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### Dialogue of Cultures - Culture of Dialogue: from Conflicting to Understanding

# SOCIO-CULTURAL ADAPTATION OF STUDENTS IN A FOREIGN LANGUAGE ENVIRONMENT: FACTOR ANALYSIS

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### *Abstract*

The research is devoted to the problem of socio-cultural adaptation of foreign students. The main purpose of the work was to identify and test experimentally the concept of the most probable, significant combination of factors affecting the process of adaptation in a foreign language environment. The article presents a rather complete analysis of the currently available works on the subject under study. The experimental part includes a description of the research tools and method. The analysis of data from the survey of a representative sample of foreign students is presented through statistical analysis of data on average values. Correlation and factor analysis were carried out using SPSS 22. The results obtained identified the most and least significant factors that can optimize and intensify the process of socio-cultural adjustment. In particular, indicators of situational and personal anxiety were identified as basic factors with the highest level of correlation with other characteristics. The factor analysis allowed identifying four block factors, each of which was represented by a set of components. The strongest factor included components of situational and personal anxiety, general indicators of culture shock, and components of linguistic anxiety with a negative value. Gender indicators and methodological aspects of foreign language learning showed minimal importance.

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## 1. Introduction

Nowadays academic mobility is on the increase with thousands of international students pursuing their educational goals in various countries. It is beneficial for host universities to enroll international students on their study programs, as this would enable them to ensure further prosperous growth. Incoming students not only enrich intellectual and cultural campus environment, but also bring substantial revenue to national economy, making education one of the most profitable service segments (Gebregergis et al., 2020). Students take the advantages of academic mobility programs for several reasons; perfecting foreign language proficiency, developing intercultural communication competence, improving prospects for career development are among the key motivators.

Transition from home country to a new cultural and educational setting can be rather challenging. In this process international students, separated from their natural home culture environment, can experience feelings of uncertainty, loss of confidence, homesickness, apprehension of communication, anxiety and stress (Haverila et al., 2020). This issue was addressed in a number of scientific research with the aim of analyzing the factors influencing international students' adjustment to a new culture.

However, the problem of adaptation in a foreign-language environment remains one of the most topical, as each time it concerns representatives of different cultural and ethnic groups, changing internal and foreign policy situations and other important concomitant factors.

## 2. Problem Statement

Socio-cultural and psychological adaptation of international students has been at the center of numerous studies (Akarowhe, 2018; Valieva et al., 2019; Yu et al., 2019). Such factors, or variables, as language proficiency, host national contact, cultural distance, perceived discrimination influence the level of students' social adjustment to host culture and psychological well-being (Wilson et al., 2017).

In research literature there have been attempts to investigate the strategies that international students use to overcome the challenges of cross-cultural adaptation (Fu et al., 2018; Peng & Wu, 2019; Wang et al., 2018). Russel et al. (2010) found that generally there are three patterns of adjusting to host culture: positive and connected, unconnected and stressed, and distressed and risk-taking. The majority of international students at Melbourne university (60%) showed constructive and positive approach to their self-identification in a new environment, they experienced a lower level of stress, led a more balanced lifestyle, coped better with their academic assignments. Students within "unconnected and stressed" pattern (34%) found it much more difficult to adapt to a new host setting, showed a high level of dissatisfaction with various aspects of life and were more exposed to stress, anxiety and depression. Students in group three (distressed and risk-taking) were also psychologically distressed but reported lower levels of social exclusion; a characteristic feature of this pattern was students' involvement in extreme behaviours such as drugs, alcohol, gambling, self-harm (Russel et al., 2010). Similarly, positive findings were reported by Gu (2009), who researched the adaptation of Chinese students at a UK university. Although some of the international students had to undergo a difficult and challenging process of finding their path in a new environment, the majority of the examined students managed to survive and successfully adapt to host

cultural and educational setting, achieving personal independence, broadening life experience and improving interpersonal and communication skills (Gu, 2009).

