

## EFFECTS OF STAY ABROAD EXPERIENCES ON GLOBAL BUSINESS LITERACY: A CASE OF CZECH AND SLOVAK UNIVERSITY STUDENTS

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**Abstract:** Global business literacy is generally considered one of the key competencies important for functioning in today's interconnected global business world. Despite some studies investigating its determinants carried out worldwide, findings related to Central Europe are rather scarce. The aim of this paper is to identify the effects especially of stay abroad experiences, but also other related factors on cultivation of global business literacy of university students. For this purpose, a total of 255 business students from the Czech Republic and Slovakia filled out the online questionnaire. The results of correlation and regression analysis showed that the most important factor for cultivating global business literacy is the completion of a course related to international business, followed by the intensity of interactions with foreigners. The stay abroad experiences significantly positively affect only the self-efficacy dimension of global business literacy. Overall, it appears that global business literacy can be well developed also through internalization activities at home.

**Keywords:** global business literacy, stay abroad, interaction with foreigners, students

### 1 Introduction

Today's global and interconnected world requires young people, especially those who aspire to work in the global business world, to be globally literate. Global literacy can be understood as a key literacy that connects global knowledge with awareness and ability to solve global issues (Cakmak et al., 2017), which in the business context, can be defined as global business literacy (hereinafter also "GBL"). Higher educational institutions, in an effort to prepare their students well for operating in a global business world, started to internationalize their environment several decades ago. In the European context, especially the Erasmus mobility program launched in 1987, fostered international mobilities of students and teachers. The new participating countries, including the Czech Republic and Slovakia, also intensively used the benefits of the program (Rodríguez González et al., 2011). In connection with these two countries, Breznik and Skrbinjek (2020) concluded that the Czech Republic should be seen as a good sender of student mobility, and Slovakia appears more like a peripheral country, as student mobility is mainly concentrated in neighboring countries. Thus, both of the countries have actively participated in the Erasmus program, although each in different way.

The effects of study abroad programs on the development of global literacy or more broadly defined global competence have widely been studied in the empirical literature. However, the majority of studies have been carried out in the countries in the north America, western Europe or China. Moreover, the authors usually distinguish between short-term and long-term study abroad programs (e.g. Geyer, 2017; Le et al., 2018), however, the distinguishing criterion in terms of the length of experience is not unified. The present study contributes to the existing literature by analyzing the effects of not only short-term and long-term study abroad programs, but also other very short-term stay abroad experiences, such as short visits, on global business literacy of business students. In addition, the research itself is carried out in the Czech and Slovak environment, which is relatively neglected in the literature so far.

The aim of the study is to investigate the effects of stay abroad experiences as well as other factors on global business literacy of university students, on a basis of correlation and regression analysis. The rest of the paper is organized as follows: The

literature review brings overview of studies that investigated effects of various study abroad programs on global knowledge, skills and attitudes of university students. It is followed by description of methodology used within own research and subsequent presentation of the achieved results. The results are then discussed, leading to the formulation of implications for internalization activities as well as for the future research agenda. Conclusion briefly summarizes the findings.

### 2 Literature Review

Studies looking at the effects of study abroad programs on global competencies usually distinguish between short-term and long-term study abroad programs, but the time frame of this distinction appears to be relative. Some authors point out to the fact that for comprehensive development of global competence a stay abroad in substantial duration is required. Berg et al. (2009), mention an optimal time frame spent by students abroad in a range of about 13 to 18 weeks to develop intercultural. An even longer stay abroad of at least half a year is considered by Behrnd and Porzelt (2012) to be necessary for the significant development of students' strategic intercultural competence. In a similar duration of one semester, Petersdotter et al. (2017) consider international academic mobility to be significant for the development of students' perceived self-efficacy. At the same time, it was found that the number of social contacts per week mediates the development of higher self-efficacy abroad. These findings were basically confirmed by the qualitative study conducted by Maharaja (2018) in the context of American students studying one semester abroad in different countries. The participants' personal essays about their life experiences documented that they gained a better understanding of their own culture and the culture of other countries, increased their level of global thinking, self-confidence, assertiveness, self-awareness, patience, adaptability and flexibility.

