Abstract

The objective of this study was to determine whether personality traits, job satisfaction, and organizational justice are associated with burnout in teachers. The sample was composed of 554 teachers (77.3% females) from 25 Bosnia and Herzegovina elementary schools. We used Big Five Inventory (John, Donahue, & Kentle, 1991), Job Satisfaction Scale (Brayfield & Rothe, 1951), Organizational Justice Scale (Colquitt, 2001) containing four subscales: Distributive justice, Procedural justice, Interpersonal justice and Informational justice, and Copenhagen Burnout Inventory (Kristensen, Hannerz, Høgh, & Borg, 2005) containing four subscales: Personal burnout, Work-related burnout and Student-related burnout. The results show that personal traits, job satisfaction, and distributive justice are associated with personal, work-related and student-related burnout. Neuroticism, job satisfaction, and distributive justice make a significant contribution to personal, work-related and student-related burnout. The openness to experience provides a significant contribution to work-related and student-related burnout, and agreeableness makes a significant contribution to personal burnout.

Keywords: personality traits, job satisfaction, organizational justice, burnout, teachers
Introduction

Burnout was established in the psychological literature in the mid-1970s. Herbert Freudenberg defined burnout as a gradual loss of motivation and emotional "exhaustion" due to the specific requirements of work, personality traits, and expectations, as well as unsatisfactory results of the invested efforts, observed in the medical staff who dealt with addicts (Schaufeli & Buunk, 2003). Several years later, Maslach and Jackson (1981) extended the term burnout to involve emotional exhaustion, depersonalization, and reduced personal accomplishment, characteristics that fit humanistic and helping professions better. Recently, as part of the PUMA study on burnout among human service employees in Copenhagen, the Copenhagen Burnout Inventory (CBI) was created (Kristensen, Borritz, Villadsen, & Christensen, 2005). The CBI consists of three dimensions which assess: personal burnout, work-related burnout and client-related burnout (Kristensen et al, 2005). The personal burnout dimension is defined as "the extent to which the person experiences physical and psychological fatigue and exhaustion" (Kristensen et al., 2005, p. 197). Client-related burnout is "the degree of physical and psychological fatigue and exhaustion that the individual perceives as having to do with his/her job with clients" (Kristensen et al., 2005, p. 197). Work-related burnout is described as "the degree of physical and psychological fatigue and exhaustion that the individual perceives as having to do with his/her job" (Kristensen et al., 2005, p. 197). The CBI was also used in our research.

Factors that influence burnout can be classified into personal and situational factors. Situational factors include workplace conditions, such as workload level or lack of support from colleagues. Situational factors include the features of the workplace, such as workload level or lack of support from colleagues (Dedić, 2005). Studies indicate that neuroticism is positively correlated (Buhler & Land, 2003; Hills & Norvell, 1991; Langelaan, Bakke, Lorenz, & Van Doornen, 2006), while extraversion is negatively correlated with burnout (Bakker, Van Der Zee, Lewig, & Dollard, 2006; Lakin, Leon, & Miller, 2007; Langelaan et al., 2006). In addition, studies show that employees younger than 35, single, without children and with less work experience, are exposed to a higher risk of burnout. (Demirci et al., 2010). Moreover, studies indicate that job satisfaction is negatively correlated with burnout (Schaufeli, Taris & Van Rhenen, 2008; Sonnentag, 2003). Many researchers (Lee & Ashforth, 1996; Maslach & Schaufeli, 1993; Miller & Ellis, 1990) emphasize that situational factors, like the nature of the work and circumstances under which the work is done, represent the main triggers for the burnout development. The results of existing research generally indicate that burnout is more determined by situational than personal factors (Dedić, 2005).

Burnout impacts the quality of a person’s life through three components: emotional, cognitive and behavioural, and it manifests itself through the interactions in a person’s private life, but also in the work environment. People suffering from burnout syndrome are susceptible to depression, alcohol abuse and suicide (Lindblom, Linton, Fedeli, & Bryngelsson, 2006; Michielsen, Willemsen, Croon, De Vries, & Van Heck, 2004). Furthermore, burnout is associated with absenteeism, decreased productivity and increased willingness to leave the workplace (Polikandrioti, 2009).

Professions that are constantly interacting with clients (e.g. call center operators), but also helping professions (e.g. health workers, teachers) are at the greatest risk of burnout (Maslach, Schaufeli & Leiter, 2001). The teacher’s burnout is becoming an increasingly frequent subject of research interests (Živič Bećirević & Smojver Ažić, 2005; Tatalović Vorkapić & Lončarević, 2013). Today’s teaching profession is characterized by a series of changes and challenges that increase the complexity and job requirements of teachers. On the one hand, many reforms in the educational system bring teachers an increased number of administrative tasks, and on the other hand, changes in the curriculum also require additional preparation. Furthermore, with rapid technological advances, teachers also encounter challenges in the way of teaching.

Understanding the mechanism of teacher burnout and recognizing factors that are influencing the teacher’s burnout we create an opportunity for preventive action. In our country, a number of studies deal-
ing with the teacher’s burnout are still rather low, and the prevention program is almost non-existing in practice. Therefore, this study examines the relations between personality traits of the Big Five model, job satisfaction, organizational justice, and the teacher’s burnout. Specifically, the aim of this study is to examine to what extent the teacher’s burnout can be explained by the personality traits of the Big Five model, job satisfaction and organizational justice.