A recent review of theoretical approaches to cross-cultural adaptation carried out by Bierwiazzonek and Waldzus (2016) has revealed that one of the most influential models applied in various studies is the bi-dimensional adaptation model proposed by Ward and colleagues. According to this model, cross-cultural adaptation may be divided into two domains: psychological (emotional, affective), which refers to “psychological well-being or satisfaction”, and sociocultural (behavioral), “related to the ability to “fit in”, to acquire culturally appropriate skills and to negotiate interactive aspects of the host environment” (Ward & Kennedy, 1999, p. 660).

Research aimed at revealing the peculiarities of socio-cultural adaptation of foreign students in Russia has been and is being conducted with sufficient activity. Previous studies show that international students in Russian educational institutions experience major difficulties with socio-cultural adaptation. Language barrier is regarded by most researchers of cross-cultural adaptation as a universal obstacle to integration into host culture environment (Bierwiazzonek & Waldzus, 2016; Teimouri et al., 2019). The Russian language is generally used as language of instruction on the territory of the Russian Federation; at the same time this language is not very widespread outside the country (apart from former Soviet Union republics) and not very often learned as a second or third foreign language. Thus, the majority of international students (from countries other than former Soviet Union) have not learned host language before arriving to Russia.

Given the complexity of the language, it can be assumed that students do not achieve sufficient language proficiency for comprehensive engagement into academic and social interaction. Nevedomskaya et al. (2006) found that international students at a Russian technical university cannot fully understand lectures, seminars and academic literature due to poor knowledge of technical terms and peculiarities of academic style. Language barrier hinders not only communication on campus, but also social contacts with host students and residents outside classroom, which leads to loss of interest and motivation in learning, a decrease in social activity and a low level of adaptation (Lyakh, 2014). To prevent social isolation and widen social network of international students at a Russian university it is essential to gradually involve more personalities into the classroom and arrange opportunities for extracurricular activities and interaction (Vladimirova & Sheveleva, 2017).

A study of Chinese postgraduate students at American universities, for example, revealed that students who had been successfully using English in their home academic environment faced difficulties with speaking English in real-world usage in the USA (Heng, 2019). Such phenomenon is generally referred to as language barrier, which means a lack of ability to communicate freely in a foreign language with native and non-native speakers, even with a relatively high level of language skills. It results in negative feelings like apprehension, anxiety, shame, fear of being tested and evaluated, low self-esteem. International students experiencing language anxiety are generally passive in classes, prefer to avoid speaking or use basic vocabulary, they often lose attention and concentration, do not control their emotions.

Social contact in host language has positive correlation with socio-cultural and psychological adaptation of international students (Hei et al., 2019). The more students are involved in social interaction on and off campus, the more they learn about peculiarities of social norms, behavioral patterns and other

aspects of host culture, which also helps to overcome language barrier and lower language anxiety. In some cases, external factors such as living conditions can play a certain role in integrating into host culture.

Cultural distance between home and host culture is recognized as one of the factors affecting the adaptation process. If socio-cultural norms and values, communicative behavior of the two cultures vary to a great extent, international students face tougher challenges and experience culture shock (Cheng & Erben, 2012); exposed to a new cultural context, students may feel disoriented, anxious and lose self-confidence. According to Cheng and Erben (2012), even such factor as gender peculiarities of home culture may play a certain role, too.

The issue of socio-cultural and psychological adaptation is not completely eliminated even if linguistic, ethnical and cultural background of international students and host country is more or less similar. Yu et al. (2019) surveyed a large sample of Hong Kong's international university students, the majority coming from other Asian countries, and observed that although generally students reported high level of socio-cultural adjustment to host setting, some of them were affected by stereotypes, perceived discrimination and cultural differences (Page & Chahboun, 2019; Yu et al., 2019).

