WORK ETHIC AND BELIEFS ABOUT THE SOCIAL WORLD AS PREDICTORS OF PROFESSIONAL BURNOUT ON THE EXAMPLE OF SELECTED MINING AND INDUSTRIAL PLANTS OF THE RYBNIK COAL AREA

Abstract The aim of the article was to diagnose the professional burnout, work ethic, beliefs about the social world among employees of the Rybnik Coal District and analyse the relationships between these variables. The authors checked whether work ethic, beliefs concerning the bad world, system justification, focus on social dominance, compassion, faith in life, as a zero-sum game and identification with Poland constitute a predictor of professional burnout of employees of industrial and mining plants. It was stated that exhaustion is associated with deferred gratification, while withdrawal with the scale of morality and ethics. The overall rate of professional burnout is associated with hard work and deferred gratification as well as with the overall result in the field of work ethic. Deferred gratification and compassion turned out to be significant predictors of professional burnout. Deferred gratification is at the same time an important predictor of exhaustion.

Keywords: professional burnout, work ethic, mentality, mining plants, Rybnik Coal District

1. Introduction

For most adults, work is one of activities that consumes a significant part of their time during the day and the conditions that prevail in it influence their physical and mental functioning. The character of the work performed, conditions prevailing in the place of employment and personal characteristics of individuals may translate into their level of professional burnout and, consequently, to the satisfaction they derive from work, the effort they put in it and to the level of absenteeism and commitment. Therefore it can be concluded
that the level of professional burnout affects the efficiency and success of the given company\(^1\).
The article includes a presentation of research results which aim mainly at determining the relationships between work ethic and beliefs about the social world (beliefs concerning bad world, system justification, focus on social dominance, faith in life, zero-sum game and identification with Poland) and level of professional burnout among employees of mining and industrial plants of the Rybnik Coal District. To this end, the following main research question was formulated: is there a relationship between the level of professional burnout and work ethic along with beliefs concerning social issues? The following research hypotheses were adopted: 1. There is a statistically significant relationship between professional burnout and work ethic among the employees of industrial and mining plants of the Rybnik Coal District. 2. There is a statistically significant relationship between beliefs concerning social issues (beliefs about the bad world, system justification, focus on social dominance, faith in life as a zero-sum game and identification with Poland) and professional burnout among employees of industrial and mining plants of the Rybnik Coal District.

2. Theoretical basis of research

2.1. Professional burnout

The concept of professional burnout comes from the early 70s of the 20th century. It was defined independently by the psychiatrist Herbert Freudenberger and the social psychologist Christina Maslach\(^2\). Currently, it is assumed that professional burnout is multidimensional. Maslach defines burnout as a *syndrome of emotional exhaustion, depersonalisation and lack of job satisfaction that can occur in people working with other people in a certain way*\(^3\) and lists three basic dimensions: 1) emotional exhaustion, i.e. excessive fatigue and depletion of emotional resources which are characterised by: general fatigue, loss of joy of life, lack of energy and willingness to take actions, irritability and psychosomatic symptoms; 2) depersonalisation denoting a specific attitude of man towards other people characterised by cynicism, maintaining a large distance in interpersonal contacts and loss of idealism; 3) reduced satisfaction with professional achievements, which is characterised by a decrease in self-confidence and performance. It may be associated with depression, occupational stress and difficulties in coping with workplace requirements\(^4\). In the original sense, professional burnout related mainly to the people who work for a long time in conditions providing a great

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\(^3\) Maslach Ch.: Burnout. The cost of caring. Prentice-Hall, Englewood Cliffs, NY, p. 3.
\(^4\) Ibidem, p. 3-7.
emotional burden (and therefore mainly employed in aid professions)\textsuperscript{5}. Currently, however, it is emphasised that along with economic changes, professional burnout does not concern only public utility professions anymore and can become a problem for employees in any industry, at any career and organisational level\textsuperscript{6}.

