

# TRANSITION PLANNING FOR HIGHER EDUCATION (HE) STUDENTS WITH DISABILITIES: A COMPARATIVE ANALYSIS OF THE OPINIONS OF STUDENTS AND EMPLOYEES WITH DISABILITIES IN SERBIA, BOSNIA AND HERZEGOVINA AND MONTENEGRO

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**Abstract:** Comparison between students with disability (SwD) and employees with disability (EwD) in RS, BiH and MNE was completed as a part of the study for further implementation of Erasmus+ Trans2work project. In this study the sample consisted of SwD studying at the university in the three countries and EwD. There was in total 170 SwD RS (65; 28.24 %), BiH (57; 33.53 %) and MNE (48; 28.24 %), and 77 EwD RS (39; 50.65 %), BiH (3; 3.90 %) and MNE (35; 45.45 %). To test differences between answers in the three countries Chi square and ANOVA analysis was conducted. Overall conclusion is that SwD and EwD in all three countries have similar view when it comes to their position at the labor market. They equally perceive themselves as capable to participate in labor market provided that they receive support at the work place from their employers and adequate preparation by their universities for the challenges of work life.

**Keywords:** Higher Education (HE), Students with Disabilities (SwD), Employees with Disabilities (EwD), Transition.

## 1. INTRODUCTION

Research presented in this paper is a part of comprehensive baseline study done by members of consortium of Trans2work project in Republic of Serbia (RS), Bosnia and Herzegovina (B&H) and Montenegro (MNE). Project aims are to highlight importance of support for SwD from HEI to labour market and help HEI, employers and SwD to make that transition.

First phase of the project was needs analysis of SwD and EwD. This was an essential first step in order to plan further project implementation.

Rights of persons with disabilities (PwD) are supported in a number of legal documents in all three countries. PwD have a right to equal access in all levels of education and on labour market [1] [2] [3] [4] [5] [6].

When we look at the situation in all three countries when it comes to HE all three countries are in a process

of implementation of Bologna reform and one of its aims is a compatibility of education and labour market. In order to do so, HE has to understand the needs of employers when it comes to the skills that future employees have to have.

Also, situation on labour market in all three countries is complex since all three countries have high unemployment rate so there is a lot of competition between people who finish HE and enter labour market.

The position of PwD is vulnerable and complex. They are often faced with prejudices about their possibilities, especially on work place.

PwD have a bigger risk for life in poverty since their household income is considerably smaller than income of the households with non-disabled persons [7].

One of the reasons for this is difficulties in finding a job, job that provides possibility of advancement, promotion and long term employment.

## 2. SAMPLE

A total of 170 SwD from RS (65; 28.24 %), BiH (57; 33.53 %) and MNE (48; 28.24 %) participated in the project. Within the entire sample, 76 participants were male (44.71 %) and 93 participants were female (54.71 %). As concerns participants' age it was ranged from 18 to 42 ( $M = 25.74$ ,  $SD = 4.287$ ). In relation to participants' year of study, 26 (15.29 %) were in 1st year, 18 (10.59 %) were in 2nd year, 39 (22.94 %) were in 3rd year, 28 (16.47 %) were in 4th year, 17 (1 %) were in 5th year and 42 (24.71 %) were graduated. Concerning participants type of disability that better describes their condition 40 (23.53 %) identified themselves as having a visual impairment, 10 (5.88 %) as having a hearing impairment, 1 (0.6 %) as having a visual & learning impairment, 1 (0.6 %) as having a visual & physical impairment, 1 (0.6 %) as having a hearing & physical impairment, 1 (0.6 %) as having a visual & learning & physical impairment, 99 (58.24 %) as having a physical impairment, 3 (1.76 %) as having a learning impairment, 1 (0.6 %) as having a physical & learning impairment, 6 (3.53 %) as having other impairments and 7 (4.12 %) are not reported answers.

