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A Polish-German Comparative Study of Support Information for First-Year University Students Faced with the COVID-19 Pandemic at Selected Universities

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Abstract

The COVID-19 pandemic has left its mark on higher education, including first-year university students. The transition to online education has been particularly challenging for the University of Silesia and, to a far lesser extent, the International University of Applied Sciences. This study examines the academic experiences of first-year students entering university in the academic year 2020/2021. This article presents the results of a comparative study conducted on a sample of N=185 students from the University of Silesia (Poland) and N=120 students from the University of Applied Sciences (Germany) using an online questionnaire. The research showed that German students ranked the investigated issues higher; this does not mean that the University of Silesia provides a lower level of support, but that the information strategy and support elements are different.

Keywords: *first-year experience (FYE), first-year students, COVID-19, university, experience.*

Introduction

Compared to high school, universities provide an entirely different educational experience for a young adult (Maślanka et al., 2010). Studying at a university, especially in the first year of a degree programme, can be a challenging experience and even slightly depressing and overwhelming (Yan & Sendall, 2016). Research indicates that the first year appears to be most critical to a student's adaptation and his/her subsequent educational success (Cliniciu, 2013; Fallows & Steven, 2000). The outbreak of the COVID-19 pandemic caused universities to shift to a fully online education, which could have further complicated the situation for first-year students. Research confirms that students who entered university in the 2020/2021 academic year are considered the most unhappy due to the pandemic, with the term the „cursed class of 2020” appearing in the literature (Jun et al., 2021).

Coincidentally, the pandemic-related changes in the education system provide the first opportunity to examine not only the impact of implementing a fully online education system on this group of students (Biedroń et al., 2021) but also the importance of the sources of support provided by universities as regards to coping with the new educational reality. The first-year experience (FYE) is a term used to describe various academic and non-academic activities undertaken during a student's first year at university (Tinto & Goodshell, 1994). The purpose of these activities is to provide (academic, social, financial) help to students adapting and integrating into their new environment (Evans & Morrison, 2011). Additionally, students in the 2020/2021 academic year experienced three critical moments in their lives. The first concerned the transition from adolescence to early adulthood. The second was related to the transition from high school to university, and the third to a transition to an unprecedented academic environment (Jun et al., 2021). Additionally, research shows that students entering university often have unrealistic expectations (Smith & Hopkins, 2005). For example, they overestimate the time spent interacting with the faculty. They also hold unrealistic beliefs about group size or workload inconsistent with university reality (Lowe & Cook, 2003).

To help students adapt to new conditions, most universities offer informational, psychological, medical, administrative, material, technical, and instructional support, as well as special support services for students with disabilities. Social support also plays a key role, which manifests itself in peer interactions organised by Student Unions, Student Council, study circles or other organisations, and in interactions with university staff (SUPP Team, 2015).

Research on first-year student adjustment versus support implemented by universities prior to the COVID-19 pandemic indicates that well-adjusted students

generally report higher levels of social support than less-adjusted students. Many students indicate a need to experience more support overall. Compared to students studying in their own country, international students report needing more emotional, practical, and informational support (Ramsey et al., 2007). Since adaptive difficulties are the most common problems among first-year students, as indicated by numerous studies (Wintre & Yaffe, 2000; Bryant et al., 2000; Enochs & Roland, 2006), it is useful to look at what sources of support and types of informational activities first-year students identify when faced with the risks and constraints of COVID-19.

Research Methodology

The study was conducted within a positivist paradigm since the research objective was to determine quantitative differences between the study groups and the strength and direction of the relationships between the variables in each study group. Reference to the paradigm was also conditioned by the desire to identify possible differences in the relationships between the examined variables among the studied groups of students.

An original questionnaire survey in Polish and German was used (the quality of which was adjusted in pilot studies) to operationalise the variables. The tool was available to all respondents online using LimeSurvey 5 web application, thanks to a license obtained by the University of Silesia in Katowice. The study participants were informed about the purpose of the study and its topic, the course of the study, the time required to complete the questionnaire, the use of the information obtained, the anonymous participation, which was voluntary and provided the opportunity to withdraw from the study. Hence, the number of correctly filled answers to each question varied. The link to the questionnaire was disseminated through the electronic communication system used by each university.

