Burnout Among Academics: An Empirical Study on the Universities of Poland

Agnieszka Springer and Iwona Werner

Abstract Professional burnout has been a growing problem not only for employees but also for their organizations, affecting the organizational costs as well as employee health and well-being. This chapter is based on the job demands-resources model of burnout which consists of two dimensions: exhaustion, i.e., general tiredness, bad mood, and fear in reaction to organizational stress, and disengagement, i.e., withdrawal from one's work owing to the difficulty in meeting professional requirements. The purpose of the study was to examine the level of burnout among Polish academics. The sector of higher education in Poland is currently experiencing significant changes which leads to subsequent major transformations. This evokes the need to continuously adapt to external demands so as to meet the expectations of the academic supervisors as well as of numerous external stakeholders. Thus, the dynamic environment that requires constant adaptation creates demanding working conditions at universities. Data were collected from 199 female and 141 male respondents working as academic staff in private and state universities in Poland. To measure the level of occupational burnout, a Polish adaptation of the Oldenburg Burnout Inventory (OLBI) was used. The analysis of the study resulted in the conclusion that the level of exhaustion is higher among the academics than the level of their disengagement. Sociodemographic characteristics and job characteristics served as differentiating variables.

Keywords Burnout · Job demands-resources model · Academic staff · The Oldenburg Burnout Inventory

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1 Introduction

European universities are currently undergoing important and dynamic changes at an unprecedented pace and scale (Enders et al. 2011). The changes have been triggered by political decisions which resulted from such European development strategies as the Bologna Declaration, whose aim was to increase the competitiveness and attractiveness of the European academic education, the EU's Lisbon Strategy, as well as its continuation, the Europe 2020 strategy (European Commission 2010), which aim at making Europe a highly competitive, innovative, and knowledge-based region. The implementation of these strategies is to be carried out with active participation of universities: "Europe must strengthen the three poles of its knowledge triangle: education, research and innovation. Universities are essential in all three. Investing more and better in the modernisation and quality of universities is a direct investment in the future of Europe and Europeans" (European Commission 2005, p. 2). Moreover, the political and social expectations of higher education institutions are contradictory: on the one hand, they are supposed to compete globally, but on the other hand they should respond to the current needs of local socioeconomic conditions and are therefore expected to be locally engaged (Zgaga et al. 2014). The major changes in the area of higher education in Europe have also been experienced in Poland for several years. Currently, for example, another reform is being implemented to increase the competitiveness of Polish universities. On the other hand, Polish universities are not organizational and functional copies of Western European universities, as the social and historical conditions have led, among other things, to the formation of interpersonal relations at Polish universities, referred to as "academic feudalism" (Kwiek 2015). This term refers to the division existing in the academic bodies: those with higher academic degrees (Habilitation degree and professorship title) and other employees (mainly PhDs and Masters). Moreover, the political and social expectations of higher education institutions are contradictory. On the one hand, they are supposed to compete globally, but on the other, they should respond to the current needs of local socioeconomic conditions and are therefore expected to be locally engaged. All this, combined with publication and promotion pressure, the need to apply for research grants, a large number of students per one academic teacher, and generally high uncertainty as to subsequent changes in the academic work environment, results in the fact that work at the university places high adaptation requirements on the individual (Werner and Springer 2018; Springer and Werner 2018). Such a situation, in the case of insufficient personal and organizational resources, might entail excessive psychophysical and emotional burden and consequently lead to the symptoms of professional burnout, in the form of increased exhaustion and reduced involvement (Bakker and Demerouti 2017). Therefore, questions regarding the level, differentiating factors, and consequences of burnout were asked. Thus, the aim of this chapter is to estimate the risk of burnout among the academics in Poland, to identify the factors differentiating the level of burnout, and to analyze selected consequences related to burnout. It was assumed that the level of professional burnout would differentiate

selected sociodemographic characteristics (e.g., the aforementioned difference between professors and other groups of academic teachers) and characteristics related to the specificity of work (e.g., weekly number of working hours). Further on, professional burnout was connected with the satisfaction from work at the university and with the intention to leave the university.

