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ACADEMIC BURNOUT AMONG HIGHER EDUCATION STUDENTS

1. Introduction

Transformation of modern societies is allowing people to live fast, smart, technology-driven lives. In workplace, it brings flexibility and news business forms. Organizations are dynamic structures, so their pursuit of adaptation and problem solving is constant. At the same time, prolonged job-related availability may eventually result in resentment, reduced satisfaction in performance and exhaustion. Industrial-organizational psychology methods focus on solving such problems and improving quality of life in the workplace.

Quality of life is a multidimensional concept [1] that comprises both positive and negative evaluations of life aspects. When applied to a workplace, quality of life can be perceived as work environment that promotes health and security, job satisfaction [2] and professional and personal development. On the other hand, work environment generating excessive stress and leading to long-term emotional, mental and physical exhaustion leads to burnout. Burnout 'reflects an uneasy relationship between people and their work' [3a, p. 44] and it is definitely an ultimately real and chronic problem nowadays.

While burnout is a serious issue for both organizations and individuals [4], and has been widely studied [3b], it has not been focus of much academic attention in the university context yet. The aim of this paper is, therefore, to examine academic burnout among higher education students in Poland.

For the purpose of the study, the Burnout Clinical Subtype Questionnaire – Students Survey was applied on-line for students registered at Polish universities.

The survey consists of 12 items in form of statements related to three dimensions of burnout: overload, neglect and lack of development.

The paper is also aimed to understand whether university students experienced burnout in any of its dimensions and whether the perception of burnout depended on student professional activity, distance from family home or failed courses.

2. Literature Review

2.1. Burnout in management

In 1974, Freudenberger [5] brought the idea of burnout as a consequence of severe, extended stress often related to supporting professions such as doctors, nurses, teachers, social workers, or police officers. People performing these jobs, by providing help and support to others, often experience stressful work-related situations, sacrifice themselves for others, and may have a tendency to work beyond limits putting behind their own mental and emotional well-being. Burnout is linked particularly to professions with close interactions with others, in which these contacts determine success, prestige or development in a certain type of work. Costs of these close interactions in combination with negative emotions, suffering and chronic stress can appear especially when doctor, teacher or nurse cannot deal with workload. Work becomes less effective and does not give satisfaction anymore.

People suffering from burnout start to keep distance from those they work with, co-workers, patients or students, what bring on more specific phenomenon in burnout – depersonalisation. The WHO [6] has recently updated the definition of burnout. The 11th Revision of the International Classification of Diseases (ICD-11) refers to burnout as 'a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed'. It is not classified as medical condition but an occupational phenomenon. This redefinition is an important shift in understanding the concept of burnout. It is hoped that it will draw attention to its prevalence and help in diagnosis.

Burnout is a complex phenomenon [7]. There is, however, a general consensus that one symptom which should be an alert for an individual is emotional exhaustion. Some other symptoms can also be considered as signs of burnout, for instance: distancing himself/herself from social interactions and keeping distance from closer relationships. Unfortunately, they are not generally acknowledged by the scientific community. Maslach and Jackson [8] refer to reduced personal accomplishment which is a reaction to unsuccessful situations in dealing with work-related stress. This, in turn, is related to a lower satisfaction with personal achievements.

Hochschild [9] argues that increased competition and increased employment in services leads to commercialization of human feelings. In the past, people used to keep their private lives as a secret. Nowadays, they are permanently present in professional environment. Hochschild [9] distinguished between effort put in regulation of emotions in private life which she calls emotion work and effort made during work-related activities named as emotional labor. Work has become an important part of our lives. Emotional labor is a way of emotion regulation in which people control their emotions and feelings at work. Hochschild [9] focused specifically on employees' attitudes and referred negative consequences of emotional labor which could be burnout, stress and reduced satisfaction from work. There are two forms of the emotional labor: surface acting and deep acting. The first is based on external level and it consists of modification of emotional expression – smiling despite of feeling negative emotions or indifference despite of sympathy. At a deep acting level, feelings are internal and are subject to change when discussing feelings experienced by the employee.