The Five-Factor Model of Personality is a comprehensive taxonomy of personality traits (McCrae & Costa, 1990). It assumes that the space of the basic personality structure can be described along five dimensions: Extraversion, Conscientiousness, Agreeableness, Openness to Experience and Neuroticism. The Five-Factor Model of Personality was also used in our research. Extraversion relates to the degree of active involvement of a person in their social environment. Characteristics associated with extraversion are activity, sociability, and adventure (McCrae & Costa, 1990). Conscientiousness relates to the degree to which a person follows social norms and goal-oriented behaviour. Responsibility, deliberateness, commitment to achievement, need for control and organizing are characteristics associated with conscientiousness (McCrae & Costa, 1990). Agreeableness refers to the extent to which an individual exhibits cooperation with and trust in others. Characteristics associated with agreeableness are kindness, cooperation, and unselfishness (McCrae & Costa, 1990). Openness to experience relates to the degree of acceptance of fresh or unconventional ideas and experiences by a person. Characteristics associated with openness to experience are imaginativeness, curiousness, and foresightedness (McCrae & Costa, 1990). Neuroticism is related to an individual’s emotional stability and adaptation. Neuroticism is generally seen as a lack of positive psychological adaptation and emotional stability (Judge, Higgins, Thoresen, & Barrick, 1999; Emmons, Diener & Larsen, 1985). Characteristics associated with neuroticism include anxiety, hostility, anger (McCrae & Costa, 1990). Having in mind that people with high scores on neuroticism are more prone to define many situations as dangerous and also use a non-adaptive stress coping strategies (Storm & Rothmann, 2003; Magnano, Paolillo & Barrano, 2015), and that working with children in their process of growing up is challenging and full of various frustrations and obstacles, we expect that teachers with high scores on neuroticism are more prone to burnout.

Job satisfaction is defined as a positive emotional state resulting from the assessment of the individual’s work, or his/her work-related experiences (Locke, 1976). Job satisfaction has significant outputs in productivity, absenteeism and fluctuation of employees. Having in mind the fact that job dissatisfaction is linked to a higher probability of the expression of emotional exhaustion (Ogresta, Rusac & Zorec, 2008), which, in turn, is at the root of burnout (Maslach, Schaufeli, & Leiter, 2001), we expect the teachers with lower scores in job satisfaction to be more prone to burnout.

Organizational justice refers to the employee’s perception of justice in various aspects of the organizational functioning (Greenberg, 1987). Colquitt’s (2001) model of organizational justice is an economical and valid measure of organizational justice (German, 2011; Shibaoka et al., 2010), and was used in this research. This model implies the existence of four components of organizational justice: distributive justice, procedural justice, interpersonal justice and informational justice (Colquitt, 2001). Distributive justice refers to fairness in the distribution of outcomes such as salaries, rewards, benefits, and promotions (Colquitt, 2001). Procedural justice refers to the fairness of organizational policies and procedures used in making decisions regarding the distribution of rewards (Colquitt, 2001). Interpersonal justice includes the motivation, respect, and dignified treatment of employees by their superiors in the organization (Colquitt, 2001). Informational justice implies the perception of justice in the communication aspect of organizational procedures (Colquitt & Jackson, 2006). Fejgin, Ephraty, and Ben-Sira (1995) emphasize that low salaries, bureaucratic constraints, and job limitations are the most relevant three factors to job burnout. Lambert et al. (2010) found that distributive justice and procedural justice have a significant negative relationship with burnout. Brotheridge (2003) noted that perceptions of distributive and procedural justice decreased work-
ers’ emotional exhaustion. Zahrani (2010) found that distributive justice, procedural justice, and interactive justice could predict 30% of burnout of employees. Having in mind the findings of the above-mentioned studies, we expect the teachers with the organizational injustice experience to be more prone to burnout.

Researching factors that contribute to the teacher’s burnout is important in order to understand the mechanism of teacher’s burnout and open up space for preventive action.

**Material and Methods**

**Participants and procedure**

A convenience sample was used in this study. The sample consisted of 554 teachers (77.3% females) from 25 Bosnia and Herzegovina elementary schools. Concerning the location of the school, 64.1% of them were placed in the city, 13.7% in the suburb, and 22% in the rural area. There were 45.1% of class teachers and 54.9% of the subject teachers who took part in this study. Participants were aged 23 to 66 (M = 39.76, SD = 9.48). In terms of the work experience, the sample was divided into four cohorts: up to 5 years of service (22%), 6-15 (41.5%), 16-25 (23.6%) and more than 26 (12.9%).

The data were collected in schools using a paper-and-pencil questionnaire format, under the supervision of the researchers. The participants filled out the questionnaires in groups. The participants needed approximately 35 minutes to complete it. The participants were notified that the collected data will be used for scientific purposes only. Participation was voluntary. The data were collected on anonymous survey sheets in order to guarantee the participant’s anonymity.

**Measures**

**Copenhagen Burnout Inventory – CBI** (Kristensen, Borritz, Villadsen & Christensen, 2005). The questionnaire consists of 19 questions distributed in three sub-scales that measure components of burnout: personal burnout (e.g. “How often do you feel tired?”), work-related burnout (e.g. “Do you feel worn out at the end of the working day?”), and student-related burnout (e.g. “Are you tired of working with pupils?”). Participant used a five-point Likert type scale (from 1- never to 5 - almost always) to assess how often they feel in a way that was described in particular statement. A higher score on the scale indicates a higher level of a specific aspect of burnout. For this study, Cronbach’s Alpha was .84 for the personal burnout scale, .84 for the work-related burnout scale and .80 for the student-related burnout scale.

