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ROLE OF SOCIO-DEMOGRAPHIC CHARACTERISTICS AND WORKING CONDITIONS IN EXPERIENCING BURNOUT

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Abstract

In the present study we attempted to identify those demographic variables and working conditions that differ significantly between groups of individuals with different profiles of expression of the basic dimensions of burnout. The study, which took place in Slovenia, included 942 participants, who completed the Maslach Burnout Inventory and a working conditions measure. We identified four distinctive clusters: low burnout, high burnout, high emotional exhaustion, and low personal accomplishment. We found that individuals in different clusters differ significantly from each other in terms of age and number of children in the household. The highest proportion of younger respondents (under 30 years) was in the low personal accomplishment and high emotional exhaustion clusters, while the low burnout cluster had the highest proportion of respondents over 49 years. The high emotional exhaustion cluster had the highest proportion of respondents with small children, whereas the highest share of respondents without children were in the low personal accomplishment cluster. An unstimulating working environment was the main contributor to the feeling of burnout. Our results point to the existence of profiles of individuals with different constellations of burnout dimensions and are thus an important complement to previous theoretical findings based on a variable-centred approach.

Key words: burnout, working conditions, socio-demographic characteristics

INTRODUCTION

Burnout has considerable negative consequences for both employers and employees (see, e.g., Bakker, Demerouti & Verbeke, 2004), and it is therefore important to try and regulate the factors of burnout even at the stage of planning work with employees. Here we can take into account both individual differences between employees and factors deriving from their working environment. In our study we attempted to build on previous findings regarding the relationship between burnout and demographic and environmental variables by studying possible differences between individuals with a similar constellation of burnout dimensions (see Maslach, Schaufeli & Leiter, 2001). The purpose of our study was to identify those demographic variables and working conditions that differ significantly between clusters of individuals with different profiles of expression of the basic dimensions of burnout.

Burnout defined

Job burnout, a syndrome characterised by high levels of exhaustion, negative attitudes toward work (cynicism) and reduced professional efficacy (Maslach et al., 2001), is most likely when job demands are high and job resources are limited (Bakker & Demerouti, 2007). Emotional exhaustion represents a general feeling of extreme chronic fatigue caused by constant exposure to demanding working conditions. Research shows that it has a central role in the process of burnout, since it is more strongly connected to outcomes such as absenteeism than the other dimensions of burnout (Lee & Ashforth, 1996). Cynicism, on the other hand, relates to a callous and cynical attitude towards work or colleagues, which the process model of burnout (Leiter, 1993) sees as a consequence of emotional exhaustion. Accordingly, feelings of exhaustion arise from stressful working conditions, whereby employees are constantly confronted with high job demands. As a consequence they develop a cynical attitude as a coping strategy to distance themselves emotionally and mentally from work.

Burnout is the end result of a dynamic process in which environmental factors trigger, stimulate or inhibit personality characteristics (Shirom, 2003). These factors complement each other and influence one another, as is also confirmed by the results of a Finnish 35-year longitudinal study (Hakanen, Bakker & Jokisaari, 2011). Both socioeconomic status and cognitive ability in adolescence were positively associated with educational level, which in turn was related to working conditions in early adulthood. Furthermore, working conditions were associated with job burnout 13 years later, while adult education and skill variety mediated the associations between original socioeconomic status and cognitive ability and burnout over a 35-year period. The results suggest that socioeconomic, individual and work-related

resources may accumulate over the life course and may protect employees from experiencing job burnout.

Socio-demographic characteristics and burnout

It is a commonly held belief in work organizations that women are more emotional. Previous research also suggests that women experience greater amounts of strain than men (i.e. higher anxiety, work-related stress and work burden; Arnten, Jansson, & Archer, 2008; Doyle & Hind, 1998). Prior findings about burnout syndrome generally show a male-female difference (Rupert & Morgan, 2005), although the results are inconsistent. Some studies have confirmed, for example, that women are more frequently emotionally exhausted (e.g. Bakker, Demerouti & Schaufeli, 2002; Rupert & Morgan, 2005), while others have not (Bekker, Croon, & Bressers, 2005; Van Horn, Schaufeli, Greenglass & Burke, 1997).