A total of 185 Polish and 120 German first-year students of bachelor's and master's studies in pedagogy aged 19–25 were included in the study. Women were more likely to participate in the survey than men, but it is difficult to give specific percentages because most respondents did not answer this question. The sample was purposively selected due to the availability of respondents.

It is worth mentioning that the Polish group consisted of undergraduate and graduate students, both in full-time (day) studies and weekend studies, who opted for on-campus studies during the admission process. In contrast, the German respondents already chose between two study models during admission: online

or myStudies. The first option assumes complete flexibility – using the materials on the digital learning platform, including watching recorded lectures and taking exams at any time and place. On the other hand, the second model also involves online learning but with the possibility of combining online learning with on-campus classes at Bad Honnef.

The study was conducted from March 1 to March 26, 2021. Because the respondents were functioning for several months in an academic environment under the COVID-19 threat, they could consider the availability of information and the sources of support they received in the early stages of their studies. The analysis of the collected data was based on the Mann-Whitney U test and Spearman's Rho test. The choice of tests was due to the lack of normal distribution of the investigated variables and equality of the compared groups. In addition, it should be emphasised that the use of Mann-Whitney U tests was conditioned by the issue of performing comparisons between non-equilibrium groups (Stanisz, 2006; Szymczak, 2010). It should be clarified that the equivalence of the respondents in the distinguished groups was not a deliberate research activity but resulted from the remote education using the research platform and the sudden increase of participants in the Polish group compared to the group of German participants in the last part of the study. The researchers, taking into account the resistance of the U test to the conditions of non-equivalence of groups, decided to include all participants in the study. Eliminating some results would give rise to a broader range of methodological doubts than using results from all respondents under conditions of resisting the comparison of medians and ranks in non-uniform groups.

Results and Discussion

The purpose of this study was to determine how first-year students rated the availability of information and sources of support at the university when faced with the COVID-19 pandemic. The availability of information was analysed first, followed by the sources of support. Finally, the relationships of the types of sources of acquiring information about studying with the level of perceived support related to students' functioning in the academic environment were distinguished. Due to space restrictions, the presentation of the results is mainly limited to descriptions, omitting statistical tabular summaries.

Availability of information

Based on surveys¹ administered to a sample of University of Silesia (N=156) and University of Applied Sciences (N=92) students, a comparison was made between them to assess the availability of information about studying in 10 dimensions. The comparisons made between the study groups, which were based on the Mann-Whitney U test, established the presence of statistically significant differences with respect to some variables. This data is presented in Table 1.

Table 1. The results of the Mann-Whitney U test on the comparison of the assessment of the availability of information about studying among Polish and German students – statistically significant differences

| How would you rate the availability of information regarding: | Sum of ranks EN | Sum of ranks DE | U | p< |
|---|-----------------|-----------------|---------|-------|
| Curriculum | 15777.00 | 15099.00 | 3531.00 | 0.001 |
| individual subjects/modules | 17104.50 | 13771.50 | 4858.50 | 0.001 |
| class schedule | 16875.50 | 14000.50 | 4629.50 | 0.001 |
| mandatory training, e.g., in OHS | 20994.00 | 9882.00 | 5604.00 | 0.004 |
| inauguration of the academic year | 23103.00 | 7773.00 | 3495.00 | 0.001 |

Source: own research.

Statistically significant differences were noted in the availability of information regarding the curriculum (U=3531.00; p<0.001), individual subjects/modules (U=4858.50; p<0.001) and class schedule (U=4629.50; p<0.001). The obtained U-test values indicate that German students rate the availability of information in the areas higher than Polish students. On the other hand, the results of the presented analysis with regard to compulsory training, e.g., OHS (U=5604.00; p<0.004) and the inauguration of the academic year (U=3495.00; p<0.001) show that Polish students rated the availability of information higher in the indicated dimensions than German students.

In terms of comparisons of dimensions concerning the level of availability of information on the subject of classes (information contained in the syllabus), enrolment/logging in for subjects (e.g., physical education, foreign language courses), student's credit record/ student ID, and student's rights and obligations

¹ Participation in this study was voluntary and provided the opportunity to withdraw from the study, hence the number of correctly filled answers to each question varied.

no statistically significant differences were obtained. However, it is worth mentioning that the comparison of the dimension of availability of information about remote education platforms resulted in U test=6168.50 (sums of ranks: 18414.50 – PL; 12461.50 – DE), showing a statistical trend level of $p=0.06$, which suggests the possibility of registering significance when considering a larger group of subjects. This result indicates that Polish students may tend to rate the availability of information related to remote education platforms higher than German students.