On the other hand, there were shown significant effects of shorter study/ stay abroad programs too. Wolff and Borzikowsky (2018) demonstrated a significant increase in the global intercultural competence of German students after three months spent abroad, with the largest increase recorded in the cultural identity reflection, which shows an intense and constant reflection of one's own cultural character. Schenker (2019) evaluated the effects of eight-week international summer program (conducted in the U.S. and Germany) and showed that students reported statistically significant increase in the majority of global competence dimensions, especially attentiveness to diversity, historical perspective, and open-mindedness but also statistically significant decline in one area, namely global awareness. A study by Nguyen (2017) proved significant influence of various short-term study abroad programs ranging from two to five weeks, on the U.S. students' self-perceived intercultural competence. Similarly, Reynolds-Case (2013) highlighted the development of students' cultural and pragmatic competence manifested through a regional linguistic feature after completion of a four-week study abroad program. Gaia (2015) also concluded that even a three-week study abroad experience increases participants' cultural understanding and global perspective. Analysis conducted by Gil and Reyes (2020) showed that Mexican business students who participated in a very short one-week international trip to New York developed their global mindset together with professional aspirations and networking skills.

However, many authors in regard with short-term programs concluded that they may not be sufficient for the development of all aspects of global competence or literacy. Thus, they need to be supplemented by longer stay abroad or other activities related to internalization at home. As for the latter, their attention is mainly focused on domestic students, who have been rather overlooked in intercultural research, even though they are much

more numerous compared to internationally mobile students (Jon, 2013; Soria and Troisi, 2014).

Some authors showed the impact of well-designed courses related to international business (Schworm et al., 2017) or cross-cultural management (Eisenberg et al., 2013) to the development of students' global literacy, cultural intelligence or even career success. In addition, Fakhredin et al. (2021) suggested that the implementation of specific supplementary teaching techniques, such as experiential and blended learning, which can replace international exposure, can be beneficial for the development of students' cultural intelligence. The examples in this regard can be collaborative online international learning experiences (Garcia et al., 2023), working in international virtual project teams (Rauer et al., 2021), or incorporation of multiple intelligences in online international managerial courses (Pathak, 2018).

Overall it seems that stay abroad experiences are beneficial for the development of global literacy, however their effects differ mainly depending on the length and intensity of their duration. In addition, to increase the range of students involved in internalization activities, many actions described in the relevant literature can be taken as part of internalization at home efforts. As concluded by Wickline et al. (2020), study abroad is not the only one way to increase students' intercultural competence.

### 3 Methodology

The aim of the study is to identify the effects of stay abroad experiences and other factors on cultivation of global business literacy of university students. For this purpose, the online questionnaire was filled out electronically via MS Forms platform by university students in two countries, namely Czechia and Slovakia, during the last week of the summer term of academic year 2022/2023. In Czechia, a total of 71 business students from Masaryk university in Brno and Prague University of Economics and Business participated in the study. In Slovakia, a total of 184 business students from University of Economics in Bratislava, Faculty of Business Economics seated in Košice participated in the study. Since our previous study (i.e. Bobenič Hintošová, 2023) showed almost no significant differences in the level of global business literacy between these groups of Czech and Slovak students, our total sample consisting of 255 students can be considered culturally homogeneous. It can also be justified by the fact that 28% of the students in the Czech sample are students from Slovakia.

For the purpose of this study, the global business literacy was assessed through the instrument developed by Arevalo et al. (2012), within which five dimensions of global business literacy were covered, namely: *Relationship development* (6 items) is related to the ability to develop and maintain relationships with foreigners. *Self-awareness* (7 items) reflects the perceived knowledge about the own culture and its impact on individual's behavior in an unfamiliar environment. *Self-efficacy* (8 items) expresses self-confidence of a person to deal with life's challenges and specially to adapt to a life and work abroad. *Technical competence* (9 items) is considered as a perceived knowledge of international business and related issues. Finally, *willingness to learn* (8 items) reflects the effort to acquire additional knowledge regarding geography, history, economy of other countries and their cultures. Thus, the main part of the questionnaire consisted of 38 items/statements, while the degree of agreement/disagreement with them was expressed by the respondents on a 7-point Likert scale. To reduce potential response bias, some items were worded negatively and responses were subsequently reverse coded. In general, the higher the score achieved, the higher the global business literacy.

In addition, the questionnaire also contained some background information, which was considered as potential factors determining the level of global business literacy. Within this study we focus on the following factors: Since our main interest is to evaluate the effect of the experiences of living or studying abroad, we asked the respondents whether they had traveled or lived outside their home country and how long this experience

lasted. This factor we labelled as *stay abroad* and the responses were assigned by points depending on the length and intensity of this experience, ranging from 1 (no stay abroad experience) to 6 (currently living and studying abroad). We then considered whether respondents had taken a college class (course) related to international studies or international business (*IB course*), with possible responses – no (1 point); yes, at my home university (2 points); yes, outside my home university (3 points). Another factor taken into account was the intensity of interactions with people from countries other than one's own country (*interactions*), which responses ranged from 1 (rarely) to 6 (every day). Finally, we took into consideration also the *age* of respondents. The descriptive characteristics of the used variables are shown in table 1.