## 4. INSTRUMENTS

A tailor-made research tool consisted of 21 questions was used in order to collect data for identifying and analyzing the needs of SwD. Aimed at gaining a holistic and in depth view of SwD needs, the questionnaire was addressed to i) former SwD - currently employees- and ii) current or graduate SwD. In this context, questionnaire was organized to three sections. Section A (7 questions) addressed to EwD, tapping their basic demographic characteristics. Section B (11 questions) addressed to current or graduate SwD. The first 7 questions of Section B aimed at collecting data concerning current and graduate SwD basic demographics. The remaining 4 questions of Section B were more targeted to SwD needs. Specifically, these 4 questions aimed at providing detailed data concerning students' with disability a) views on (i) whether and how their faculty had enabled/facilitated them to acquire knowledge and skills helpful for finding a job, (ii) whether and how their studies increase their skills to find a job and become competitive on the labor market (iii) any additional training needs they have for finding a job and b) level of awareness concerning several amenities they may have once they find a job and have assessed level of disability. The last section of the questionnaire (Section C) addressed to all the participants and covered the main research questions (5 questions). The questionnaire consisted of different types of questions (open ended, close ended, Likert type etc.) in order to better achieve a rich amount of data concerning participants' different needs. All partners participated

in the project used the questionnaire with no modification to its structure or content with the only exception of the needed translation/linguistic adaptation to partners' national language.

## 3. PROCEDURE

All partners of the project participated in research tool's design and development. During the development phase, several former versions of the questionnaire were exposed to few changes for better complying with the specifics of the area as well as to the specific requirements of all three partner countries where data collection would be conducted. The questionnaire has been modified mainly to provide the collection of all necessary data related to the specific problem of SwD transition from schooling to employment and to detect as many as possible needs of SwD in the transition process. Following the aims of the project and trying to achieve a sufficient number of participants from all the target populations that is EwD, current SwD and graduate SwD, public and private Universities as well as several Associations and Organizations related to SwD and EwD, located in each partner country, were contacted to serve as sources of participants of our project. Participants were informed about the objectives of the project, the voluntary and anonymous character of their participation and their right to give up their participation at any time.

Two forms of the questionnaire were available to target populations:

- An online form
- A hardcopy form.

For those participants selected to fill-in a hardcopy version of the questionnaire, assistance were provided in case it was needed.

## 5. RESULTS

On the question "*Has your faculty enabled/facilitated you to acquire knowledge and do practical work or other activities that may help you find a job?*", 64.62% respondents from Serbia, 62.50% respondents from BiH and 55.32% respondents from MNE answered with "Yes" and 35.38% respondents from Serbia, 37.50% respondents from BiH and 44.68% respondents from MNE while answered with "No" Pearson Chi-Square didn't show any significant differences between answers on questions from three partner countries ( $p > .05$ ).

On the question "*Do you think that your studies will increase your skills to find a job and become competitive on the labour market?*" 30.77% respondents from Serbia answered with "No" and 69.23% with "Yes", 26.79% respondents from BiH answered "No" while 73.21% said "Yes", and in Montenegro 19.15% examinee gave "No" and 80.85% "Yes" as an answer. Pearson Chi-Square didn't show

any significant differences between answers on questions from three partner countries ( $p > .05$ ).

On the question “Do you know that if you have assessed level of disability and you find a job your salary is subverted from the Fund for professional rehabilitations and employment for people with disabilities?” 49.23% respondents from Serbia answered with “Yes” and 50.77% with “No”, 53.57% respondents from BiH answered “Yes” while 46.43% said “No”, and in Montenegro 76.60% examinee gave “Yes” and 23.40% “No” as an answer.

We observed a strong association between the Yes/No answer on question “Do you know that if you have assessed level of disability and you find a job your salary is subverted from the Fund for professional rehabilitations and employment for people with disabilities” and the country,  $\chi^2=9.188, p=.010$ .

On the question “Do you know that if you have assessed level of disability and you find a job costs for assistive equipment and technical and technological adaptation of working place are covered?” 50.77% respondents from Serbia answered with “Yes” and 49.23% with “No”, 35.71% respondents from BiH answered “Yes” while 64.29% said “No”, and in Montenegro 54.55% examinee gave “Yes” and 45.45% “No” as an answer. Pearson Chi-Square didn’t show any significant differences between answers on questions from three partner countries ( $p > .05$ ).

On the question “Do you know that if you have assessed level of disability and you find a job earnings to your assistant are covered in case you have 80% or more disability rating?” 27.69% respondents from Serbia answered with “Yes” and 72.31% with “No”, 16.07% respondents from BiH answered “Yes” while 83.93% said “No”, and in Montenegro 58.14% examinee gave “Yes” and 41.86% “No” as an answer.

