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## A STUDY OF WORK SATISFACTION, BURNOUT AND OTHER WORK-RELATED VARIABLES AMONG HUNGARIAN EDUCATORS

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The main goal of the present study was to investigate, based on the Job Demands–Resources Model, a set of work-related variables as possible correlates (either as job demands or resources) of work satisfaction in a sample of Hungarian educators (N = 2,068, aged between 23–74 years, mean = 48.1 and S.D. = 8.9; 83.5% females). Results report that in this sample of Hungarian educators, their work satisfaction is closely related to the presence of burnout (particularly emotional exhaustion) and it is also influenced by role conflicts and role ambiguity in their workplace; whereas work-family conflict and work time demands do not play a role. On the other hand, educators' work satisfaction may be protected by certain job resources such as satisfaction with professional prestige, work social support and work involvement. Satisfaction with salary and work policy was not significant. Findings suggest that interventions at both individual and organisational level should be necessary, e.g. learning effective coping techniques to prevent burnout and increase work satisfaction well before the start of an educator's career. The organisational interventions should strengthen job resources and eliminate/decrease job demands.

**Keywords:** work satisfaction, educator burnout, job demand, job resources

**Studie zur Zufriedenheit mit der Arbeit, zu Burnout und anderen Variablen bezüglich der Arbeit bei ungarischen Erziehern:** Das Hauptziel dieser Studie bestand darin, anhand des Job Demands–Resources Model eine Reihe von Variablen im Zusammenhang mit der Arbeit als mögliche Korrelate (entweder Arbeitsanforderungen oder Ressourcen) der Zufriedenheit mit der Arbeit an einer Stichprobe ungarischer Erzieher (N = 2 068, Alter von 23 bis 74 Jahre, Mittel = 48,1 und S. D. = 8,9; 83 % Frauen) zu untersuchen. Die Ergebnisse zeigen, dass die Zufriedenheit mit der Arbeit bei diesen ungarischen Erziehern eng mit dem Vorliegen eines Burnouts (insbesondere emotionaler Erschöpfung) zusammenhängt und auch durch Rollenkonflikte und Rollenunklarheit am Arbeitsplatz beeinflusst wird, während Konflikte zwischen Arbeit und Familie sowie Arbeitszeitanforderungen keine Rolle spielen. Andererseits kann die Zufriedenheit von Erziehern mit der Arbeit durch bestimmte Ressourcen wie Zufriedenheit mit dem beruflichen Ansehen, soziale

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Unterstützung der Arbeit und Engagement geschützt werden. Die Zufriedenheit mit dem Gehalt und den Vorschriften bezüglich der Arbeit war nicht signifikant. Die Ergebnisse deuten darauf hin, dass auf individueller wie auf organisatorischer Ebene Interventionen erforderlich sind, zum Beispiel das Erlernen wirksamer Methoden zur Bewältigung, um ein Burnout zu vermeiden und die Zufriedenheit mit der Arbeit zu erhöhen, lange bevor ein/e Erzieher/in seine/ihre Laufbahn beginnt. Organisatorische Interventionen sollten die Ressourcen für die Arbeit steigern und Anforderungen bezüglich der Arbeit eliminieren / senken.

**Schlüsselbegriffe:** Zufriedenheit mit der Arbeit, Burnout bei Erziehern, Anforderungen bei der Arbeit, Ressourcen bei der Arbeit

## 1. Introduction

Teaching has always been identified as a stressful occupation. As an earlier paper described (RUSSEL et al. 1987), there are many negative aspects that might cause job stress for educators, namely: disciplinary problems, lack of students' motivation, crowded classrooms, excessive administration, inadequate salary, demanding parents, rapid changes in educational policy or lack of peer or principal social support. Teacher burnout, particularly, is a world-wide phenomenon (SCHWARZER et al. 2000), including Hungary (PETRÓCZI 2007; SALAVECZ et al. 2006). In a comparison of workers of all human services in Finland, educators have the highest level of burnout (HAKANEN et al. 2006). Burnout has a direct effect on job satisfaction (MALINEN & SAVOLAINEN 2016) and job dissatisfaction plays a decisive role in teachers' motivation to leave their profession (SKAALVIK & SKAALVIK 2011).

Work satisfaction seems to be a relevant indicator of job stress and burnout and their organisational and health consequences (HOSSEINKHANZADEH et al. 2013; MALINEN & SAVOLAINEN 2016; SKAALVIK & SKAALVIK 2011). The Job Demands–Resources Model (BAKKER et al. 2003) provides a good rationale for understanding the balance in parallel processes of job satisfaction and motivation among educators. This balance model often used in the literature suggests that work strain and its consequences (such as work dissatisfaction) are the result of a disturbance in the equilibrium between the demands employees are exposed to and the resources they have at their disposal. This model is similar to an influential theory of KARASEK (1979), namely, the demands–control model. High job demands and low job control may lead to disturbances in both the employee's work accomplishment and well-being.