This method causes a change of emotional expression. While surface acting is to meet certain social or work rules, deep acting is about a person trying to feel a specific emotion which they have in their mind. Both ways result in showing a certain attitude, but surface acting is more demanding because emotions experienced by the employee are unchangeable. It means that the employee can feel angry or bored but still has to keep smiling in front of the customer [10].

Another relevant input into understanding burnout was given by Maslach and Jackson. Their multidimensional model of burnout was applied in numerous investigations and gave origin to the MBI – Maslach Burnout Inventory, used in burnout assessment. The burnout model suggested by Maslach and Jackson considers three symptoms: exhaustion, reaction on other people (depersonalization) and reaction on herself/himself (reduced personal accomplishment) and is based on exploratory studies rather than theoretical considerations.

Initial research was performed to investigate doctors and nurses. Maslach chose this professional group because she was inspired by two statements she found in medical literature. The first one was the description of Lief and Fox of 'detached concern' in 1963 which is a perfect combination of sympathy and emotional distance, especially important in medical professions. The second statement that inspired Maslach was Zimbardo's one. It concerned dehumanization in self-defence which is a kind of self-protection against incapacitating emotions. Here, the reaction is more objective and impersonal.

These two ideas were considered a good theoretical background for addressing emotional aspects of work in the studied professional groups. There were, however, several other questions to be answered in order to understand in more detail the reality of work in medical care. Maslach conducted interviews with doctors and nurses that allowed her to refine the ideas and suggest three burnout

indicators which later became the part of the model. She also noticed in another circumstance that all three indicators were present in professions related to coping with people.

These empirical studies of Maslach were the beginning of her work on burnout that brought further questions and opened other research hypotheses. She moved into larger studies working on care-related providers and care receivers. Broadening the scope of research was an important step as it allowed her to study burnout in the context of family life and demographic, work-related variables together with situational strategies.

The three-dimensional MBI measurement tool came as a result of these investigations. The model reflects the diversity of psychological reactions on work-related situations that people experience. The three dimensions: exhaustion, depersonalization and reduced personal accomplishment were studied individually and holistically. One of ways to understand the relationships between the dimensions suggests an increasing development of one dimension while another one appears within time.

Golembiewski et al. (1990) [11] have shown that the first phase of burnout is depersonalization. Depersonalization is based on reduced personal accomplishment which ends with emotional exhaustion. An alternative idea by Leiter and Maslach (1988) [11] suggests that emotional exhaustion comes first and results in development of depersonalization. This leads to reduction of personal accomplishment. Leiter [12] introduced some rectifications to this idea, suggesting that reduction of personal accomplishment happens regardless of the other two components of the model. In other words, some burnout elements progress simultaneously, not sequentially, because there are different reactions to conditions in the work environment.

Differences in reactions do not necessarily have to be a function of individual factors (such as personality) but can show the importance and impact of situational conditions on three burnout dimensions. This multidimensional approach suggests that activities, which aim to reduce burnout should be planned bearing in mind the factor that needs to be eliminated. It means that certain activities, which reduce the likelihood of emotional exhaustion, prevent depersonalization or increase personal accomplishment, may be more successful than using a more general approach to reduce stress [13].

2.2. Burnout among students

Burnout is widely studied in professions related to care provision but as a matter of fact they can be experienced by any professional. In the higher education context, research focusing on burnout among academic staff is present. On the other hand, students can and do experience burnout as well. It has been

shown that fulfilling academic requirements has some characteristics of performing a professional job. What is more, there are studies concerning undergraduate and graduate students.

The paper [14, p. 47] argues that burnout has some similarities when experienced in occupational cases. One of the investigations was performed with the objective to study the relationship between gender and average grade in three burnout dimensions. The research was conducted in Serbia among 376 students of management and IT between the second to the final year of studies. It has been found that 46.3% of students were at risk of burnout and 20.7% were considered to be at high risk. There was no statistically significant correlation between burnout and gender. One important predictor of burnout appeared to be the average grade [14]. The risk of burnout increased also with the year of study.