Older employees have more professional experience and, in accordance with that, more experience in coping with stress. They are more stable, mature and balanced in their perspective on work and life in general. They often enjoy a better financial position. Taken together, all this enhances their sense of strength and sense of self-identity. They therefore use more effective strategies to cope with stress and more rarely experience burnout. On the other hand, young workers generally have lower salaries, less emotional support and less self-confidence. A key finding of a study by Johnson, Holdsworth, Hoel and Zapf (2013) was that older employees' stress management strategies of emotion control and active coping had a more positive effect on emotional exhaustion and cynicism compared to younger employees. Exploratory analyses revealed systematic findings in the expected direction in high stress situations with younger employees using these strategies less successfully to reduce levels of emotional exhaustion and cynicism. In another study (Blau, Tatum & Ward Goldberg, 2013), using a national sample of psychiatric rehabilitation practitioners, age was negatively related to depersonalisation and diminished personal accomplishment. On the other hand, some researchers have found the opposite, namely that older employees are more at risk (e.g. Bakker, Schaufeli & Van Dierendonck, 2000; Mukundan & Ahour, 2011).

The majority of studies show that individuals with a higher level of education are more at risk (e.g. Cole, Salahadin, Shannon, Scott & Eyles, 2002; Newbury-Birch & Kamali, 2001). The reasons for this may be sought in personality characteristics such as performance-based self-esteem (Dahlin, Joneborg & Runeson, 2007; Hallsten, 2005; Hallsten, Josephson & Torgén, 2005) and external locus of control (Bühler & Land, 2004; Glass & McKnight, 1996), which make individuals strive for more demanding and generally recognised goals. For example among psychiatric rehabilitation practitioners, for example, education level was positively related to emotional exhaustion (Blau et al., 2013). Research also shows that single individuals are more at risk than those who live with a partner (Maslach et al., 2001; Zijlstra & de Vries, 2000). This finding is linked to the greater emotional support supplied by the partner or his/her children. Married employees can also share living expenses with a partner and in this way lessen the feeling of financial responsibility.

The number of children in a family can also play an important role in burnout. The results of a series of studies (e.g. Mukundan & Ahour, 2011; Shanafelt, Balch, Bechamps et al., 2009) show that the number of children is a significant indicator of burnout syndrome. Also interesting is the finding of Dutch researchers (Ten Brummelhuis, Van der Lippe, Kluwer & Flap, 2008), that the presence of young children and doing more household chores were positively related to feelings of burnout, whereas having children reduced employees' feelings of burnout.

The role of the work environment in burnout

Schaufeli and Enzmann (1998) classify the factors linked to the development of burnout syndrome into four groups: individual, interpersonal, organizational and sociological. In our research, we will be interested above all in organizational factors, with an emphasis on the social component and the cognitive aspects of the psychological component. The social dimension refers to relations with clients, colleagues, direct supervisors and organization managers at work. The cognitive aspects of the psychological component include lack of information and feedback, conflicts, sanctions, etc.

Also important when it comes to understanding the different organizational factors affecting the development of burnout syndrome is the job demands-resources model (JD-R model; Bakker & Demerouti, 2007; Demerouti & Bakker, 2011). This includes many possible working conditions (and can therefore be applied to a broad variety of fields of work) and focuses on both negative and positive indicators of employee well-being. It tries to integrate two research traditions – the stress research tradition and the motivation research tradition. The model is based on the assumption that it is possible to classify various factors related to stress at work (which may be different in every organization) into two basic categories; these are the job demands category and the resources category.

Job demands refer to those physical, psychological, social or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological and/or psychological costs (Bakker & Demerouti, 2007). Examples include high work pressure, an unfavorable physical environment, irregular working hours, etc. There is a significant link between job demands and burnout, in particular the exhaustion dimension (see, e.g., Demerouti, Bakker, Nachreiner & Schaufeli, 2001; Schaufeli & Bakker, 2004). Job resources, on the other hand, refer to those physical, psychological, social or organizational aspects of the job that help the employee

achieve work goals, reduced job demands and the associated physiological and psychological costs, and similar personal growth and development (Bakker & Demerouti, 2007).