We observed a strong association between the Yes/No answer on question “Do you know that if you have assessed level of disability and you find a job earnings to your assistant are covered in case you have 80% or more disability rating?” and the country,  $\chi^2= 20.681, p=.000$ .

**Table 1:** In your experience, how strongly do you agree (or disagree) with the following statements regarding the most important things an employer could do to facilitate you to do your job best? [8]

		Mean	SD
I. Assign part of the my job duties to a coworker	Serbia (RS)	2,24	1,027
	Bosnia and Herzegovina (BiH)	2,11	1,145
	Montenegro (MNE)	3,19	1,214
	Total	2,46	1,208
II. Make certain facilities accessible.	Serbia (RS)	4,65	,786
	Bosnia and Herzegovina (BiH)	4,35	,935
	Montenegro (MNE)	4,40	1,026
	Total	4,48	,915
III. Purchase or change equipment	Serbia (RS)	3,84	,954
	Bosnia and Herzegovina (BiH)	3,67	1,058
	Montenegro (MNE)	4,08	1,088
	Total	3,85	1,036
IV. Reassign me to a vacant position	Serbia (RS)	3,40	1,185
	Bosnia and Herzegovina (BiH)	3,30	1,253
	Montenegro (MNE)	3,33	1,342
	Total	3,35	1,248
V. Make my work schedule more flexible	Serbia (RS)	3,75	1,135
	Bosnia and Herzegovina (BiH)	3,98	1,126
	Montenegro (MNE)	3,00	1,111
	Total	3,61	1,188
VI. Change a company policy	Serbia (RS)	3,02	1,120
	Bosnia and Herzegovina (BiH)	2,95	1,329
	Montenegro (MNE)	2,46	1,237
	Total	2,83	1,243
VII. Leave me to do my job and provide supervision	Serbia (RS)	3,30	1,136
	Bosnia and Herzegovina (BiH)	4,19	1,060
	Montenegro (MNE)	3,44	1,398
	Total	3,64	1,251

In Table 1 are presented the findings from the main research questions of the entire sample of three partner countries. Concerning participants’ views on the most important things an employer could do to facilitate a PwD to do his/her job best the top ranked thing was to make certain facilities accessible (M= 4.48, SD= 0.915), to purchase or change equipment (M= 3.85, SD= 1.036), to leave them to do their job and provide supervision (M= 3.64, SD= 1.251), to make their work schedule more flexible (M= 3.61, SD=1.188), to reassign them to a vacant position (M= 3.35, SD= 1.248), to change a company policy (M= 2.83, SD= 1.243), to assign part of the their job duties to a co-worker (M= 2.46, SD= 1.208)

There was a statistically significant difference between groups as determined by one-way ANOVA in questions :

- Assign part of my job duties to a coworker {F(2,165) = 14,143, p = .000}
- Make my work schedule more flexible {F(2,165) = 10,635, p = .000}
- Change a company policy {F(2,166) = 3,196, p = .043}
- Leave me to do my job and provide supervision {F(2,166) = 9,470, p = .000}

The Scheffe post hoc tests indicated that Montenegrin answers on question ”Assign part of my job duties to a coworker” ( $p=.000$ ) and “Make my work schedule

more flexible” ( $p=.0030$ ) differ significantly from answers in Serbia and BiH. Also, BiH answers on question “Leave me to do my job and provide supervision” ( $p=.006$ ) differ significantly from answers in Serbia and Montenegro.

**Table 2:** What should universities need to do in order to facilitate the transition to employment of students with disabilities? [8]

		Mean	SD
I. Improve the knowledge and skills of persons with disabilities through additional training and education	Serbia (RS)	4,17	,925
	Bosnia and Herzegovina (BiH)	4,26	1,027
	Montenegro (MNE)	4,06	1,192
	Total	4,17	1,038
II. Raise the awareness and sensitivity of the employers towards employees who may have a disability/ impairment	Serbia (RS)	4,56	,639
	Bosnia and Herzegovina (BiH)	4,63	,587
	Montenegro (MNE)	4,29	1,166
	Total	4,51	,817
III. Support the position of mentor during their first period at work	Serbia (RS)	4,23	,792
	Bosnia and Herzegovina (BiH)	4,26	,768
	Montenegro (MNE)	3,85	1,130
	Total	4,14	,906
III. Educate employers on issues concerning accessibility, assistive technologies, individualized support	Serbia (RS)	4,55	,665
	Bosnia and Herzegovina (BiH)	4,63	,487
	Montenegro (MNE)	4,27	1,086
	Total	4,50	,772
V. Inform employers on the provided support services that person with disabilities might need during their employment.	Serbia (RS)	4,37	,829
	Bosnia and Herzegovina (BiH)	4,56	,627
	Montenegro (MNE)	4,29	1,071
	Total	4,41	,850
VI. Educate employers on issues concerning the obstacles a person with disabilities may encounter during their employment	Serbia (RS)	4,27	,827
	Bosnia and Herzegovina (BiH)	4,58	,565
	Montenegro (MNE)	4,31	1,035
	Total	4,39	,826

