

# Learning and growing in a foreign context: Review of literature on cross-cultural adaptation of international students

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## Abstract

**Research background:** The evolving opportunities of studies at foreign universities and the geographical expansion of the labour market create the need of facilitating a process of adapting students to studying and working. Despite a rapid increase in the number of international students in the higher education sector, little is known about their adaptation.

**Purpose of the article:** The aim is to point out the topicality and importance of the issue of adaptation of foreign students in the globalizing world in the form of the bibliometric analysis of scientific publications.

**Methods:** We use a combination of methods: setting parameter search by keywords, number of citations and publications, their segmentation, as defined by classification disciplines, and graphical analysis. The sample used consists of articles from WoS - Core Collection.

**Findings & Value added:** The findings of this study have important implications for universities and educators in relation to helping students in their pursuit of academic and work success. The results provide a broader view of the research continuum and the publishing trends, in the domain of the adaptation process of students studying at foreign universities.

**Keywords:** *bibliometric analysis; students; adaptation; study; labour market*

**JEL Classification:** *I12; J24*

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## 1 Introduction

Foreign migration is closely connected with the globalisation process, and it is one of its natural consequences. The world has been internationalised and globalised, the transnational mobility of students all over the world included. The ever-developing possibilities of studying abroad and the geographic expansion of the labour market have resulted in an increased mobility of young people (Johnson, 2020). Foreign students also represent a significant part of the Slovak higher education sector. Universities are responsible for the education of foreign students and the development of meta competences in a country and their overall adoption (adaptation, study, personal relations, work activities, everyday life etc.). Thus, study provides all the opportunities for their success, namely: academic, personal and professional. The paper has emphasized the up-to-datedness of the issue of foreign students' adaptation to changes in living conditions, and in the study and work environment. It presents the starting points leading towards the understanding of concurrently running adaptations in the form of the bibliometric analysis of scientific publications. The topic of the article has resulted from a project dealt with at the Department of Social Sciences, Technical University of Košice under the name Education of Foreign Students with the emphasis on creating key competences in the context of building a job career and inclusion in the Slovak labour market, which has focused on such education of students that would increase their success in adaptation to higher education study, their competence and their asserting in the labour market (Ferencz et al., 2020).

## 2 Theoretical Background

Adaptation represents a general property of an organism to adjust to the conditions, in which it exists, including the adjustment of behaviour, perception, thinking and attitudes. A foreign student is an established personality requiring adaptation to the reality and specifics of new society.

How successfully an individual is anchored in the world of their family, school and in the world of people and work is expressed by objective adaptation. Subjective adaptation is evaluated based on how satisfied an individual feels in these areas of life or whether they feel anxious and troubled (Badelina, 2020). The process of adaptation to a new country has usually several phases - leaving the country of origin, legalisation of one's stay; ensuring existential conditions: accommodation, work, language, cultural and social adjustment or return to one's home country. This process is not the same for each individual. *Personal* variables concerning self-concept (e.g., the perception of one's own potential, self-assessment, own effectiveness, clarity of one's self-concept), and *situational variables* (influenceability, ability to assess situations as non-accidental or accidental) also play their part. What they have in common is that they have to "adapt to the new environment": to learn new ways of behaving, feeling, and thinking. This can be unexpected and demanding (Furnham, 2019). Adaptation to new environment is perceived as a multi-dimensional variable due to the recognition of more of its dimensions based on various cognitive, emotional and behavioural manifestations (Neely-Prado et al. 2019). Generally speaking, students must adjust in the areas such as new cultural, economic, and social environment of the country given; institutional system of the university given; cultural and social atmosphere of the university given; and new free-time arrangement. It results in various forms of adaptation: *Social adaptation* is considered a comprehensive lifelong process, in which an individual acquires essential standards, values, habits and behavioural patterns in the culture and society in question, thus becoming its member (Terziev, 2019). It is social support that predicts adaptation to study and university environment (Lee et al., 2018). New culture requires a conscious effort to understand and interpret new verbal, non-verbal, contextual,