**Big Five Inventory – BFI** (John, Donahue & Kentle, 1991). The questionnaire contains 44 items distributed in five sub-scales that measure personality traits: Extraversion (e.g. “I see myself as someone who is talkative.”), Agreeableness (e.g. “I see myself as someone who is helpful and unselfish with others.”), Conscientiousness (e.g. “I see myself as someone who is a reliable worker.”), Neuroticism (e.g. “I see myself as someone who can be tense.”), and Openness to experience (e.g. “I see myself as someone who is curious about many different things.”). The items are formulated as short phrases based on the adjectives of traits that are the prototypes of the Big Five model. The participants’ responses to the BFI are given on a 5-point Likert type scale from 1 (1 – strongly disagree) to 5 (5 – strongly agree). A higher score on the scale indicates a higher level of specific personality traits. For this study, Cronbach’s alpha was .81 for the extraversion scale, .70 for the agreeableness scale, .85 for the conscientiousness scale, .82 for the openness scale and .73 for the neuroticism scale.

**Job Satisfaction Scale – JSC** (Brayfield & Rothe, 1951). The questionnaire consists of 18 items (e.g. “I enjoy my work more than my leisure time.”) that measure job satisfaction. The participants’ responses to the
JSS are given on a 5-point Likert type scale from 1 (1 – *strongly disagree*) to 5 (5 – *strongly agree*). A higher score on the scale indicates greater job satisfaction. For this study, Cronbach’s Alpha was .85.

The Organizational Justice Scale – OJC (Colquitt, 2001). The scale consists of 20 items distributed in four sub-scales that measure components of organizational justice: distributive justice (e.g. “My compensation level reflects the effort I put into my work.”), procedural justice (e.g. “The procedures used to arrive compensation level are applied consistently.”), interpersonal justice (e.g. “My supervisor treated me with respect.”), and informational justice (e.g. “My supervisor is candid in communications with me.”). The participants’ responses to the OJC are given on a 5-point Likert type scale from 1 (1 – *completely disagree*) to 5 (5 – *completely agree*). A higher score on scales indicates a higher level of a specific aspect of justice. For this study, Cronbach’s alpha was .90 for the distributive justice scale, .87 for the procedural justice scale and .94 for the interpersonal justice scale, .94 for the informational justice scale.

Demographic checklist. The questionnaire designed for this research consisted of five questions about the following demographic characteristics: gender, age, length of service, position and placement of the school.

Data analysis

In data analysis the following statistical procedures were used: descriptive statistics, correlation analysis, and hierarchical regression analysis. Data analysis was performed using the statistical software package SPSS for Windows, version 20.0.

Results

Table 1 presents descriptive indicators for the variables used in the study. The data from Table 1 shows that respondents’ results at the sample level are shifted to higher values for the extraversion, agreeableness, conscientiousness, neuroticism, openness, job satisfaction, distributive justice, interpersonal justice and informational justice. Distribution of the respondents’ results related to extraversion, conscientiousness, and openness is platykurtic, which implies there is a tendency of results dispersion on the mentioned scales. Respondents’ results for personal burnout, work-related burnout, student-related burnout, neuroticism, and procedural justice are shifted to lower values. Distribution of respondents’ results on the scale procedural justice is platykurtic, which indicates a tendency of results dispersion on this scale (George & Mallery, 2010; Gravetter & Wallnau, 2014).

<table>
<thead>
<tr>
<th></th>
<th>Min</th>
<th>Max</th>
<th>M</th>
<th>SD</th>
<th>Skewness (SE)</th>
<th>Kurtosis (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal burnout</td>
<td>6</td>
<td>28</td>
<td>13.54</td>
<td>3.82</td>
<td>.41 (.10)</td>
<td>.20 (.21)</td>
</tr>
<tr>
<td>Work-related burnout</td>
<td>7</td>
<td>31</td>
<td>14.17</td>
<td>4.51</td>
<td>.74 (.10)</td>
<td>.49 (.21)</td>
</tr>
<tr>
<td>Student-related burnout</td>
<td>6</td>
<td>28</td>
<td>13.37</td>
<td>3.99</td>
<td>.52 (.10)</td>
<td>.12 (.21)</td>
</tr>
<tr>
<td>Extraversion</td>
<td>12</td>
<td>40</td>
<td>29.60</td>
<td>5.17</td>
<td>-.10 (.10)</td>
<td>-.27 (.21)</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>18</td>
<td>45</td>
<td>35.54</td>
<td>4.66</td>
<td>-.69 (.10)</td>
<td>.85 (.21)</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>20</td>
<td>45</td>
<td>36.78</td>
<td>5.17</td>
<td>-.50 (.10)</td>
<td>-.18 (.21)</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>8</td>
<td>39</td>
<td>20.87</td>
<td>4.70</td>
<td>.14 (.10)</td>
<td>.41 (.21)</td>
</tr>
</tbody>
</table>
Since the primary aim of this study was to determine the contribution of the personality traits of Big Five model, job satisfaction, and organizational justice in explaining the burnout of teachers, prior to the implementation of regression analysis, we calculated a series of Pearson correlation coefficients. The obtained values of correlation coefficients are shown in Table 2.