Academic burnout is a serious problem for students, families, educational professionals and higher education system. Undoubtedly, it has a negative impact on students' mental health [15]. Positive and negative aspects can influence learning outcomes and trigger burnout symptoms. They are a central part of human personality as a dynamic system [15]. Positive and negative emotions can play an essential role in anticipating and realigning health consequences such as different mood states.

Most of study-related student feelings are experienced in the academic environment which is why they are related with academic achievements and academic adjustment [15]. Negative emotions are linked to academic stressors and academic exhaustion [15], and turn students into less active participants of the learning process [15]. Emotional exhaustion in the study-related context is the most overpowering symptom of burnout among students in relation to other dimensions (that is, cynicism and academic efficacy) [16]. Another study has shown that stress among students depends from negative effect and is associated with academic failure [15].

In education, academic burnout has been the subject of some attention. Neuman (1990) has argued that understanding academic burnout can be the key to understanding students' behaviors during the period of study (look [15]). Academic burnout can affect students' interest, enthusiasm and decisions on continuing education. Students who feel less competent and unsuccessful can experience feelings of low academic efficacy [16].

However, these life changes may be a cause of stress. Russell's (2010 cited in [17]) research among 979 international students has concluded that 41% of them felt stress and homesickness. Young people often combine the academic studies with professional work, an issue discussed in the context of burnout [18], [19].

Some studies (see [20]) have examined differences in the level of student burnout in different cultures. There were differences in the structure of the Finnish and Chinese higher educational systems because they needed to suit the local society's needs.

The results revealed that the difference in the main level of overall burnout between the Chinese and the Finnish students is very small. It means that there is practically no difference in the main level of experienced burnout between these two groups. However, this study suggests that Finnish students experience more exhaustion than the Chinese students. At the same time, Chinese students experience more cynicism than their Finnish colleagues. In both countries, there is a general concern to help students to get through this problem.

Data from Hungary suggest that from quarter to more than one third of medical students experience symptoms of burnout. One study from Romania has found that 15% of students could have been affected by burnout while an American investigation suggests that 43% of students are coping with consequences of burnout [21].

Unfortunately, there is no exact data from Poland. It is estimated only that 20% students are experiencing burnout symptoms [21].

Study program-wise, medical students have been a focus group of a lot of research as far as academic burnout is concerned. Further research interest has been spreading into other fields of study especially those related to help and support. For example, in Slovakia, students of psychology, nursing and midwifery have been examined [22]. The study has shown that students of nursing and midwifery demonstrated higher level of burnout than psychology students.

2.3. The Burnout Clinical Subtype Questionnaire

The Burnout Clinical Subtype Questionnaire (BCSQ) [22] is an instrument addressing clinical and therapeutic experience in burnout. It was created because of an increasing awareness that different types of burnout require different therapeutic actions so that these were the most effective. The preliminary classification was proposed by Farber (see [23]), who introduced three syndrome profiles: 'frenetic', 'underchallenged' and 'worn-out'. Montero-Marin and Garcia-Campayo [23] used Farber's classification and systematized the taxonomy and each profile.

Highly committed individuals, who invest significant amount of time and effort in their work belong to the frenetic type. They are characterized by high degree of involvement and tend to work harder when facing difficulties. When overloaded by work, frenetic individuals focus on objectives even ignoring their own needs, such as health or personal life. The frenetic profile needs achievements and is a source of great ambition.

The underchallenged type is used to describe individuals who are not so much interested in their work and who perform duties by obligation. Unmotivated, unengaged and unchallenged, they seek the easiest ways to do the job. Boredom, monotonous and repetitive tasks have their impact on limited way these employees use their talent and contribute to their dissatisfaction from work. Individuals in the 'worn-out' category tend to ignore their responsibilities and present a lower involvement. They cope with work-related stress and frustration by indifference and negligence.

The frenetic profile uses the dimensions of involvement, ambition and overload. The profile is linked to emotional exhaustion and likely to experience burnout [23]. Workaholism stays in line with profile [23] and, by going beyond physical and emotional limits to reach work-related objectives can contribute to burnout. The underchallenged profile was created on the dimensions of boredom, indifference and lack of development. It has been linked to exhaustion, lack of efficacy and cynicism. Underchallenged employees lose interest in work and may become cynical in the way they perceive and do things. Lack of feedback, limited variety of tasks and dissatisfaction are factors contributing to the experience of burnout. The worn-out profile was created on the dimensions of neglect, lack of both control and acknowledgement. It relates to exhaustion, cynicism and lack of efficacy. This profile matches specifically Maslach, Schaufeli and Leiter's definition of burnout [23].