The Job Demands–Resources Model argues that, regardless of the occupation, two broad categories of work characteristics can be distinguished: job demands and job resources (BAKKER et al 2003). Job demands, such as role conflicts, role ambiguity, time demands or work-family conflicts may serve as risk factors (PALOMINO & FREZATTI 2016). Burnout is a relevant indicator of the inability to function effectively in work due to prolonged and extensive work stress and a failure to cope with it. This syndrome, characterised by emotional exhaustion, depersonalisation and the lack of personal accomplishment, is usually linked to human service professionals, such as

nurses, educators, social workers or police officers (BYRNE 1993). Particularly emotional exhaustion plays a decisive role in teacher job satisfaction and motivation to leave the teaching profession (SKAALVIK & SKAALVIK 2011).

In contemporary organisations, employees must face several and different expectations both from others and themselves. Despite that they make continuous effort to carry out their roles effectively, incompatible, vague or conflicting expectations may often lead to role conflict and role ambiguity (BELIAS et al. 2015). The role theory also emphasised the scarcity hypothesis, that is, due to a fixed amount of resources, such as time and energy, the different requirements may lead to incompetency in work, family or both (MICHEL et al. 2010). Therefore, the literature often focused on the work–family conflict, namely a source of stress related to the role pressures from the work and family domains which may influence a number of outcomes including psychological distress, job satisfaction, organisation commitment, turnover, and life satisfaction (ADAMS et al. 1996; CARLSON et al. 2000). Increasing work assignment, work load and hectic workday, increasing demand for documentation and paperwork, more frequent meetings, the administration and scoring of achievement tests, frequent changes of the curriculum, and participation in a number of school development projects may result in time pressure and role conflicts or ambiguity in both job and family (SKALVIK & SKAALVIK 2011).

Whereas job demands may contribute to work dissatisfaction, job resources seem to reduce job stress, burnout and increase work satisfaction (BAKKER et al. 2003). Previous studies suggest that teacher autonomy, work involvement and empowerment help reduce work stress and increase work satisfaction, particularly the latter factor (PEARSON & MOOMAW 2005). Job involvement includes a personal interest centering on the job that may contribute to work motivation and a higher degree of professionalism, work engagement and organisational commitment. These job resources reduce job demands and stimulate personal growth and development through achieving work goals (DEMEROUTI et al. 2001). Job resources may also buffer against the impact of job demands or burnout (BAKKER et al. 2005) – particularly those stemming from the school climate (MALINEN & SAVOLAINEN 2016). In a broader concept, school climate is a microculture within school including values, educational goals, local educational policy or the psychosocial context in which educators work or teach (JOHNSON et al. 2007). On the other hand, work-related social support (both organisational support and peer support) is an important aspect of the work environment that interferes with coping resources and job stress (ADAMS et al. 1996). Thus it is related to a number of job-related consequences such as work satisfaction, work involvement, teacher motivation and effort (BETORET 2006; HOSSEINKHANZADEH et al. 2013; LENT et al. 2011; SKAALVIK & SKAALVIK 2011). Collegial relationships – whether cooperative and supportive or jealous – were found to be important correlates of the secondary school teachers' work satisfaction (WEIQI 2007).

Besides school climate, a more general perception of one's occupation may also be relevant in teachers' work satisfaction, such as satisfaction with educators'

social prestige or salaries, similar to other professions (BELIAS et al. 2015). In relation to the educators' occupation, job perception may include autonomy at work, professional prestige and status, personal development, work policy, professional self-efficacy as well as benefits (e.g. salaries; BOGLER 2001). Educators' perception of the macro-environment of education, such as educational and teaching systems, is an important element of work satisfaction similarly to their social status, income and welfare, and social acknowledgement by society (WEIQI 2007). In a Hungarian study, the role of collegial relationships and professional autonomy was more relevant to the educators' work satisfaction than professional prestige and salaries (HOLECZ & MOLNÁR 2014).

Based on the literature findings, the main goal of the present study is to investigate, based on the Job Demands–Resources Model, a set of work-related variables as possible correlates (either as job demands or resources) of work satisfaction in a sample of Hungarian educators. Those variables are the following: burnout, satisfaction with salary, professional prestige and work policy, work social support, work involvement, role conflicts and ambiguity, time demands, work-family conflicts. We hypothesised that burnout, role conflicts and ambiguity, time demands and work-family conflicts might act as risk factors which might negatively contribute to educators' work satisfaction. On the contrary, satisfaction with salary, professional prestige and work policy, work social support, work involvement may act as protective factors, that is, they might be positively related to work satisfaction.