Table 2  Correlations between predictor (personality traits of Big Five model, job satisfaction, organizational justice) and criterion variables (burnout)

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>C</th>
<th>N</th>
<th>O</th>
<th>JS</th>
<th>DJ</th>
<th>PJ</th>
<th>INTJ</th>
<th>INFJ</th>
<th>PB</th>
<th>WB</th>
<th>SB</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>.22*</td>
<td>.40**</td>
<td>-.29**</td>
<td>.45**</td>
<td>.27**</td>
<td>-.02</td>
<td>-.03</td>
<td>.14**</td>
<td>.16**</td>
<td>-.15**</td>
<td>-.14**</td>
<td>-.13**</td>
</tr>
<tr>
<td>A</td>
<td>-</td>
<td>.47**</td>
<td>-.31**</td>
<td>.38**</td>
<td>.38**</td>
<td>.05</td>
<td>.05</td>
<td>.24**</td>
<td>.24**</td>
<td>-.16**</td>
<td>-.19**</td>
<td>-.21**</td>
</tr>
<tr>
<td>C</td>
<td>-</td>
<td>-.37**</td>
<td>.38**</td>
<td>.41**</td>
<td>-.01</td>
<td>.01</td>
<td>.14**</td>
<td>.19**</td>
<td>-.24**</td>
<td>-.23**</td>
<td>-.22**</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>-</td>
<td>-.26**</td>
<td>-.27**</td>
<td>-.09*</td>
<td>-.04</td>
<td>.06</td>
<td>-.06</td>
<td>.39**</td>
<td>.31**</td>
<td>.26**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>-</td>
<td>-.26**</td>
<td>-.04</td>
<td>-.07</td>
<td>.09*</td>
<td>.10*</td>
<td>-.07</td>
<td>-.05</td>
<td>-.07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS</td>
<td>-</td>
<td>-.02</td>
<td>-.03</td>
<td>.14**</td>
<td>.16**</td>
<td>-.54**</td>
<td>-.60**</td>
<td>-.64**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DJ</td>
<td>-</td>
<td>.05</td>
<td>.24**</td>
<td>.24**</td>
<td>-.18**</td>
<td>-.18**</td>
<td>.20**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PJ</td>
<td>-</td>
<td>.14**</td>
<td>.19**</td>
<td>-.14**</td>
<td>-.12**</td>
<td>-.14**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INTJ</td>
<td>-</td>
<td>-.06</td>
<td>-.16**</td>
<td>-.16**</td>
<td>-.18**</td>
<td>-.18**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INFJ</td>
<td>-</td>
<td>-.54**</td>
<td>-.60**</td>
<td>-.64**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PB</td>
<td>-</td>
<td>.85**</td>
<td>.77**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WB</td>
<td>-</td>
<td>.81**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: E = Extraversion; A = Agreeableness; C = Conscientiousness; N = Neuroticism; O = Openness; JS = Job satisfaction; DJ = Distributive justice; PJ = Procedural justice; INTJ = Interpersonal justice; INFJ = Informational justice; PB = Personal burnout; WB = Work-related burnout; SB = Student-related burnout; *p < .05; **p < .01

Correlation coefficients between predictor and criterion measures are in line with our expectations. Correlations between the personality traits of Big Five model: extraversion, agreeableness, and conscientiousness and burnout are negative and of low intensity (Cohen, 1988), while correlations between the neuroticism and burnout are positive and of low to moderate intensity. Correlations between job satisfaction and burnout, and organizational justice and burnout are negative and of large intensity.

The obtained correlations between the predictor variables are also in line with expectations. Correlations between extraversion, agreeableness, conscientiousness, neuroticism and job satisfaction are
positive and of low to moderate intensity, while the correlation between openness and job satisfaction is negative and of low intensity. Neuroticism is in low negative correlation with distributive justice, while extraversion, agreeableness, conscientiousness, and openness are in low positive correlations with interpersonal and informational justice. Job satisfaction is in low positive correlation with interpersonal and informational justice.

Finally, the obtained correlations between criterion variables are expected. Correlations between personal burnout, work-related burnout, student-related burnout are positive and of large intensity.

In order to determine the particular contribution of the personality traits of the Big Five model, job satisfaction and organizational justice to explanation of personal burnout, work-related burnout, and student-related burnout, three hierarchical regression analyses were conducted, and the results are shown in Tables 3-5. In each hierarchical regression analysis, the sequence of introducing the predictor variables into the regression equation was the same. Based on the results of previous research on the role of personal and situational factors in the occurrence of burnout of employees (Dedić, 2005), in the first step we introduced personality traits. Although the results of the correlation analysis did not indicate significant correlations between openness and burnout on our sample, the results of previous research show that openness is a significant determinant of employee burnout, and therefore openness was included in the regression model nevertheless. In the second step, job satisfaction was introduced. Organizational justice was introduced in the last step.

<table>
<thead>
<tr>
<th>Table 3</th>
<th>Hierarchical regression analysis of personality traits, job satisfaction and organizational justice for personal burnout</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predictors</td>
<td>Step 1</td>
</tr>
<tr>
<td>Extraversion</td>
<td>-.042</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>-.033</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>-.103*</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>.356**</td>
</tr>
<tr>
<td>Openness</td>
<td>.093*</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>-.525**</td>
</tr>
<tr>
<td>Distributive justice</td>
<td>-.141**</td>
</tr>
<tr>
<td>Procedural justice</td>
<td>.020</td>
</tr>
<tr>
<td>Interpersonal justice</td>
<td>-.041</td>
</tr>
<tr>
<td>Informational justice</td>
<td>.055</td>
</tr>
<tr>
<td>Corrected $R^2$</td>
<td>.162**</td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>.214**</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01

As shown in Table 3, the personality traits of the Big Five model, included in the first step explained 16.2% of the variance of personal burnout, which indicates moderate predictive power ($14 < R^2 < .26$; Cohen, 1988). The job satisfaction, included in the second step, explained an additional 21.4% of the variance of personal burnout, which indicates moderate predictive power of job satisfaction for personal burnout.
The organizational justice, included in the third step, explained an additional 11% of the variance of personal burnout, which indicates weak predictive power \((.02 < R^2 < .13;\) Cohen, 1988) of the organizational justice for the personal burnout. The model as a whole explained 38.7% of the variance of personal burnout, and significant partial predictors are the agreeableness, neuroticism, openness, job satisfaction, and distributive justice. Job satisfaction is the strongest partial predictor, whereby higher job dissatisfaction correlated with higher personal burnout. It was followed by neuroticism, whereby higher neuroticism correlated with higher personal burnout. Distributive justice was also an important partial predictor, whereby lower distributive justice correlated with higher personal burnout. The openness and agreeableness were the weakest partial predictors, whereby higher openness and higher agreeableness correlates with higher personal burnout.