social and other meanings in communication. This is the time of adjustment to a new environment – *cultural adaptation*. Social cultural adaptation is mainly evaluated based on the living environment adaptation, interpersonal adaptation, and perceived value adaptation. (Luo, Zhang, 2019). *Adaptation to study and university* is understood as a process leading towards the achievement of such an individual's mental and physical state that enables successful study of the selected field and involvement in social structures at the university of choice and creating positive relations to relevant life and work conditions together with an adequate resistance to stress factors (Yu, Wright, 2016). *Work adaptation* represents processes of adjustment to physical work conditions and demands of work activities related to expertise and a new employee's ability to work (Gajda, 2019) in terms of such work contents and character, work conditions, management method and style, work organisation etc. The process can only be successful in case of interaction between personality and environment. Person's ability to satisfy his/her needs without any internal and external conflicts, to perform professional activities, including studying, efficiently is the evidence of high level of adaptation (Latipov et al, 2017).

### **3 Methodology**

The authors' objective is to translate the bibliometric analysis of scientific publications into the topic of foreign students' adaptation. There are currently several data platforms suitable for bibliometric analyses. Liao et al. (2017) suggest the databases such as Scopus, Web of Science and Science Direct. Lu (2017) uses Web of Science, Scopus and Google Scholar. We have used Web of Science (hereinafter WoS) for the particular needs of the analysis due to the following: (1) the database provides a wide interdisciplinary extent which corresponds to the character of the topic subject to our research; (2) the WoS service directly integrates a spectrum of suitable tools for bibliometric analyses. Within WoS, we have decided for WoS - Core Collection, as this database is robust and provides a credible overview of today's scientific efforts. It contains over 21,000 reviewed scientific journals of high quality and covers 250 scientific fields, starting from natural and technical sciences and ending with social sciences and humanities (WoS / Core Collection, 2020). An alternative to Core Collection would be Current Content Connect. This, however, is limited to high-profile scientific journals where the quality of research is thoroughly verified (Current Content Connect, 2020). As our goal is to provide a wider overview of current research continuity and publication tendencies, we have decided for Core Collection which to a large extent also includes the WoS / Current Content Connect database.

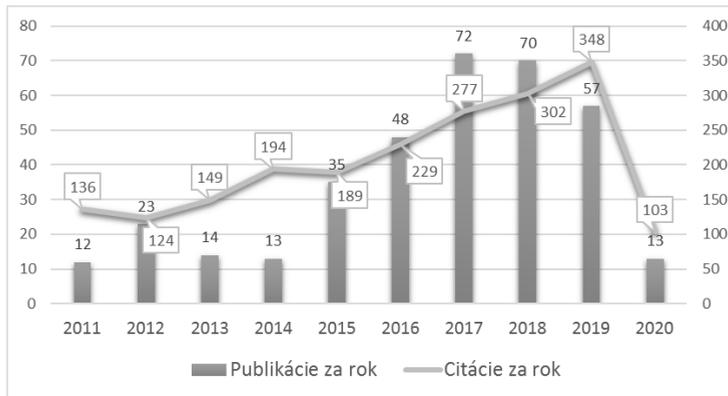
#### **3.1 Analysis of Foreign Students Adaptation**

For the purpose of a citation analysis concerning "Foreign students adaptation" the search parameters have been set up through the key words „foreign, students, adaptation“, which has enabled us to search for the articles in headings, key words and abstracts. No limits have been set, not even in relation to the search for document types. This made it possible to create a better overview of publication spectrum: scientific articles, conference papers, book chapters etc. The found documents have subsequently been put in the order based on the number of citations. The following table and chart show the annual number of citations and publications within the topic subject to research.

**Table 1.** Citation analysis, the number of quotes and publications to the topic of “foreign students adaptation”, database - Web of Science - Core Collection.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Number of publications a year	12	23	14	13	35	48	72	70	57	13
Number of citations a year	136	124	149	194	189	229	277	302	348	103

Source: Web of Science, citation analysis, May 2020

**Figure 1.** Citation analysis, number of citations and publications concerning the topic of “foreign students adaptation”, database - Web of Science - Core Collection.