## 2. Subjects and method

Data were collected during a one-month-long period between December, 2016 and January, 2017. A multistage sampling method was used to reach educators (school teachers, music teachers, nursery school teachers, social pedagogues, school principals, special education teachers, adult education teachers, etc.) using the Central Information System of the National Educational Office (KIR). From the central data file of e-mails of the institutions (14,000 altogether), every 10<sup>th</sup> was selected and posted about the main goal of the study. After receiving ethical approval from the Institutional Review Board (IRB) of the Doctoral School, University of Szeged, data were collected via online survey by means of a link distributed by e-mails. The final sample size was 2,068 (aged between 23 and 74; mean = 48.1 years, S.D. = 8.9 years; 83.5% females). Participation in the survey was anonymous and based on self-reported data, and the participants agreed that completion and return of the questionnaire was construed as consent. The questionnaire contained items on the educators' health and work-related experience, in addition to sociodemographics.

The Maslach Burnout Inventory (MBI), Educator Survey (MASLACH & JACKSON 1986) was designed to assess job stress in teaching professionals. The 22-item MBI has three factor-analytically derived scales: emotional exhaustion, depersonalisation (positively related to burnout) and personal accomplishment (negatively related to burnout). Responses were assessed by a seven-point Likert-type response format

ranging from Almost never (= 0) to Almost always (= 6). Cronbach's alpha reliability values with the current sample were the following: 0.89 (MBI), 0.89 (Emotional exhaustion), 0.73 (Depersonalisation) and 0.77 (personal accomplishment).

Work satisfaction was measured by six items (e.g. 'Most days, I am enthusiastic about my work.') that reflect overall satisfaction with one's job instead of specific dimensions (BABIN & BOLES 1998). The scale was adapted to Hungarian by Csaba KISS (2013). Responses were evaluated on a 5-point Likert-type scale indicating the level of agreement from 1 = strongly disagree to 5 = strongly agree. The reliability coefficient was .88 with the current sample.

Two scales were applied to measure role conflict and role ambiguity developed by RIZZO and colleagues (1970). The Hungarian version was adapted by KISS (2013). The role conflict scale (e.g. 'I have to do things that should be done differently.') consisted of eight items (one of which was reversed); whereas the role ambiguity scale (e.g. 'I know exactly what is expected of me.') contained six items (all of them were reversed). Responses vary based on the level of agreement with each item ranging from 1 (= strongly disagree) to 5 (= strongly agree). Cronbach's alpha coefficients were the following: 0.86 (role conflict scale) and 0.78 (role ambiguity scale).

The Hungarian version of the Work-Family Conflict Scale (CARLSON et al. 2000) was translated by the authors; its Hungarian validation is in progress. This is a self-report measure composed of 18 items assessing six conceptually and empirically distinct dimensions (Time-based work interference with family; Time-based family interference with work; Strain-based work interference with family; Strain-based family interference with work; Behaviour-based work interference with family; Behaviour-based family interference with work). Each of the six dimensions is assessed with three items. Responses were measured on 5-point Likert-type scales (1 = strongly disagree to 5 = strongly agree). Cronbach's reliability was 0.88.

Work-related time demands were measured by the educators' perceived level of role overload developed by BEEHR and colleagues (1976). The scale consisted of 3 items (e.g. 'It often seems like I have too much work for one person to do.') and it was adapted to Hungarian by KISS (2013). Similarly to the above mentioned measurements, responses were measured on 5-point Likert-type scales based on the level of agreement. The internal consistency estimate for this scale was 0.73, similarly to US studies (e.g. CARLSON & KACMAR 2000).

Social support in work was measured by 10 items of the self-report questionnaire (ETZION 1984). The Hungarian version (KISS 2013) of the scale was used here. The participants were asked to respond to those items on a 7-point scale of which seven correspond to support in their work, namely, feedback from others, recognition, sharing duties when in need, or emotional reciprocity. Additional three items correspond to the quality of the relationships with supervisors, colleagues or subordinates. The Cronbach's alpha value of reliability was 0.88 with the current sample.

Work involvement was assessed by the four items of the Job involvement scale (FRONE & RUSSEL 1995). That scale was adapted and validated to Hungarian by MAKRA and colleagues (2012). All items (e.g. 'My job is a very important part of my

life'.) were evaluated on a four-point agree/disagree response scale. Cronbach's alpha value was 0.78 with this sample.

Finally, satisfaction with salaries, professional prestige and job-related decisions with three single-item questions were also added. Those were based on previous research findings (e.g. BOGLER 2001; WEIQI 2007). In each case a dichotomised response (yes/no) was applied.