The results show that the two study groups of students who started a new stage in their lives and were facing the COVID-19 pandemic perceive the accessibility to the information they provided about studying differently. German students give higher rates regarding the accessibility to information on such issues as curriculum, course information, and class schedule. On the other hand, Polish students report greater availability of information related to the formal functioning of the university. The range of the areas rated higher by the respondents from Germany indicates that the activities leading to student adaptation are focused less on organisational and formal aspects and more on elements strictly related to the knowledge about studying. Therefore, both universities should pay attention to those areas where students feel there is some lack of information. Research to date shows that in addition to access to information, students need ongoing support during their first semester, including more opportunities to ask questions about university life, as they often perceive the information provided as too general (Leese, 2010). Furthermore, research indicates that effective design of activities during the COVID-19 pandemic and direct interaction with students, as well as access to resources and information, helps students successfully find their way into the university space (Combrink & Oosthuizen, 2020). Thus universities must be proactive in this area (Hassel & Ridout, 2018; Orosová et al., 2021).

Support

The next issue that was analysed was the evaluation of the support that the respondents received at the beginning of the study during the COVID-19 pandemic. In this respect, 18 areas were distinguished, mainly concerning informational, psychological, medical, administrative, financial, technical, personal, and educational support. The comparison performed using the Mann-Whitney U test between the Polish ($N=142$) and German students ($N=75$) showed statistically significant differences in all examined areas.

The comparisons made between the study groups, based on the Mann-Whitney U test, established the presence of statistically significant differences for the dimensions of support during the first period of study concerning:

- **v1** – user-friendly websites containing comprehensive information about the university, university facilities, city, living conditions, health services, student life, the pandemic, etc. (U=2972.50; p<0.001; rank sums: 13125.50 – PL; 10527.50 – DE);
- **v2** – sections of websites designed to answer frequently asked questions – FAQs (U=1719.50; p<0.001; rank sums: 11872.50 – PL; 11780.50 – DE);
- **v3** – social media – specifically Facebook, Twitter and Instagram (U=3846.50; p<0.001; rank sums: 13999.50 – PL; 9653.50 – DE);
- **v4** – video materials about the university (U=3875.50; p<0.001; rank sums: 14028.50 – PL; 9624.50 – DE);
- **v5** – leaflets, brochures, guides, self-help materials – printed and available online in pdf format (U=3622.00; p<0.001; rank sums: 13775.00 – PL; 9878.00 – DE);
- **v6** – option to receive psychological counselling (U=4469.50; p<0.05; rank sums: 14622.00 – PL; 9030.50 – DE);
- **v7** – option to get medical consultation (U=4111.50; p<0.01; rank sums: 14264.50 – PL; 9388.50 – DE);
- **v8** – learning assistance (U=3851.00; p<0.001; rank sums: 14004.00 – PL; 9649.00 – DE);
- **v9** – support from faculty administration – dean’s office (U=3077.50; p<0.001; rank sums: 13230.50 – PL; 10422.50 – DE);
- **v10** – support from university administration (U=2284.50; p<0.001; rank sums: 12437.50 – PL; 11215.50 – DE);
- **v11** – help with financial aid issues (U=3648.00; p<0.0001; rank sums: 13801.00 – PL; 9852.00 – DE);
- **v12** – assistance regarding the use of remote learning platforms (U=1087.50; p<0.001; rank sums: 11240.50 – PL; 12412.50 – DE);
- **v13** – personal contact with a university employee – in-person meetings, phone calls, email, chat, video conferences, online forums (U=1449.00; p < 0.001; rank sums: 11602.00 – PL; 12051.00 – DE);
- **v14** – online group meetings such as workshops, open days (U=2569.50; p<0.001; rank sums: 12722.50 – PL; 10930.50 – DE);
- **v16** – assistance from course instructors (U=2067.00; p<0.001; rank sums: 12220.00 – PL; 11433.00 – DE);
- **v17** – assistance from Student Service Center (U=1884.00; p<0.001; rank sums: 12037.00 – PL; 11616.00 – DE);
- **v18** – mutual support among students online – social media groups, chat rooms (U=3309.50; p<0.001; rank sums: 13462.50 – PL; 10190.50 – DE).