The nature of the work has also a substantial impact on incidence of burnout among employees. Evidence suggests higher scores of the frenetic type among temporary workers. On the other hand, employees with permanent employment score higher in underchallenged and worn-out profiles. These groups received higher scores in indifference, boredom, lack of acknowledgement, and negligence. There are no significant differences between genders.

Montero-Marin and Garcia-Campayo [23] argue that the burnout profiles illustrate different levels of burnout development. For the most effective treatment, specialists should decide on the type of burnout that is experienced.

A shorter version of the measure, the Burnout Clinical Subtype Questionnaire – Students Survey (BCSQ-12-SS), was created and adapted to the educational context [23]. The adaptation consisted of replacing all references to the work environment by academic activities. The questionnaire is composed of 12 items divided in three dimensions: overload (e.g., 'I think I invest more than is healthy in my commitment to my studies'), lack of development (e.g., 'I would like to study something else that would be more challenging to my abilities') and neglect (e.g., 'When the results of my studies are not good at all, I stop making an effort') [23]. Items have a form of statements scored from 1 to 7, in which 1 means 'completely disagree' and 7 means 'completely agree' [24].

2.4. Hypothesis development

The aim of the study is to show that academic burnout is a serious problem for Polish students. Research confirms that academic burnout is a serious problem for students, families, educational professionals, and the higher education system [15], [16], [20]. There is no research using the Burnout Clinical Subtype Questionnaire among Polish higher education students. The instrument was tested on dental students in Spain [23] and among medical practitioners in India [25].

Burnout in the academic context can be related to involvement, ambition, feeling overloaded, or indifferent. The lack of concern about development and failure to meet responsibilities are also examples of burnout factors [24]. One important predictor of burnout appeared to be the average grade [14]. It can therefore be assumed that:

H1: The failed courses are associated with burnout syndrome.

Research confirms that a lot of students leave their hometown to study in other cities, [17]. However, these life changes may be a cause of stress. Russell's (2010 cited in [17]) research confirms that investigated students experienced stress and homesickness. It can therefore be assumed that:

H2: The distance from the family home is associated with academic burnout.

Young people often combine academic studies with professional work. This is an issue discussed in the context of burnout [18], [19]. It can therefore be assumed that:

H3: Professional activity during studies is associated with academic burnout.

Research confirms that there was no statistically significant correlation between burnout and gender [14], [24]. It can therefore be assumed that:

H4: There doesn't exist a statistically significant correlation between burnout and gender.

Some studies [20] show differences in the level of student burnout in different cultures. It can therefore be assumed that:

H5: There exist statistically significant differences in academic burnout of Polish and Spanish students.

3. Material and methods

An on-line questionnaire was created in April 2019 in Google Forms. The questionnaire was published on the fanpage of our University and on a Facebook private profile. It was sent to individual students with a request to share it with

their friends. The questionnaire was also sent to lecturers, who provided classes in English with a request to inform their students about the research and to encourage them to take part. The questionnaire was accompanied with a cover letter. A snowballing technique was used to reach as many respondents as possible. Data collection took 32 days.

The first part of the questionnaire consisted of socio-demographic questions regarding gender, age, distance from family home, relationship status, university, field of study, cycle of study, year of study, number of failed courses, professional activity (yes/no), number of working hours/week (if professionally active), reasons for professional activity (if professionally active), and hours/weeks spent at university.

The second part of the questionnaire consisted of 12 BCSQ-SS questions [23], (presented in table 1). Items had a form of statements scored from 1 to 7, in which 1 meant 'completely disagree' and 7 meant 'completely agree' [24].

The respondents were provided with all the necessary information. Participation in the study was voluntary. Respondents could withdraw at any time. Therefore, only those participants who gave their consent and were willing to complete the sent questionnaire took part in the study.