SPSS program was used in the calculations with a maximum significance level of 0.05. The analysis begins with descriptive statistics and correlation matrix for the study variables. The role of work-related variables in educators' work satisfaction was assessed by multiple linear regression analysis. Collinearity diagnostics of the multiple linear regression models were also calculated to examine reliability for the models.

### 3. Results

*Table 1* provides descriptive statistics and correlation matrix of study variables in this sample of Hungarian educators. There were strong intercorrelations among the subscales of burnout, particularly between emotional exhaustion and depersonalisation. Emotional exhaustion was the strongest correlate of work satisfaction ( $r = -0.60$ ,  $p < 0.001$ ). Burnout subscales, role conflicts, role ambiguity, time demands and work-family conflicts showed negative correlations with work satisfaction, whereas work social support, work involvement, and satisfaction with professional prestige, salaries and work policy were positively correlated. Work social support was the strongest positive correlate of the educators' work satisfaction ( $r = 0.48$ ,  $p < 0.001$ ). Burnout subscales were negatively correlated with satisfaction with prestige, salaries and work policy and positively with role conflicts and ambiguity, work-family conflicts and time demands. Work involvement did not play a role in emotional exhaustion, whereas it was negatively correlated with depersonalisation and lack of personal accomplishment. This variable showed significant but moderate relationship with satisfaction with work policy and prestige, work social support, role conflicts, work-family conflicts (positive correlations) and time demands (negative correlation). Work social support was negatively associated with role conflicts and ambiguity, time demands, and work-family conflicts. Role conflicts showed the strongest correlation with time demands ( $r = 0.48$ ,  $p < 0.001$ ).

*Table 2* presents results for multiple linear regression analysis for the relationships between educators' work satisfaction (as dependent variable) and other work-related factors (as independent variables). In Model 1, total score of the Maslach Burnout Inventory was applied, whereas in Model 2, subscales were used. The total burnout score was a negative predictor ( $\beta = -0.53$ ,  $p < 0.001$ ). Work social support and work involvement were significant but moderate positive predictors similarly to the satisfaction with professional prestige. Role conflicts and role ambiguity contributed to the regression model as negative predictors, with 57% of total variance explained.

*Table 1*  
Descriptive statistics and correlation matrix of study variables (N = 2,068)

	Mean (S.D.)	2	3	4	5	6	7	8	9	10	11	12	13
1. Emotional exhaustion (range: 0–54)	23.7 (10.5)	0.53***	0.36***	-0.15***	-0.36***	-0.14***	-0.42***	0.44***	0.33***	0.44***	0.01	0.60***	-0.60***
2. Depersonalisation (range: 0–30)	7.2 (5.3)	-	0.42***	-0.08***	-0.23***	-0.06**	-0.25***	0.32***	0.27***	0.16***	0.11***	0.38***	-0.47***
3. Lack of personal accomplishment (range: 0–48)	20.7 (6.3)	-	-	-0.07**	-0.27***	-0.10***	-0.31***	0.17***	0.36***	0.10***	-0.26***	0.28***	-0.56***
4. Satisfaction with salary yes/no%	44.1% 55.9%	-	-	-	0.34***	0.26***	0.22***	-0.20***	-0.11***	-0.15***	0.03	-0.16***	0.17***
5. Satisfaction with professional prestige yes/no%	11.8% 88.2%	-	-	-	-	-	0.36***	-0.29***	0.26***	-0.25***	0.08***	-0.28***	0.36***
6. Satisfaction with work policy yes/no%	40% 60%	-	-	-	-	-	0.15***	-0.20***	-0.13***	-0.16***	0.06**	-0.14***	0.15***
7. Work social support (range: 11–50)	37.1 (7.4)	-	-	-	-	-	-	-0.49***	-0.48***	-0.28***	0.07**	-0.35***	0.48***
8. Role conflicts (range: 8–40)	22.5 (7.4)	-	-	-	-	-	-	-	0.47***	0.48***	-0.01	0.46***	-0.42***
9. Role ambiguity (range: 6–30)	12.9 (4.2)	-	-	-	-	-	-	-	-	0.29***	-0.15***	0.33***	-0.45***
10. Work time demands (range: 3–15)	9.9 (3.0)	-	-	-	-	-	-	-	-	-	0.11***	0.43***	-0.27***
11. Work involvement (range: 4–16)	11.4 (2.2)	-	-	-	-	-	-	-	-	-	-	0.07***	0.26***
12. Work-family conflicts (range: 8–40)	47.6 (12.4)	-	-	-	-	-	-	-	-	-	-	-	-0.40***
13. Work satisfaction (range: 6–30)	23.2 (4.7)	-	-	-	-	-	-	-	-	-	-	-	-

r = correlation coefficients; \*, p < 0.05; \*\*, p < 0.01; \*\*\*, p < 0.001

*Table 2*  
The role of work-related variables in teachers' work satisfaction:  
Multiple linear regression analysis