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>-.054</td>
<td>.008</td>
<td>.005</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>-.089</td>
<td>.045</td>
<td>.048</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>-.113*</td>
<td>.026</td>
<td>.025</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>.250**</td>
<td>.206**</td>
<td>.206**</td>
</tr>
<tr>
<td>Openness</td>
<td>.119*</td>
<td>.135**</td>
<td>.124**</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>-.612**</td>
<td>-.607**</td>
<td></td>
</tr>
<tr>
<td>Distributive justice</td>
<td>-.145**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedural justice</td>
<td></td>
<td>.053</td>
<td></td>
</tr>
<tr>
<td>Interpersonal justice</td>
<td></td>
<td>.011</td>
<td></td>
</tr>
<tr>
<td>Informational justice</td>
<td></td>
<td>.009</td>
<td></td>
</tr>
</tbody>
</table>

| Corrected $R^2$    | .112**  | .403**  | .412**  |
| $\Delta R^2$       | .291**  | .090*   |         |

*p < .05, **p < .01

When it comes to work-related burnout (Table 4), the personality traits of the Big Five model, included in the first step, explained 11.2% of the variance of work-related burnout, which indicates weak predictive power. The job satisfaction, included in the second step, explained an additional 29.1% of the variance of work-related burnout, which indicates substantial predictive power \((R^2 > .27;\) Cohen, 1988) of job satisfaction for work-related burnout. The organizational justice, included in the third step, explained an additional .09% of the variance of work-related burnout, which indicates weak predictive power of organizational justice for the work-related burnout. The model as a whole explained 41.2% of the variance of work-related burnout, and significant partial predictors are the neuroticism, openness, job satisfaction, and distributive justice. Job satisfaction is the strongest partial predictor, whereby higher job dissatisfaction correlated with higher work-related burnout. It was followed by neuroticism; whereby higher neuroticism correlates with higher work-related burnout. Distributive justice was also an important partial predictor, whereby lower distributive justice correlated with higher work-related burnout. The openness was the weakest partial predictor, whereby higher openness correlated with higher work-related burnout.
As for the student-related burnout (Table 5), the personality traits of the Big Five model, included in the first step, explained 9.8% of the variance of student-related burnout, which indicates weak predictive power. The job satisfaction, included in the second step, explained an additional 33.3% of the variance of student-related burnout, which indicates substantial predictive power of job satisfaction for the student-related burnout. The organizational justice, included in the third step, explained an additional 1.3% of the variance of student-related burnout, which indicates weak predictive power of organizational justice for the student-related burnout. The model as a whole explained 44.4% of the variance of student-related burnout, and significant partial predictors are the neuroticism, openness, job satisfaction, and distributive justice. Job satisfaction was the strongest partial predictor, whereby higher job dissatisfaction correlated with higher student-related burnout. Distributive justice and neuroticism followed, whereby lower distributive justice and higher neuroticism correlated with higher student-related burnout. The openness was the weakest partial predictor, whereby higher openness correlated with higher student-related burnout.

Since zero-order correlations between openness and burnout indicators are statistically non-significant (Table 2), and beta ponders of openness are positive and statistically significant (Table 3, 4, 5), there is a high likelihood that the suppression effect occurred. Namely, the suppressor variable has a positive beta when the correlation of the suppressor variable and some predictor is negative. In this case, the openness is in a negative and statistically significant correlation with neuroticism (Table 2).
Discussion

The aim of this study was to examine the contribution of personality traits of the Big Five model, job satisfaction, and organizational justice in explaining teachers’ burnout. The results of the conducted research on a relatively large and heterogeneous sample of elementary school teachers in Bosnia and Herzegovina showed that personal burnout, work-related burnout, and student-related burnout in teachers can be explained based on the personality traits of the Big Five model, job satisfaction and organizational justice.

Organizational justice explained the small percentage of the variance of personal burnout, work-related burnout, and student-related burnout and only distributive justice proved to be a significant negative predictor of personal burnout, work-related burnout, and student-related burnout. Such findings were expected. According to Cohen-Charash and Spector (2001), distributive justice is in a strong relationship with cognitive, affective, and behavioural reactions to particular outcomes. When a particular outcome is perceived to be unfair, it affects the person’s emotions, cognition, and behaviour. The working conditions in schools in Bosnia and Herzegovina are challenging (e.g. a large number of children in classes, inclusive education, administrative jobs), and require teachers’ higher commitment to work and teachers do more jobs than they are paid for. Teachers who devote themselves to the teaching process by attending conferences, investing resources in additional education, engaging in the development of each student, and working with the families and local community, are treated almost the same way as teachers who do not devote themselves to the teaching process (teachers who are just fulfilling the required minimum). The perception of the level of investment and the benefits achieved, do not differ regardless of their level of invested resources. This leads to dissatisfaction and frustration, and in the end, to burnout.