The chapter presents a brief review of the literature on selected concepts of occupational burnout and methodological assumptions, results, and conclusions evaluating the level of disengagement and exhaustion in the group of faculty academics in Poland.

2 Literature Review and Hypothesis

The concept of professional burnout has been present in the literature since the 1970s. The term burnout was first used as a literary metaphor for a situation in which an employee feels exhausted and sees no further opportunities to do his or her job (Maslach et al. 2001). The negative effects of overburdening in the workplace have quickly become an important subject of debate and research (Freudenberger 1974; Maslach 1976). In the initial phase of the study on burnout, the main focus was clinical: both Herbert Freudenberger as a psychiatrist and Cristina Maslach as a social psychologist conducted a series of in-depth interviews with people suffering from excessive stress at work. The first period involved a qualitative research and it was only with time that researchers began to diagnose the problem on a wider scale, conducting quantitative research and identifying the key causes, symptoms, and differences in the course of professional burnout (Maslach et al. 2001). Initially, the group of workers whose professional burnout was analyzed included service workers who, confronted with excessive bureaucracy and lack of support, felt fatigue and physical and mental exhaustion. But over time it was noticed that this problem affects employees in practically every profession (Schaufeli and Salanova 2014). Extensive research carried out by Schaufeli and Salanova (2014) shows that 6% of all workers already suffer from burnout and a further 16% are at risk thereof. According to Lindblom et al. (2006), 18% of employees showed a high level of professional burnout in Sweden.

Identifying the relationship between the requirements to be met by the employee and the resources that can be used in the course of his or her work is crucial for risk assessment and burnout prevention (Demerouti et al. 2001; Bakker et al. 2004). According to the demands-resources model, which has become one of the most important approaches indicating the determinants of employee well-being, resources include all physical, psychological, social, and organizational factors that contribute to the achievement of the organization's objectives and lead to employee development. At the same time, the demands of work include all the aspects of professional work that mean that an employee must make physical, mental, or emotional effort (Hakanen et al. 2008). Excessive demands accompanied by low organizational support lead to negative consequences such as professional burnout. The

demands-resources model was confirmed by research on various groups of employees, including the academic staff (Boyd et al. 2011).

In the research on stress and burnout, academics complain about excessive requirements and point to a heavy workload, lack of time to keep up to date as well as the time-consuming preparation for the classes they teach (Doyle and Hind 1998), a multitude of functions and tasks they are expected to complete (Schmidt 2017), as well as inadequate resources, e.g., inadequate salary, the conflict between personal and departmental goals (Doyle and Hind 1998), and underestimating their teaching work (Schmidt 2017). What is more, the need to compete for these scarcely available resources results in the development of individualistic attitudes and a lack of identification with the university (Pieniądz 2017). In order to cope with the multiplicity and complexity of tasks while trying to secure satisfactory remuneration (e.g., through overtime or working at two universities), many academics devote more and more time to their work. The academic staff generally have flexible working hours, yet the number of hours devoted to teaching, research, and organizational activities should not exceed 40 hours per week. However, it is evident that, in many cases, employees wishing to advance in their research work, or for financial reasons, devote much more time to their work. It can therefore be concluded that members of the academic staff have to deal with an excessive burden, which may result in their burnout. Therefore, a hypothesis was put forward:

H1 : *The amount of working hours is positively related to the risk of occupational burnout.*