In relation to the question, that is participants’ views concerning what the universities should do in order to facilitate the transition to employment of SwD based on the results statement „Raise the awareness and sensitivity of the employers towards employees who may have a disability/impairment“ has the highest value ( $M= 4.51, SD= 0.817$ ), followed by „Educate employers on issues concerning accessibility, assistive technologies, individualized support (trainings, working assistance, flexible working time and workplace“ ( $M= 4.50, SD= 0.772$ ), „Inform employers on the provided support services that person with disabilities might need during their employment“ ( $M=4.41, SD= 0.850$ ), „Educate employers on issues concerning the obstacles a person with disabilities may encounter during their employment“ ( $M= 4.39, SD= 0.826$ ), „Improve the knowledge and skills of persons with disabilities through additional training and education“ ( $M= 4.17, SD= 1.038$ ) and „Support the position of mentor during their first period at work“ ( $M= 4.14, SD= 0.906$ ) (see Table 2). All mean values are very high (above 4.00) showing that overall opinion is that universities have important role in facilitating the transition to employment of SwD.

There was a statistically significant difference between groups as determined by one-way ANOVA in questions:

- Support the position of mentor during their first period at work { $F(2,166) = 3,353, p = .037$ }
- Educate employers on issues concerning accessibility, assistive technologies, individualized support { $F(2,166) = 3,133, p = .046$ }

However, as it can be seen from next table Scheffe post hoc test didn’t show some significant differences in provided answers between partner countries.

Even one-way ANOVA results regarding questions III and IV showed some significant differences between groups, Scheffe’s post hoc test did not support these findings, because all p values are greater than 0.05

In relation to the question, that is participants’ views concerning what companies can do in order to improve the employment of PwD it was found that statement to provide an accessible environment/work place to attract employees with disabilities has the greatest result ( $M= 4.51, SD= 0.825$ ), take targeted training/educational actions for improving working skills and knowledge of persons with disabilities, so they are better prepared for employment ( $M= 4.22, SD= 0.912$ ) and to support the position of a mentor during the first period at work has the smallest result ( $M= 4.21, SD= 0.877$ ).

There was a statistically significant difference between groups as determined by one-way ANOVA in a question:

- Take targeted training/educational actions for improving working skills and knowledge of persons with disabilities, so they are better prepared for employment { $F(2,165) = 3,406, p = .036$ }.

The Scheffe post hoc tests indicated that Montenegrin and Serbian answers on question “Take targeted training/educational actions for improving working skills and knowledge of persons with disabilities, so they are better prepared for employment” ( $p = .049$ ) are significantly different.

**Table 3:** Where should universities need to focus in order to promote the transition from Higher Education to Work life of the students with disabilities? [8]