### **3. Research Questions**

In our study, we tried to consider some features of adaptation of Chinese students in the Russian-speaking educational environment. In particular, we intended to study the extent to which various factors, including both linguistic characteristics and individual psychological data, influence the adaptation of students. We were interested in the degree of influence of such characteristics as gender and a certain commitment to correct methods of learning a foreign language, different types of anxiety and cultural shock.

### **4. Purpose of the Study**

The main objective was to identify the most relevant and important combination of factors that can influence the adaptability of the above group in a foreign language environment. The goal was achieved through the following tasks: to consider the concept of socio-cultural adaptation; to analyze the available research results in this field, with special emphasis on the adaptation problems of Chinese/Asian students; to build a model of factors influencing successful socio-cultural adaptation; to use specially selected research tools to identify the most significant factors of socio-cultural adaptation and analyze the obtained research data.

The main issue that actualized our research was the correlation of factors and their components in the conditions of socio-cultural adaptation of Chinese students. This aspect is extremely important for creating more comfortable adaptation conditions and reducing various socio-cultural adaptation barriers.

### **5. Research Methods**

The following research methods were used: theoretical analysis and synthesis of research results, content analysis, partial modeling, survey, asserting experiment, mathematical-statistical analysis of obtained data, including correlation and factor types of analysis.

The study involved two stages: theoretical and experimental. The theoretical part analyzed modern research in the field of socio-cultural adaptation of students and young people. Based on these studies were identified factors that can have a significant impact on the successful adaptation of foreign students in the educational environment. The experimental stage involved a stated experiment to identify the most/lowest influencing adaptation factors and their components.

The respondents were Chinese students studying at Peter the Great St Petersburg Polytechnic University. They were surveyed in 2019-2020. The respondents were given block-questionnaires, which consisted of four parts:

personal data about students including questions about the frequency of their use of the Russian language in various situations; Language Anxiety Test by Horwitz; Spielberger-Hanin Questionnaire; Culture Shock Test.

The questionnaires were translated into three languages: Russian, English and Chinese; the respondents had to answer the questions in written form on paper, no time limit was set for filling in the form. It was not obligatory to sign the questionnaire, so that students did not feel any discomfort when disclosing their personal data, preferences and aspects of their personality. Overall, 110 questionnaires were handed out. Only 81 of them were returned, 5 questionnaires were anonymous.

The following data were received about the respondents. 43 out of 81 students surveyed (53%) were women and 38 students (47%) were men. The age of the respondents varied from 18 to 26. The majority of them were 2nd-year students (45 students, 56%), 31 students (39%) attended intensive preparatory courses of the Russian language, and 5 of them were 3rd-year students (5%). The period of learning Russian: less than a year - 25%, 1 year - 14%, 2 years - 14%, 3 years – 36%, 4 years – 10%, 5 years – 1%.

## **6. Findings**

### **6.1. Statistical analysis**

The leading response to the question about reasons of learning the Russian language was to study in Russia, receive higher education or get a degree in this country – 51% (36 students). 14% (10 students) said that they want to study Russian as a foreign language, some of the reasons were that they like the language, some find it beautiful, some admire Russian art and culture.

As regards receptive language activity, the respondents most frequently listen to Russian music and radio programs (21% do it daily, 28% 3-4 times a week, 31% 1-2 times a week). Reading books, newspapers, etc. in Russian was among the most popular activities, for entertainment, Chinese students prefer watching Russian films to watching television programs.

Concerning productive language activities, we can conclude that the participants of the survey quite often communicate with their Russian friends and acquaintances in the native language of the host country (27% on a daily basis, 20% 3-4 times a week, 24% 1-2 times per week).

As for the data on various types of anxiety, some checked up indicators gave a somewhat unexpected picture. The results of a comparative analysis of data on situational, personal and linguistic anxiety revealed the following picture. More than 60% have increased rates of personal anxiety. A little over 20% showed a low level of personal disturbances. The remaining 18% of respondents took an intermediate place. As for

situational anxiety, the picture is slightly more positive. Less than 50% showed high data on this type of anxiety, data on the remaining respondents were distributed roughly equally - rounded off by 25% in each group. An interesting fact about gender indicators is that female respondents had higher scores on situational anxiety. The data on language anxiety were as neutral as possible. High linguistic anxiety was recorded for single representatives. The data tended to decrease, i.e. they were recorded at average and below average levels. Most of our research involved students from technical and economic fields. This, to some extent, can also explain the rather averaged scores on language anxiety.

