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ACADEMIC BURNOUT AMONG MANAGEMENT COURSES STUDENTS WHILE DISTANCE LEARNING DURING COVID-19 PANDEMIC (SURVEY REPORT)

Keywords: distance learning, Covid-19 pandemic, academic burnout, management courses students.

Summary: The development of Covid-19 pandemic forced mass use of distance learning in the school system, including higher education. The rapid change and related consequences may contribute to the so-called academic burnout. The following research questions are stated in the article: to what extend did management courses students experience academic burnout while distance learning during the Covid-19 pandemic? How did distance learning change their academic burnout? Did the mode of study (full-time/external) differentiate students' opinions? The subject of the study comprised of 172 randomly chosen students of management courses, i.e. Management, Economics and Logistics. A technique of an online survey was made use of, using a compartmentalised and standardised survey questionnaire, including The Oldenburg Burnout Inventory questionnaire – student version (The OLBI-S). It was demonstrated that in the majority of subjects academic burnout increased while distance learning during Covid-19 pandemic. A slightly higher level of burnout was detected in the case of 'exhaustion' than 'disengagement' scale. Moreover, differences between full-time and external students were noticed, as in general a higher level of burnout characterised the former category of respondents.

Introduction

The development of Covid-19 pandemic caused a rapid change in the field of education, related to mass use of distance learning. According to Keegan (1996; cf.

Garrison and Shale, 1987) teaching at distance is characterised by the separation of the teacher from the learner, and the learner from the learning group, whereby the interpersonal face-to-face communication is replaced with the communication mediated by technology. Distance education can also be conceptualized as 'the family of instructional methods, in which behaviours related to teaching are separated from behaviours related to learning so that the communication between the teacher and the learner needs to be facilitated by print, electronic devices or others (Moore and Kearsley, 1996). Distance learning was closely connected to applying computer networks and making use of on-line learning, which use the Web or computer networks as the primary environment for course discussion and interaction (Harasim, 2000; Dabbagh and Bannan-Ritland, 2005; Allen, Seaman, and Garret, 2007).

The implemented changes took place in the context of an external, stress-generating threat, they required hasty adaptation and acting ad hoc, they also involved reversal of the order of socialisation. What is more, distance learning is related to certain constraints – mitigation of direct interpersonal relations, an increase in own workload, etc. (cf. Cekiera, 2020; Długosz, 2020; Klimowicz, 2020; Mazur, 2021; Sujkowska-Sobisz, Latkowska, Ślęczek-Czakon and Piwowarczyk, 2020). These factors might favour the emergence of academic burnout syndrome (Ptaszek, Bigaj, Dębski, Pyżalski and Stunża, 2020).

To what extend did management courses students experience academic burnout while distance learning during the Covid-19 pandemic? How distance learning changed their academic burnout? Did the mode of study (full-time / external) differentiate students' opinions? The aim of this article is to answer these questions.

The article is divided into sections, which are as follows: introduction, literature review, methods, results and conclusions.

Academic burnout

The most common definition of psychological burnout comes from Maslach and Jackson (1981), who defined it as a syndrome consisting of three dimensions: emotional exhaustion, depersonalization and reduced personal accomplishment. Emotional exhaustion refers to the feeling of emotional overload and difficulty in coping with emotions, depersonalization – to a cynical, negative or detached response to other people who are usually the recipients of the services or care concerned. Whereas reduced personal accomplishment regards the conviction that it is no longer possible to work effectively with clients or care recipients. Initially, the syndrome was thought to affect representatives of social services, such as doctors, emergency services, care workers and teachers (cf. Maslach and Jackson, 1981; Maslach, Jackson and Leiter, 1996). However, over the years, further empirical studies have shown that the syndrome of burnout may affect

all employees, regardless of the type of job they do (Leiter and Schaufeli, 1996) as long as they face an imbalance between their job demands and the available resources (Demerouti, Bakker, Nachreiner and Schaufeli, 2001). In a similar period, scientists began to investigate the burnout phenomenon among students (e.g. Balogun, Helgemoe, Pellegrini and Hoeberlein, 1995; Gold and Michael, 1985; Schaufeli, Martinez, Pinto, Salanova and Bakker, 2002). It was found that the core activities (such as attending classes and completing assignments which are directed towards a specific goal – passing exams) of students can be considered 'work' (cf. Schaufeli and Taris, 2005; Breso, Salanova and Schaufeli, 2007). Following the initial construct's definition of a professional burnout created by Maslach and Jackson (1981), academic burnout can also be conceptualized in three dimensions: exhaustion, cynicism and academic inefficacy (Schaufeli et al., 2002). It can also be understood as "a phenomenon that is characterized by feelings of (emotional, physical, and cognitive) exhaustion due to the demands of studying and an attitude of withdrawal and detachment from one's studies" (Reis, Xanthopoulou and Tsaousis, 2015, p. 9; cf. Demerouti, Mostert and Bakker, 2010).