<i>Independent variables</i>	<i>Model 1</i>	<i>Model 2</i>
<i>POTENTIAL RISK FACTORS</i>		
<i>Maslach Burnout Inventory</i>	-0.53***	
<i>Emotional exhaustion</i>		-0.35***
<i>Depersonalization</i>		-0.06**
<i>Lack of personal accomplishment</i>		-0.26***
<i>Role conflicts</i>	-0.10***	-0.12***
<i>Role ambiguity</i>	0.09***	-0.08***
<i>Work time demands</i>	0.02	0.03
<i>Work-family conflicts</i>	-0.01	-0.01
<i>POTENTIAL PROTECTIVE FACTORS</i>		
<i>Satisfaction with salary</i>	0.01	0.01
<i>Satisfaction with professional prestige</i>	0.04	0.04
<i>Satisfaction with work policy</i>	0.01	0.04
<i>Work social support</i>	0.13***	0.12***
<i>Work involvement</i>	0.17***	0.17***
<i>Constant</i>	25.48***	26.65***
<i>R<sup>2</sup></i>	0.57***	0.57***

$\beta$  = standardised regression coefficients: \*:  $p < 0.05$ ; \*\*:  $p < 0.01$ ; \*\*\*:  $p < 0.001$

As Model 2 suggested, among the burnout subscales, emotional exhaustion was the strongest negative predictor ( $\beta = -0.35$ ,  $p < 0.001$ ). Work social support and work involvement positively, whereas role conflicts and ambiguity negatively contributed to the model. All these variables explained 57% of total variance explained.

The reliability of the models was further examined with VIF (Variance Inflation Factor) indices and tolerance values (*Table 3*). The VIF values were within the acceptable VIF range (below 2) except for emotional exhaustion in Model 2 which was slightly above.



*Table 3*  
Collinearity diagnostics of the multiple linear regression models for teachers' work satisfaction

<i>Independent variables</i>	<i>Model 1 Tolerance (VIF)</i>	<i>Model 2 Tolerance (VIF)</i>
<i>POTENTIAL RISK FACTORS</i>		
<i>Maslach Burnout Inventory</i>	0.56 (1.79)	
<i>Emotional exhaustion</i>		0.45 (2.21)
<i>Depersonalization</i>		0.62 (1.61)
<i>Lack of personal accomplishment</i>		0.70 (1.43)
<i>Role conflicts</i>	0.56 (1.79)	0.54 (1.84)
<i>Role ambiguity</i>	0.65 (1.54)	0.63 (1.58)
<i>Work time demands</i>	0.91 (1.09)	0.89 (1.13)
<i>Work-family conflicts</i>	0.57 (1.76)	0.56 (1.79)
<i>POTENTIAL PROTECTIVE FACTORS</i>		
<i>Satisfaction with salary</i>	0.82 (1.22)	0.82 (1.22)
<i>Satisfaction with professional prestige</i>	0.69 (1.44)	0.70 (1.44)
<i>Satisfaction with work policy</i>	0.87 (1.15)	0.86 (1.16)
<i>Work social support</i>	0.61 (1.63)	0.60 (1.66)
<i>Work involvement</i>	0.69 (1.46)	0.64 (1.55)

*Notes:* VIF = Variance Inflation Factor.

#### 4. Discussion

Work satisfaction has a determinant role in employees' work achievement, motivation to work, health and quality of life; not only at individual but also at organisational and societal level (HOSSEINKHANZADEH et al. 2013; MALINEN & SAVOLAINEN 2016; SKAALVIK & SKAALVIK 2011). Based on the Job Demands–Resources Model (BAKKER et al. 2003), we investigated a set of demands and burdens (burnout, role conflicts, role ambiguity, work time demands, work–family conflicts), resources and benefits (satisfaction with salary, professional prestige and policy, work social support and work involvement) in relation to educators' work satisfaction. We anticipated that the previous set of variables might act as risk factors that contribute negatively to work satisfaction, whereas the latter ones may provide protection.

There were strong correlations between the burnout subscales and educators' work satisfaction; it was the strongest predictor in multivariate analysis, whereas emotional exhaustion proved to be the strongest contributor among the burnout subscales.