In case of the culture shock survey, we analyzed the most salient characteristics of the phenomenon. The first seven questions covered the “core” culture shock items, whereas the second five questions dealt with the “Interpersonal stress” items experienced by students doing a course at a foreign university.

Most of the students surveyed find it difficult to adapt to the new culture. 63.4% of the respondents feel stressed, whereas 10 % even claim to be extremely stressed.

The second element that contributed to the culture shock to a much greater extent than the first one was feeling homesick. Of the total number of the respondents 56.3% said that they were seriously affected by homesickness, whereas fewer than 40 % of the students say that even though it occasionally affects them, they can cope with feeling stressed, isolated and lonely. The questionnaire revealed that homesickness is one of the principal contributors to the stress experience by foreign students.

Over two-thirds (67.6%) of the respondents pointed out that they are affiliated with the local national group, since both the local students and the teachers go to great lengths to make them feel at home. However, about 10% of the participants pointed out that they do not feel accepted by the local students.

A significant number of the respondents (31%) wish to escape from their new surroundings and two-thirds of the students said that they sometimes experience such feelings.

The vast majority of the respondents (89%) sometimes feel confused about their identity and their new social role. Only 5.5% of the respondents are shocked at and disgusted with many things in their new environment/Most of the students (79%) experience such negative emotions only occasionally. As the participants of the survey are young people, they are more open-minded than the older generation and adapt better than them to the new environment. For the same reason only a small minority (about 8.5%) of the respondents feel helpless and vulnerable when they try to adapt to the new culture. Roughly 40% experience such feelings just occasionally, and more than half of them (51.5%) do not have difficulty adapting to the new environment.

The vast majority of the respondents (60.5%) sometimes feel anxious and awkward when they have contact with the local residents. Only a small minority on the students (5.6%) feel this way under all circumstances.

Only 15% of the students participating in the survey feel highly embarrassed and uncomfortable when they are stared at. Many respondents (45%) said that they sometimes feel uneasy when locals' eyes are riveted to them. A significant number of the students (40.1%) do not mind being looked at. Probably these reactions depend on the personality traits of the students in question: some of them are accustomed to getting a lot of attention, whereas others would rather go unnoticed.

Only 2.8% feel as if being cheated when they buy something, whereas almost half of the respondents (49.3%) feel this way just occasionally. More than half of the students (50.7%) have to take sustained effort to be polite to their hosts, while only 7 % of the respondents claim that they do not face such a challenge.

## 6.2. Correlation analysis

Pearson's formula was taken for the correlation analysis, allowing to consider linear interdependence between the investigated indicators of sociocultural adaptation.

The following individual psychological characteristics were taken as variables for the analysis: age, sex, data on frequency of use of a foreign language (language of the receiving culture), an indicator of linguistic anxiety, personal psychological anxiety, situational psychological anxiety, cultural shock. In general, the correlation coefficient of these variables varied between values from -0.456 to 0.820, with  $r=0.01$  ( $r=0.05$ ).

The largest number of correlated links was found in the variables of individual and situational anxiety, as well as in the variables of the general indicators of cultural shock. Thus, personal and situational anxiety, according to the results of this study, positively correlated with each other in the range from 0.466\*\* to 0.820\*\*. However, these characteristics negatively correlate with language anxiety data. The correlation range is - 0.456\*\* to - 0.334\*\*.