Research on academic burnout was conducted among students from Greece & Germany (Reis, Xanthopoulou and Tsaousis, 2015), Brasil & Portugal (Campos, Carlotto and Marôco, 2012), Italy (Platania, Di Nuovo, Caruso, Digrandi and Caponnetto, 2020), Poland (Łoza, 2016; Pieniawska, Śmiech, Bar and Pawlas, 2017), China (Zhang, Gan and Cham, 2007), etc. It was most often conducted among people attending health courses – medical, dental, pharmacy, nursing etc. (cf. Campos, Carlotto and Marôco, 2012; Costa, Santos, Santos, Melo and Andrade, 2012; Ried, Motycka, Mobley and Meldrum, 2006; Łoza, 2016; Shreffler et al., 2020), and less frequently among students specialized in technical subjects (Yang and Farn, 2005). No research on this topic among management students has been identified, especially in the context of the Covid-19 pandemic[1].

In research about burnout, negative consequences of this phenomenon are emphasised. It relates to loss of productivity, absenteeism and presentism, lack of engagement or apparent engagement (Łoza 2016). It has a negative impact on academic performance (cf. Madigan and Curran, 2020; Mikaeili, Afrooz and Gholiezadeh, 2013; Yang, 2004). An increase in academic burnout among the students leads to a decrease in their academic self-efficacy (Jenaabadi, Nastiezaie and Safarzaie, 2017). Capri, Ozkendir, Ozkurt and Karakus (2012) have shown that life satisfaction is inversely related to all burnout dimensions. Moreover, according to Dyrbye et al. (2011) research, a significant number of students in whom the burnout syndrome was identified, simultaneously had suicidal thoughts and wanted to forego studying.

[1] Recently, articles concerning the influence of Covid-19 pandemic on students' actions and behaviours have been published (e.g. Aristovnik, Keržič, Ravšelj, Umek and Tomaževič, 2020; Mahdy, 2020; Mazur, 2021; Rodek, 2020).

In the literature we find several tools for measuring academic burnout. The Maslach Burnout Inventory (MBI) (Maslach and Jackson, 1981; Maslach, Jackson and Leiter, 1996), a tool used to assess professional burnout, was developed by Schaufeli et al. (2002). The student version of this instrument was called MBI-SS[2]. Another one, The School-Burnout Inventory scale (SBI-U) was designed by Salmela-Aro, Kiuru, Leskinen and Nurmi (2009), and its authors have shown that it can also be used to measure burnout among university students. An alternative instrument is The Oldenburg Burnout Inventory (OLBI-S), based on the OLBI – a tool used for measuring the occupational burnout proposed by Demerouti and collaborators (Demerouti and Nachreiner, 1998; Demerouti et al., 2001; Domerouti et al., 2010). Reis, Xanthopoulou and Tsaousis (2015), through the research, have shown that the OLBI-S is a robust instrument for the measurement of academic burnout.

Methods

Our own study was conducted in January 2021 and it covered the March 2020 – January 2021 period, in which on Polish universities, including the Faculty of Economics and Management of the University of Zielona Góra, classes were conducted in the form of distance learning. During the summer term 2019/2020 they were pursued using various programmes / applications (Discord, Google Hangouts, Skype, Messenger, e-mail, What's App etc. – depending on the academics' preferences), and the communication between lecturers and students could take place not only in a synchronous way, but also in an asynchronous way. During the winter term 2020/2021 the classes were taking place by means of Google Classroom, a free of charge Internet service for schools and universities, developed by Google, which was aimed at simplifying the process of communication, as well as creating, distributing and marking of assignments in an electronic form.

The research process consisted of the following stages: literature analysis, research gap identification, formulation of research questions and hypotheses, sample selection and development of adequate research tools, data collection and analysis, formulation of conclusions, indication of limitations and future directions.

The subject of the study comprised of 172 randomly selected[3] students of management courses, i.e. Management, Economics and Logistics (no surveys were

[2] According to some researchers, the MBI has several weak points, both theoretical and psychometric. Kalliath, O'Driscoll, Gillespie and Bluedorn (2000), for instance, argued that only the first two dimensions of emotional exhaustion and depersonalization should be included in the burnout model. Moreover, Demerouti et al. (2001) note that one-sided scales are inferior to scales that include mixed (both positively and negatively formulated) items, as they can lead to artificial factor solutions in which positively and negatively formulated items are likely to cluster.

[3] The sampling frame had 1387 items (388 persons studied Economics, 296 – Management and 703 – Logistics). The examined faculties have 756 full-time students and 631 part-time students. The sample size was determined using the formula for sample size in the non-probability sampling

identified among the representatives of these courses). They were asked to assess different aspects of distance learning during the Covid-19 pandemic, including their academic burnout, engagement and satisfaction.