Other studies also emphasised the importance of emotional exhaustion in teachers' work satisfaction and leaving the profession (SKAALVIK & SKAALVIK 2011). Burnout seemed a real problem in the sample; most of the mean scores were relatively higher than previous international findings, e.g. Spanish (ALUJA et al. 2005), German and Chinese (SCHWARZER et al. 2000), Australian (DORMAN 2003) or Namibian (LOUW et al. 2011). As it turned out, burnout had an important negative role in educators' work satisfaction. Role conflicts and role ambiguity were also strongly and negatively correlated with work satisfaction and they also predicted it in multivariate analysis similarly to previous studies (e.g. BELIAS et al. 2015). Although at bivariate level there were intercorrelations among work time demands, work-family conflicts and work satisfaction in concordance with previous studies (ADAMS et al. 1996; CARLSON et al. 2000; MICHEL et al. 2010), those variables became nonsignificant in the multivariate models. This fact also strengthened the relative dominant role of burnout.

Among the potential protective factors, satisfaction with salary and work policy were not significant contributors, although in bivariate relationships they were positively correlated with educators' work satisfaction. In other studies those organisational variables seemed to be more relevant (BELIAS et al. 2015; BOGLER 2001). On the other hand, a previous study also emphasised that social acknowledgement by society was a very important aspect of work satisfaction with teachers' job perception and satisfaction (WEIQI 2007). The ratio of satisfaction/dissatisfaction with professional prestige (11.8% vs. 88.2%) showed a much greater difference than their reported data about salaries (44.1% vs. 55.9%) and work policy (40% vs. 60%). This finding might support the highlighted role of professional prestige for educators; unfortunately most of them seemed dissatisfied with its level.

Work-related social support (both organisational support and peer support) was previously found as important aspect of the work environment that might have an impact on a number of job-related consequences such as work satisfaction, work involvement, teacher motivation and effort (ADAMS et al. 1996; BETORET 2006; HOSSEINKHANZADEH et al. 2013; LENT et al. 2011; SKAALVIK & SKAALVIK 2011). Cooperative and supportive collegial relationships were important correlates of secondary school teachers' work satisfaction (WEIQI 2007) that was also supported by a Hungarian study (HOLECZ & MOLNÁR 2014). Our finding was in concordance with those previous research results. Similarly to Kobasa's hardiness model of which personal commitment is an integral element (KOBASA 1982), the role of work involvement contributed to work satisfaction. Job involvement represents a belief of positive identification with one's job and thus it may have a moderating influence on the relationship between job stressors and employee well-being (FRONE & RUSSEL 1995).

As a consequence, we may conclude that in this sample of Hungarian educators, their work satisfaction 1) is closely related to the presence of burnout (particularly emotional exhaustion); 2) is also influenced by role conflicts and role ambiguity in their workplace; 3) may be protected by certain job resources such as satisfaction with professional prestige, work social support and work involvement. The relatively great sample size and the uniqueness of the population (to our best knowledge, very

few studies have investigated educators' work satisfaction in Hungary thus far) are the main strengths of the paper. In addition, the risk and protective factors approach provided a good rationale to investigate its correlates. Since standardised international scales were used as measurements, we really think that our findings would be also interesting for an international readership beyond Hungarians. Burnout among educators is also an under-investigated field of research in Hungary (see PETRÓCZI 2007; SALAVECZ et al. 2006); therefore, these data may be really valuable for the Hungarian audience (both educators and policymakers). Similarly to international studies (e.g. SKAALVIK & SKAALVIK 2011), emotional exhaustion was the strongest predictor of educators' work satisfaction. As it seems, a general perception of one's occupation, such as satisfaction with educators' social prestige or salaries were more relevant contributors for educators' work satisfaction in international literature (e.g. BOGLER 2001; WEIQI 2007) than for Hungarian educators. This finding is similar to a previous (and the only) Hungarian study on this issue (HOLECZ & MOLNÁR 2014). Other findings about the positive role of collegial relationships and professional autonomy/ work involvement are also in concordance with that study (HOLECZ & MOLNÁR 2014). We expected that work-family conflict might play a more decisive role in educators' work satisfaction based on previous research results (e.g. ADAMS et al. 1996; CARLSON et al. 2000; MICHEL et al. 2010); however, this was not the case in our study. More research is needed to clarify this difference. Future research should also be focused on the role of more job demands and resources.

The findings should be evaluated in the light of some limitations, e.g. due to the cross-sectional study design, cause-and-effect relationships cannot be justified. In addition, several variables (e.g. satisfaction items) were measured with a single-item question, instead of a composite measure, such as a scale. The online data collection does not allow us to get a statistically representative sample. Finally, due to cultural differences, the findings may not be generalisable. Overall, we really think that this study is unique since very few studies in Hungary have focused on educators' burnout and work satisfaction thus far. The findings suggest that interventions at both individual and organisational level should be necessary. Educators should learn effective coping techniques to prevent burnout and increase work satisfaction well before their start of a career. Our data suggest that educators may not have the necessary coping skills that should be addressed during educator training years to prepare them for their job. The organisational interventions should strengthen job resources and eliminate/decrease job demands.