Source: Web of Science, quote analysis, May 2020

It is clear from the chart and the table that the number of publications has been growing and that, between the years 2011 and 2019, such a number increased several times and that the number of citations has also been systematically increasing. The total number of publications within this topic is 431, the h- index is 26 and the average number of citations per item is 6.02, which can be interpreted as a situation in which the research community is lively and active and is interested in the intellectual and publication activities within the community given. The total number of citing articles and deliverables is 2,142 (2,080 without auto-citations).

The following table (Table 2) has presented the classification of publications based on classification fields - WoS. As expected, the largest number of publications is in the field of education sciences and pedagogical research (47,6%), social sciences (10 %), psychology (7 %), sociology (6,2 %), and general and special linguistics (together over 10 %). The rest of the fields does not exceed 3 %.

**Table 2.** Topics of publications as per WoS classification fields.

Research areas as per WoS	Number of records	% of the total number of 431
Education and pedagogical research	205	47.564 %
Social sciences - interdisciplinary approach	42	9.745 %
Psychology - interdisciplinary approach	30	6.961 %
Sociology	27	6.265 %
Linguistic	25	5.800 %
Linguistic focused on a particular language	24	5.568 %
Social psychology	21	4.872 %

Humanities - interdisciplinary approach	12	2.784 %
Applied psychology	10	2.320 %
Pedagogical psychology	9	2.088 %
Education sciences	8	1.856 %
Interdisciplinary sciences	8	1.856 %
Communication	7	1.624 %
History	7	1.624 %
Clinical psychology	7	1.624 %
Field/territorial studies	6	1.392 %
Business	6	1.392 %
Management	6	1.392 %

Source: Web of Science, quote analysis, May 2020

The following table (Tab. 3) presents an overview of the most frequently cited articles within the topic given. The search has covered all the databases accessible through WoS in order to find the most relevant articles in the field.

**Table 3.** Overview of most frequently cited articles within “foreign student’s adaptation” topic.

1. <b>Adaptive memory: Survival processing enhances retention</b> By: Nairne, James S.; Thompson, Sarah R.; Pandeirada, Josefa N. S. JOURNAL OF EXPERIMENTAL PSYCHOLOGY-LEARNING MEMORY AND COGNITION Volume: 33 Issue: 2 Pages: 263-273 Published: MAR 2007	20	22	21	23	8	251	17.93
2. <b>DEVELOPMENT OF AN ACCULTURATIVE STRESS SCALE FOR INTERNATIONAL STUDENTS - PRELIMINARY FINDINGS</b> By: SANDHU, DS; ASRABADI, BR PSYCHOLOGICAL REPORTS Volume: 75 Issue: 1 Pages: 435-448 Part: 2 Published: AUG 1994	21	18	24	24	5	227	8.41
3. <b>'I wouldn't want it on my CV or their records': medical students' experiences of help-seeking for mental health problems</b> By: Chew-Graham, CA; Rogers, A; Yassin, N MEDICAL EDUCATION Volume: 37 Issue: 10 Pages: 873-880 Published: OCT 2003	14	14	14	26	4	203	11.28
4. <b>Theoretical models of culture shock and adaptation in international students in higher education</b> By: Zhou, Yuefang; Jindal-Snape, Divya; Topping, Keith; et al. STUDIES IN HIGHER EDUCATION Volume: 33 Issue: 1 Pages: 63-75 Published: 2008	25	21	21	30	9	185	14.23
5. <b>COUNSELING INTERNATIONAL STUDENTS</b> By: PEDERSEN, PB COUNSELING PSYCHOLOGIST Volume: 19 Issue: 1 Pages: 10-58 Published: JAN 1991	5	14	14	5	2	171	5.70
6. <b>E pluribus unum: Bilingualism and loss of language in the second generation</b> By: Portes, A; Hao, LX SOCIOLOGY OF EDUCATION Volume: 71 Issue: 4 Pages: 269-294 Published: OCT 1998	7	11	10	5	2	155	6.74
7. <b>Learning and growing in a 'foreign' context: intercultural experiences of international students</b> By: Gu, Qing; Schweisfurth, Michele; Day, Christopher COMPARE: A JOURNAL OF COMPARATIVE AND INTERNATIONAL EDUCATION Volume: 40 Issue: 1 Special Issue: SI Pages: 7-23 Published: 2010	20	21	18	26	3	151	13.73
8. <b>Understanding academic performance of international students: the role of ethnicity, academic and social integration</b> By: Rienties, Bart; Beausaert, Simon; Grohner, Theresie; et al. HIGHER EDUCATION Volume: 63 Issue: 6 Pages: 685-700 Published: JUN 2012	18	20	20	25	5	119	13.22
9. <b>When in Rome ... Learn Why the Romans Do What They Do: How Multicultural Learning Experiences Facilitate Creativity</b> By: Maddux, William W.; Adam, Hajo; Galinsky, Adam D. PERSONALITY AND SOCIAL PSYCHOLOGY BULLETIN Volume: 36 Issue: 6 Pages: 731-741 Published: JUN 2010	17	12	15	12	3	115	10.45
10. <b>Satisfaction with life among international students: An exploratory study</b> By: Sam, DL SOCIAL INDICATORS RESEARCH Volume: 53 Issue: 3 Pages: 315-337 Published: MAR 2001	12	10	12	11	5	106	5.30