A technique of an online survey was used, practicing a compartmentalised and standardised survey questionnaire, including, among others, 12 questions: closed, half-open, tabular. In order to investigate the academic burnout among analysed students while distance learning during Covid-19 pandemic The Oldenburg Burnout Inventory questionnaire – student version (The OLBI-S) was used (Reis, Xanthopoulou and Tsaousis, 2015). It consists of 16 items and was designed to measure academic burnout in 2 dimensions – Disengagement (an attitude and detachment from one's study) and Exhaustion (due to the demands of studying). Each of two subscales contains eight questions; 4 of them are worded positively while the other 4 are worded negatively (for each subscale). Likert-type four-point response scale was applied: 1: totally disagree to 4: totally agree. The positive worded items were reversed (R) before summing the scores so that a high score refers to high levels of exhaustion and disengagement.

English version was translated into Polish. Before the data collection, the nine items were piloted in a small group of participants to verify their clarity (n = 8). None of the respondents expressed problems with understanding the items.

The internal consistency was confirmed using standard Cronbach's alpha coefficient (α) for each dimension proposed in the inventories (α-Cronbach's coefficient for the 'disengagement' subscale was 0.814661[4], and for 'exhaustion' – 0.809373).

The following general hypotheses were formulated:

- H_1: According to the majority[5] of surveyed management students, distance learning during Covid-19 pandemic increased their academic burnout.
- H_2: There are differences between full-time and external management students in terms of their academic burnout during Covid-19 pandemic.

Statistical analyses were carried out using Microsoft Excel and Statistica software. A nonparametric test was performed – the U Mann-Whitney (with continuity correction). This was proceeded by examining the normality of the distribution of individual research groups – using the Kolmogorov Smirnov test with the Lillefors correction, whose results justified performing a non-parametric test.

In the study there were 172 respondents who were students of Economics (27.91%), Management (21.51%) or Logistics (50.58%). They were studying

scheme (Szreder, 2004, p. 121; cf. Brzeziński, 1999). The size of the sample depended on the number of students of each management courses as well as on the number of persons studying in each mode of study: full-time and external one.

[4] The scales forming part of the tool should exhibit value of the α-Cronbach's coefficient larger than 0.7. Questionnaires whose α-Cronbach's coefficient is smaller than 0.6 should not be used (Brzeziński, 2011).

[5] According to the Wielki słownik języka polskiego (Żmigrodzki, https://wsjp.pl/index.php?id_hasla = 35345), 'the majority' is 'the number of objects that account for more than half the total'.

full-time (54.07%) or externally (45.93%), pursuing undergraduate (63.95%) or postgraduate degree (36.05%). There were more women (65.70%) than men (34.30%). The average age of respondents was: 24.44. More than half of them, i.e. 57.56% were people in the age of 20–23.

Results

In order to investigate the academic burnout while distance learning during Covid-19 pandemic, the OLBI–S was used (Reis, Xanthopoulou, Tsaousis, 2015). Detailed findings are shown in Table 1.

Table 1. The academic burnout of the students of management courses (The OLBI-S); self-assessment

The OLBI-S items	Arithmetic mean $\bar{n}$
Disengagement	
1(R). I always find new and interesting aspects in my studies.	2,3314
2. It happens more and more often that I talk about my studies in a negative way.	2,4942
3. Lately, I tend to think less about my academic tasks and do them almost mechanically.	2,5465
4(R). I find my studies to be a positive challenge.	2,2093
5. Over time, one can become disconnected from this type of study.	2,4651
6. Sometimes I feel sickened by my studies.	2,5640
7(R). This is the only field of study that I can imagine myself doing.	2,7907
8(R). I feel more and more engaged in my studies.	2,5523
Total	**2,4941**
Exhaustion	
9. There are days when I feel tired before I arrive in class or start studying.	3,1570
10. After a class or after studying, I tend to need more time than in the past in order to relax and feel better.	2,6337
11(R). I can tolerate the pressure of my studies very well.	2,5814
12. While studying, I often feel emotionally drained.	2,7384
13(R). After a class or after studying, I have enough energy for my leisure activities.	2,6105
14. After a class or after studying, I usually feel worn out and weary.	2,8081
15(R). I can usually manage my study-related workload well.	2,3256
16(R). When I study, I usually feel energized.	2,6686
Total	**2,6904**

Source: Own elaboration based on research

Note: (R) means reversed item when the scores should be such that higher scores indicate more burnout.

Table 2. The Mann Whitney U test results (with continuity correction) (academic burnout while distance learning during the Covid-19 pandemic and type of studies)