In addition to the requirements, the availability of resources, both organizational and personal ones, is the second key factor for the perceived burnout (Taris and Schaufeli 2016). Job resources may be located at the macro-organizational level (e.g., career opportunities, job security), the interpersonal level (e.g., supervisor and coworker support), the specific job position (e.g., role clarity, participation in decision making), and at the level of the task (e.g., skill variety, task identity, task significance, autonomy, and feedback). However, the use of organizational resources depends on personal resources. The research into personal resources carried out by Xanthopoulou et al. (2007) mediated the relationship between job resources and engagement/exhaustion and influenced the perception of job resources. In Conservation of Resources Theory (COR), which is also referred to by the authors of job demands-resources model, Hobfoll (1989) recognized four types of resources, namely objects, conditions, personal characteristics, and energies. Therefore, the use of holiday leave by employees is an important factor determining the employee's well-being (Westman and Etzion 2001) as it gives them an opportunity to replenish their energy which constitutes an important resource. Insofar as the literature identifies personal characteristics for employee well-being (Xanthopoulou et al. 2008; Lorente et al. 2014; Grover et al. 2016), no work has been found which analyzes the relationship between an employee's energy and well-being. Hence, referring to the job demands-resources model and the conservation of resources theory, another research hypothesis was put forward:

H2 : *The amount of leisure days is negatively related to the risk of occupational burnout.*

The group of academic staff is differentiated not only in terms of demographic variables, but also, which seems to be more important from the point of view of the scope of requirements imposed on employees, in terms of the stage of their professional career. In the case of research and teaching staff employed at Polish universities, the career stages are closely related to their academic degrees. At the same time, despite numerous reforms and changes that have affected Polish science in recent years, many employees see significant barriers to conducting scientific research (Kowzan et al. 2016; Kwiek 2015), and they are in doubt as regards the transparency of the system of promotions (Pieniądz 2017). At the same time, the stability of employment, as well as the assessment of the academic staff, is determined by the achievement of subsequent academic degrees. For this reason, it was considered that the workload and psychological pressure would be the strongest in the group of dependent workers; hence, the third research hypothesis was made:

H3 : *Assistant professors are the group facing the highest risk of occupational burnout.*

Studies in the area of burnout, which have been carried out for several years, show that burnout has negative consequences for the mental and physical health of the employee (Maslach 2001), as well as being an important factor relevant for achieving the expected organizational effects, including involvement, work efficiency (Bakker et al. 2004), absenteeism (Bakker et al. 2009), or devotion to the organization (Hakanen et al. 2008). All these implications make the issue of burnout important not only from the perspective of employee welfare but also for the functioning of entire organizations, including universities. Therefore, two further research hypotheses were put forward, indicating a connection between burnout and negative attitudes of employees toward their work:

H4 : *The level of occupational burnout is negatively related to the level of job satisfaction.*

H5 : *Level of occupational burnout is positively related to the intention to resign from the job.*

3 Methodology

The research was of a quantitative nature, and it was carried out in 2017. The research data were collected by means of an online questionnaire. In total, about 1200 invitations to participate in the study were sent out, addressed to the employees of public and private universities from all over Poland. Eventually, 340 correctly completed questionnaires were submitted. The majority of respondents (72.6%) were employed at public universities, less than every tenth respondent (9.3%) was

Table 1 The structure of the respondents with a view to their sex and academic degrees

Academic degrees	Women (%)	Men (%)	Total (%)
MA/MSc degree	10.58	6.18	16.76
PhD degree	32.95	19.7	52.65
Habilitation degree	12.65	10.29	22.94
Professorship title	2.36	5.29	7.65
Total (%)	58.54	41.46	100

Source: Authors' own study

Table 2 The structure of the respondents with a view to their age and years of experience

		Number of respondents	Valid percentage of respondents
Age	< 35	85	25.22
	35–44	136	40.36
	45–54	72	21.36
	55–64	32	9.50
	> 65	12	3.56
Total		337	100.00
Missing data		3	
Years of experience	Up to 5 years	75	22.12
	6–10 years	66	19.47
	11–20 years	109	32.15
	21–30 years	54	15.93
	Above 30 years	35	10.32
Total		339	100.00
Missing data		1	

Source: Authors' own study

employed at a private university, and almost every fifth (18.1%) was a full-time employee of both public and non-public universities—this proportion captures very well the employment structure depending on the type of university (Central Statistical Office 2017). More than half of the studied group consisted of academic teachers with the PhD degree; the second most numerous was the group of academics with Habilitation degree (almost 23%). The sample was dominated by women, 35–44-year-old with work experience of 11–20 years. Detailed characteristics of the research sample in terms of basic variables (sex, degree of scientific advancement, age, seniority) are presented in Tables 1 and 2.