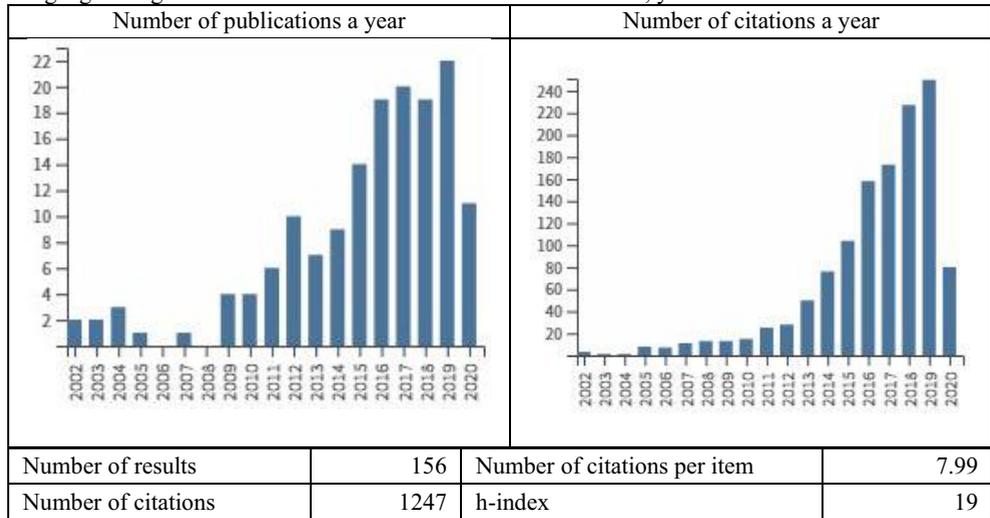
Source: Web of Science, quote analysis, May 2020

### 3.2 Analysis of the topic of foreign students' adaptation during their university study

Key words: (international student\* adaptation (university or study) (problem\* or barrier\*))

Languages: English

All the databases, years without limitation



**Table 4.** Summary of deliverables.

Name of publication	Authors	Source	Year	Cit.
A review of the acculturation experiences of international students	Smith, Rachel A.; Khawaja, Nigar G.	International j. of intercultural relations	2011	224
Prevalence of Problematic Mobile Phone Use in British Adolescents	Lopez-Fernandez, Olatz; Honrubia-Serrano, L.; Freixa-Blanxart, Montserrat; Gibson	Cyberpsychology behaviour and social networking	2014	100
Prevalence of substance use and delinquent behaviour in adolescents from Victoria, Australia and Washington State, United States	McMorris, B. J.; Hemphill, S. A.; Toumbourou, J. W.; Catalano, R. F.; Patton, G. C.	Health education & behaviour	2007	94
Crossing the distance: Adjustment of Taiwanese graduate students in the United States	Swagler, MA; Ellis, MV	J. of counselling psychology	2003	75
Why can't we be friends?: Multicultural attitudes and friendships with international students	Williams, Christina T.; Johnson, L. R.	International j. of intercultural relations	2011	68
Profiles of Acculturative Adjustment Patterns Among Chinese International Students	Wang, Kenneth T.; Heppner, P. P.; Fu, Chu-Chun; Zhao, R.; Li, F.; Chuang	J. of counselling psychology	2012	63
Critical issues of literature on counselling international students	Yoon, E; Portman, T.A.A	J. of multicultural counselling and development	2004	55
Homesickness and Adjustment in University Students	Thurber, C. A.; Walton, E.A.	J. of American college health	2012	54