Personality traits of the Big Five model explained the relatively small percentage of the variance of work-related burnout and student-related burnout and a moderate percentage of the variance of personal burnout. Agreeableness, neuroticism, and openness proved to be significant predictors of personal burnout, while neuroticism and openness proved to be significant predictors of work-related burnout and student-related burnout; whereby higher agreeableness correlated with higher personal burnout, and higher neuroticism and higher openness correlated with higher personal burnout, work-related burnout, and student-related burnout. As we noted earlier in the Results, there is a high likelihood that openness is a suppressor variable. On the one hand, zero-order correlations between openness and burnout indicators are statistically non-significant, and beta ponders of openness are positive and statistically significant. On the other hand, openness is in a negative and statistically significant correlation with neuroticism.

Neuroticism proved to be the most powerful positive predictor of personal burnout, work-related burnout, and student-related burnout in teachers. This finding is expected and in accordance with the findings of earlier research (Storm & Rothmann, 2003; Magnano, Paolillo & Barrano, 2015). Individuals with a high score on neuroticism are more prone to define many situations as dangerous and also use a non-adaptive stress coping strategy (McCrae & Costa, 1990). Working with children in their process of growing up is challenging and full of various frustrations and obstacles. Teachers are challenged to monitor the development of each student individually, cooperate with parents, school and the local community. Such challenges for teachers with pronounced neuroticism can be frustrating and stressful, and due to the lack of coping mechanisms, it can lead to burnout.

Openness in a rigid education system can be a problem because teachers are forced to constantly adapt their work to fit rigidness. In addition, teachers constantly accumulate new experiences, and only some of them can be implemented in practice. This is something that can lead to professional burnout (Kokkinos, 2009). On the one hand, openness is associated with curiosity and readiness to leave the comfort zone (McCrae & Costa, 1990) and this brings innovation into the teaching process. On the other hand, this also increases the chances of burnout, because the level of invested resources is far higher than the profit which
teachers can get from their jobs.

Teachers with high scores on the agreeableness scale have a tendency to become compassionate (McCrae & Costa, 1990), which can be stressful in a school environment. Teachers’ job includes cooperating with parents, which is very challenging in our educational system. The desire to encourage the change and to help children in different ways, and the inability to achieve change, can be frustrating. Teachers who strive to respond to high standards, by trying to satisfy everyone involved in children’s education, are challenged to fulfill many needs and requirements, but also to harmonize their work-life balance. Finally, in previous research (Cano-Garcia, Padilla-Munoz, & Carrasco-Ortiz, 2005; Fontana & Abousaarie, 1993), agreeableness also proved to be a significant positive predictor of burnout in teachers.

Job satisfaction explained a relatively large percentage of the variance of personal burnout, work-related burnout, and student-related burnout, and proved to be the most powerful predictor of personal burnout, work-related burnout, and student-related burnout in teachers. The obtained results indicate that teachers who are more satisfied with their work are less inclined to burnout. This finding is expected and in accordance with research findings made in this field (Brackett, Palmer, Moses-Kaja, Reyes, Salovey, 2010; Skaalvik & Skaalvik, 2009). Teachers who are satisfied with their job are considered efficient in performing work responsibilities and are less inclined to burnout. They feel efficient and eager to respond to job requirements, which is very important in the prevention of burnout.

Finally, the present study has several limitations. Firstly, the study used a convenience sampling method. Although the sample is heterogeneous in terms of the basic characteristics of teachers employed in a relatively large number of elementary schools from different urban and rural parts of Bosnia and Herzegovina - it is not representative and it’s possible that the differences in terms of socio-demographic characteristics in relation to the population of teachers in Bosnia and Herzegovina were not completely verified. Moreover, the effect of a ‘healthy employee’ (Karas&M Theorell, 1990) should be put into consideration. The study included teachers who performed their work responsibilities at the time the study was being conducted (meaning, relatively healthy teachers), and excluded those who were absent due to illness or work burnout. Secondly, all data were collected from the same sources during the same time period - through the self-assessment of participants, therefore there is the possibility of the effect of “common method bias” (Podsakoff et al., 2003). The respondents might have distorted results by not answering quite honestly, either due to distrust in their own anonymity or giving socially desirable responses as they were aware of the importance of the teaching profession. In order to prevent this problem in future research, data on predictor and criterion variables should be collected from different sources, in this case, from supervisors and students. In addition, it is necessary to introduce a time difference between the measurement of predictor and criterion variables. In the third place, the transversal research design does not allow the conclusion of causal relationships between the examined constructs, nor the determination of the process of their development and change over time. Therefore, this research does not try to draw conclusions about causal relations, but it remains at the level of correlation and prediction and retains the possibility of obtaining alternative explanations of the relations between the variables in the tested model. Finally, other personal factors of burnout also include self-efficacy and work motivation, while situational factors of burnout also include support from colleagues and leaders and work engagement, which was not included in this study. Therefore, future research should include and examine the contribution of these personal and situational factors to the teacher’s burnout.

However, indicated limitations do not diminish the significance of the obtained results, and it’s practical implications, which refer to the importance of the role of personality traits, job satisfaction, and organizational justice in the occurrence of the teacher’s burnout phenomenon. Although the teacher’s burnout partly arises from personality traits, it is also strongly conditioned by work-related attitudes, so job satisfaction and experience of distributive justice can be used to prevent professional burnout. Accordingly, in preventing teacher’s burnout it is important to focus on a better selection of candidates for the position.
of a teacher. In addition, school’s management should work on increasing teachers’ job satisfaction and the experience of fairness in the distribution of organizational resources in order to prevent burnout. This is important not only in the context of the teacher’s mental and physical health but also in the implementation of the educational goals.