First, each respondent received a written request to participate in this survey. Before the start of the study, each respondent confirmed electronically their consent to participate. The data is not linked to the requested characteristics that would allow the identification of an individual case. All data was fully anonymised at the time of collection. The research non-interventional studies with Human Participation (this type of survey) does not need the approval of the Committee of Ethics in the regulations of the Lodz University of Technology. The following research studies concerning human beings have been performed in accordance with the principles stated in the Declaration of Helsinki.

The study was conducted in English using the original questionnaire. The reliability of respondents was assessed by asking the same question twice (once in reverse form). Finally, only data were qualified for analysis where there was a match between these responses.

4. Results

4.1 Descriptive statistics

From 225 respondents who took part in this research, 55.56% (n=125) were females and 44.44% (n=100) were males. More than a half of respondents (53.33%) declared they were not in a relationship and almost none (99.56%) was married or had children. The minimum age of respondents was 19, and the maximum age was 30 years old with the average age of 22 years and the standard

deviation 1.56 years. Most respondents was in the 20-22 (65.78%) age range and only 2.67% was less than 20 years old.

The respondents were from eighteen universities (n=225). The biggest number (56%) was from Lodz University of Technology, while the overall number of participants, who studied in Lodz was in total 201 (besides Lodz University of Technology, there were 26.67% from University of Lodz and 5.78% from Medical University of Lodz).

The respondents were from 40 different fields of study. The biggest number of respondents (15.56%) studied Information and Technology. There were 17 fields of study represented by only one respondent and 6 fields with 2-3 respondents. 71.56% of the respondents were students in the 1st cycle of the studies. Other 40.37% of respondents were from the 3rd year of 1st cycle of studies.

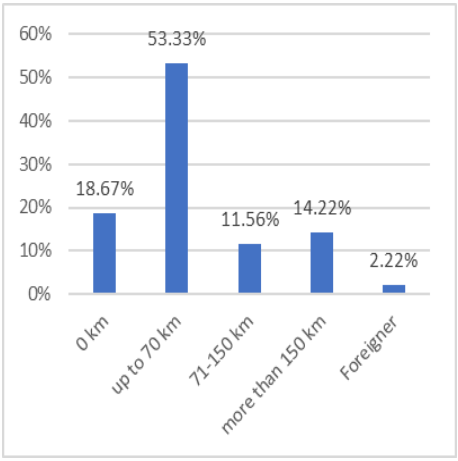

Fig. 1. Respondents' distance from family home

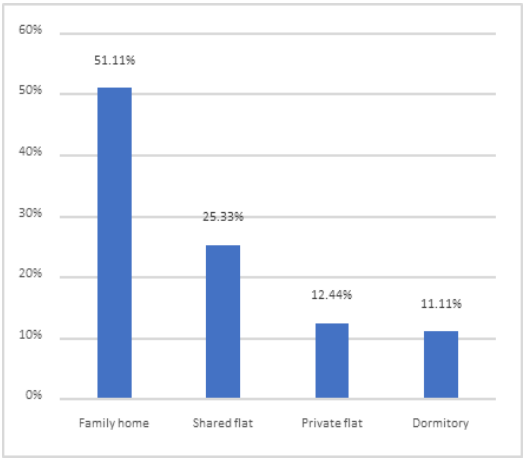

Fig. 2. Respondents' place of residence

There were more than a half of respondents (53.33%) who lived 70km or closer from the university. There were only 5 (2.22%) respondents who were foreigners (fig. 1). They were from Pakistan, Lebanon, Syria, Ukraine and Poland. That last respondent was a Polish student, who studied abroad. There were more than a half of respondents (51.11%) living in their family homes and 11.11% lived in a dormitory (fig. 2).

Requested to estimate their time spent at the university, 46.22% of respondents pointed out that it was between 21 and 30 hours per week. 44% of respondents spent less than 240 hours at the university whereas 8.44% of respondents pointed out that it was between 31 and 40 hours per week. Only 1.33% of respondents spent more than 40 hours at the university.