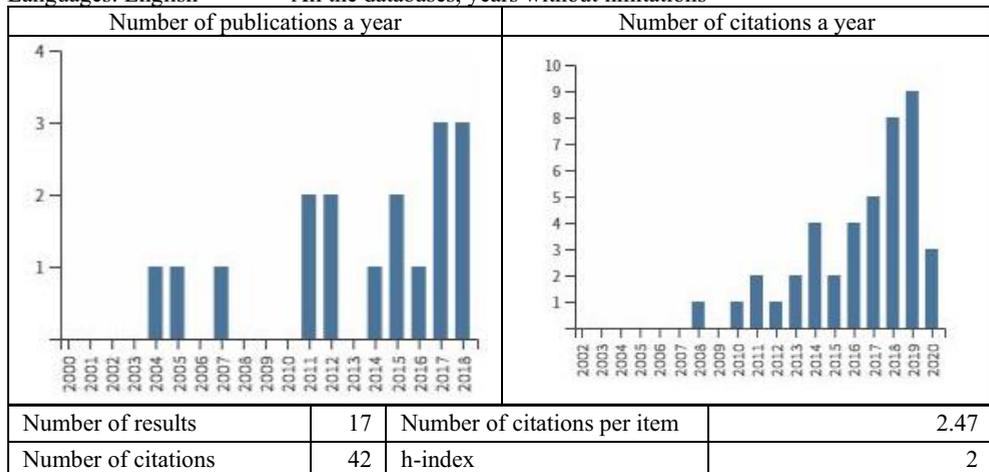
Internationalisation of higher education: integrating international students into Canadian academic environment	Guo, Shibao; Chase, Mackie	Teaching in higher education	2011	45
Promoting Intercultural Contact on Campus: A Project to Connect and Engage International and Host Students	Campbell, Nittaya	J. of studies in international education	2012	40
Assessing the predictive validity of cultural intelligence over time	Ward, C.; Wilson, J.; Fischer, R.	Personality and individual differences	2011	35
Italian Adolescent Gambling Behaviour: Psychometric Evaluation of the South Oaks Gambling Screen: Revised for Adolescents (SOGS-RA) Among a Sample of Italian Students	Colasante, E.; Gori, M.; Bastiani, L.; Scalse, M.; Siciliano, V.; Molinaro S.	J. of gambling studies	2014	32
The Birth of Academic Subalterns: How Do Foreign Students Embody the Global Hegemony of American Universities?	Kim, Jongyoung	J. of studies in international education	2012	26
Exploring the experiences and coping strategies of international medical students	Malau-Aduli, Bunmi S.	Bmc medical education	2011	23
Understanding the symbolic capital of intercultural interactions: a case study of international students in Australia	Lien Pham; Ly Tran	International studies in sociology of education	2015	22
Internationalization of Canadian higher education: discrepancies between policies and international student experiences	Guo, Yan; Guo, Shibao	Studies in higher education	2017	21

Source: authors, 2021

### 3.3 Analysis of foreign students' adaptation to labour market

Key words: (international student\* (job\* or labour or labour/ market adaptation)