The examined sample of academic teachers can also be described with regard to certain features of the working environment, especially those related to the intensity of work measured by the number of working hours (total obligatory hours resulting from the implementation of the so-called teaching workload and overtime), as presented in Table 3.

According to the Polish legislation in force, academic staff employed at a higher education institution are entitled to 36 days of paid leave. For practical reasons,

Table 3 The structure of the respondents with a view to their annual workload

		Number of respondents	Valid percentage of respondents
Annual, averaged number of teaching hours completed in the last 2 years	< 250 h	146	43.58
	> 250 h	189	56.42
Total		335	100.00
Missing data		5	
Weekly, average number of working hours	< 40 h	175	52.40
	> 40 h	159	47.60
Total		334	100.00
Missing data		6	

Source: Authors' own study

Table 4 Average annual number of holiday days the academic staff spent resting

		Number of respondents	Valid percentage of respondents
Average annual number of holiday days the academic staff spent resting	< 7 days	49	14.6
	7–14 days	99	29.5
	15–24 days	91	27.1
	25–35 days	42	12.5
	36 days	55	16.4
Total		336	100.0
Missing data		4	

Source: Authors' own study

teachers may take time off work during the summer and winter semester breaks. Due to the task-based system of work done by research and teaching staff and their workload, it was intended to find out what amount of holiday time is actually spent resting. The results are presented in Table 4.

The Polish adaptation of the Oldenburg Burnout Inventory (OLBI), a tool developed Demerouti and Bakker (2008), was used to measure the level of occupational burnout. The questionnaire consists of sixteen items and two sub-scales (each with eight items) of exhaustion and disengagement from the job. The respondents could use a 4-point scale, from 1 "I agree" to 4 "I do not agree." In each of the sub-scales, half of the statements were worded negatively and half positively. After reversing the answers, averages were calculated for each scale. The Polish version of the scale meets the criteria of theoretical accuracy and has satisfactory reliability measures (Baka and Basińska 2016; Chirkowska-Smolak 2018). A single-item scale

was used to measure job satisfaction, asking respondents to respond to the statement: "My overall job satisfaction at university is at a high level." In order to diagnose the intention to resign from work, a single-item scale in the form of a statement was used: "If I had the opportunity to make a real choice, I would give up working full-time at the university." In both cases, the respondents replied on a 5-point scale ("I definitely don't agree," "I rather disagree," "It's hard to say," "I rather agree," "I definitely agree").

4 Results

In the studied group, the average level of professional burnout was 2.4 (sd 0.48), the level of exhaustion was 2.5 (sd 0.6), and disengagement was on the level of 2.29 (sd 0.46). Comparing the results with the disengagement and exhaustion standards developed by Baka and Basińska for a group of people in social professions (2016), it is noticeable that the professional group under examination is particularly exposed to exhaustion since as much as 39% of the respondents showed high results. In the case of disengagement, the situation is slightly better as high results were obtained by 16% of the respondents (Table 5).