The survey showed that 78.67% of respondents had no failed courses at the time of data collection. More than a half of respondents (58.33%) had one unsuccessful course. 31.25% of respondents pointed out that they failed two courses. There were 6.25% of respondents with two failed courses. On the other hand, cases of more frequent failed courses were uncommon (4.16% more than four).

More than a half of respondents (56.89%) declared they did not combine studies and professional career. On the other hand, 43.11% of respondents had professional activity they combined with academic studies. From those who did work, almost a half (49.48%), said their work took from 20 to 29 hours per week. 21.65% of respondents claimed that their work took less than 20 hours per week and 28.86% of respondents who pointed out that their work took more than 30 hours per week.

A little bit more than a half of respondents (50.52%) worked because of financial reasons. Other 25.77% of the survey takers said that they worked in order to raise their competences and 23.17% pointed out that they worked for both reasons.

4.2. Results of the BCSQ-12-SS

Items were rated on the scale from 1 (strongly disagree) to 7 (strongly agree). The lowest mean (2.32) was on item 9 (‘I give up when faced with any difficulty in my tasks as a student’) and the highest (3.84) was on item 8 (‘I would like to study something else in which I could better develop my talent’).

In statement 3, ‘When the results of my studies are not good at all, I stop making an effort’, the number of negative answers was 164 (72.89%) and the number of positive answers was 40 (17.78%).

Most of respondents disagreed with the statement 6, ‘I give up in response to an obstacle in my studies’. In this item, the number of negative answers was 177 (78,67%) and the number of positive answers was 28 (12.45%).

In statement 9, ‘I give up when faced with any difficulty in my tasks as a student’, the number of negative answers was 189 (84%) and number of positive answers was 29 (12.89%), which shows a domination of negative values.

Most of students would disagree with statement 10, ‘I ignore my own needs to satisfy the requirements of my studies’: number of negative answers was 152 (67.56%) and positive answers was 58 (25.78%). In statement 12, ‘When the effort invested in studying is not enough, I give up’, the asymmetry continued with negative answers 179 (79.56%) and positive answers 28 (12.45%).

Table 1. Factorial weights and descriptive statistics of the BCSQ-12-SS

Item	Components			Descriptive statistics	
	Overload	Neglect	Lack of development	Average	Standard deviation
1. I think I invest more than is healthy in my commitment to my studies.	0.790	0.039	0.129	3.41	2.003
4. I neglect my personal life to pursue great accomplishments in studying.	0.858	0.067	-0.026	3.59	1.960
7. I am endangering my health in pursuing good results in my studies.	0.878	0.220	-0.003	2.64	1.645
10. I ignore my own needs to satisfy the requirements of my studies.	0.864	0.135	0.007	3.27	1.816
3. When the results of my studies are not good at all, I stop making an effort.	0.133	0.812	0.099	3.82	1.879
6. I give up in response to an obstacle in my studies.	0.116	0.835	0.157	2.43	1.472
9. I give up when faced with any difficulty in my tasks as a student.	0.128	0.834	0.202	3.05	1.897
12. When the effort invested in studying is not enough, I give up.	0.068	0.788	0.078	3.84	2.086
2. I would like to study something else that would be more challenging to my abilities.	-0.002	0.025	0.806	2.32	1.498
5. I feel that my current studies are hampering the development of my abilities.	0.086	0.206	0.776	3.01	1.759
8. I would like to study something else in which I could better develop my talent.	0.061	0.126	0.864	3.62	1.882
11 .My studies do not provide me with opportunities to develop my abilities.	0.790	0.039	0.129	2.38	1.444

Table 1 shows descriptive statistics and internal consistency (IC). The latter was measured by Cronbach's alpha (α). IC was equal α=0.876 for overload, α=0.856 for neglect, α=0.852 for lack of development dimensions respectively.

