# ARE STUDENTS OF VARIOUS STUDY PROGRAMS DIFFERENTLY GLOBALLY LITERATE?

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**Abstract:** Young people in today's interconnected world are expected to be globally literate in order to be able to effectively solve situations in different cultural environments. This is particularly true for students, who in their studies focus on economics, marketing and management, since business environment in which they are supposed to operate, is highly globalized. At the same time, globally literate people should be media literate and be willing to cope with unfamiliar environments and situations. Hence, within this paper, we focus on the evaluation of global business literacy, conscious media use and risk-taking attitude of the students of master's degree study programs at the Faculty of Business Economy of the University of Economics in Bratislava, with seat in Košice. The evaluation was conducted using online questionnaire. The aim of the paper is to identify differences in the level of global business literacy, conscious media use and risk-taking attitude between groups of students who attend different study programs as well as between men and women. The results provide feedback for adjustment of the structure and content of the respective study programs so that these are more focused on the development of global business literacy.

Keywords: global business literacy, risk-taking, media literacy, study programs, gender

JEL Classification: A23, F23, M16

#### INTRODUCTION

There is no doubt that we live in an interconnected globalized world, but many predictions indicate that this interconnectedness will intensify in the future. In this context, for example, Johansen (2017) states that the new world will be based mainly on intensive digital connectivity, which will create new requirements for future leaders who will have to abandon hierarchical practices of leadership and in this context will also have to acquire new literacies. Hence, it seems that the key attributes of future talents on the global labor market will be the so-called multiliteracy, including e.g. digital literacy and skills, broad-based soft skills such as skills for teamwork, problem-solving, creativity as pointed out by Jagannathan and Maclean (2019). Higher education institutions thus face new challenges to prepare their graduates for functioning in the future world and to equip them with adequate literacies in this regard.

Specifically with regard to global literacy, it can be broadly defined as a set of global knowledge and awareness helping to understand global events (Çakmak, 2017). As stated by Nair et al. (2012), in order to promote global literacy and awareness of students, higher education institutions should make this literacy relevant for different students. They should adapt their teaching approaches to provide students with a broader global awareness and experiences as well as develop their tacit understanding that would enable them to link global and local perspectives to make them useful and meaningful for their lives and work.

Moreover, there are other literacies that can support the ability of an individual to function effectively in the new global world. For example, individuals who are better able to cope with new situations and unfamiliar environments are generally considered to be better prepared to operate in today's interconnected world. Hence, risk-taking tendency is among dimensions considered within global

competence e.g. in the frame of the Global Competence Aptitude Assessment (Global Competence Associates, 2022). The specific knowledge of risk is by Lusardi (2015) referred to as risk literacy. At the same time, with the unprecedented development of digital communication tools such as interactive platforms, social networks and media that promote interconnectedness, but are also often a source of inappropriate content or even fake news, the development of media literacy, understood as a set of skills based on critical thinking (Bulger, Davison, 2018), appears to be crucial too.

In the light of the above considerations, the aim of the present paper is to identify the differences in the level of global business literacy, conscious media use and risk-taking attitude of the students of two master's degree study programs at the Faculty of Business Economy of the University of Economics in Bratislava, with seat in Košice. In our interest is to consider the differences in terms of two slightly different study programs as well as in terms of gender in order to find out what factors (education process or demographic characteristic) play more important role in forming above mentioned literacies.

#### 1. LITERATURE REVIEW

The literature offers a number of comparative studies related to global literacy conducted in different educational or cultural contexts. We can mention a study by Zhang et al. (2010) who compared global literacy of students in China and the USA with general results that the Chinese students are more globally literate than their American counterparts are. More specifically, Chinese students reported above all, a better understanding of cross-cultural differences and the interdependence and interconnectedness of their own country with other countries. On the other hand, students in both countries showed similar level of using new literacies (i.e. ability to use information and communication technologies).