Statement numer	Mann-Whitney U test results (with continuity correction) for the variable: type of studies								
	Rank sum – Group 1	Rank sum – Group 2	U	Z	P	Z adjusted	P	N valid – Group 1	N valid – Group 2
1	8703,500	6174,500	3014,500	2,02334	0,04304	2,24175	0,024978	93	79
2	8776,000	6102,000	2942,000	2,24610	0,02470	2,38920	0,016886	93	79
3	8882,000	5996,000	2836,000	2,57181	0,01012	2,78690	0,005322	93	79
4	8347,500	6530,500	3370,500	0,92948	0,35264	1,04790	0,294686	93	79
5	8903,500	5974,500	2814,500	2,63787	0,00834	2,79522	0,005187	93	79
6	8923,000	5955,000	2795,000	2,69778	0,00698	2,85945	0,004244	93	79
7	7622,000	7256,000	3251,000	-1,2967	0,19475	-1,3928	0,163678	93	79
8	8131,500	6746,500	3586,500	0,26578	0,79041	0,28675	0,774304	93	79
9	8698,000	6180,000	3020,000	2,00644	0,04481	2,23764	0,025245	93	79
10	8128,500	6749,500	3589,500	0,25657	0,79751	0,26816	0,788575	93	79
11	8387,000	6491,000	3331,000	1,05085	0,29333	1,12789	0,259367	93	79
12	8844,000	6034,000	2874,000	2,45504	0,01409	2,58496	0,009741	93	79
13	7832,000	7046,000	3461,000	-0,6514	0,51479	-0,6955	0,486764	93	79
14	7302,500	7575,500	2931,500	-2,2784	0,02271	-2,5761	0,009992	93	79
15	8136,000	6742,000	3582,000	0,27961	0,77978	0,31328	0,754070	93	79
16	8513,500	6364,500	3204,500	1,43954	0,15000	1,59781	0,110085	93	79

Source: Own elaboration based on research
U – Mann-Whitney test value used for small numbers <20
Z – Mann-Whitney test value used when number of both groups is greater than 20
P – significance level for the test for the Z test value
Z adjusted – test value adjusted for combined weights
p – significance level for Z adjusted
N valid – numerical amount of groups
– highlighted results significant at p<,05000

On the ground of analysis of research results, it was found that arithmetic means were slightly higher in the case of 'exhaustion' scale ($\overline{n}$ = 2.6904) than of 'disengagement' ($\overline{n}$ = 2.4941) (let us remind that answers were given in the scale of 1: 'totally disagree' to 4: 'totally agree', and higher results indicate a higher level of academic burnout). The three highest arithmetic means were obtained in the 'exhaustion' scale, for statements concerning: a. feeling tired before arriving in class or starting studying ($\overline{n}$ = 3.1570), b. feeling worn out and weary after a class or after studying ($\overline{n}$ = 2.8081) and c. feeling emotionally drained while studying ($\overline{n}$ = 2.7384).

To check whether the mode of study (full-time/external) differentiated the respondents' answers concerning 16 expressions included in the applied research tool, the Mann-Whitney U test (with continuity correction)[6] was used. The results are presented in Table 2.

The analysis of information contained in Table 2 has shown that there is no ground to deem that opinions of respondents studying intramurally or extramurally did not differ from each other with regard to the following 8 statements:

- I always find new and interesting aspects in my studies (no. 1; *disengagement*);
- It happens more and more often that I talk about my studies in a negative way (no. 2; *disengagement*);
- Lately, I tend to think less about my academic tasks and do them almost mechanically. (no. 3; *disengagement*);
- Over time, one can become disconnected from this type of study (no. 5; *disengagement*);
- Sometimes I feel sickened by my studies (no. 6; *disengagement*);
- There are days when I feel tired before I arrive in class or start studying (no. 9; *exhaustion*);
- While studying, I often feel emotionally drained (no. 12; *exhaustion*);
- After a class or after studying, I usually feel worn out and weary (no. 14; *exhaustion*).

Results of comparison between statements of full-time and external students about their academic burnout are presented in Table 3.

Higher average grades were obtained in the case of six out of eight mentioned expressions by analysed external students (Table no. 3). The largest differences in the grading concerned the 5th, 6th and 12th expressions. These expressions concerned the following issues: becoming disconnected from this type of studies, feeling sickened by studies (disengagement scale) and feeling emotionally drained while studying (exhaustion scale). In the case of the mentioned statements from the 'disengagement' scale, higher arithmetic means were obtained by full-time

[6] The null hypothesis assumes in the Mann-Whitney U test that the types of distribution of the analysed samples do not differ significantly from each other, while the alternative – that they differ significantly from each other (for more, see: Rabiej, 2012). If the p-value is below the adopted threshold of significance, there are reasons to reject the null hypothesis (Moczko, 2014).

students, while in the case of the indicated statement from the 'exhaustion' scale – by external students.

Table 3. Arithmetic means for statements included in the OLBI-S by the type of studies (students' self-assessment)

Statement number in OLBI-S	Participants of full-time studies	Participants of external studies	|a–b|
	Arithmetic means		
	a	b	
Disengagement			
1	2,430108	2,21519	**0,214918**
2	2,634409	2,329114	**0,305295**
3	2,688172	2,379747	**0,308425**
4	2,247312	2,164557	0,082755
5	2,634409	2,278481	**0,355928**
6	2,741935	2,392405	**0,349530**
7	2,698925	2,898734	0,199810
8	2,559140	2,544304	0,014836
Exhaustion			
9	3,258065	3,037975	**0,220090**
10	2,655914	2,607595	0,048319
11	2,634409	2,518987	0,115422
12	2,903226	2,544304	**0,358922**
13	2,569892	2,658228	0,088340
14	2,860215	3,189873	**0,329660**
15	2,333333	2,316456	0,016877
16	2,752688	2,569620	0,183068
Total	**2,662635**	**2,540348**	**0,122286**

Source: Own elaboration based on research

The students were also asked how distance learning during the Covid-19 pandemic changed their academic burnout (refers to H_1). The most people (46.51%, i.e. 21.51% and 25.0%) stated that during the Covid-19 pandemic period their academic burnout increased. Less than one in ten respondents (9.30%, i.e. 4.07% and 5.23%) expressed a contrary view. Every fourth (26.16%) deemed that this form of learning did not have an impact on their academic burnout. Among the respondents were those (6.98%) who did not have an opinion on this subject, as well as those who declared that they did not experience academic burnout before the Covid-19 pandemic, nor do they experience it now (11.05%).