Conclusion

The obtained results show that personal burnout, work-related burnout, and student-related burnout in teachers can be explained based on the job satisfaction, personality traits of the Big Five model – agreeableness, neuroticism and openness, and distributive justice. The results are important for researchers, as they help them understand the mechanism of teacher burnout, but also for the school management so they can work on more efficient prevention programs.

References


Zahrani, A. (2011). The impact of organizational justice on job burnout: a study in private hospitals in Ri-
yad, Saudi Arabia. *Interdisciplinary journal of contemporary research in business*, 3(6), 627-637.

Reviewers list

Agostini Tiziano, University of Trieste, Italy
Ambrosi-Randić Neala, The Juraj Dobrila University of Pula, Croatia
Banai Benjamin, University of Zagreb, Croatia
Bubić Andreja, University of Split, Croatia
Burić Irena, University of Zadar, Croatia
Chang Meilin, Kennesaw State University, USA
Galić Slavka, General County Hospital Požega, Croatia
Giannini Marco, University of Florence, Italy
Glavaš Dragan, Catholic University of Croatia, Croatia
Jerković Ana, Primary school Petar Berislavić Trogir, Croatia
Kostović Ana, University of Split, Croatia
Kurtović Ana, Josip Juraj Strossmayer University of Osijek, Croatia
Mededović Janko, Institute of Criminological and Sociological Research, Serbia
Merkas Marina, Catholic University of Croatia, Croatia
Meško Maja, University of Primorska, Slovenia
Mihić Ivana, University of Novi Sad, Serbia
Mitrović Dušanka, University of Novi Sad, Serbia
Mujagić Amela, University of Bihać, Bosnia and Herzegovina
Nakić Radoš Sandra, Catholic University of Croatia, Croatia
Nekić Marina, University of Zadar, Croatia
Nikolić Ivanišević Matilda, University of Zadar, Croatia
Ombla Jelena, University of Zadar, Croatia
Oreb Tereza, University of Zagreb, Croatia
Pavela Banai Irena, University of Zadar, Croatia
Pejic-Bach Mirjana, University of Zagreb, Croatia
Podlesek Anja, University of Ljubljana, Slovenia
Prizmic Larsen Zvjezdana, Washington University in St. Louis, USA
Proroković Ana, University of Zadar, Croatia
Ramos Jose, University of Valencia, Spain
Rogić Vidaković Maja, University of Split, Croatia
Rončević Zubković Barbara, University of Rijeka, Croatia
Sesar Kristina, University of Mostar, Bosnia and Herzegovina
Slišković Ana, University of Zadar, Croatia
Šimić Nataša, University of Zadar, Croatia
Šimunić Ana, University of Zadar, Croatia
Tatalović Vorkapić Sanja, University of Rijeka, Croatia
Tokić Andrea, University of Zadar, Croatia
Tomić Selimović Ljubica, University of Tuzla, Bosnia and Herzegovina
Tucak Junaković Ivana, University of Zadar, Croatia
Uzelac Ena, University of Zagreb, Croatia
Valerjev Pavle, University of Zadar, Croatia
Vidaković Marina, University of Zadar, Croatia
Zezelj Iris, University of Belgrade, Serbia
1
Teachers’ Emotions and Emotion Regulation: An Overview of Contemporary Research Findings
Irena Burić, Department of Psychology, University of Zadar,
Obala P. Krešimira IV 2, Zadar, Croatia
inekic@unizd.hr

2
Big Data Between Technology and Science: Challenges for Psychology and Social Sciences
Bojan Musil, Department of Psychology, Faculty of Arts,
University of Maribor, Koroska 160, 2000 Maribor, Slovenia
bojan.musil@um.si

3
Stress among Humanitarian Deminers: the Role of Family Support, Work-to-Family Conflict and Factors Related to Mental Help-Seeking
Dora Popović, University Department of Croatian Studies,
Division of Psychology, Borongaj Campus,
Borongajska cesta 83d, 1000 Zagreb, Croatia
dora.popovic123@gmail.com

4
Preliminary Findings of a Single Session of Non-Invasive Brain Stimulation over Parietal Lobe and Performance on Spatial Memory Task
Uroš Konstantinović, Institute for Medical Research, DrSubotića 4,
Po Box 124, Belgrade, Serbia
uros.konstantinovic@imi.bg.ac.rs

5
Life Satisfaction Determinants in Older Adults: Do Different Living Arrangements Count?
Jasminka Despot Lučanin, Department of Psychology, Croatian Studies,
University of Zagreb, Borongajska cesta 83d, Zagreb, Croatia
jdespot@hrstud.hr

6
Reading Habits of Croatian Citizens
Marina Kotrla Topić, Institute of Social Sciences Ivo Pilar,
Center Osijek, Šamačka 9/11, Osijek, Croatia
marina.kotrla.topic@pilar.hr

7
Does Art Expression Help Mood Regulation?
Josip Kresović, Josip Basiolić 9, Zadar, Croatia
josip.kresovic@gmail.com

8
Testing the Fisher’s Temperament Model on a Croatian Sample
Ana Lucić, OŠ Antuna Mihanovića-Petropoljskog, Drniš, Croatia
analuciccc@gmail.com
9 What is Humility and Do We Need It?
Validating a Humility Questionnaire
Jasmina Mehulić, Department of Psychology, Faculty of Humanities and Social Sciences University of Zagreb, I. Lučića 3, Zagreb, Croatia
jmehulic@ffzg.hr

10 Emotional Problems and Specific Irrational Beliefs of Children and Adolescents Suffering from Headaches
Marina Perković Kovačević, Department of Psychiatry and Psychological Medicine, Josip Juraj Strossmayer University of Osijek, Faculty of Medicine, Josipa Huttlera 4, Osijek, Croatia
marina.perkovic@gmail.com

