to this work.

Statement of ethical approval

The present research work does not contain any studies performed on animals/humans subjects by any of the authors.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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