Table 4. Respondents' answers to the question about the meaning of distance learning realised during Covid-19 pandemic for their academic burnout – arithmetic means

The importance of distance learning realized during the Covid-19 pandemic for respondents' academic burnout	Full-time students a	External students b	Total	|a–b|
	[%]			
It definitely increased my academic burnout	23.66	18.99	21.51	4.67
It rather increased my academic burnout	26.88	22.78	25.00	4.1
It had no effect on my academic burnout	21.51	31.65	26.16	10.14
It rather decreased my academic burnout	3.23	5.06	4.07	1.83
It definitely decreased my academic burnout	5.38	5.06	5.23	0.32
I did not feel academic burnout before the Covid-19 pandemic and I do not feel it now	10.75	11.39	11.05	0.64
Difficult to say	8.60	5.06	6.98	3.54

Source: own elaboration based on research.

The Mann-Whitney U test did not show a basis to deem that the opinions of respondents studying full-time or externally differed significantly in this respect ($p = 0.5778>0.05$) (refers to H_2), what was confirmed by further analysis of the obtained data. The largest difference concerned the answer: distance learning definitely had no effect on my academic burnout, which was provided more often by external students compared to full-time ones (31.65% : 21.51%, respectively) (Table 4).

Conclusions

The results of conducted analyses showed that in the majority of respondents academic burnout increased while distance learning during Covid-19 pandemic. A slightly higher level of burnout was ascertained in the case of the 'exhaustion' scale ($\overline{n} = 2.6904$) than of 'disengagement' scale ($\overline{n} = 2.4941$). Additionally, certain differences between full-time and external students were noticed, where in general a higher level of burnout characterised the former category of respondents. From another studies conducted by the authors of this article it resulted that full-time students were less satisfied with distance learning than external students, who appreciated the convenience of this form of studying (Seiler, Bortnowska, Noskowska, 2021, in review). It might translate into a higher level of academic burnout.

In the future, it is worth continuing research among students to identify significant alarming changes in the area of academic burnout, and as a result undertake preventive actions. These actions can be: providing them with

psychological support (working with a psychologist, counsellor, mentor, etc.[7]) and more intense dissemination of information about the ability to benefit from this kind of help, organising additional classes regarding coping with stress, balancing of studies with other responsibilities (private and/or professional), self-motivation, time management, healthy lifestyle under pandemic conditions, etc. It may also be necessary to develop students' self-efficacy, to increase their interest in the learning process, to offer them individual learning trajectories. It may also be important to encourage them to seek opportunities to develop their passions in a virtual environment, to create virtual teams, student support groups, or to conduct surveys of student needs, identifying the problems they face when studying during the Covid-19 pandemic (cf. Koropets, Fedorova and Kacane, 2019; Shreffler et al., 2020).

Some limitation of conducted research was the fact that data regarding academic burnout before the pandemic and implementation of distance learning was not available. As a consequence, students' declarations concerning whether their experience of burnout increased, or decreased had to be used. However, it was not possible to compare the results obtained using the OLBI-S questionnaire from before and during the pandemic. Additionally, let us emphasise that the research was conducted among students of one department (in which management courses are studied), so their representative character is limited. Besides, it was quantitative and a better understanding of the analysed problem would require more in-depth qualitative research.

References

Allen, I.E., Seaman, J., Garrett, R. (2007). *Blending in: The Extent and Promise of Blended Education in the United States*. Needham: Sloan Consortium.

Aristovnik, A., Keržič, D., Ravšelj, D., Umek, L., Tomaževič, N. (2020). Impacts of the COVID-19 Pandemic on Life of Higher Education Students: A Global Perspective. *Sustainability*, *vol. 12, no. 20*, p. 8438. DOI: 10.3390/su12208438.

Balogun, J. A., Helgemoe, S., Pellegrini, E., Hoeberlein, T. (1995). Test-retest reliability of a psychometric instrument designed to measure physical therapy students' burnout. *Perceptual & Motor Skills, vol. 81*(2), pp. 667–672. DOI: 10.2466/pms.1995.81.2.667.

Breso, E., Salanova, M., Schaufeli, W. B. (2007). In search of the third dimension of burnout. *Applied Psychology: An International Review*, vol. 56, pp. 460–478. DOI: 10.1111/j.1464-0597.2007.00290.x.

Brzeziński, J. (1999, 2011). *Metodologia badań psychologicznych*. Warszawa: PWN.