The results showed that German students assigned higher values to almost all aspects of support. Only the dimension concerning the option to receive support from the tutor of year v15 ($U=2680.50$; $p<0.001$; rank sums: 18122,50 – PL; 5530,50 – DE) was rated higher by Polish students.

It is worth mentioning that both study groups were in a rather unusual situation – one was adapting to the new conditions at the universities, and the other was facing the threat of COVID-19. The adaptation strategies previously developed by the universities had to be, to a considerable extent, transferred to the Internet, for which the Germans were better prepared as they have more extensive resources for adaptation opportunities using modern technologies because they offer online degree programmes.

Studies conducted during the pandemic have revealed problems with access to support services among students (Bouchey et al., 2021). Hence, the Polish university is not unique in this regard. However, it is impossible not to mention here the only dimension rated higher by Polish students. Research shows that social support plays a vital role in students' adaptation to study at higher education level (DeAndrea et al., 2012). Hence, the personal support of the tutor of the year may have been a key factor in compensating for the remaining deficiencies.

Sources of information vs support

Based on the theoretical assumptions, correlation analyses were also performed using Spearman's rank correlation coefficient showing the **relations of the types of sources for acquiring information about studying with the level of perceived support related to students' functioning in the academic environment**. The analysis results indicate more statistically significant links between particular aspects of acquired information on studying and types of experienced support from various sources in the Polish students group than in the German students group. The description of the relationship between the variables is shown in Table 2.

The comparison showing statistically significant differences in correlation coefficients in the group of Polish and German students between selected areas of information availability and aspects of support reveals that more categories of information availability exhibit connections with different types of dimensions of experiencing support offered by universities. At the same time, it is worth noting that the correlations have higher values in the German group. In this context, the recorded differences concerning the support experienced by students should be interpreted. It should be presumed that specifying the sources of information in relation to its established forms or functions performed by specific persons may foster greater effectiveness in building a sense of support. The diffusion of respon-

Table 2. A summary of the relationship between the availability of information and aspects of support in a group of respondents from Poland and Germany found statistically significant differences

| Variables concerning aspects of support | | Assessment of availability of information regarding: | | | | | |
|---|----|--|------------------------------------|----------------|---------------------|----------------------------|------------------------------------|
| | | class topics | enrollment/logging in for subjects | class schedule | compulsory training | remote education platforms | student's credit record/student ID |
| v1 | PL | 0.38* | 0.38* | 0.22* | 0.39* | 0.46* | 0.36* |
| | DE | 0.26* | 0.37* | 0.27* | 0.06 | 0.13 | 0.29* |
| v2 | PL | 0.26* | 0.27* | 0.25* | 0.30* | 0.32* | 0.37* |
| | DE | 0.22 | 0.22 | 0.31* | 0.03 | 0.17 | 0.23 |
| v3 | PL | 0.20* | 0.19* | 0.17* | 0.20* | 0.23* | 0.14 |
| | DE | 0.20 | 0.24* | 0.34* | -0.05 | 0.33* | 0.22 |
| v4 | PL | 0.29* | 0.19* | 0.07 | 0.40* | 0.28* | 0.32* |
| | DE | 0.20 | 0.13 | 0.18 | 0.16 | 0.20 | -0.16 |
| v5 | PL | 0.27* | 0.25* | 0.02 | 0.37* | 0.32* | 0.30* |
| | DE | 0.19 | 0.03 | 0.16 | -0.06 | 0.09 | 0.05 |
| v6 | PL | 0.23* | 0.14 | 0.08 | 0.34* | 0.24* | 0.23* |
| | DE | 0.20 | -0.05 | -0.07 | 0.12 | -0.21 | 0.25* |
| v7 | PL | 0.22* | 0.18* | 0.14 | 0.32* | 0.26* | 0.28* |
| | DE | 0.20 | 0.08 | 0.10 | 0.03 | -0.06 | 0.08 |
| v8 | PL | 0.25* | 0.16* | 0.21* | 0.24* | 0.27* | 0.17* |
| | DE | 0.24* | 0.18 | 0.45* | 0.15 | 0.23* | 0.06 |
| v9 | PL | 0.24* | 0.12 | 0.07 | 0.27* | 0.28* | 0.27* |
| | DE | 0.27* | 0.47* | 0.34* | 0.12 | 0.29* | 0.18 |
| v10 | PL | 0.23* | 0.14 | 0.16 | 0.34* | 0.37* | 0.42* |
| | DE | 0.25* | 0.45* | 0.37* | 0.21 | 0.14 | 0.47* |
| v11 | PL | 0.19* | 0.30* | 0.17* | 0.23* | 0.22* | 0.08 |
| | DE | 0.15 | 0.11 | 0.19 | 0.13 | -0.07 | 0.25* |
| v12 | PL | 0.39* | 0.44* | 0.21* | 0.43* | 0.50* | 0.32* |
| | DE | 0.15 | 0.09 | 0.39* | -0.01 | 0.24* | 0.11 |
| v13 | PL | 0.23* | 0.37* | 0.09 | 0.29* | 0.41* | 0.23* |
| | DE | 0.20 | 0.11 | 0.31* | 0.05 | 0.12 | 0.24* |
| v14 | PL | 0.31* | 0.20* | 0.10 | 0.24* | 0.30* | 0.17* |
| | DE | 0.16 | 0.34* | 0.27* | 0.17 | 0.19 | 0.07 |