When looking at different educational approaches, Arevalo et al. (2012) concluded that for gaining foundations of global literacy related to business, the traditional classroom-based approach seems to be suitable. However, for the complexity of the global literacy development, application of also other complementary approaches would be desirable. In this context, we can mention the use of social media, as shown in the study by Alon and Herath (2014). Similarly, Yang and Kuo (2021) found that blended learning activities helped to develop students' global literacy, since through online social contacts they entered into intercultural communication with teachers coming from different cultural backgrounds.

With regard to gender, e.g. Kirkwood-Tucker et al. (2018) found that women exhibited significantly higher scores in all aspects of global mindedness than men did. Similar positive findings in favor of girls were also reported in the study by Johnson et al. (2011), which tested students' readiness for challenges that occur in a globalized world. However, similar studies conducted in the Slovak context are rather rare.

Regarding the relationship between education and risk-taking, according to Irandoust (2017), risk-averse individuals have a lower tendency to study at university. The results of the study by Nicolini et al. (2017) also confirm that respondents with low financial literacy, on average, rate their attitude towards risk more negatively than more financially literate respondents. Many studies have examined gender differences in risk attitudes, with the overwhelming conclusion that women are more risk averse than men (e.g. Twumasi Baffour et al., 2019; Charness & Gneezy, 2012).

In connection with the development of media literacy, several studies (e.g. Webb & Martin, 2012) have shown positive effects of educational programs, especially with regard to the development of critical thinking related to the media. Kahne and Boywer (2017) found that people with a higher level of media literacy are more likely to rate evidence-based posts as accurate than those containing misinformation. On the other hand, there are studies pointing out negative effects related to education in the field of media literacy, pointing in particular to filling individuals with a false sense of confidence in their ability to navigate the media environment (Sanchez & Dunning, 2018). Therefore, in their review study, Bulger and Davison (2018) stated that there is a lack of comprehensive evaluation data regarding the effects of targeted media literacy efforts. Hence, further research in this field, especially with regard to the interconnectedness of different types of literacies, is desirable.

## 2. METHODOLOGY

The aim of the present paper is to evaluate the differences in the level of global business literacy, risktaking and conscious use of media between students of two study programs as well as from gender point of view. The research sample consisted of 34 students of the master's degree study program Corporate Business and Marketing (CBM) as well as of 35 students of the master's degree study program Corporate Financial Management (CFM) at the Faculty of Business Economy of the University of Economics in Bratislava, with seat in Košice. There is a significant contentual overlap between the two study programs, however, there are also courses intended only for students of a certain study program (e.g. course International Business that is intended only for the students of CBM study program). In terms of gender, the research sample consisted of 48 women and 21 men.

For the purpose of evaluation of global business literacy of the involved students, the concept developed and validated by Arevalo at al. (2012) was used. Their concept and survey items were developed to assess the learning outcomes of a traditional classroom-based approach to education, which can be considered appropriate for our case. Besides this, the risk-taking tendency was evaluated on a basis of general risk-taking question/ statement adopted from Dohmen et al. (2017) and three complementary questions/ statements evaluating also the riskiness of purchasing behavior, which were adopted from Donthu a Gilliland (1996). With regard to conscious use of media, similarly four questions/ statements were used, two of which adopted from Koc and Barut (2016) and two of which from Jones-Jang et al. (2021).

The survey consisted of total 46 items/ statements divided into five specific and interrelated dimensions of global business literacy, namely: development of relationships - 6 items (*DoR*), self-awareness - 7 items (*SA*), self-efficacy - 8 items (*SE*), international business competence - 9 items (*IBC*) and willingness to learn - 8 items (*WtL*). Moreover 4 items/ statements evaluated risk-taking tendency (*RT*) and 4 items/ statements evaluated conscious use of media (*CUM*). Students were asked to express the extent to which they agree with each statement on this 7-point Likert-type scale: 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neither agree nor disagree, 5 = somewhat agree, 6 = agree, 7 = strongly agree. There were also some statements that were negatively worded and the responses were consequently reverse coded. In general, the higher the score, the higher the achieved global business literacy, risk-taking tendency and more conscious use of media.

