Stress Factors among International and Domestic Students in Russia

Elena Yu. Kosheleva a,*, Amartey Josiah Amamnor a, Ellina Chernobilsky b

a National Research Tomsk Polytechnic University, 30, Lenin Ave, Tomsk, 634050, Russia
b Caldwell University, 120 Bloomfield Ave, Caldwell, NJ 07006, USA

Abstract

The paper examines the key stress factors affecting the academic achievements of international and domestic students in Russian universities. Information about the sources and levels of stress was elicited through a 16-item Likert-style questionnaire. The results of the survey indicate that most of stress factors are mainly the same for both groups of students. These factors are work load, lack of sleep, and deadline pressure among others.

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1. Introduction

The beginning of the 21st century is characterized by the rise in globalization, a process which diminishes the necessity of a common and shared territorial basis for social, economic and political activities, processes and relations (Crane & Matten, 2010). This process has affected all parts of contemporary life. One major aspect which has undergone changes due to globalization is education in general, and higher education, in particular. To be an effective partner in the global world, a country has to have strong, quality education and be open to offer it to anyone in the world. The Russian Federation is an active participant of the globalized education market.

During the last decade, higher education in Russia has gone through massive transformation. Currently institutions of higher education in Russia are cooperating with leading scientific and educational centers in the USA,

* Corresponding author. Tel.: +7-953-920-1533.
E-mail address: key@tpu.ru
Europe, Asia, and Latin America, establishing joint educational programs and participating in collaborative projects, using Russian and foreign funds (Ministry of Education and Science of the Russian Federation, 2013).

Since joining the Bologna Process in 2003, there has been a steady increase in the number of foreign students in Russia. There have been expansions in educational services export, especially to the CIS countries. Currently, approximately 57 thousand students from various CIS countries are enrolled in numerous higher education institutions across Russia. This comprises 56% of the total number of international students studying in Russia today (Ministry of Education and Science of the Russian Federation, 2013).

As cited on the National Research Tomsk Polytechnic University (TPU) website (2013a), according to Alexander Arefyev, a Deputy Director of the Center for Sociological Research of the Ministry of Education of the Russian Federation, more than 39% of the foreign students in Russian Universities come from the CIS countries, more than 35% - from Asian countries, students from the Middle East and North Africa make up 6.3%, from other African countries - 6.9%, representatives of Western Europe comprise 4.4%. The most popular fields of study among foreign students are engineering and technical services, which are chosen by 19.7 % of students (TPU, 2013a).

Tomsk Polytechnic University has about 20 years of experience in teaching foreign students. Today, more than 2000 students from 40 countries, such as Austria, Czech Republic, Brazil, Jamaica, Sudan, the Democratic Republic of the Congo, Egypt, India, Iraq, China, Bangladesh, Mongolia, Australia, and many others attend the University (TPU, 2013b).

Studying in a higher education institution can be stressful, particularly for international students, who leave their home to study in another country. Unlike native students, international students need to develop bicultural competence, as they maintain their own values while adjusting to the practical, interpersonal, and emotional challenges encountered in the host country (Noh & Kaspar, 2003; Poyrazli & Grahame, 2007; Musgrave-Marquart, Bromly, & Dalley, 1997). Most students are young adults who are in the process of developing personal characteristics and identity in order to function with a greater psychological and financial independence (Furnham, 2004). Such demands are more complex for the international students, who have to adapt to a new culture, language, academic and social environment. Taking into consideration the importance of international students, it is necessary to evaluate their adjustment to the university life and to compare their experiences with those of the domestic students. The purpose of this research study was to conduct such comparative investigation.

Studies that look into the experiences and adaptation of students to university lives have been carried out before. Some studies focus on financial factors. For example, Roberts, Golding, Towell and Weinreib (1999) found that the majority of university students have problems meeting their financial commitments. In particular, financial strain has been commonly reported among first year university students who are either moderately or severely stressed by the task of managing money (Tyrell, 1992). Financial concerns are commonly identified as one of the greatest sources of stress for international students as well (Chen, 1999; Lin & Yi, 1997; Mullins, Quintrell and Hancock, 1995, Mori, 2000). Specifically, increasing tuition fees and living expenses are notable areas of concern (Chen, 1999).

International students also experience a range of emotional stressors. These include not only typical developmental challenges of most students (autonomy, intimacy, belief systems), but also difficulties associated with their international status, such as being away from one’s loved ones for prolonged periods of time, guilt, discrimination, and intense pressure from families and home culture to excel academically (Mori, 2000).