Two processes play a key role in the development of job-related strain and motivation – the process of health impairment and the process of motivation. The former refers to chronic job demands that exhaust employees' mental and physical resources, and the latter to the motivational potential of job resources (Bakker & Demerouti, 2007; Demerouti & Bakker, 2011). The main assumption of the JD-R model is that the risk of burnout is greatest when the individual is confronted with high job demands and the available job resources are low (Demerouti et al., 2001). The principal effects of job demands and job resources are also joined by their interaction (see, e.g., Xanthopoulou et al., 2007).

Present study

The purpose of the study was to identify the optimal categories or clusters of participants with regard to the profile of their responses on the three scales of the burnout questionnaire. We assumed that clusters of individuals with high and low burnout would appear, and that other combinations of burnout dimensions would also be possible.

We also focused on individual differences between employees and on factors that derive from the working environment and play an important role in the burnout process. We tried to establish how clusters of participants differ from each other with regard to the selected demographic variables, and discover a linear combination of different working conditions on the basis of which we could maximise the differences between individual clusters of employees (e.g. what combination of working conditions contributes significantly to lower employee burnout). We assumed that clusters of employees would differ significantly in terms of gender, age, education level, marital status and number of children. Among individuals with low burnout there would be, in comparison to individuals with high burnout, older men with a lower educational level who would be in a relationship and have no children. In addition, individuals low in burnout were expected to have the lowest values for factors measuring different working conditions, as compared to individuals high in burnout.

METHOD

Participants and procedure

Data were collected using a combination of computer assisted web interviews (CAWI; 83%) and pencil and paper method (17%). The method used was based on organizational preferences. The data were collected in two ways:

- Researchers randomly selected people included in their database that met the inclusion criteria and invited them to participate in the study (577 participants responded to the invitation).
- Students from the Faculty of Administration at the University of Ljubljana, Slovenia were asked to give questionnaires to their relatives or friends who met the inclusion criteria (365 questionnaires were returned).

The final sample consisted of 942 respondents, of whom 63% were female and 37% were male. On average, they were 38.7 (SD = 10.5) years of age, with 16.1 (SD = 11.7) years for overall period of employment. In the entire sample, 2% completed compulsory education or less, 43% completed general secondary high school or vocational education school and 55% completed higher education. The majority of participants (91%) worked in the private sector and 9% in the public sector.

The sample comprised 43.5% employees who live in the central region of Slovenia, 56.5% live in other regions; 45.7% of participants were married, 26.4% lived with a partner in an intimate relationship, 17.5% were single, 10.1% had a partner but lived in separate households and 1% of participants were widowed. In 17.4% households there were no children, 64.6% had at least one (pre)school child and in 68.5% they had at least one adolescent or adult child. To conduct the analyses properly, we split participants that had (pre)school children and teenagers or adults into two classes, according to the age of the youngest child in the family.

Instruments

Burnout was measured by the Maslach Burnout Inventory (MBI; Maslach, Jackson & Leiter, 1996). According to the MBI, burnout is defined as a three-dimensional construct consisting of emotional exhaustion (EE; 9 items), depersonalisation (D; 5 items) and a reduced sense of personal accomplishment (PA; 7 items). All three components are measured by items on a 7-point scale (0 – never; 1 – several times a year; 6 – every day). The scores on each of the scales are added up. The minimum score on all three scales is 0, while the maximum scores on the emotional exhaustion, depersonalisation and personal accomplishment scales are 63, 35 and 49, respectively. The overall score is treated as a continuous variable and is defined as: 1) *High*, when EE and D scores are above-average and PA score is below-average, 2) *Average*, when scores on all three scales are average, 3) *Low*, when EE and D scores are below-average and PA score is above-average.

The reliability values indicated an acceptable statistic testing level $-\alpha = 0.90$ for emotional exhaustion, $\alpha = 0.71$ for depensionalisation and $\alpha = 0.81$ for reduced sense of personal accomplishment.

By asking the question "How frequently do you encounter the following factors in the workplace?" we measured working conditions on a 5-point Likert scale (1 - hardly ever; 5 - always) with regard to the following factors: lack of information,

conflicts, poor teamwork, too much work, monotonous work or not enough work, lack of feedback, helplessness, sanctions, lack of clarity, lack of stimulation, conflict of values and passivity of superior.

Statistical analysis

Hierarchical cluster analysis using the Ward method was performed to identify clusters of respondents with regard to their summated score on the three measured dimensions of burnout. The number of groups was defined based on the resulting dendrogram.