Campos, J.A., Jordani, P.C., Zucoloto, M.L., Bonafé, F.S., Maroco, J. (2012). Burnout syndrome among dental students. *Revista Brasileira de Epidemiologia*, *vol. 15*(1), pp. 155–65. DOI: 10.1590/s1415-790x2012000100014.

[7] Currently, according to the information posted in the University of Zielona Gora website, students can access free of charge professional help, from e.g. psychologists, addiction therapists, sociotherapists (https://www.infoserwis.uz.zgora.pl/index.php?pomoc-specjalistow-dla-studentow-i-pracownikow-uz, 24.02.2021).

Campos, J., Carlotto, M., Marôco, J. (2012). Oldenburg Burnout Inventory – student version: cultural adaptation and validation into Portuguese. *Psicologia: Reflexão e Crítica*, *vol. 25*(4), pp. 709–718. DOI: 10.1590/S0102-79722012000400010.

Capri, B., Ozkendir, O. M., Ozkurt, B., Karakus, F. (2012). General self-efficacy beliefs, life satisfaction and burnout of university students. *Procedia Social and Behavioral Sciences*, *vol. 47*, pp. 968–73. DOI: 10.1016/j.sbspro.2012.06.765.

Cekiera, R. (2020). *Semestr z laptopa, czyli o studiach online*. Retrieved from: https://www.miesiecznik.znak.com.pl/semestr-z-laptopa-czyli-o-studiach-online/ (16.02.2021).

Costa, E.F., Santos, S.A., Santos, A.T., Melo, E.V., Andrade, T.M. (2012). Burnout Syndrome and associated factors among medical students: a cross-sectional study. *Clinics, vol. 67*(6), pp. 573–80. DOI: 10.6061/clinics/2012(06)05.

Dabbagh, N., Bannan-Ritland, B. (2005). *Online learning: Concepts, strategies and application.* Upper Saddle River: Pearson Prentice Hall.

Demerouti, E., Bakker, A. B., Nachreiner, F., Schaufeli, W. B. (2001). The job demands--resources model of burnout. *Journal of Applied Psychology*, *vol. 86*, pp. 499–512. DOI: 10.1037/0021-9010.86.3.499.

Demerouti, E., Mostert, K., Bakker, A. B. (2010). Burnout and work engagement: A thorough investigation of the independency of both constructs. *Journal of Occupational Health Psychology*, *vol. 15*(3), pp. 209–222. DOI: 10.1037/a0019408.

Demerouti, E., Nachreiner, F. (1998). Zur Spezifität von Burnout für Dienstleistungsberufe: Fakt oder Artefakt. *Zeitschrift für Arbeitswissenschaft*, *vol. 52*, pp. 82–89. DOI: 10.1007/s41449-018-0100-4.

Długosz, P. (2020). *Raport z II etapu badań studentów UP. Opinia na temat zdalnego nauczania i samopoczucia psychicznego*, Instytut Filozofii i Socjologii, Uniwersytet Pedagogiczny w Krakowie, Cracow, Retrieved from: https://ifis.up.krakow.pl/wp-content/uploads/sites/9/2020/06/Raport-Studenci-UP-II-etap.pdf (16.02.2021).

Dyrbye, L., Harper, W., Durning, S., Moutier, Ch., Thomas, M., Massie, F., Eacker, A., Power, D., Szydlo, D., Sloan, J., Shanafelt, T. (2011). Patterns of Distress in US Medical Students. *Medical Teacher*, *vol. 33*, pp. 834−839. DOI: 10.3109/0142159X.2010.531158.

Gold, Y., Michael, W. B. (1985). Academic self-concept correlates of potential burnout in a sample of first-semester elementary-school practice teachers: A concurrent validity study. *Educational and Psychological Measurement*, *vol. 45* (4), pp. 909–914. DOI: 10.1177/0013164485454022.

Harasim, L. (2000). Shift happens Online education as a new paradigm in learning. *Internet and Higher Education*, *vol. 3*, pp. 41–61.

Jenaabadi, H., Nastiezaie, N., Safarzaie, H. (2017). The Relationship of Academic Burnout and Academic Stress with Academic Self-Efficacy among Graduate Students. *New Educational Review*, *vol. 49*, pp. 65–76. DOI: 10.15804/tner.2017.49.3.05.

Kalliath, T., O'Driscoll, M., Gillespie, D., Bluedorn, A.C. (2000). *A test of the Maslach Burnout Inventory in three samples of healthcare* professionals. *Work & Stress*, *vol. 14*, pp. 35–50.

Keegan, D. (1996). *Foundations of distance education*. London – New York: Routledge.

Klimowicz, M. (2020). *Polskie uczelnie w czasie pandemii*. Retrieved from: https://centrumcyfrowe.pl/wp-content/uploads/sites/16/2020/10/Raport_Polskie_uczelnie_w_czasie_pandemii.pdf (15.02.2021).

Koropets, O., Fedorova, A., Kacane, I. (2019). Emotional and academic burnout of students combining education and work*, Proceedings of EDULEARN19 Conference 1st-3rd July 2019*, Palma, Mallorca, Spain, DOI: 10.21125/edulearn.2019.2038.