Furthermore, academic-related issues have been found to pose considerable concern for students (Rice and Dellwo, 2002). Academic demands often create significantly more problems for international students than their domestic counterparts (Burns, 1991). Past research findings have shown that academic related problems are of major concern to international students (Hashim & Zhiliang, 2003; Misra, Crist & Burant, 2003). These problems are heightened as international students try to master a new language and grapple with specifics of the educational system they are now experiencing. For example, in Russia, foreign students have to master the Russian language suitable for academic purposes in just 1 year prior to beginning of studies in their major.

As many students move away from home and their familiar environments, they may lose important support structures that have acted as powerful coping mechanisms in times of stressful life events. Social support helps in personal adjustment. Sarason, Sarason and Pierce (1990) suggest that social support can be two-fold: instrumental and emotional. Instrumental support involves assistance with practical problems, while emotional support is associated with the knowledge that one is valued, supported and belongs to a group (Sarason et al.). Domestic students have been shown to have lower levels of adjustment at entry and three months into the semester, likely...
because they have an advantage over international students by having more opportunities to access family and
friends (DEST, 2005).

Similarly, the students’ successful adjustment to university life and studies is also influenced by their coping
styles. Lazarus and Folkman (1984) maintain that there are two general ways in which an individual copes with
stressful situations. Problem-focused and active coping style involves using positive strategies to manage stressors.
This style has been associated with better adjustment (Crockett, Iturbide, Stone, McGinley, Raffaelli et al, 2007).
These efforts help an individual manage or minimize the internal or external demands. On the other hand, emotion-
focused and avoidant coping style involves dysfunctional and debilitating strategies such as substance abuse,
behavioral disengagement, self-blame, and denial. Such style has been associated with poor psychological outcomes
(Crockett et al, 2007; Carver, 1997).

Differences in coping styles have been found within and between cultural groups. Leong and Lau (2001) assume
that Asian cultures have a tendency to utilize repression and avoidance. Similarly, Bjork, Cuthbertson, Thurman and
Lee (2001) state that passive coping strategies such as avoidance, withdrawal, resignation to and acceptance of fate
are often exhibited by the Asians students. Furthermore, there is evidence that insufficient or maladaptive coping
resources during the time of adjustment may lead to psychopathological consequences (Berry, 1980).

The current research is aimed to investigate the attitudes that international and domestic students exhibit toward
stress factors. The main objectives of the study have been to analyze and compare the sources of stress and
adaptation strategies as self-reported by the international and Russian students.

2. Method

The study took place in TPU in 2013-2014 academic year.

2.1. Participants

The participants in the study were international and domestic students studying at TPU. The total number of
participants was 121. There were 60 international students, 33 males and 27 females. The international students
ranged in age from 19 to 33 years. The international participants came from China, Vietnam, Mongolia, Nigeria,
Kazakhstan, and Ivory Coast.

There were 61 Russian students who participated in the study, 25 males and 36 females. The domestic students
ranged in age from 17 to 23 years.

2.2. Materials and Procedure

A data gathering instrument for the study was a stress survey questionnaire. It consisted of a short information
note that laid out the reasons for the survey and explained what the researchers wanted the students to do. The survey
also had space to fill out basic demographic information. Following the demographics part of the questionnaire,
there were 16 questions. The questions asked the students to rank their stress levels on a predetermined scale from
low to high. The questions focused on such issues as financial matters, family and friendship, health, organization
and work load, level of confidence, and other issues that can contribute to student stress. The questionnaire can be
found in Appendix A. Students were given the survey in class. The instructor was not present in the class while the
students filled out the surveys.

3. Analysis and discussion

The analysis identified the most and least stressful factors among both groups of students. Figure 1 depicts the
results in percentages for Russian students. As can be seen from the Figure, the highest stress levels that students
report are related to the lack of sleep (57.8%) and the high work load (54.7%), whereas the students report that they
are least bothered by the separation from family (57.8%), lack of friends (53.1%) and cultural differences (51.6%).
Figure 2 focuses on the results from the international students. As can be seen from the figure, the international students indicate that few factors contribute to the high levels of stress. The highest levels of stress were in the upper 20s in terms of percentages (the deadline pressure - 29.6%, too much work - 28.2%, and climate - 24.4%). However, there were quite a few factors that students rated as medium level stressors. Among the highest ranked medium-level stressors were lack of organization, lack of self-discipline, accommodations, and financial problems. Interestingly, separation from family (38%), cultural differences (36.6%) and lacking friends (32.4%) were reported as the lowest stress factors.

The mean and standard deviations reveal that international students tend to downgrade stress factors, whereas Russian students have a much larger spread of factors they consider stressful.