As far as exhaustion is concerned, significant differences between the respondents were observed in the case of two differential variables: weekly working hours and the number of days actually spent resting during holidays (Table 5). More than half of those who devoted over 40 hours a week to all work-related activities were highly exhausted. The variables such as sex, age, job tenure, the academic degree, and the number of teaching hours performed during the year did not significantly diversify the studied group. The university employees who spent less than 25 days a year resting were significantly more physically, emotionally, and cognitively

Table 5 The level of occupational burnout of academic teachers and the differentiating variables

	Exhaustion	Disengagement
Distribution of levels	%	%
Low	16.3	23.4
Average	44.4	59.9
High	39.3	16.6
Differentiating variables	p values	p values
Sex[a]	0.65	0.20
Age[b]	0.71	0.15
Years of experience[b]	0.45	0.05
Academic rank[b]	0.85	0.02
Working hours weekly[b]	0.00	0.11
Teaching hours per year[b]	0.86	0.05
Leisure days per year[b]	0.00	0.00

Source: Authors' own study
[a]Mann–Whitney test
[b]Kruskal–Wallis test

exhausted in comparison to the group using the time off for rest. This suggests that there is a link between exhaustion and increased work intensity exceeding 40 hours per week, which limits the time that can be used for systematic rest and psychophysical regeneration and indicates that less than 25 days of rest per year also does not sufficiently restore psychophysical resources. Thus, Hypothesis H1 might be accepted that the amount of working hours is positively related to the risk of occupational burnout. Additionally, this leads to accepting Hypothesis H2 which says that there is a negative connection of the number of days spent resting with the threat of professional burnout.

The second dimension of professional burnout, i.e., disengagement, was differentiated by four variables monitored in the study: the duration of service, the academic degree, the number of teaching hours during the academic year, and the number of days of leave spent on recreation (Table 5). A higher level of disengagement is observed among employees with moderate employment experience (6–20 years) in comparison to the academic teachers with the longest employment (over 30 years). This can be explained by the specificity of the academic career development. The employees with moderate employment are usually those in the position of assistant professors who are obliged to achieve the next level of promotion—Habilitation degree. Among the employees with the longest career experience, there are the largest number of professors who, having reached the highest level of academic advancement, are not subject to pressure of further career development and have a stable tenure in the structure of the university. An analogous explanation can be applied in the case of the differentiating importance of the academic degree: compared to other groups (with MA/MSc degree, PhD degree, and Habilitation degree), a greater commitment is shown by the group of professors. Therefore, Hypothesis 3 can be partially accepted, since as regards the disengagement component, only those with lower academic degree suffered from a higher level of professional burnout. A higher level of disengagement of commitment is also manifested by employees with a higher workload, i.e., those teaching more than 250 hours per year and resting less than 25 days per year.

As in the case of exhaustion, neither gender nor the age of university employees was significant. Interestingly, the weekly working hours, exhausting as they might be, were not relevant as regards the lack of commitment, which may suggest that intensive academic work may be exhausting, but does not necessarily reduce job commitment. Comparison of job satisfaction with three standardized levels of professional burnout (low, average, high) revealed further dependencies, both in terms of exhaustion and disengagement (Figs. 1 and 2). The vast majority of respondents (83.6%), who did not show exhaustion, confirmed with varying degrees of certainty that they felt a high level of job satisfaction. Fewer people (67.1%) were in the group with moderate exhaustion and the least in the group with high exhaustion rate (40.6%), so the H4 hy.

Hypothesis 4 is confirmed by the analysis of the relationship between the level of satisfaction and the level of disengagement (Fig. 2): the vast majority of employees (84.8%), who did not lose their commitment, were satisfied with academic work, a lower percentage of people who felt satisfaction (62.1%) was in the group showing