Leiter, M., Schaufeli, W.B. (1996). Consistency of the burnout construct across occupations. *Anxiety, Stress, and Coping*, *vol. 9, no. 3*, pp. 229–243. DOI: 10.1080/10615809608249404.

Łoza, O. (2016). Zespół wypalenia wśród studentów medycyny – prospektywne badania roczne. *Psychiatria*, *vol. 13*(4), pp. 224–228.

Madigan, D., Curran, T. (2020). Does Burnout Affect Academic Achievement? A Meta-Analysis of Over 100,000 Students. *Educational Psychology Review*, published on-line: 15th of May, 2020. DOI: 10.1007/s10648-020-09533-1. Retrieved from: http://eprints.lse.ac.uk/104989/ (10.02.2021).

Mahdy, M.A.A. (2020). The Impact of COVID-19 Pandemic on the Academic Performance of Veterinary Medical Students. *Frontiers in Veterinary Science*, published on-line: 6th of October, 2020. DOI: 10.3389/fvets.2020.594261. Retrieved from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7572855/ (11.02.2021).

Maslach, C., Jackson, S.E. (1981). The measurement of experienced burnout. *Journal of Occupational Behavior*, *no. 2*, pp. 99–113.

Maslach, C., Jackson, S.E., Leiter, M. (1996). *Maslach burnout inventory.* Palo Alto: Consulting Psychologists Press.

Mazur, J. (oprac.). (2021). *Nauczanie zdalne. Oswojenie (nie)znanego. Wpływ pandemii COVID-19 na szkolnictwo wyższe.* Retrieved from: https://eduhack2021.eu/wp-content/uploads/2021/01/PL-Raport_Nauczanie-zdalne-Oswojenie-nieznanego-Wplyw-pandemii-COVID-19-na-szkolnictwo-wyzsze.pdf (17.02.2021).

McCarthy, M.E., Pretty, G.M., Catano, V. (1990). Psychological sense of community and student burnout. *Journal of College Student Development*, *vol. 31* (3), pp. 211–216.

Mikaeili, N, Afrooz, G, Gholiezadeh, L. (2013). The relationship of self-concept and academic burnout with academic performance of girl students. *Journal of School Psychology*, *vol. 1*, pp. 124–30. DOI: d_1_4_91_12_1_6.

Moczko, J.A. (2014). Czy zawsze prawidłowo interpretujemy wyniki statystycznych testów nieparametrycznych. *Przegląd Lekarski*, *71*.

Moore, M.G., Kearsley, G. (1996). *Distance Education: A Systems View*. Boston: Wadsworth Publishing Company.

Pieniawska, K., Śmiech, K., Bar, K., Pawlas, K. (2017). Zawód przez zawodem – czy wypalenie może objawiać się już na studiach? Badanie populacji polskich studentów medycyny. *Medycyna Środowiskowa*, *vol. 20*(2), pp. 22–31. DOI: 10.19243/2017203.

Platania, S., Di Nuovo, S., Caruso, A., Digrandi, F., Caponnetto, P. (2020). Stress among university students: the psychometric properties of the Italian version of the SBI-U 9 scale for Academic Burnout in university students. *Health Psychology Research*, *vol. 8*(2), p. 9209. DOI: 10.4081/hpr.2020.9209.

Pomoc specjalistów dla studentów i pracowników UZ. Retrieved from: https://www.infoserwis.uz.zgora.pl/index.php?pomoc-specjalistow-dla-studentow-i-pracownikow-uz (24.02.2021).

Ptaszek, G., Bigaj, M., Dębski, M., Pyżalski, J., Stunża, G.D. (2020). *Zdalna edukacja – gdzie byliśmy, dokąd idziemy? Wstępne wyniki badania naukowego „Zdalne nauczanie a adaptacja do warunków społecznych w czasie epidemii koronawirusa”.* Retrieved from: https://fundacja.orange.pl/files/user_files/user_upload/Badanie_zdalnenauczanie_org_prezentacja_25.06.2020.pdf (04.03.2021).

Rabiej, M. (2012). *Statystyka z programem STATISTICA*, Gliwice: Helion.

Reis, D., Xanthopoulou, D., Tsaousis, I. (2015). Measuring job and academic burnout with the Oldenburg Burnout Inventory (OLBI): Factorial invariance across samples and countries. *Burnout Research*, *vol. 2, iss. 1*, pp. 8–18. DOI: 10.1016/j.burn.2014.11.001.

Ried, L.D., Motycka, C., Mobley, C., Meldrum, M. (2006). Comparing self-reported burnout of pharmacy students on the founding campus with those at distance campuses. American. *Journal of Pharmaceutical Education*, *vol. 70*(5), p. 114. DOI: 10.5688/aj7005114.

Rodek, V. (2020). Uczenie się w czasie pandemii – obszary trudności i próby optymalizacji procesu na podstawie autorefleksji studentów. *Edukacja Dorosłych*, *vol. 82, no. 1*, pp. 99–112. DOI: 10.12775/ED.2020.007.