## References

- ADAMS, G.A., L.A. KING & D.W. KING (1996) 'Relationships of Job and Family Involvement, Family Social Support, and Work-Family Conflict With Job and Life Satisfaction', *Journal of Applied Psychology* 81, 411–20 (<https://doi.org/10.1037/0021-9010.81.4.411>).
- ALUJA, A., A. BLANCH & L.F. GARCIA (2005) 'Dimensionality of the Maslach Burnout Inventory in School Teachers: A Study of Several Proposals', *European Journal of Psychological Assessment* 21, 67–76 (<https://doi.org/10.1027/1015-5759.21.1.67>).

- BABIN, B.J. & J.S. BOLES (1998) 'Employee Behavior in a Service Environment: A Model and Test of Potential Differences between Men and Women', *Journal of Marketing* 62, 77–91.
- BAKKER, A.B., E. DEMEROUTI, E. DE BOER & W.B. SCHAUFELI (2003) 'Job Demands and Job Resources as Predictors of Absence Duration and Frequency', *Journal of Vocational Behavior* 62, 341–56 ([https://doi.org/10.1016/S0001-8791\(02\)00030-1](https://doi.org/10.1016/S0001-8791(02)00030-1)).
- BAKKER, A.B., E. DEMEROUTI & M. EUWEMA, (2005) 'Job Resources Buffer the Impact of Job Demands on Burnout', *Journal of Occupational Health Psychology* 10, 170–80 (<https://doi.org/10.1037/1076-8998.10.2.170>).
- BEEHR, T.A., J.T. WALSH & T.D. TAUBER (1976) 'Relationships of Stress to Individually and Organizationally Valued States: Higher Order Needs as a Moderator', *Journal of Applied Psychology* 61, 41–47 (<https://doi.org/10.1037/0021-9010.61.1.41>).
- BELIAS, D., A. KOSTELIOS, L. SDROLIAS & G. ASPRIDIS (2015) 'Job Satisfaction, Role Conflict and Autonomy of employees in the Greek Banking Organization', *Procedia - Social and Behavioral Sciences* 175, 324–33 (<https://doi.org/10.1016/j.sbspro.2015.01.1207>).
- BETORET, F.D. (2006) 'Stressors, Self-Efficacy, Coping Resources, and Burnout among Secondary School Teachers in Spain', *Educational Psychology* 26, 519–39 (<https://doi.org/10.1080/014434105.00342492>).
- BOGLER, R. (2001) 'The Influence of Leadership Style on Teacher Job Satisfaction', *Educational Administration Quarterly* 37, 662–83 (<https://doi.org/10.1177/00131610121969460>).
- BYRNE, B.M. (1993) 'The Maslach Burnout Inventory: Testing for Factorial Validity and Invariance Across Elementary, Intermediate and Secondary Teachers', *Journal of Occupational and Organizational Psychology* 66, 197–212 (<https://doi.org/10.1177/1069072717714545>).
- CARLSON, D.S. & K.M. KACMAR (2000) 'Work-Family Conflict in the Organization: Do Life Role Values make a Difference?' *Journal of Management* 26, 1031–54 (<https://doi.org/10.1177/014920630.002600502>).
- CARLSON, D.S., K.M. KACMAR & L.J. WILLIAMS (2000) 'Construction and Initial Validation of a Multidimensional Measure of Work-Family Conflict', *Journal of Vocational Behavior* 56, 249–76 (<https://doi.org/10.1006/jvbe.1999.1713>).
- DEMEROUTI, E., A.B. BAKKER, F. NACHREINER & W.B. SCHAUFELI (2001) 'The Job Demands – Resources Model of Burnout', *Journal of Applied Psychology* 86, 499–512.
- DORMAN, J. (2003) 'Testing a Model for Teacher Burnout', *Australian Journal of Educational & Developmental Psychology* 3, 35–47 (<https://doi.org/10.1023/A:1023296126723>).
- ETZION, D. (1984) 'Moderating Effect of Social Support on the Stress–Burnout Relationship', *Journal of Applied Psychology* 69, 615–22 (<https://doi.org/10.1007/BF01857718>).
- FRONE, M. R. & M. RUSSEL (1995) 'Job Stressors, Job Involvement and Employee Health: A Test of Identity Theory', *Journal of Occupational & Organizational Psychology* 68, 1–11 (<https://doi.org/10.1111/j.2044-8325.1995.tb00684.x>).
- HAKANEN, J.J., A.B. BAKKER & W.B. SCHAUFELI (2006) 'Burnout and Work Engagement Among Teachers' *Journal of School Psychology* 43, 495–513 (<https://doi.org/10.1016/j.jsp.2005.11.001>).
- HOLECZ, A. & SZ. MOLNÁR (2014) Pedagógusok pozitív pszichológiai tükörben: A jóllétet erősítő tényezők jellemzői a pályán, *Iskolakultúra* 10, 3–14.
- HOSSEINKHANZADEH, A.A., A. HOSSEINKHANZADEH & T. YEGANEH (2013) 'Investigate Relationship Between Job Satisfaction and Organizational Culture Among Teachers', *Procedia: Social and Behavioral Sciences* 84, 832–36 (<https://doi.org/10.1016/j.sbspro.2013.06.656>).
- JOHNSON, B., J.J. STEVENS & K. ZVOCH (2007) 'Teachers' Perceptions of School Climate: A Validity Study of Scores from the Revised School Level Environment Questionnaire', *Educational and Psychological Measurement* 67, 833–44 (<https://doi.org/10.1177/00131644062.99102>).