2.2. Work ethic

The modern term of work ethic comes mainly from Weber's works and describes a group of behaviours that are desired by the social environment. Weber tries to find the sources that shaped modern capitalism in Protestant ethic. The concept of the spirit of capitalism is also important here\textsuperscript{7}. It is an attitude according to which people should strive after the maximisation of their professional potential, aimed at multiplying wealth. A number of definitions of work ethic including a list of desired and undesired work-related behaviours can be found in the literature. Miller, Woehr and Hudspeth\textsuperscript{8} describe seven components of work ethic, which are: 1) placing the job at the center of life; 2) performing hard work and believing that such an action leads to success; 3) self-reliance, self-confidence, individualism; 4) negative attitude towards leisure activities; 5) honesty in contacts and business with other people; 6) unwillingness to waste time, treating time as a valuable resource; 7) deferring the gratification, emphasising the value of things one needs to wait for. People, who have a high level of work ethic, work hard, are proud of their work, put effort above rest, save money and strive to collect as much goods as possible. A high social position that an individual can achieve and the remuneration received for the effort put into work are external signs of high work ethic. Nowadays, it is emphasised, contrary to the Weber's understanding, that the work ethic is of a non-religious nature\textsuperscript{9}.

2.3. Beliefs about the social world

The functioning of a person in the employment situation can be affected not only by the working conditions or his/her personal predispositions, but also by the beliefs about the surrounding world and other people.

Researchers of the Polish mentality point to the functioning of the "Polish norm of negativity" in the thinking about the social world\textsuperscript{10}. Research shows that the majority of Poles

\textsuperscript{6} Maslach C., Leiter M.P.: Prawda o wypaleniu zawodowym. PWN, Warszawa 2011.
feel dissatisfied with their lives, long for the past, which they consider better than the presence, and feel disadvantaged. Poles also express a negative opinion about their countrymen, believing that they have more and more negative traits (they are more malicious, selfish and impudent) and break moral norms. Politicians are also evaluated extremely negatively.

Another variable that can be considered as a belief about the social world is the focus on social dominance defined as the desire for group domination and inequality. The theory of social dominance explains how intra-group hierarchies are created and maintained, taking into account both individual, cultural, ideological and political predispositions. People with a high focus on social dominance support actions and policies aimed at maintaining social inequalities. Research also shows that such individuals tend to perceive the social world as a brutal jungle in which the immoral struggle for resources continues.

Justification of the system is "a process by means of which the existing social relationships are justified, even at the cost of the personal and group interest." This process contributes to the internalisation of the sense of inferiority among people belonging to disadvantaged groups. In this theory, it is assumed that individuals who tend to justify and rationalise the existing system perceive the existing social, economic and political order as just, desirable and justified simply because it exists.

Belief in life perceived as a zero-sum game is a view concerning the characteristics of social relationships shared in a given culture or society, it is a conviction that successes of one

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person are possible only in connection with the failure of other people\textsuperscript{24}. Individuals professing faith in life as a zero-sum game are convinced that the interests of people are antagonistic at their bases, the success in life of one person, or his/her economic success, is inextricably linked to the lack of success and loss of other people.

The last variables related to beliefs about the social world which were analysed constituted the identification with Poland indicating the strength of identification with one's own national group (Poles)\textsuperscript{25} and compassion constituting one of the components of the Agreeableness factor in the Five Factor Model.

3. Research method

3.1. Characteristics of the research group

61 people employed in the mining and industrial plants of the Rybnik Coal District took part in the research. The research group consisted of 20 women and 41 men. One of the respondents had primary education, 9 people had vocational education, 18 people had secondary education, 6 respondents had vocational higher education and 27 people had a university degree. The majority of respondents (47 people) indicated the private sector as a place of employment and the remaining persons (14 respondents) indicated the public sector. The least numerous age group consisted of people under 30 (2 people), the age group 30-40 included 20 people, the age group 40-50 – 28 people, the age group 50-60 – 8 people and 3 respondents were over 60 years old. Fourteen people in the research group are white-collar workers and the rest of them are blue-collar workers.

3.2. Research tools

The following studies were used to carry out the research: Multidimensional Work Ethic Profile (MWEP), Questionnaire of Beliefs on Social Topics and scale of Faith in Life as Zero-Sum Game.

Wielowymiarowy Profil Etyki Pracy (WPEP) created by Grabowski and Chudzicka-Czupała\textsuperscript{26} is the Polish adaptation of Multidimensional Work Ethic Profile (MWEP) (Miller, Woehr i Hudspeth 2002). A 40-item version of the questionnaire was used in the planned research. It consisted of eight scales: hard work (HW) ($\alpha = 0.84$); centrality of work (CW)


\textsuperscript{25}Klebaniuk J.: Orientacja na dominację społeczną i usprawiedliwianie systemu w kontekście nierówności międzypaństwowych. „Psychologia Społeczna”, Vol. 51(13), 2010, p. 42-56.