Salmela-Aro, K., Kiuru, N., Leskinen, E., Nurmi, J. E. (2009). School-Burnout Inventory (SBI) – Reliability and validity. *European Journal of Psychological Assessment, vol. 25*, pp. 48–57. DOI: 10.1027/1015-5759.25.1.48.

Schaufeli, W.B., Martinez, I.M., Pinto, A.M., Salanova, M., Bakker, A.B. (2002). Burnout and engagement in university students – A cross-national study. *Journal of Cross-Cultural Psychology*, *vol. 33*(5), pp. 464–481. DOI: 10.1177/0022022102033005003.

Schaufeli, W.B., Taris, T.W. (2005). The conceptualization and measurement of burnout: Common ground and worlds apart. *Work & Stress*, *vol. 19*(3), pp. 256–62. DOI: 10.1080/02678370500385913.

Seiler, B., Bortnowska, H., Noskowska, A. (2021). Management courses students towards distance learning during Covid-19 pandemic period – their academic engagement and satisfaction (survey report). *Szkoła – Zawód – Praca* (in review).

Shreffler, J., Huecker, M., Martin, L., Sawning, S., Thé, S., Shaw, M.A., Mittel, O., Holthouser, A. (2020). Strategies to Combat Burnout During Intense Studying: Utilization of Medical Student Feedback to Alleviate Burnout in Preparation for a High Stakes Examination. *Health Professions Education*, *vol. 6, iss. 3*, pp. 334–342. DOI: 10.1016/j.hpe.2020.04.009.

Sujkowska-Sobisz, K., Latkowska, J., Ślęczek-Czakon, D., Piwowarczyk, P. (2020). *Zdalne kształcenie na Wydziale Humanistycznym Uniwersytetu Śląskiego w Katowicach*, Katowice. Retrieved from: https://us.edu.pl/wydzial/wh/wp-content/uploads/sites/15/Nieprzypisane/ZDALNE-KSZTA%C5%81CENIE-NA-WYDZIALE-HUMANISTYCZNYM-RAPORT.pdf (15.02.2021).

Szreder, M. (2004). *Metody i techniki sondażowych badań opinii*. Warszawa: PWE.

Yang H.-J., Farn C.K. (2005). An investigation the factors affecting MIS student burnout in technical–vocational college. *Computers in Human Behavior*, *vol. 21*(6), pp. 917–932. DOI: 10.1016/j.chb.2004.03.001.

Yang, H.J. (2004). Factors affecting student burnout and academic achievement in multiple enrolment programs in Taiwan's technical – Vocational colleges. *International Journal of Educational Development, vol. 24*, pp. 283–301. DOI: 10.1016/j.ijedudev.2003.12.001.

Zhang, Y., Gan, Y., Cham, H. (2007). Perfectionism, academic burnout and engagement among Chinese college students: A structural equation modelling analysis. *Personality and Individual Differences*, *vol. 43, issue 6*, pp. 1529–1540. DOI: 10.1016/j.paid.2007.04.010.

Żmigrodzki P. (ed.). *Wielki słownik języka polskiego*. Retrieved from: https://wsjp.pl/index.php?id_hasla = 35345 (15.12.20210).

WYPALENIE WŚRÓD STUDENTÓW KIERUNKÓW MENEDŻERSKICH PODCZAS NAUKI ZDALNEJ W TRAKCIE PANDEMII COVID-19 (RAPORT Z BADAŃ ANKIETOWYCH)

Słowa kluczowe: nauka zdalna, pandemia Covid-19, wypalenie studentów, studenci kierunków menedżerskich.

Streszczenie: Rozwój pandemii Covid-19 wymusił masowe zastosowanie nauki zdalnej w szkolnictwie, w tym szkolnictwie wyższym. Gwałtowna zmiana i związane z nią konsekwencje mogą przyczyniać się do tzw. wypalenia akademickiego. W artykule postawiono następujące pytania badawcze: w jakim stopniu studenci kierunków menedżerskich odczuwali wypalenie podczas nauki zdalnej w trakcie pandemii Covid-19? Jak nauka zdalna zmieniła ich wypalenie? Czy tryb studiów (dzienny/zaoczny) różnicował opinie studentów? Podmiotem badań było 172 losowo dobranych studentów kierunków menedżerskich, tj. zarządzania, ekonomii i logistyki. Posłużono się techniką ankiety internetowej, stosując skategoryzowany i wystandaryzowany kwestionariusz ankiety, w tym kwestionariusz The Oldenburg Burnout Inventory – wersje dla studentów (The OLBI-S). Wykazano, że u większości badanych wypalenie studiami zwiększyło się podczas nauczania zdalnego w okresie pandemii Covid-19. Stwierdzono nieco wyższy poziom wypalenia w przypadku skali 'wyczerpanie' niż 'brak zaangażowania'. Dostrzeżono także różnice pomiędzy studentami dziennymi i zaocznymi, gdzie generalnie wyższy poziom wypalenia cechował tę pierwszą kategorię badanych.

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