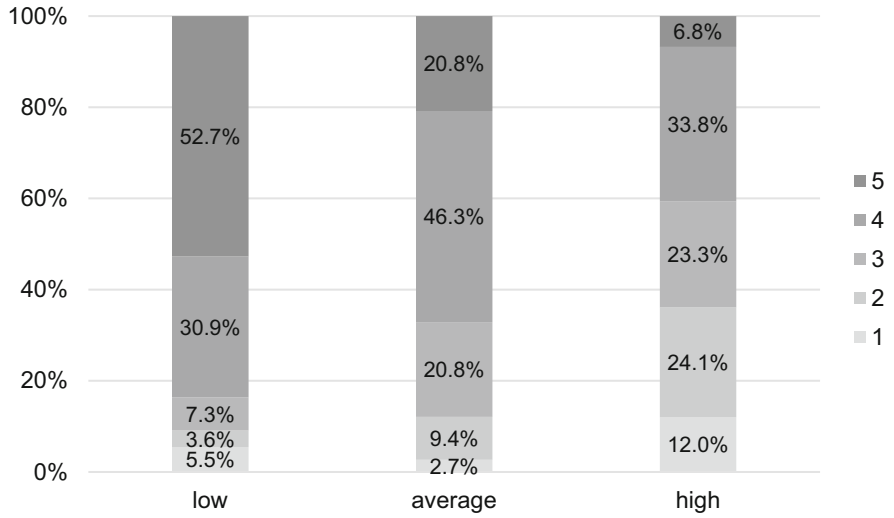

Fig. 1 Level of job satisfaction at different exhaustion levels. (Note (1) The respondents referred to the statement: "My overall job satisfaction at university is at a high level" (1—"I definitely don't agree," 2—"I rather disagree," 3—"It's hard to say," 4—"I rather agree," 5—"I definitely agree"). (2) Significance of differences measured by the Kruskal–Wallis test, $p = 0.000$. Source: Authors' own study)

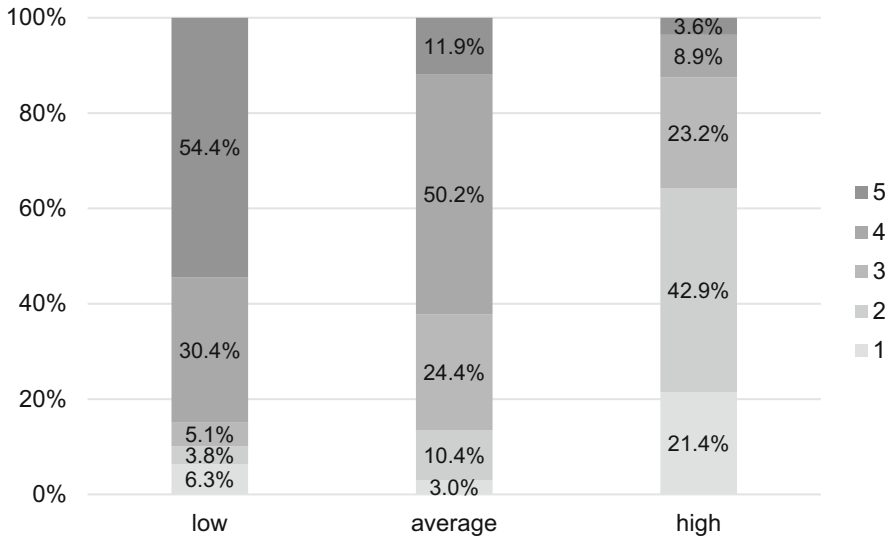

Fig. 2 Level of job satisfaction at different disengagement levels. (Note (1) The respondents referred to the statement: "My overall job satisfaction at university is at a high level" (1—"I definitely don't agree," 2—"I rather disagree," 3—"It's hard to say," 4—"I rather agree," 5—"I definitely agree"). (2) Significance of differences measured by the Kruskal–Wallis test, $p = 0.000$. Source: Authors' own study)