Languages: English All the databases, years without limitations



**Table 5.** Summary of deliverables.

<b>Name of publication</b>	<b>Authors</b>	<b>Source</b>	<b>Year</b>	<b>Cit.</b>
Making Careers in the Occupational Niche: Chinese Students in Corporate Japan's Transnational Business	Liu-Farrer, Gracia	J. of Ethnic and Migration Studies	2011	26
Hitting, Missing, And in Between: A Typology of the Impact of Western Education on the Non-Western World	Grigorenko, Elena L.	Comparative Education	2007	13
Appropriation of Foreign Approaches for Sustainable Development and Transformational Changes in Vietnamese Vocational Education	Tien Thi Hanh Ho; Ly Thi Tran	Higher Education Skills And Work-Based Learning	2018	1
More Active Outside the Classroom Chinese International Students' Interactions with Chinese Communities in Australia	Gao, Jia	J. of Chinese Overseas	2016	1
Gender Segregation in Occupational Expectations and in the Labour Market: International Variation And the Role of Education And Training Systems	Hillmert, Steffen	Gender Segregation in Vocational Education	2015	1
Development of Intercultural Competence of Students with Disabilities in the Process of Improving a Foreign Language	Kireeva, Irina Anatolyevna a kol.	Modern J. of Language Teaching Methods	2018	0
Developing Students' Leadership Skills at Higher Educational Institutions for Their Successful Adaptation at the Labour Market	Mizintseva, M.; Sardarian, A.; Petrochenko, A.	Proceedings of the 2nd International Conference on Social, Economic and Academic Leadership (Icseal 2018)	2018	0
Global Pressure or National Identity: Strategic Challenges for Russian Business Schools	Gerasimenko, V.; Molchanova, O.	Serbian J. of Management	2017	0
Study Regarding Dimensions of Graduates Satisfaction of the Military Higher Education Institutions	Stoenica, Laurentiu Florentin	Inted2017: 11th International Technology, Education and Development Conference	2017	0
Graduate Students Satisfaction of Business Administration Bachelor's Program	Vasiliu, Cristinel; Albastroiu, I.; Dina, Razvan	Basiq International Conference: New Trends in Sustainable Business and Consumption 2017	2017	0
Approaches to Designing a Language Course for Engineering Students	Sidorenko, T.; Loginova, A.	Inted2015: 9th International Technology, Education and Development Conference	2015	0

Navigating the Impending Mooc Storm in Middle Eastern Higher Education	Gallacher, D.	Inted2014: 8th International Technology, Education and Development Conference	2014	0
Analysis of Reform on Badminton Specialist Course	Wang, Jin Liang; Chen, Xiao Xia	2012 2nd International Conference on Physical Education and Society Management (Icpesm 2012), Vol. 9	2012	0
Elearning in Lithuania: Overcoming Barriers Towards Universal Access to Education	Rutkauskiene, Danguole; Pociute, Egle	3rd Internat. Conference on Politics and Information Systems: Technologies and Applications, Proceedings	2005	0
Executive Economic Thinking Changes in Lithuania in Global Economy Context	Ciburieni, J; Pukeliene, V	EISTA '04: International Conference on Education and Information Systems: Technologies and Applications, Vol. 3	2004	0

Source: authors, 2021

The results show that the process of foreign student's adaptation runs on several levels and includes the psychological, social, cultural, climatic, physiologic, and inter-cultural adaptation, closely relating to the mental, emotional, intellectual and physical load. We support the opinion that it is necessary to increase the interest in and pay more attention to the given issue. This has to be achieved not only by the pedagogical employees of the Department of Social Sciences but also by the tutors of the first years, freshmen students and faculty management. As part of our conclusion, it is to be stated that we have reached our goal concerning the submitted research. The results can be of benefit for more specific and professional preparation of the issue given. At the same time, they contain the proposal of alternative solutions and recommendations related to the improvement of the current adaptation process state at universities.

## 4 Discussion and Conclusion

The bibliometric analysis has discovered that most of the existing research focuses on the small children's or secondary school students' adaptation. to schools. Not many of them, however, focus on university students though. Foreign students represent a significant part of the Slovak higher education sector. For many students from nearby Slavic countries the completion of Slovak university study means more opportunities in the labour market. In order to successfully adapt to, integrate in and settle into a new environment, this group of foreigners clearly needs support and help of various players, with whom they come into contact in various areas of integration - education, accommodation, employment, health and social care, cultural and social integration etc. Thus, the adoption of several internal, national reforms focused on higher education study and active employment policy needs to be emphasised. Help with the adaptation to a different study and social environment increases positive study, work and stay results. Foreign students thus often become more self-confident and open to both coexistence and various ideas related to work life, and have better social and language skills. Many of these benefits occur naturally as the consequence of adjustment to the demands of life in a foreign environment, meeting different types of people and relying on one's abilities. Help and special consultancy aimed at students' preparation for a multi-cultural environment and easier adaptation to different study and social environments have increased the positive results of one's study, work and stay.

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