Table 2. Descriptive statistics for the BCSQ-12-SS dimensions

Dimensions	Mean	Median	Quartile 1	Quartile 3	SD	Relative SD	Quartile deviation	Relative QD
Overload	3.19	2.75	2	4.25	1.60	50.15%	1.125	40.91%
Neglect	2.44	2	1.5	3	1.27	51.90%	0.75	37.50%
Lack of development	3.67	3.75	2.5	4.75	1.43	38.95%	1.125	30%

Descriptive statistics of the BCSQ-12-SS are presented the table 2. The minimum in all dimensions was 1. The maximum for the overload and lack of development was 7, and for the neglect dimension was 6.5.

The distribution of data from the overload dimension is presented by the downward trend from disagree to completely agree. Lower values were more frequent hence, a positive asymmetry can be observed. The distribution of the neglect dimension is presented by the downward trend from disagree to completely agree. Again, the distribution is asymmetric. In the case of the lack of development dimension there of no clear tendency of distribution. Similar numbers of higher and lower values can be observed (looks like normal distribution).

Table 3. Scores in the dimensions

	Overload	Neglect	Lack of development
Quartile 1	2	1.5	2.5
≥25 (percentile)	75	71	58
% of low scores	33.33%	31.56%	25.78%
Median	3.19	2.44	3.67
225-Q1-Q3	88	85	107
% of moderate scores	39.11%	37.78%	47.56%
Quartile 3	4,25	3	4,75
≥75 (percentile)	62	69	60
<75 (percentile)	163	156	165
% of high scores	27.56%	30.67%	26.67%

Montero-Marin [25] argues that respondents who got at least quartile 3 at each dimension (percentile 75), can be at risk of burnout. On the other hand, participants, who got less than quartile 3, are not at risk of burnout. Results of the

present study show that there were 27.56% (n=62) of respondents with high scores on the overload dimension, 30.67% (n=69) with high scores on the neglect dimension, and 26.67% (n=60) with high scores on the lack of development dimension (see tab. 3). There were 20 students (8.88%) who had high scores on all three dimensions.

Pearson's correlation coefficient was used to measure correlations between each dimension of the BCSQ-12-SS. There was a positive and statistically significant correlation between the overload and the neglect dimensions. The Pearson coefficient was r=0.2691 (p<0.001). Correlation between the overload and the lack of development dimensions was r=0.3736 and it was positive and statistically significant as well (p<0.001). For the neglect and the lack development dimensions the Pearson coefficient was r=0.3605 (p<0.001). In all the cases, correlations were low, positive, and statistically significant.

There was a correlation between the failed courses and the neglect dimension (r=0.1660; p=0.0061). The other two dimensions have not shown to be statistically significant. This result partly confirms H1.

Other relationships were measured by chi-squared test. The overload, neglect and lack of development dimensions were independent on gender, distance from family home, student professional activity, and hours spent at work. This result confirms H4 and not confirms H2.

Independent samples of t-test suggests that there were statistically significant differences between students who worked and who did not in the neglect dimension (p=0.003). Neglect dimension values seemed to be higher for students who failed courses (mean=2.92) as compared to those who did not (mean=2.31). This result partly confirms H3.

Table 4. Comparison of Montero-Marin et al's [24] results and the results of the present study

Items	The results of this research		Montero-Marin's results		t-test for equality of means	
	Mean	SD	Mean	SD	t	p-value
1. I think I invest more than is healthy in my commitment to my studies.	3.14	2.00	4.07	1.59	-5.95	0.00
2. I would like to study something else that would be more challenging to my abilities.	3.59	1.96	2.73	1.65	5.52	0.00
3. When the results of my studies are not good at all, I stop making an effort.	2.64	1.64	2.25	1.41	2.97	0.00

4. I neglect my personal life to pursue great accomplishments in studying.	3.27	1.82	3.26	1.77	0.07	0.40
5. I feel that my current studies are hampering the development of my abilities.	3.82	1.88	2.32	1.35	10.47	0.00
6. I give up in response to an obstacle in my studies.	2.43	1.47	2.14	1.35	2.41	0.02
7. I am endangering my health in pursuing good results in my studies.	3.05	1.90	2.98	1.84	0.44	0.36
8. I would like to study something else in which I could better develop my talent.	3.84	2.09	2.41	1.61	8.82	0.00
9. I give up when faced with any difficulty in my tasks as a student.	2.32	1.50	1.85	1.06	4.13	0.00
10. I ignore my own needs to satisfy the requirements of my studies.	3.01	1.76	2.98	1.75	0.20	0.39
11. My studies do not provide me with opportunities to develop my abilities.	3.62	1.88	2.37	1.45	8.57	0.00
12. When the effort invested in studying is not enough, I give up.	2.38	1.44	2.03	1.22	3.05	0.00

Table 4. presents (mean and standard deviation) an overview of the results of Montero Marin et al. [24] study and the present research by each items.