A chi-square test was used to test the differences in socio-demographic characteristics among clusters. The number of factors measuring working conditions was identified using explorative factor analysis (EFA method and varimax rotation). The last part was tested using discriminant analysis. Factors identified were used as independent variables and cluster membership as the dependent variable. A weighted linear combination of predictors maximising the between-cluster variability and minimising the within-cluster variability was identified. It was primarily used to explain the differences between groups.

RESULTS

The sum of scores for each respondent on the three dimensions of burnout was computed and descriptive statistics were calculated. Respondents have mild feelings of emotional exhaustion (M = 19.46; SD = 11.19) and depersonalisation (M = 8.13; SD = 5.61) and quite intense feelings of personal accomplishment (M = 30.61; SD = 8.79). On average, respondents experience mild feelings of burnout.

There are some respondents who could be experiencing higher burnout levels compared to others, and some respondents that differ from others only in terms of the score in one dimension. Hierarchical cluster analysis (N=811) was performed to identify homogeneous groups with respect to burnout scores. Only respondents with available data on burnout dimensions were used in hierarchical cluster analysis. The cluster analysis yielded four clearly distinctive clusters that can also be considered optimal due to their interpretability while at the same time not being too small for further analysis.

Descriptive statistics comprising scores on each burnout dimension for the four clusters are shown in Table 1. Mean scores that are below the overall mean of the sample are shown in grey. The clusters are named after their distinctive characteristics:

Low burnout cluster (low BO): below-average EE and D scores, above-average PA score;

- High burnout cluster (high BO): above-average EE and D scores, belowaverage PA score;
- Emotionally exhausted cluster (high EE): above-average EE and PA scores, below average D score;
- Low personal achievement cluster (Low PA): below-average scores on all three dimensions.

The proportions of respondents belonging in the low PA, high BO, high EE and low PA clusters are 33, 29, 20 and 18%, respectively.

The identification of a smaller number of burnout groups of respondents proved feasible. Subsequently, socio-demographic characteristics of the clusters were examined and are shown in Figure 1. However, a chi-square test showed that differences are only significant for age ($\chi^2 = 18.91$, p = 0.026) and presence of children in household ($\chi^2 = 13.61$, p = 0.034).

Feelings of low personal achievement and emotional exhaustion are experienced by a higher proportion of younger respondents (< 30 years). Concomitantly, lower burnout is experienced by a higher proportion of respondents older than 49 years vs. younger respondents. In line with these results, in the low personal accomplishment and high emotional exhaustion clusters there is a higher proportion of respondents younger than 30 years, while in the low burnout cluster there is a higher proportion of respondents over 49 years. The high emotional exhaustion cluster shows the highest proportion of respondents with small children in the household. Concomitantly, the low personal accomplishment cluster has the highest share of

	Range	M	SD	n
Emotional Exhaustion	0-20	8.29	5.36	145
Depersonalisation	0-23	4.28	4.19	
Personal Accomplishment	29 - 48	41.22	4.04	
Emotional Exhaustion	13 - 53	30.51	8.49	236
Depersonalisation	3 - 26	14.27	3.96	
Personal Accomplishment	5 - 47	27.77	6.81	
Emotional Exhaustion	14 - 46	24.76	6.73	162
Depersonalisation	0-16	6.58	3.82	
Personal Accomplishment	27 - 47	35.56	4.73	
Emotional Exhaustion	0-26	12.56	5.75	268
Depersonalisation	0 - 28	5.74	3.85	
Personal Accomplishment	4 - 36	24.38	7.01	
	Emotional Exhaustion Depersonalisation Personal Accomplishment Emotional Exhaustion Depersonalisation Personal Accomplishment Emotional Exhaustion Depersonalisation Personal Accomplishment Emotional Exhaustion Depersonalisation Personal Accomplishment	RangeEmotional Exhaustion $0-20$ Depersonalisation $0-23$ Personal Accomplishment $29-48$ Emotional Exhaustion $13-53$ Depersonalisation $3-26$ Personal Accomplishment $5-47$ Emotional Exhaustion $14-46$ Depersonalisation $0-16$ Personal Accomplishment $27-47$ Emotional Exhaustion $0-26$ Depersonalisation $0-28$ Personal Accomplishment $4-36$	Range M Emotional Exhaustion $0-20$ 8.29 Depersonalisation $0-23$ 4.28 Personal Accomplishment $29-48$ 41.22 Emotional Exhaustion $13-53$ 30.51 Depersonalisation $3-26$ 14.27 Personal Accomplishment $5-47$ 27.77 Emotional Exhaustion $14-46$ 24.76 Depersonalisation $0-16$ 6.58 Personal Accomplishment $27-47$ 35.56 Emotional Exhaustion $0-26$ 12.56 Depersonalisation $0-28$ 5.74 Personal Accomplishment $4-36$ 24.38	RangeMSDEmotional Exhaustion $0-20$ 8.29 5.36 Depersonalisation $0-23$ 4.28 4.19 Personal Accomplishment $29-48$ 41.22 4.04 Emotional Exhaustion $13-53$ 30.51 8.49 Depersonalisation $3-26$ 14.27 3.96 Personal Accomplishment $5-47$ 27.77 6.81 Emotional Exhaustion $14-46$ 24.76 6.73 Depersonalisation $0-16$ 6.58 3.82 Personal Accomplishment $27-47$ 35.56 4.73 Emotional Exhaustion $0-26$ 12.56 5.75 Depersonalisation $0-28$ 5.74 3.85 Personal Accomplishment $4-36$ 24.38 7.01