Separately, we should mention the identified stable correlation links between the above components and cultural shock indicators. As it was mentioned earlier, we used the Mumford scale as an identifier of the cultural shock. According to the obtained data, general and interpersonal indicators of cultural shock have positive bilateral and one-sided correlation with data on situational and personal anxiety. The correlation coefficient between the general indicators of cultural shock and the data on mental anxiety ranges from 0.395\*\* to 0.331\*\*. While interpersonal indicators of cultural shock have a one-sided positive correlation with the results on situational anxiety. This feature can be interpreted as a need to reduce situational anxiety, which will further reduce interpersonal communication problems among students. Separately, we should mention the revealed negative one-sided correlation between the general characteristics of cultural shock and age (-0,258\*). This to some extent indicates the natural predisposition of the younger generation to adaptation problems, especially at the first stage of entering a foreign-language sociocultural environment.

The results of the correlation analysis allowed us to draw some important conclusions. Primarily, it concerns the strongest, most important variables. This category includes indicators of personal anxiety and general characteristics of cultural shock; these characteristics are systemic in our study. The second place, according to the correlation coefficient, is occupied by situational and linguistic anxiety data. The third place is occupied by interpersonal characteristics of cultural shock and age. Gender characteristics and data on the frequency and diversity of forms of learning a foreign language (in our case Russian) have not shown significant correlations. Therefore, in developing a strategy to ensure the successful socio-cultural adaptation of students one should focus on forms and techniques to reduce personal and situational anxiety and provide students with more professional support at the stage of primary adaptation in a foreign language environment. Linguistic anxiety has a somewhat different picture of both prerequisites and mitigation strategies.

### 6.3. Factor analysis

The main component method was used for factor analysis. The data were processed again with the varimax rotation method with Kaiser normalization. According to the data of factor analysis, 4 factors were identified, each referred to the bipolar type. The first factor, which includes all types of anxiety and basic components of cultural shock, is the most significant in terms of load (34,992). The second factor includes age indicators, language anxiety and general characteristics of cultural shock (47,713). The third factor combined the gender characteristics and frequency data of foreign language learning. The fourth factor included age indicators and interpersonal aspects of the cultural shock.

All these factors indicate the greatest importance of the data on anxiety, including language, situational and personal. To a lesser extent, gender characteristics, interpersonal characteristics of the cultural shock and peculiarities of building the process of learning a foreign language influence social and cultural adaptation. We should remind that the majority of the surveyed students by the level of foreign language proficiency belongs to the elementary or higher levels. The intermediate place is occupied by age and some components of the basic characteristics of cultural shock.

## 7. Conclusion

They feel anxious because they have to get accustomed to a new lifestyle and acquire new habits, and some of them feel that they are not open-minded enough to deal with unfamiliar situations. Probably some of the questioned students are less sociable and they would feel isolated in any social group.

As for the results on culture shock, perhaps the condition may be explained by the fact that in many cases foreign students tend to set themselves apart from the locals as they do not get out of their comfort zone when they socialize with the representatives of their own culture. Probably it occasionally happens when they cannot fully understand the way in which they are perceived by the locals. They may feel that they do not live up to the locals' expectations, but they do not know how to address this problem.

Foreign students need a certain period of time to adapt to their new environment. They also need a preparatory language course that will allow them to adapt more quickly in a foreign language environment. This is particularly true when languages belong to completely different language groups. Moreover, not all of students are fully aware of stereotypical patterns of behavior in their new cultural environment. Due to the so-called "Disneyland effect" they only have a limited understanding of the locals' personality traits, so they feel uncertain about the ways they may be perceived by them.

Speaking about three patterns of adjusting to host culture (Russel et al., 2010), we can say that among the students in our representative sample were identified representatives of two groups: positive and connected, unconnected and stressed.

The results of correlation and factor analysis showed that the basic factor can be called personal anxiety, and then successively we can arrange situation anxiety, components of cultural shock and language anxiety. Gender characteristics, as found in our study, do not play a significant role. The data can be used by teachers in foreign groups (with Chinese students), specialized faculties and training courses to develop more effective technology for socio-cultural adaptation.

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