All items, except from items 4, 7 and 10, differ significantly. In this type of research, this might suggest national variations. This result partly confirms H5.

5. Discussion

The aim of this study was to examine burnout among higher education students in Poland. Results show that 8.89% of students achieved high scores in all three dimensions of the BCSQ-SS. 30.67% of respondents reached higher scores in the neglect dimension. Results also indicate that some of the respondents may not be fully satisfied with the overall study program (38.67%). The result suggests a mean 28.3% student risk of burnout in the studied sample. Results suggestions are in line with previous studies [14], [21] and show an increasing trend.

Correlations between each of the BCSQ-SS dimensions are statistically significant and they are higher than in Montero-Marin's research in most cases [25]. Differences in the values of these correlations may also confirm the cultural differences indicated by Hernesnemi et al. [19], or the approach to emotions indicated by Bikar et al. [15] and Navarro-Abal et al. [16].

Results suggest that the BCSQ-SS dimensions are independent of gender in the studied population. These results are in line with the Spanish [24] and Serbian context [13] but for instance not with studies from India [26] which suggest that higher burnout among Indian women may be caused by higher requirements and responsibilities imposed by culture.

Results show that distance from family home has no impact on the perceived burden and any of the dimensions of burnout. Montero Marin et al. [24] have found similar results in this matter. There was also no concern about family home distance in the research about Indian practitioners [26]. But this is a significantly different result from what he got Russell's (cited in [17]) in the context of international students.

Failed courses seem to be an issue in the academic burnout syndrome. Interestingly, the relation seems to be relevant in the neglect dimension only. It may suggest that students opt for inefficient study strategies that do not help them deal with academic requirements and create later anxiety. It can also suggest that respondents do not feel committed to tasks and responsibilities associated with their studies [25]. These results are partly in line, only one dimension, with the Serbian context [13] and emotions aspect present by Bikar et al. [15].

Professional activity during studies did not seem to be a relevant factor in academic burnout in the studied context. Independently on motivations or the number of weekly hours spent at work, students did not feel academic requirements were a burden. These results go in line with those of [24], [25], [18], [19] who were also interested in professional activity during the academic course.

5. Limitations

This study has several limitations. The problems are related to the chosen methodology. While Facebook allows quick recruitment of respondents, it also creates important risks. It cannot be taken for granted that only students received invitations and send answers. For this reason, each respondent was asked about their faculty and university.

Data collection was done on-line and reached a number of Polish cities and universities, but the sample cannot be considered representative of the current Polish higher education students. Most of the respondents were from our city, mainly from two universities. The instrument was used in its original form, as it had not been validated so far for the Polish language. Language proficiency needs

to be considered as a possible limitation in this study. Future studies could translate and validate the BCSQ-SS into Polish.

6. Conclusion

The conducted research shows that professional burnout at Polish universities may be a problem. Both improved education quality and interesting and innovative teaching methods can possibly prevent high levels of burnout among students. Another solution which can be implemented is to make students and teachers aware of the possibility of counteracting this phenomenon.

The results of the present study indicated that academic burnout among the students exists. Therefore, given the obtained results, it can be concluded that an increase in positive affect and an improvement in the method of controlling negative effects can play key role in the prevention of academic burnout.

In this regard, it is highly recommended to revise school curriculums and pay attention to students' interests and community needs when planning a course content. Teachers are also advised to be as flexible as possible and use new and interesting methods of learning and requiring commitment from the student.

The above process has to create positive emotions in students and as a result, students will not suffer from academic burnout. Self-awareness and evaluation of students' skills will provide them with positive emotions and thus help them to reduce academic burnout.

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