The respondents filled out the survey items electronically, via the MS Forms platform, in the last week of the summer term of the academic year 2021/2022. As part of our analysis, differences in the mean score of responses to individual items/ statements of the survey were subsequently evaluated, which are presented in the next section of this paper. A two sample t-test was used to evaluate the statistical significance of the differences in the mean scores reported within particular dimensions of global business literacy, risk-taking tendency and conscious use of media (counted as mean scores of individual items/ statements belonging to particular dimensions).

## 3. RESULTS AND DISCUSSION

Before presenting the results of our research, it is necessary to state that the research sample is homogeneous from a cultural point of view, as all participating respondents indicated the Slovak Republic as their home country and Slovak as their native language. Likewise, the research sample is relatively homogeneous in terms of age, as the participating respondents indicated their age ranging from 22 to 25 years.

Table 1 shows comparison of the level of global business literacy, risk attitude and conscious use of media from the two study programs as well as gender point of view. The mean scores of the responses to the items/statements belonging to the individual dimensions of the concept of global business literacy, risk attitude and conscious use of media are presented, as well as the results of the two sample t-test (two-tail). Statistically significant differences are marked in bold.

Dimension	Study program differences			Gender differences		
	mean	mean	t-test	mean	mean	t-test
	CBM	CFM	p-value	women	men	p-value
Development of Relationships	5,0245	4,8286	0,2708	4,9549	4,8571	0,6145
Self-Awareness	5,6176	4,9837	0,0000	5,4613	4,9184	0,0024
Self-Efficacy	4,9265	4,7071	0,3655	4,8281	4,7857	0,8724
International Business Competence	5,3562	4,6825	0,0000	5,0069	5,0317	0,8956
Willingness to Learn	5,6728	4,9323	0,0002	5,3490	5,25	0,6436
All dimensions of GBL	5,3195	4,8268	0,0000	5,12	4,9686	0,2687
Conscious Use of Media	5,5074	4,9357	0,0066	5,2344	5,1786	0,8122
Risk Attitude	3,3088	3,25	0,7518	3,25	3,3452	0,6372

Tab.	1: Analys	is of difference	es in global bus	iness literacy, ris	isk attitude and	conscious media use
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Source: own processing

The results show that more statistically significant differences are found between the two study programs with the predominance of the Corporate Business and Marketing in all the cases. This is particularly true (and statistically significant) in the case of overall evaluation of global business literacy, as well as the conscious use of media. Discrepancies in global literacy depending on the field of study were detected also by previous studies (e.g. Meng et al., 2017), what indicates that the structure of study program matters for acquisition of specific literacies (namely global business and media literacy in our case). Students of the study program CMB, unlike the students of the CFM study program, completed the course International Business that could significantly positively influence the level of the aforementioned literacies.

On the other hand, if we look at the gender differences with regard to the level of global business literacy, there are slightly higher scores shown for women, but these differences are not statistically significant except for self-awareness. This dimension reflects the ability to develop a sense of cultural identity. The overall look at global business literacy confirms these partial results in the sense of slightly better but statistically insignificant results for girls. The risk-attitude differences in terms of study programs as well as gender are only negligible in all the cases.

Further, we looked in more details at the differences in the responses to the individual survey items/ statements between the two study programs. Figure 1 graphically displays these responses to 46 individual survey items/ statements divided into particular dimensions. Students of the CMB study program significantly prevailed in the self-awareness dimension, especially because they believe to easily adapt on conditions in a foreign country if they job would require them to live there. Similarly, predominance was reported also in the international business competence dimension that can be directly linked to the acquisition of knowledge in the field of international trade and investment. Willingness to learn more about world history as well as global geography also tends to be higher in the case of these students.