A statistical analysis was performed, using Spearman's rank correlation coefficient. The Spearman's Rho is a non-parametric test used to measure the strength of association between two variables, where the value $r = 1$ means a perfect positive correlation and the value $r = -1$ means a perfect negative correlation. The p-value is the probability of obtaining a test statistic result at least as extreme as the one that was actually observed, assuming that the null hypothesis is true (Gay, Mills & Airasian, 2006).

Using the Spearman’s Rho calculator (http://www.socscistatistics.com/tests/spearman/default2.aspx ), comparisons of each level across both groups of students were made. That is, we compared all the high level stressors of international students with all the high level stressors of domestic students and so forth. The Spearman's rho revealed a statistically significant relationship between the percentages of high stress factors for international and domestic students, $rs(121) = 0.57$, $p < 0.05$. The correlation analysis also indicated that medium level stressors...
for both groups were significant: \( rs(121) = 0.63, p< 0.05 \). Finally, the analysis indicated that low level stressors correlated significantly in the two groups as well: \( rs (121) = 0.70, p< 0.05 \). The results indicate that there is an association between both types of students, and the association is positive because the students in both groups rate the factors similarly.

The present study compared the international and domestic students on a range of variables. The hypotheses were partially supported as the two groups showed similarities and differences.

### 3.1. Similarities

International and domestic students alike feel comfortable being separated from their families, and indicate that lacking of friends or experiencing cultural differences do not constitute major stress factors for them. In addition, students in both groups agree that five of the most stressful factors that affect their adjustment to the university life are work load, lack of sleep, pressures imposed by academic deadlines, facing health problems, and being perfectionist. Thus, it is evident that regardless of the status, students face similar issues when it comes to adjusting to the life as a university student.

### 3.2. Differences

As expected, the two groups differed in their reports regarding the language of instruction. As Figures 1 and 2 indicate, there was a big difference between international and domestic students in regards to the language of instruction. Most international students at TPU take classes conducted in Russian, which means a lot of work has to be done in order to understand what is being covered in each course. International students spend extra hours trying to translate what they have been taught into their native languages and this can be not only time consuming but really stressful as well. Domestic students do not have such issues as all of them regardless of their ethnicity are required to master the Russian language while in secondary schools. This knowledge gives them the edge over their international counterparts.

Groups also differed on the attitudes towards the climate of the area where the university is located. Siberia is one of the coldest places in Russia and in the world. Living in a place where temperatures can fall as low as minus 45 degrees Celsius during winter can be very stressful, especially for students who come from the countries with mild climates year around.

### 4. Conclusion

This study compared international and domestic students on a range of variables. In spite of limitations in the collection of data, the findings provide further insight into the nature of the university experiences for both international and domestic students in Tomsk Polytechnic University.

International students’ limited knowledge of the academic Russian language can place them at a disadvantage as compared to their Russian peers. The current finding highlights certain key issues concerning studies in Tomsk Polytechnic University. This finding might be useful to consider when (re)designing academic programs and improving the university approaches to student’s adaptation.

To relieve student feelings of being overwhelmed due to rigorous academic deadlines, to help students adjust to the university-level work load, as well as to assist students in recognizing and addressing health issues before they become troublesome, it might be useful for the university administration to design specific courses that would help students in their first year to learn how to learn more efficiently. The same course can also help students learn how to take care of themselves now that their families are not around to provide support and assistance. This course could also include the basics of financial and time management, and stress relief.

### Appendix A. An example appendix

Dear student,
We would like to know about stress factors in your academic life. Think about situations that can lead to student’s stress and indicate whether you feel they represent high risk, medium risk or low risk as a source of stress for you.

| Age | Male | Female |
|----|-----|-------|
| Gender |       |       |
| country of citizenship |     |       |

Stress Factors
Please, tick the appropriate variant

| Stress Factors | HIGH LEVEL | MEDIUM LEVEL | LOW LEVEL |
|---------------|------------|--------------|-----------|
| A. Financial problems |            |              |           |
| B. Lacking friends |            |              |           |
| C. Health problems |            |              |           |
| D. Too much work |            |              |           |
| E. Lack of confidence |            |              |           |
| F. Lack of organization |            |              |           |
| G. Too little sleep |            |              |           |
| H. Being perfectionist |            |              |           |
| I. Lack of self-discipline |            |              |           |
| J. Inability to prioritize |            |              |           |
| K. Deadline pressure |            |              |           |
| L. Medium of instruction (Russian medium) |            |              |           |
| M. Climate |            |              |           |
| N. Accommodation satisfaction |            |              |           |
| O. Culture |            |              |           |

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