Table 1: Descriptive statistics of the used variables

Variable	N	Mean	Std. dev.
Relationship development	255	5.1622	0.7546
Self-awareness	255	5.2107	0.6656
Self-efficacy	255	4.9181	1.0570
Technical competence	255	4.8728	0.7474
Willingness to learn	255	5.3990	0.5966
Stay abroad	255	2.8300	1.4090
IB course	255	1.4700	0.5080
Interactions	255	2.5400	1.8160
Age	255	21.890	1.7750

Source: own processing

Among the particular dimensions of GBL, students on average reported the highest score in the willingness to learn dimension, accompanied by the lowest standard deviation, which indicates similar attitudes of the students in this dimension. On the other hand, the lowest score was reached in the dimension of technical competence, i.e. knowledge about international business, with relatively higher variation among students in this regard. This can be related to the fact that the majority of students (i.e. 53%) have not taken a course related to international studies/international business yet. The average score is 1.47. With regard to stay abroad experiences, average student traveled outside of home country for short visits or for shorter (4 weeks or less) study abroad programs. Only 24% of students lived or studied abroad for more than one month. Students in our sample on average interact with people from different countries two or three times a month. The average age of our students is almost 22 years, what is influenced by the relatively high portion of master students in our sample.

In is in our interest to investigate the effect of stay abroad experiences and other potential determinants such as taking an IB course, interactions with foreigners and age on a level of global business literacy, which is evaluated through its five dimensions. For this purpose, the regression and the correlation analyses were applied. Table 2 shows Pearson correlation coefficients between each pair of potential determinants of GBL, as well as between the pairs of these determinants and dimensions of GBL.

Table 2: Correlation matrix

	Stay abroad	IB course	Interactions	Age
Stay abroad	1			
IB course	0.218***	1		
Interactions	0.410***	0.092*	1	
Age	0.103*	0.296***	0.014	1
Relationship development	0.195***	0.203***	0.245***	-0.112**
Self-awareness	0.014	0.163***	-0.062	0.060
Self-efficacy	0.361***	0.162**	0.317***	0.007
Technical competence	0.207***	0.319***	0.251***	0.210***
Willingness to learn	0.099*	0.097*	0.120**	-0.036

Note: \*, \*\*, \*\*\* denote statistical significance at the level of 10, 5, or 1 %, respectively.

Source: own processing

Although the correlation matrix shows some statistically significant relations between the pairs of potential determinants of GBL, the strength of relation is rather small, thus we do not expect multicollinearity problem in the regression models. At the same time, we expect that some of the potential determinants will have significant effect on some of the dimensions of global business literacy, which form dependent variables in the subsequent regression models.

#### 4 Results

Our analysis was aimed to determine the factors that potentially influence particular dimensions of global business literacy. We are interested especially in the impact of stay or study abroad experiences in this regard.

Following table presents the results of the regression analysis, within which five regression models were constructed, each of which is dedicated to one of the dimensions of global business literacy forming the explained variables. As explanatory variables were used stay abroad experiences, taking course related to international business, frequency of interactions with foreigners and age. Results of linear regression analysis are shown in table 3.

Overall, all models are statistically significant according to F-statistics and report no autocorrelation problem (values of Durbin-Watson test are around 2), except for the last model. At the same time, there is no multicollinearity issue (values of VIF are close to 1).

Table 3: Regression results (t values in parentheses)

	Model 1	Model 2	Model 3	Model 4	Model 5
Dependent variable	Relationship development	Self-awareness	Self-efficacy	Technical competence	Willingness to learn
Constant	6.105*** (10.995)	4.864*** (9.418)	4.441*** (5.860)	2.856*** (5.313)	5.618*** (12.103)
Stay abroad <i>VIF=1.255</i>	0.47 (1.328)	0.005 (0.143)	0.196** (4.059)	0.029 (0.858)	0.020 (0.664)
IB course <i>VIF=1.141</i>	0.330*** (3.523)	0.217** (2.492)	0.212* (1.659)	0.368*** (4.058)	0.116 (1.484)
Interactions <i>VIF=1.204</i>	0.080*** (2.962)	-0.030 (-1.198)	0.117*** (3.197)	0.084*** (3.218)	0.031 (1.361)
Age <i>VIF=1.099</i>	-0.081*** (-3.063)	0.004 (0.169)	-0.031 (-0.874)	0.054** (2.118)	-0.024 (-1.086)
Adjusted R <sup>2</sup>	0.116	0.017	0.161	0.156	0.012
Durbin-Watson	1.963	1.950	2.106	1.868	0.886
F stat.	9.371	2.129	13.200	12.716	1.791
<i>Sig.</i>	0.000	0.078	0.000	0.000	0.131

Note: \*, \*\*, \*\*\* denote statistical significance at the level of 10, 5, or 1 %, respectively.