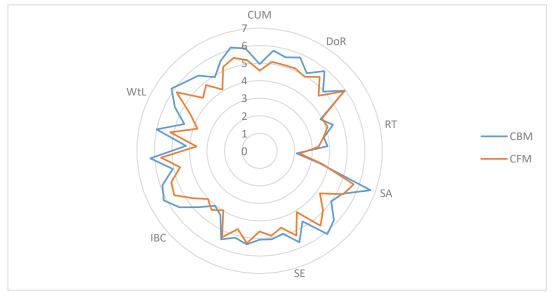
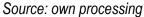
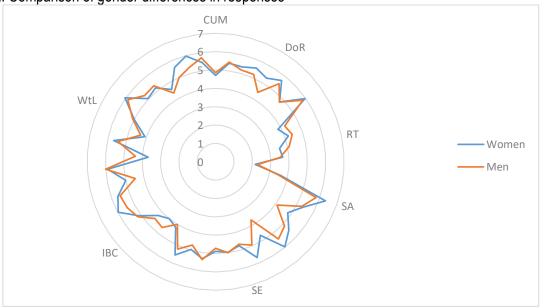


Fig. 1: Comparison of differences in responses between the two study programs



We believe that students' critical global literacy needs to be fostered across all curricula. There are number of instructional examples that can be after adjustment used in the variety of study fields in order to promote students' global business literacy. In this regard, we can suggest a study by Yoon (2018) who hopes to move the literacy education forward by offering an instructional framework for teachers that can be used in literacy learning. Similarly, we analyzed in more details also gender differences in the responses to the individual survey items/ statements divided into particular dimensions that are shown in figure 2.

Fig. 2: Comparison of gender differences in responses



Source: own processing

With regard to gender, women showed to be better in relationship development, especially, they are not so quick to get angry when dealing with someone from a different country (relationship development dimension). They also report higher self-awareness, since they realize more that doing business abroad is much different from at home. On the other hand, men are more willing to travel to a new country by themselves (self-efficacy dimension) and feel to know more about world history (international business competence dimension). Overall, however, these differences between men and women cannot be considered significant.

Our previous study, which was based on detailed analysis of the results of the OECD global competence survey released in October 2020 showed that 15-year-old girls in Visegrad and Baltic countries reported significantly greater level of global competence in the most cases (Bobenič Hintošová, 2022). These findings may suggest that global literacy changes differently with age for women and men. Hence, investigation of the development of gender gap over time with respect to global literacy can form interesting future research challenge. In addition, other authors (e.g. Karanikola, 2022) also indicated that variables such as gender as well as study program seem to affect only some of subscales with respect to competencies in a global environment.

In our research, risk attitude and media literacy level did not show significant gender differences. This finding is broadly consistent with Croson and Gneezy's (2009) conclusion that there is a publication bias towards publishing studies highlighting the existence of gender differences compared to studies that do not.

#### CONCLUSION

The presented paper evaluated the differences in the level of global business literacy, risk-taking and conscious use of media on a sample of students of two study programs as well as in terms of gender. These literacies we consider to be key for future leaders operating in a global business context. For the purpose of their evaluation, already tested and validated surveys/ items were used.

Based on the look at the overall results, it seems that the particular study program and its structure in terms of composition of particular courses has more significant impact on the development of literacies than other characteristics such as gender. The findings of our study showed significant differences in the level of global business literacy and media literacy between the groups of students studying slightly different study programs, which were shown to be higher for students of the CBM study program. This can possibly by attributable to the composition of the two study programs. Although there is an overlap between the two study programs, there are also distinct courses such as International Business. Students, who completed this course, reported significantly higher global business as well as media literacy.

However, with respect to the particular dimensions of global business literacy the statistically significant difference was reported only in the case of three dimensions from five, which are connected especially with technical competence, e.g. knowledge about international business, willingness to gain new knowledge and self-awareness. These dimensions can apparently be developed well even on a basis of classroom-based approach, what is the case of the International Business course. However, for the development of the remaining two dimensions, namely development of relationship and self-efficacy, application of other pedagogical approaches and activities would be needed.

The results presented in this paper are only a starting point for further research activities, which should be extended to a wider sample of students (i.e. other degrees of study) not only in Slovakia, but also abroad. Hence, current results cannot be considered general.

Further limitations of the study are connected especially with the reliance on self-reported measures that are subjective. Therefore, in further research, it would be appropriate to focus on the collection and analysis of more objective information obtained, e.g. through experimental research. At the same time, it would be appropriate to focus in the future on comparative research directly comparing the learning outcomes of traditional and non-traditional approaches in the context of development of the global business as well as other literacies.

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