Table 1. Burnout scores of the four clusters (descriptive statistics)

Note. 1) Grey = mean < overall mean; 2) Black = mean > overall mean.

L	ow BO	High BO	High EE	Low PA
n	= 145	n = 236	n = 162	n = 268
Gender				
female _	62%	61%	69%	62%
male _	38%	39%	31%	_38%_
Age				
< 29 _	19%	_23%	28%	_33%
30 - 39	33%	29%	28%	%
40 - 49	22%	29%	26%	
50 and more _	_26%	19%	-18%	16%
Education _	2 0.0 /		100/	
high school or less	-38%	47%	43%	-51%
higher education	-62%	_53%	-57%	-49%
Region of residence				
other _	_50%	_57%	55%	_53%
central _	-50%	43%	45%	47%
Marital status				
married _	49%	47%	46%	42%
single	17%	_17%	18%	18%
cohabitation _	24%	26%	29%	27%
partner, separate households	-9%	10%	-8%	13%
widowed _	1%	0%	0%	0%
Children in household				
without ch.	55%	58%	51%	64%
(pre)school ch.	27%	_19%	31%	20%
adolecsent or adult ch.		-23%	17%	—15%

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Figure 1. Socio-demographic characteristics of burnout clusters.

respondents without children in the household. Results show that the clusters differ in some socio-demographic characteristics.

Working conditions can be presumed to be correlated with the experienced burnout. In the next step, identification of factors describing working conditions was attempted. The KMO of 0.93 showing a high degree of common variance among the variables measuring working conditions suggested that factor analysis was appropriate. Bartlett's test of sphericity showed that the correlation matrix was not an identity matrix ($\chi^2 = 3816.19$, p < 0.001), thus also confirming that factor analysis was appropriate for the data. Four factors were extracted, accounting for 51% of the variance. Communalities and factor weights are shown in Table 2.

The three highlighted items in the table were removed from further analysis. The communality of the item "monotonous or not enough work" was small and its variance contributed little to the common factor. The other two highlighted items were excluded because they loaded on two factors. The obtained factors of working conditions are the following: motivation contributing factors, information flow, interpersonal relations and extensive work. Mean scores on each of the factors were calculated and used in the subsequent analysis.

When testing the role of work conditions in predicting experienced burnout, working conditions' factors were used as independent variables and cluster membership as a dependent variable by discriminant analysis. Equality of variance-co-

		R	otated fac	tor weigh	its	
	Communalities	1	2	3	4	Clusters' names
Lack of information	.449		.560			Information flow
Lack of feedback	.783		.773			
Conflicts	.406			.687		Interpersonal
Poor team work	.431			.538		relations
Too much work	.401				.558	Extensive work
Monotonous or not enough work	.263					
Helplessness	.533	.498	.457			
Lack of clarity	.573	.517	.455			
Sanctions	.378	.506				Motivation
Lack of stimulation	.469	.467				contributing factors
Conflict of values	.627	.647				Jucions
Passivity of superior	.449	.496				

Table 2. Exploratory factor analysis regarding working conditions

variance matrices across groups was tested and confirmed (Box's M = 41.36, F = 1.36, p = 0.09). Although the analysis provided three discriminant functions, only two of them were statistically significant (Wilks' $\lambda_1 = 0.78$, p < 0.0001, Wilks' $\lambda_2 = 0.98$, p = 0.019, Wilks' $\lambda_3 = 0.998$, p = 0.409). A structure matrix showing correlations between independent variables and each discriminant function is shown in Table 3.