(α = 0.78); wasted time (WT) (α = 0.68); leisure (L) (α = 0.76); delay of gratification (OG) (α = 0.80); morality/ethics (ME) (α = 0.69); self-reliance/independence (SR/I) (α = 0.81) and the scale of work as a moral obligation (WMO) diagnosing the tendency to consider work in terms of moral value. The subject takes a stance on the statements on the 5-point Likert scale, choosing the answer from 1 – "I completely disagree" to 5 – "I totally agree.

The Questionnaire of Beliefs on Social Issues by Jaroslaw Klebaniuk (2010) consists of 52 statements making up 5 scales: Bad World Scale (12 statements) (α = 0.71), System Justification Scale (8 statements) (α = 0.67), Scale of Focus on Social Dominance (16 statements) (α = 0.84); Scale of Identification with Poland (5 statements) (α = 0.75). The subject takes a stance on the statements on the 5-point Likert scale, choosing the answer from 1 – "I completely disagree" to 5 – "I totally agree".

The Scale of Faith in the Zero-Sum Game is used to diagnose the general belief that life is a zero-sum game, i.e. a hidden assumption that achieving success or earning a profit by one person is only possible at the expense of failure or loss of other person. The tool consists of 12 items in relation to which respondents respond on the 7-grade Likert scale. Internal compliance of the scale ranges from 0.70 to 0.87 for Polish samples.

The Polish version of the Oldenburg Burnout Inventory (OLBI) consists of 16 items forming 2 subscales (8 items for each): exhaustion and keeping distance (withdrawal) from work. The respondent answers questions on a four-grade scale from 1 – "I agree" to 4 – "I disagree". Cronbach's α reliability coefficient for the exhaustion subscale is 0.73, and for the withdrawal scale - 0.69.

3.3. Results

Correlation analyses were conducted in order to establish the relationships between work ethic and professional burnout, as well as between beliefs about the social world and professional burnout in people employed in the selected mining and industrial plants of the Rybnik Coal Area. The relationships between beliefs about the social world, justification of the system, deferred gratification and the exhaustion (Table 1), between compassion and morality and withdrawal (Table 2), between compassion, hard work, deferred gratification along with work ethic and professional burnout were analysed (Table 3). The results of the analysis in the form of Pearson's correlation coefficients are shown in the following tables.
Table 1

Correlations between the variables studied (N = 61)

<table>
<thead>
<tr>
<th>Variables:</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Exhaustion</td>
<td>18.97</td>
<td>3.454</td>
<td>0.248*</td>
<td>0.264*</td>
<td>-0.315**</td>
<td></td>
</tr>
<tr>
<td>2. Beliefs about the social world</td>
<td>197.51</td>
<td>3.085</td>
<td>0.248*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. System justification</td>
<td>27.10</td>
<td>6.239</td>
<td>0.264*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Deferred gratification</td>
<td>16.54</td>
<td>3.617</td>
<td>-0.315**</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** p < 0.01; * p < 0.05.

Source: Own study.

Table 2

Correlations between the variables studied (N = 61)

<table>
<thead>
<tr>
<th>Variables:</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Withdrawal</td>
<td>19.17</td>
<td>2.471</td>
<td>0.348**</td>
<td>-0.278*</td>
<td></td>
</tr>
<tr>
<td>2. Compassion</td>
<td>41.51</td>
<td>5.887</td>
<td>0.348**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Morality and ethic</td>
<td>21.43</td>
<td>2.826</td>
<td>-0.278*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** p < 0.01; * p < 0.05.

Source: Own study.

Table 3

Correlations between the variables studied (N = 61)

<table>
<thead>
<tr>
<th>Variables:</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Professional burnout</td>
<td>38.06</td>
<td>3.165</td>
<td>0.299**</td>
<td>-0.315**</td>
<td>-0.364**</td>
<td>-0.258*</td>
<td></td>
</tr>
<tr>
<td>2. Compassion</td>
<td>41.51</td>
<td>5.887</td>
<td>0.299**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Hard work</td>
<td>21.43</td>
<td>2.826</td>
<td>-0.315**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Deferred gratification</td>
<td>16.54</td>
<td>3.617</td>
<td>-0.364**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Work ethic</td>
<td>163.09</td>
<td>16.777</td>
<td>-0.258*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** p < 0.01; * p < 0.05.