11 Personality and Dressing Style: Cues and Stereotypes
Maja Ribar, Institute of Social Sciences Ivo Pilar, Marulićev trg 19, Zagreb, Croatia
maja.ribar@yahoo.com

12 Who’s That girl? Facial Appearance Based Inferences
Ines Sučić, Institute of Social Sciences Ivo Pilar, Marulićev trg 19, Zagreb, Croatia
ines.sucic@pilar.hr

13 Predicting Work and Family Conflict Using Personal Values, Work Characteristics and Family Functioning Perceptions from Both Spouses
Ana Šimunić, Department of Psychology, University of Zadar, Obala P. Krešimira IV 2, Zadar, Croatia
asimunic@unizd.hr

14 The Role of Personality and Sensation Seeking in Understanding Sociosexuality
Dora Trgovec, Department of Psychology, Croatian Studies, University of Zagreb, Borongajska cesta B3d, Zagreb, Croatia
dora.trgovec@gmail.com

15 Social Identities and Attitudes towards Assimilationism and Multiculturalism in Four Multiethnic Communities
Ena Uzelac, Department of Psychology, Faculty of Humanities and Social Sciences University of Zagreb, I. Lučića 3, Zagreb, Croatia
ena.uzelac@gmail.com

16 The Impact of the Length and Solvability of Anagrams on Performance and Metacognitive Judgments
Pavle Valerjv, Department of Psychology, University of Zadar, Obala P. Krešimira IV 2, Zadar, Croatia
valerjev@unizd.hr

17 Premature Birth: Social Support as a Predictor of Positive and Negative Aspects of Maternal Well-Being
Marina Vidaković, Department of Psychology, University of Zadar, Obala P. Krešimira IV 2, Zadar, Croatia
mjurkin@unizd.hr
Personality Traits, Job Satisfaction and Organizational Justice as Determinants of Burnout in Teachers

Ivana Zečević, Faculty of Philosophy, University of Banja Luka, Bulevar vojvode Petra Bojovića 1A, Banja Luka, Bosnia and Herzegovina

ivana.zecevic@ff.unibl.org
# Contents

1 Teachers’ Emotions and Emotion Regulation: An Overview of Contemporary Research Findings  
Irena Burić .............................................................................................................................................. 5

2 Big Data Between Technology and Science: Challenges for Psychology and Social Sciences  
Bojan Musil & Nenad Čuš Babič ............................................................................................................. 17

3 Stress among Humanitarian Deminers: the Role of Family Support, Work-to-Family Conflict and Factors Related to Mental Help-Seeking  
Marija Brajković, Dora Popović, Petra Žukina, & Sanja Budimir .............................................................. 29

4 Preliminary Findings of a Single Session of Non-Invasive Brain Stimulation over Parietal Lobe and Performance on Spatial Memory Task  
Marija V. Čolić, Uroš Konstantinović, Jovana Bjekić, & Saša R. Filipović .................................................. 41

5 Life Satisfaction Determinants in Older Adults: Do Different Living Arrangements Count?  
Jasminka Despot Lučanin, Damir Lučanin, Andrijana Košćec Bjelajac,  
Eva Andela Delale, & Marina Štambuk .................................................................................................... 51

6 Reading Habits of Croatian Citizens  
Marina Kotrla Topić ................................................................................................................................... 69

7 Does Art Expression Help Mood Regulation?  
Josip Kresović & Matilda Nikolić Ivanišević ............................................................................................. 83

8 Testing the Fisher’s Temperament Model on a Croatian Sample  
Ana Lucić & Nataša Šimić ......................................................................................................................... 97

9 What is Humility and Do We Need It? Validating a Humility Questionnaire  
Jasmina Mehulić & Margareta Jelić .............................................................................................................. 109
10 Emotional Problems and Specific Irrational Beliefs of Children and Adolescents Suffering from Headaches
Marina Perković Kovačević, Maja Buljubašić, & Anja Kereta ................................................................. 125

11 Personality and Dressing Style: Cues and Stereotypes
Maja Ribar & Denis Bratko .......................................................................................................................... 139

12 Who’s That girl? Facial Appearance Based Inferences
Ines Sučić, Anja Wertag, Tiffany Matej Hrkalović, Vanja Oparnica, Dora Trgovec, Marta Šojat, & Jelena Žipovski ........................................................................................................... 153

13 Predicting Work and Family Conflict Using Personal Values, Work Characteristics and Family Functioning Perceptions from Both Spouses
Ana Šimunić .................................................................................................................................................. 171

14 The Role of Personality and Sensation Seeking in Understanding Sociosexuality
Dora Trgovec, Josipa Šimac, & Klara Janečić ............................................................................................... 189

15 Social Identities and Attitudes towards Assimilationism and Multiculturalism in Four Multiethnic Communities
Ena Uzelac & Margareta Jelić ..................................................................................................................... 201

16 The Impact of the Length and Solvability of Anagrams on Performance and Metacognitive Judgments
Pavle Valerjev & Marin Dujmović ............................................................................................................. 217

17 Premature Birth: Social Support as a Predictor of Positive and Negative Aspects of Maternal Well-Being
Marina Vidaković & Jelena Ombla ............................................................................................................. 231

18 Personality Traits, Job Satisfaction and Organizational Justice as Determinants of Burnout in Teachers
Ivana Zečević, Biljana Mirković, & Nela Marinković .................................................................................. 245
Graphic design
University of Zadar

Printed by
Tiskara Zelina d.d.

Issued in
200 copies