The first function encompasses motivation contributing factors and interpersonal relations. This function could be named "poor working environment". The second function correlates only with "extensive work" and can be therefore named after this item. The third function did not contribute to discrimination between clusters and was not further explained.

Table 3. Structure matrix of independent variable and discriminant functions

	Fun	Function		
	1	2		
Motivation contributing factors	0.923*	-0.209		
Interpersonal relations	0.725*	-0.134		
Extensive work	0.565	0.747*		
Information flow	0.636	-0.425		

	Function			
Groups	Poor working environment	Extensive work		
Low BO	-0.78	0.10		
High BO	0.62	-0.05		
EE	0.25	0.21		
Low PA	-0.28	-0.13		

Table 4. Functions at group centroids

Group centroids, which are the mean discriminant functions' value for each cluster were calculated and are shown in Table 4.

Table 4 shows that the high burnout cluster has a higher value on the first function (poor working environment), while the low burnout cluster has a lower value on the same function. Values of low personal accomplishment and high emotional exhaustion cluster centroids are closest to the average on both functions, indicating lower discriminating performance of the obtained functions. Higher emotional exhaustion is still to a certain extent related to extensive work.

Correct classification was achieved in 38% of cases when they were classified on the basis of discriminant functions. This exceeds the proportion (25%) that would be expected if the classification was random. Table 4 also shows that discrimination is best between the high and low burnout group. Indeed, if discriminant analysis is repeated with only these two groups as dependent variables, the performance of the discriminant function increases to 77% of correctly classified cases. There are some working conditions (i.e. extensive work) that predict the feeling of burnout, but poor information exchange did not prove to be a relevant predictor of feeling of burnout.

DISCUSSION

Burnout clusters (types)

We used a cluster analysis procedure which identified four clearly distinctive and highly replicable clusters of individuals with different patterns of expression of the three burnout dimensions. These are therefore groups of individuals that correspond to each other in terms of the pattern of their results in the burnout dimensions. The first is the *low burnout cluster*. Individuals classified in this cluster report low levels of exhaustion and depersonalisation at work (they are well able to face work burdens and can successfully manage the emotional and cognitive demands of their job, without having to distance themselves emotionally or cognitively from their work); they also have a high sense of personal accomplishment and are effective in their job. Individuals classified in *the high burnout cluster* show a completely opposite picture. They have above-average levels of exhaustion, distance themselves cognitively and emotionally from their work in order to cope more easily with its demands, or develop a cynical and indifferent attitude towards their job. They have a low feeling of efficacy at work and their sense of personal accomplishment is diminished.

The existence of the types of individuals described here was expected and we were able to predict it quite clearly. More interesting was the existence of two other types, which indicate characteristics of alternative patterns of the three burnout dimensions. The first is the *emotionally exhausted cluster*, which includes individuals with above-average exhaustion and reduced personal accomplishment/efficacy, who are nevertheless still relatively successful at coping with the emotional or cognitive demands of their job and are not indifferent or cynical (their depersonalisation is below average). Although a close connection exists between exhaustion and depersonalisation, according to Maslach, Jackson and Leiter (1996) depersonalisation is actually a consequence of, or reaction to exhaustion. This cluster may therefore be understood as a kind of pre-stage of burnout in which individuals already have an above-average level of exhaustion and are less effective in their work, but are still capable of responding to various emotional or cognitive job demands. We may assume, for the individuals classified in this cluster, that they will feel the symptoms of burnout in the near future unless they successfully confront the situation on time.