Source: own processing

The first model shows factors that influence the ability to develop relationships with foreigners. Among the investigated factors, except for the constant, the highest positive statistically significant impact has taking a course related to international business, followed by the frequency of interactions with foreigners. Surprisingly, age play a small negative role in this regard. In the second model, which is explaining the self-awareness, only one statistically significant factor is evident, namely the course related to international business, which has a positive effect.

In the case of the third model, which shows the factors determining self-efficacy, the IB course is marginally significant, besides other two positively statistically significant factors, namely stay or study abroad experiences and the frequency of interactions with foreigners. The last mentioned is significant factor also in the case of fourth model, explaining the technical competence, i.e. the perceived level of international business knowledge. The other two positively significant factors are the IB course and the age of respondents. In the fifth model, except for the constant, none of the investigated factors is statistically significant and the adjusted R<sup>2</sup> of the model is very low. Thus, it seems that the dimension of willingness to learn is determined by other factors than we considered in our study. Moreover, according to F-statistics, the model is not statistically significant.

#### 5 Discussion

When looking at the potential determinants of global business literacy, it can be concluded that among the investigated factors, taking a course related to international business or international studies plays the most important role. It positively significantly affects four of the five dimensions of GBL. Frequency of interactions with foreigners is positive and significant in three of the five GBL dimensions. Thus, it appears that some aspects of global business literacy, particularly technical competence, self-efficacy and relationship development, can be well developed through internalizing activities at home. Meng et al.

(2017) also investigated the effects of enrolment in courses related to internationalization and the contacts with foreigners through domestic campuses activities in the Chinese context and found that both of these factors are significant predictors of students' global competence. This is basically in line with conclusions provided by Fakhreldin et al. (2021) who suggested that the implementation of well-designed cross-cultural management courses supplemented by experiential and blended teaching techniques can replace international exposure.

Age has a small significant but rather controversial effect on two GBL dimensions. It is positively associated with technical competence, which should be a logical consequence of the acquisition of more knowledge by older students, but negatively associated with the development of relationships, which may reflect the curiosity of younger students to develop new relationships.

The stay abroad experiences positively influence all the dimensions of GBL, however, statistical significance was shown only in the case of self-efficacy. In general, it can be concluded that the more time a student spends abroad, the higher is the achieved self-efficacy. Similar findings were presented in the study by Petersdotter et al. (2017), who in addition showed that the number of social contacts encountered per week mediated the development of higher self-efficacy abroad. Frequency of interactions with foreigners is an important determinant of self-efficacy also within our study. In the similar sense Genkova and Kruse (2020) also concluded that students' show more cultural intelligence, the longer they stay abroad.

However, our study also revealed that there are other factors that determine the level of global business literacy that we did not consider. Among other factors that can possibly influence the students' intention to study abroad and gain specific competencies, personality traits (Niehoff et al., 2017) or students' socioeconomic background (Hübner et al., 2021) can be considered, which should form part of the future research. At the same time, our study did not strictly distinguish the purpose

of the stay abroad, so the findings may differ slightly when distinguishing study and vacation abroad, which constitute our future research ambition.

## 6 Conclusion

This study aspired to evaluate the effects of stay abroad experiences and other factors on cultivation of global business literacy of business students in the Czech Republic and Slovakia. The own research was carried out on a sample of 255 university students and the data were processed using correlation and regression analysis. The results show that the length and intensity of stay abroad significantly and positively contributes only to the development of self-efficacy dimension of GBL.

The remaining dimensions seem to be well developable by other means, such as specific courses related to international business enriched with experiential teaching techniques based e.g. on online contacts with foreigners. Fostering these interactions appears to be another important factor for the development of the most dimensions of GBL. These factors can be supported not only during international exposure, but also through internalization at home and can thus be available to all students, including those who cannot afford to study abroad.

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**Primary Paper Section: A**

**Secondary Paper Section: AE, AM**