		Mean	SD
I. Work together with team members in a respectful and collaborative manner to complete tasks.	Serbia (RS)	4.33	.691
	Bosnia and Herzegovina (BiH)	4.39	.648
	Montenegro (MNE)	3.96	1.071
	Total	4.24	.820
II. Demonstrate leadership, including giving direction and guidance, as well as strategic visioning	Serbia (RS)	4.24	.665
	Bosnia and Herzegovina (BiH)	4.32	.711
	Montenegro (MNE)	3.88	1.044
	Total	4.16	.821
III. Exhibit personal organization, accountability and time management.	Serbia (RS)	4.16	.787
	Bosnia and Herzegovina (BiH)	4.30	.626
	Montenegro (MNE)	4.08	1.048
	Total	4.18	.824
IV. Identify and solve problems, including evaluating alternatives and articulating reasoning.	Serbia (RS)	4.22	.750
	Bosnia and Herzegovina (BiH)	4.40	.563
	Montenegro (MNE)	4.04	1.071
	Total	4.23	.811
V. Obtain, critically evaluate and use information effectively from a variety of resources and formats.	Serbia (RS)	4.27	.696
	Bosnia and Herzegovina (BiH)	4.28	.750
	Montenegro (MNE)	4.04	1.031
	Total	4.21	.823
VI. Interpret, use and communicate numerical data and quantitative evidence.	Serbia (RS)	3.83	.908
	Bosnia and Herzegovina (BiH)	4.12	.867
	Montenegro (MNE)	3.85	1.148
	Total	3.93	.974
VII. Use appropriate technology to enhance and manage communication knowledge.	Serbia (RS)	4.33	.757
	Bosnia and Herzegovina (BiH)	4.49	.571
	Montenegro (MNE)	4.27	1.086
	Total	4.37	.814
VIII. Gain intercultural knowledge so as to interact effectively in various cultural contexts.	Serbia (RS)	4.19	.895
	Bosnia and Herzegovina (BiH)	4.44	.627
	Montenegro (MNE)	4.04	1.129
	Total	4.23	.902
IX. Be engaged within the community to make a difference in a civic life.	Serbia (RS)	4.27	.821
	Bosnia and Herzegovina (BiH)	4.47	.630
	Montenegro (MNE)	3.92	1.217
	Total	4.24	.921
X. Present and write information clearly and effectively.	Serbia (RS)	4.24	.797
	Bosnia and Herzegovina (BiH)	4.47	.538
	Montenegro (MNE)	4.23	1.016
	Total	4.32	.798
XI. Integrate, experience, disciplinary and interdisciplinary knowledge and communicate this effectively.	Serbia (RS)	4.37	.679
	Bosnia and Herzegovina (BiH)	4.49	.601
	Montenegro (MNE)	4.15	1.072
	Total	4.35	.797

Participants were asked to answer *where universities should focus on in order to better promote SwD transition from HE to work life*. It was found that statement use appropriate technology to enhance and manage communication knowledge (M= 4.37, SD= 0.814), integrate, experience, disciplinary and interdisciplinary knowledge and communicate this effectively has the best score (M= 4.35, SD= 0.797), present and write information clearly and effectively (M= 4.32, SD= 0.798), work together with team members in a respectful and collaborative manner to complete tasks (M=4.24, SD= 0.820), be engaged within the community to make a difference in a civic life (M= 4.24, SD= 0.921), identify and solve problems, including evaluating alternatives and articulating reasoning (M= 4.23, SD= 0.811), gain intercultural knowledge so as to interact effectively in various cultural contexts (M= 4.23, SD= 0.902), obtain, critically evaluate and use information effectively from a variety of resources and formats (M= 4.21, SD= 0.823), exhibit personal organization, accountability and time management (M= 4.18, SD= 0.824), demonstrate leadership, including giving direction and

guidance, as well as strategic visioning (M= 4.16, SD= 0.821), interpret, use and communicate numerical data and quantitative evidence (M= 3.93, SD= 0.974) as the lowest result.

There was a statistically significant difference between groups as determined by one-way ANOVA in questions :

- Work together with team members in a respectful and collaborative manner to complete tasks {F(2,166) = 4,259, p=.016}
- Demonstrate leadership, including giving direction and guidance, as well as strategic visioning {F(2,165) = 4,369, p =.014}
- Be engaged within the community to make a difference in a civic life {F(2,166) = 5,048, p=.007}

The Scheffe post hoc tests indicated that Montenegrin answers on question “Work together with team members in a respectful and collaborative manner to complete tasks” (p = .027), “Demonstrate leadership, including giving direction and guidance, as well as strategic visioning” (p= .022) and “Be engaged within the community to make a difference in a civic life” (p = .008) differ significantly from answers in BiH.

## 6. CONCLUSION

As it can be seen from results above SwD and EwD are aware of a difficult position they have when it comes to their chances to find and keep a work position. Differences found between countries are minimal and do not indicate big differences in perception and status of SwD. Importance of HEIs in facilitating of transition to labour market is marked as important in sample from all three countries.

SwD and EwD perceive their position on labour market as more vulnerable and the need for support at the work place is highlighted as essential for integration.

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