| Variables concern- ing aspects of sup- port | Assessment of availability of information regarding: | | | | | | |
|--|--|---|---------------------|--------------------------|----------------------------------|--|-------|
| | class topics | enrollmen- tenrol- ment/log- ging in for subjects | class sched- ule | compulso- ry training | remote education platforms | student's credit record/ student ID | |
| v15 | PL | 0.06 | 0.13 | 0.09 | 0.12 | 0.16* | 0.13 |
| | DE | 0.29* | 0.22 | 0.04 | -0.04 | 0.34* | 0.09 |
| v16 | PL | 0.30* | 0.21* | 0.17* | 0.27* | 0.31* | 0.34* |
| | DE | 0.48* | 0.46* | 0.38* | 0.08 | 0.54* | 0.13 |
| v17 | PL | 0.19* | 0.21* | 0.21* | 0.29* | 0.22* | 0.26* |
| | DE | 0.24* | 0.41* | 0.49* | 0.39* | 0.15 | 0.28* |
| v18 | PL | 0.12 | 0.003 | -0.004 | 0.04 | 0.12 | 0.06 |
| | DE | 0.15 | 0.19 | 0.38* | 0.04 | 0.51* | 0.24* |

Source: own research (*- statistically significant relations at $p < 0.05$).

sibility can be referred to – students obtaining information from multiple sources may not identify which sources are providing them with support in a given area. This problem is related to the diffusion of the support experience, which does not occur in the German group, where a specific information area is supposed to lead to specific supportive dimensions. The results are likely based on the fact that the German university is more specific in its informational activities than the Polish one.

As for further research, the problem of measuring the global sense of academic support would need attention. Considering the obtained correlations based on the indicated differences, it should not be assumed that the Polish university provides less support in total but that its information strategy differs from the German university. It is related to differences in the levels of relationship structure between access to specific information and a sense of support in various aspects of studying.

Conclusions

Student access to information and advice, various university services designed to support students, high quality of courses and curricula, and helpful instruction and study guidelines are key institutional factors affecting student engagement and academic careers (Pather et al., 2017). The purpose of this study was to explore

first-year students' experiences with the availability of information and sources of support at the university in the face of the COVID-19 pandemic.

The comparison of the Polish university, which until the outbreak of the COVID-19 pandemic was focused exclusively on the face-to-face model of education, with the German university with extensive experience in holding online classes provides important clues that may prove crucial in bringing about changes in the higher education system. Good practices of the German university are not limited to using a digital educational platform or participation in online classes through a virtual campus, although these are undoubtedly innovative examples to follow by Polish universities.

Therefore, the recommendation should address the issue of the greater specification of certain informational activities with a support aspect so that the student obtains specific information from the source responsible for a specific support activity. It will help to even out the recorded differences between Polish and German students. It is also possible that the results obtained are the effect of the mentality of students who identify support in the context of help received from a specific person, e.g., the tutor of the year. Further research on informing and supporting first-year students and other aspects of academic policies to improve the student experience in this area is recommended.

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