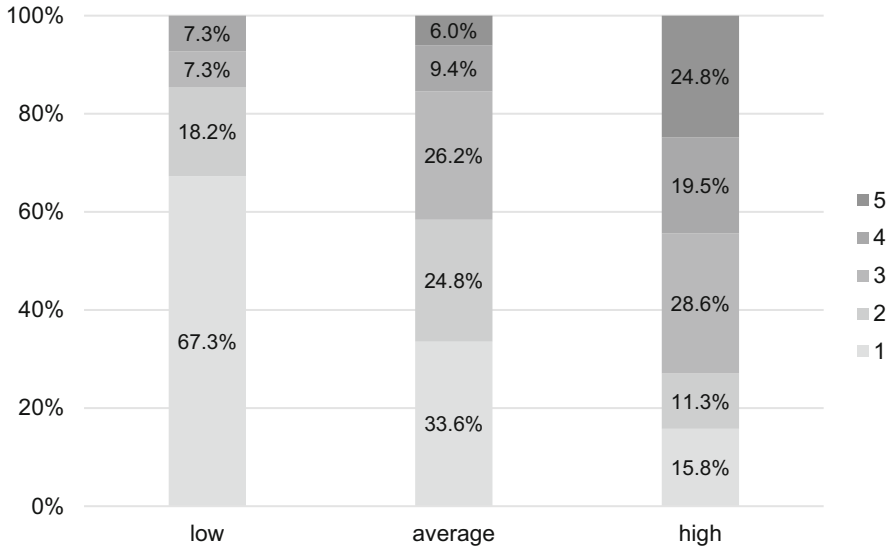

Fig. 3 The willingness to give up work at different levels of exhaustion. (Note (1) The respondents referred to the statement: "If I had the opportunity to make a real choice, I would give up working full-time at the university" (1—"I definitely don't agree," 2—"I rather disagree," 3—"It's hard to say," 4—"I rather agree," 5—"I definitely agree"). (2) Significance of differences measured by the Kruskal–Wallis test, $p = 0.000$. Source: Authors' own study)

exhaustion at the average level, and in the group with high disengagement rates only 12.5% declared satisfaction from work at universities, while the percentage of dissatisfied people was high (64.3%). To sum up, it should be noted that in relation to the low and moderate disengagement rate (Fig. 2), a very similar distribution of results was obtained for the level of disengagement as for the level of exhaustion (Fig. 1). However, a significantly different distribution of results was obtained for the high disengagement rate, and therefore, it may be assumed, it is the level of disengagement rather than exhaustion which more accurately indicates the lack of academic work satisfaction. Hypothesis 5 assumed that the higher the level of professional burnout, the greater willingness to resign from the job. This correlation was fully confirmed for both professional burnout dimensions (Fig. 3, Fig. 4): the lowest for the low level (7.3% for exhaustion vs. 7.6% for disengagement), slightly higher for the average level (15.4% for exhaustion vs. 21.4% for disengagement), and significantly increased for the high level (44.3% for exhaustion vs. 64.3% for disengagement).

As in the case of academic work satisfaction, in the case of the intention to leave the job, it is more clearly marked with respect to disengagement than exhaustion (64.3% vs. 44.3%), which once again indicates that university employees are better able to cope with the requirements causing exhaustion than with the aspects of their work leading to disengagement.