The last cluster, i.e. the *low personal achievement cluster*, serves to classify individuals who have a below-average result in all three burnout dimensions. This means that they are not overburdened or exhausted at work, that they deal successfully with work tasks from both the emotional and cognitive points of view, but nevertheless do not achieve high efficacy in their work, which means that their personal accomplishment is reduced. Maslach et al. (1996) state that exhaustion or depersonalisation interferes with efficacy, but that lack of efficacy can also appear independently of (or in parallel with) the other two aspects of burnout, above all as a result of a lack of job resources. We may therefore conclude that the individuals in this cluster are faced both with low job demands and work burdens and with low job resources (see, e.g., Bakker & Demerouti, 2007; Demerouti & Bakker, 2011), and that although they are not exposed to symptoms of burnout in their job, they do not have opportunities for personal achievement either. This can be linked to low work engagement, low job satisfaction, low sense of belonging to the organization, etc.

Burnout types and socio-demographic characteristics

Further in our study, we try to establish how the identified clusters of participants differ from each other with regard to the selected demographic variables. We assumed that among individuals with low burnout there would be, in comparison to individuals with high burnout, older men with a lower education level who would be in a relationship and have no children. However, the results showed that differences were only significant regarding age and number of children in the household. The low personal accomplishment and high emotional exhaustion clusters had a higher proportion of younger respondents (under 30 years), while the low burnout cluster had a higher proportion of respondents over 49. The high emotional exhaustion cluster had the highest proportion of respondents with small children, whereas the highest share of respondents without children was in the low personal accomplishment cluster.

Past studies have also shown that older employees use more effective strategies to cope with stress and are less likely to experience burnout. This is linked to their greater professional experience and greater experience of coping with stress, greater maturity, better financial situation, etc. (see, e.g., Blau et al., 2013; Johnson et al., 2013). It is therefore no surprise that the largest proportion of employees aged over 49 is in the low burnout cluster. On the other hand, younger employees are expected to be more exposed to burnout because they have lower salaries, less emotional support, etc. In our case, then, the considerable share of employees younger than 30 in the high emotional exhaustion cluster is expected. These are those young people who already show the first signs of burnout because they have above-average levels of exhaustion and are less effective, yet are still relatively successful at coping with the emotional or cognitive demands of their job. Despite these factors being linked to burnout in younger employees, young people are also protected against burnout by a number of factors such as better psychophysical condition, fewer health problems, etc. This could be the reason why we do not find the highest proportion of employees under 30 in the high burnout cluster, where individuals aged between 30 and 49 represent the largest group.

It is also interesting that we find the largest proportion of employees younger than 30 in the low personal accomplishment cluster (faced both with low job requirements and work burdens and with low job resources). Young people are often assigned less responsible duties through which they would have the opportunity to prove themselves, while at the same time fewer job resources are available to them – such as variety of work, sufficient feedback about progress in the job, close relationships with co-workers, etc. All this can contribute to lower personal efficacy and achievement.

The high emotional exhaustion cluster contained the highest proportion of participants with small children, while the highest proportion of participants without children was in the low personal accomplishment cluster. This finding can also be linked to the age of participants in these two clusters – in which we established that the highest proportion of those under 30 could be placed. It is therefore expected that we will also have the highest proportion of individuals without children or with small children in these two clusters. The findings of Ten Brummelhuis et al. (2008) also show that the presence of young children is positively related to feelings of burnout. In our case, we do not have the largest number of individuals with small children in the high burnout cluster but rather in the high emotional exhaustion cluster, although this is expected in view of the age structure of individuals in the two clusters.

On the other hand, it is not surprising that the largest number of individuals without children is in the low personal accomplishment cluster. These are those young individuals who do not face excessive pressures in their jobs and cope well with existing demands, probably also on account of having lower burdens in their family life. Despite this, they do not achieve high efficacy in their work. We might have also expected there to be a large number of individuals without children in the low burnout cluster, but in this cluster we also have the largest proportion of older participants (i.e. over 49).

The role of working conditions in burnout

Working conditions, especially high job demands, are supposed to be related to burnout. Numerous previous studies also confirm this connection (e.g. Demerouti et al., 2001; Schaufeli & Bakker, 2004). Factor analysis showed that the working conditions included in the study can be combined into four factors: those contributing to motivation of employees, information flow, interpersonal relations and extensive work. Discriminant analysis yielded two statistically significant discriminant functions of working conditions factors (poor working environment and extensive work) that contributed to discrimination between clusters of employees.