Source: Own study.

A statistically significant average correlation between exhaustion and beliefs about the social world (r = 0.25, p < 0.05) and between exhaustion and system justification (r = 0.26, p < 0.05) was shown in the research. The analysis of the relationships between exhaustion and deferred gratification also showed a moderate significant negative correlation (r = -0.32, p < 0.01) between these variables, as shown in Table 1. The withdrawal correlates moderately positively with compassion (r = 0.35, p < 0.01) and slightly less, but negatively (r = -0.28, p < 0.05) with the scale of morality and ethics (Table 2).

Professional burnout moderately positively correlates with compassion (r = 0.30, p < 0.01). Considering the relationships between professional burnout, hard work and deferred gratification, moderate negative relationships between these variables can be noticed. Professional burnout also correlates negatively with work ethic, however, slightly weaker (r = -0.26, p < 0.05) (Table 3).
A multiple regression analysis, verifying the model in which professional burnout was the explained variable and hard work, compassion, deferred gratification and work ethic were predictors, showed that significant predictors include compassion (beta = 0.401, p < 0.01) and deferred gratification (beta = -0.412, p < 0.01). The proposed model proved to be well suited to the data F(2.51) = 10.429, p < 0.001 and explained 26.2% of the variance of the dependent variable (R² = 0.262) (Table 4).

Table 4
Professional burnout compared to compassion and deferred gratification – results of multiple regression analysis (N = 61)

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Independent variables</th>
<th>(beta)</th>
<th>R</th>
<th>R²</th>
<th>F</th>
<th>SR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional burnout</td>
<td>Compassion</td>
<td>0.401</td>
<td>0.539</td>
<td>0.290</td>
<td>10.429*</td>
<td>0.262</td>
</tr>
<tr>
<td></td>
<td>Deferred gratification</td>
<td>-0.412</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < 0.001.

Source: Own study.

The regression analysis that aims at verifying the model in which exhaustion was an explained variable and the predictors were the following variables: deferred gratification and system justification was also carried out. The analysis showed that only deferred gratification is an important predictor (beta = -0.259, p < 0.05). The proposed model proved to be well suited to the data F(2.58) = 4.497, p < 0.05 and explained 10.4% of the variance of the dependent variable (R² = 0.104) (Table 5).

Table 5
Exhaustion against system justification and deferred gratification – results of multiple regression analysis (N = 61)

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Independent variables</th>
<th>(beta)</th>
<th>R</th>
<th>R²</th>
<th>F</th>
<th>SR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exhaustion</td>
<td>Deferred gratification</td>
<td>-0.259</td>
<td>0.366</td>
<td>0.133</td>
<td>4.497*</td>
<td>0.104</td>
</tr>
</tbody>
</table>

* p < 0.05.

Source: Own study.

4. Summary

To sum up, it can be noted that professional burnout is associated with beliefs about the social world as well as with world ethic. Exhaustion is associated with deferred gratification, while withdrawal with the scale of morality and ethics. The overall rate of professional
burnout is associated with hard work and deferred gratification as well as with the overall result in the field of work ethic. Deferred gratification and compassion turned out to be significant predictors of professional burnout. The deferring of gratification is at the same time an important predictor of exhaustion. It is worth noting that, according to the research, it is not the performance of hard work and treatment of job as the centre of life or unwillingness to perform leisure activities and avoidance of them which pose a threat of occurrence of professional burnout symptoms, but the deferred gratification (especially exhaustion).

The research presented in this article, despite limited research group, shows factors important for the professional burnout associated with the beliefs about the social worlds and work ethic. The variables analysed in this article are associated not only with mental wellbeing, but also have a real impact on the effectiveness of the organisation. The analysis of the employees of the Rybnik Coal District resulted in a valuable regional perspective. At the same time, the obtained results may prove to be useful during activities undertaken by psychologists employed in HR departments. During the research, there were also reflections concerning other variables that may be significant for the analysed issues. Questions that arise should become a basis for further, broader research. It would also be valuable to compare the results obtained by employees of mining and industrial plants with employees employed in other industries.

**Bibliography**