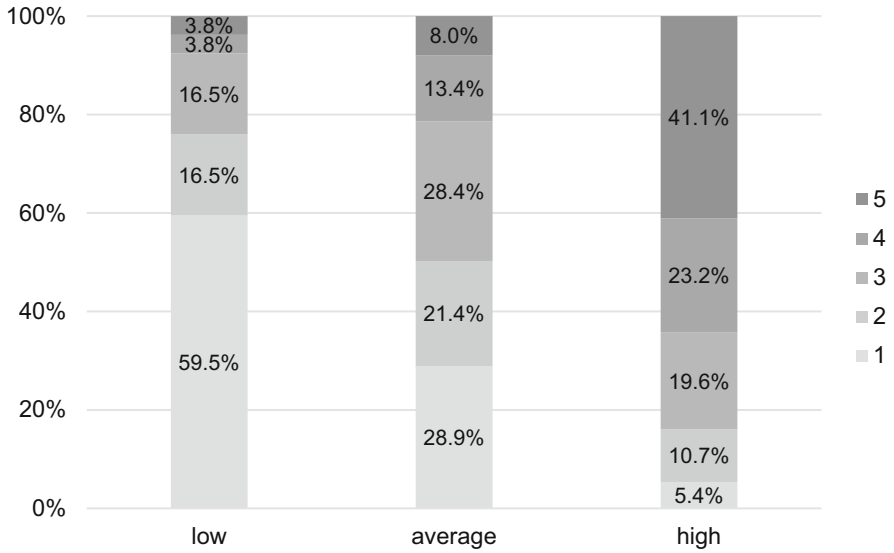

Fig. 4 The willingness to resign from work at different disengagement levels. (Note (1) The respondents referred to the statement: "If I had the opportunity to make a real choice, I would give up working full-time at the university" (1—"I definitely don't agree," 2—"I rather disagree," 3—"It's hard to say," 4—"I rather agree," 5—"I definitely agree"). (2) Significance of differences measured by the Kruskal–Wallis test, $p = 0.000$. Source: Authors' own study)

5 Conclusions

In the study group of academic teachers, the average intensity of the overall professional burnout measured by the Oldenburg Burnout Inventory was obtained. Adequate analysis can be made by comparing the obtained data on exhaustion and disengagement. Compared to the results obtained during the standardization of the tool (Baka and Basińska 2016) on the sample of people working in social professions ($N = 1804$), in our study the identical averages for the sub-scale of disengagement ($M = 2.29$) were obtained, while the average in terms of exhaustion was higher in the study of university employees ($M = 2.5$) in comparison with people working in social professions ($M = 2.31$) (Baka and Basińska 2016). Moreover, nearly 40% of academic teachers are highly exhausted (i.e., $M \geq 2.75$). Interestingly, further analyses have revealed that in terms of selected consequences (i.e., job satisfaction and willingness to leave the job), a high level of disengagement is negatively linked to job satisfaction and positively linked to willingness to resign from the job. At the same time, a high degree of exhaustion shows similar relationships with job satisfaction and the willingness to resign from the job, yet the intensity of these relationships is weaker.

According to the concept of job demands-resources (Demerouti and Bakker 2008), exhaustion appears as a result of exposure to long-term job demands in the physical, emotional, and cognitive spheres. This suggests that Polish academics are

subject to high stress, which is confirmed by the results of the measurement of perceived work-related stress: university employees obtained higher rates than the people working in other sectors (Werner and Springer 2018). A high level of disengagement is present in a lower percentage of academics compared to the exhaustion factor. The disengagement factor is a measure of identification with the job, especially with its content (Demerouti and Bakker 2008); hence, it can be concluded that despite considerable job demands, the majority of university employees identify themselves with the objectives of their work, accept its content, and, as it may be assumed, see some sense in it, despite the intense psychophysical effort associated with it. This conclusion is complementary to the conclusions obtained by us on the same research sample (Werner and Springer 2018). Although the academics surveyed perceive more risks arising from the content of the work (e.g., the need for long-term focus or the need for continuous development) than from the context of the work, they feel the burden of the work context to a higher degree. Therefore, we are left with the question of identifying organizational and individual resources which, with high requirements and the accompanying stress, will allow the vast majority of academics to retain at least a moderate level of engagement. Several such factors can be observed from our research: higher rank in the university hierarchy and longer work experience (professors as well as the staff with the greatest work experience show a lower level of disengagement), less commitment to teaching work, which usually also involves a higher level of promotion and taking more time off for rest rather than for research work (preparing publications, grant projects, preparation for conferences, etc.). The relationship between work requirements and burnout can also be influenced by other intermediary variables, such as mastery or goal orientation, which, as shown by Van Ypereen and Janssen, moderate the relationship between work requirements and satisfaction (2002). In the case of a professional group of academic staff, the analysis of internal motivation as an important personal resource seems to be particularly important, both from the point of view of the multitude of roles that academic staff members have to face (Gordon and Whitchurch 2007; Gordon 1997) and ongoing discussions about changes in the ethos of academic work (Kwiek 2017). It therefore seems necessary to take this variable into account in further work on the well-being of the academic staff.

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