The discrimination was best between the high burnout and low burnout groups (the high burnout cluster had a higher value on the poor working environment function as compared to the low burnout cluster), whereas, higher emotional exhaustion was to a certain extent related to extensive work. It can be concluded that an unstimulating working environment in which employees perceive conflict of values and poor leadership, is the main contributor to the feeling of burnout. Poor interpersonal relations contribute to the feeling of burnout to a somewhat lesser, but still significant, extent.

Working conditions represent more or less dynamic variables that, with the help of good information, education and advice, can gradually be altered so as to create an employee-friendly working environment. The findings of our study show that among working environment factors, motivation contributing factors and interpersonal relations (poor working environment) are most important when it comes to distinguishing between individuals with high and low burnout, and therefore most attention should be dedicated to them. A less pronounced but still significant role is played by extensive work. It is also possible that a slightly more favorable working environment helps the individual deal with extensive work (high EE cluster), which could perhaps be explained by the interaction between job resources and job demands.

Limitations and future directions

The present study has some limitations, which need to be mentioned. The first is the unrepresentative sample, which we obtained through ad hoc sampling. There were disproportionate ratios of men and women in the sample. Nevertheless, the study included a large and heterogeneous sample of participants – both from the point of view of age range and education.

In future studies it would be worth testing the obtained burnout types on different samples of employees and in different cultural environments. It would also be a good idea to test how burnout types differ from each other in terms of certain other variables such as personality, well-being, work engagement, sense of belonging to the organization, etc. Our study includes exclusively self-reported measures. Studies on burnout that include objectively measured behavioural indicators (e.g. sickness absenteeism, performance) are rare, but can offer a different quality of data than exclusively self-report measures. Last but not least, it would also be a good idea to test how belonging to an individual burnout type is apparent in employees' actual job activities.

CONCLUSION

The results of our study pointed to the existence of profiles of individuals with different constellations of burnout dimensions. The existence of low burnout and high burnout clusters was expected and, in view of previous studies, we were able to predict it quite clearly. The results also revealed the existence of two additional clusters – high emotional exhaustion and low personal accomplishment – which indicate characteristics of different profiles of burnout dimensions which were less expected on the basis of previous studies. The clusters differ significantly from each other with regard to age and children in the household. Poor working environment was the main contributor to the feeling of burnout, whereas higher emotional exhaustion was to a certain extent related to extensive work. Our results significantly complement previous theoretical findings based on a variable-centred approach and draw attention to the importance of researching typical patterns of burnout dimensions within individuals. Understanding the latter is not only important from the theoretical point of view, it also has important practical implications (e.g. various forms of interventions adapted to individual profiles).

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ULOGA SOCIODEMOGRAFSKIH KARAKTERISTIKA I RADNIH UVJETA U IZGARANJU NA POSLU

Sažetak

U istraživanju smo pokušali utvrditi demografske varijable i radne uvjete koji se značajno razlikuju među skupinama osoba s različitim profilima izraženih osnovnih dimenzija izgaranja na poslu. Istraživanje, koje je provedeno u Sloveniji, uključilo je 942 sudionika koji su ispunili Inventar izgaranja na poslu Christine Maslach i mjeru radnih uvjeta. Utvrdili smo četiri odvojena klastera: nisko izgaranje, visoko izgaranje, visoku emocionalnu iscrpljenost i nisko osobno postignuće. Osobe u različitim klasterima značajno se razlikuju s obzirom na dob i broj djece u kućanstvu. Najviši udio mlađih ispitanika (ispod 30 godina) smješten je u klastere niskog osobnog postignuća i visoke emocionalne iscrpljenosti, dok je klaster niskog izgaranja imao najveći broj ispitanika starijih od 49 godina. Klaster visoke emocionalne iscrpljenosti imao je najveći broj ispitanika s malom djecom, dok je najveći udio ispitanika bez djece smješten u klaster niskog osobnog postignuća. Radno okruženje bez stimulacije glavni je faktor koji doprinosi osjećaju izgaranja. Naši rezultati upućuju na postojanje profila pojedinaca s različitim rasponom dimenzija izgaranja na poslu te su stoga važan doprinos prethodnim teorijskim nalazima utemeljenim na pristupu usmjerenom na varijable.

Ključne riječi: izgaranje na poslu, radni uvjeti, sociodemografske karakteristike

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