- KARASEK, R.A. (1979) 'Job Demand, Job Decision Latitude, and Mental Strain: Implications for Job Redesign', *Administrative Science Quarterly* 24, 285–309 (<https://doi.org/10.2307/2392498>).
- KISS, Cs. (2013) *A szervezeti elkötelezettség és a munka-család konfliktus összefüggései az ügyfélszolgálati munkában* (PhD Diss., Corvinus University, Budapest).
- KOBASA, S.C, S.R. MADDI & S. KAHN, S. (1982) 'Hardiness and Health: A Prospective Study', *Journal of Personality and Social Psychology* 42, 168–77 (<https://doi.org/10.1037/0022-3514.42.1.168>).
- LENT, R.W., L. NOTA, S. SORESI, M.C. GINEVRA, R.D. DUFFY & S.D. BROWN (2011) 'Predicting the Job and Life Satisfaction of Italian Teachers: Test of a Social Cognitive Model', *Journal of Vocational Behavior* 79, 91–97 (<https://doi.org/10.1016/j.jvb.2010.12.006>).
- LOUW, D.A., E. GEORGE & K. ESTERHUYSE (2011) 'Burnout amongst Urban Secondary School Teachers in Namibia', *SA Journal of Industrial Psychology* 37, 201–7 (<https://doi.org/10.4102/sajip.v37i1.1008>).
- MAKRA, E., D. FARKAS & G. OROSZ (2012) 'A munka-család konfliktus kérdőív magyar validálása és a munka-család egyensúlyra ható tényezők', *Magyar Pszichológiai Szemle* 67, 491–518 (<https://doi.org/10.1556/MPSzle.67.2012.3.5>).
- MALINEN, O.-P. & H. SAVOLAINEN (2016) 'The Effect of Perceived School Climate and Teacher Efficacy in Behavior Management on Job Satisfaction and Burnout: A Longitudinal Study', *Teaching and Teacher Education* 60, 144–52 (<https://doi.org/10.1016/j.tate.2016.08.012>).
- MASLACH, C. & S.E. JACKSON (1986) *Maslach Burnout Inventory* (Palo Alto: Consulting Psychologists).
- MICHEL, J.S., J.K. MITCHELSON, S. PICHLER & K.L. CULLEN (2010) 'Clarifying relationships among work and family social support, stressors, and work–family conflict', *Journal of Vocational Behavior* 76, 91–104 (<https://doi.org/10.1016/j.jvb.2009.05.007>).
- PALOMINO, M.N. & F. FREZATTI (2016) 'Role Conflict, Role Ambiguity and Job Satisfaction: Perceptions of the Brazilian Controllers', *Revista de Administração* 51, 165–81 (<https://doi.org/10.5700/rausp1232>).
- PEARSON, L.C. & W. MOOMAW (2005) 'The Relationship between Teacher Autonomy and Stress, Work Satisfaction, Empowerment, and Professionalism', *Educational Research Quarterly* 29, 38–54 (<https://doi.org/10.12973/jesr.2016.62.1>).
- PETRÓCZI, E. (2007) *Kiegész: Elkerülhetetlen?* (Budapest: Eötvös József Kiadó).
- RIZZO, J.R., HOUSE, R.J. & S.I. LIRTZMAN (1970) 'Role Conflict and Ambiguity in Complex Organizations', *Administrative Science Quarterly*, 15, 150–63 (<https://doi.org/10.2307/2391486>).
- RUSSEL, D.W., E. ALTMAIER & D. VAN VELZEN (1987) 'Job-Related Stress, Social Support, and Burnout Among Classroom Teachers', *Journal of Applied Psychology* 72, 269–74 (<https://doi.org/10.1037/0021-9010.72.2.269>).
- SALAVECZ, GY., K. NECULAI & E. JAKAB (2006) 'A munkahelyi stressz és az énhatékonyság szerepe a pedagógusok mentális egészségének alakulásában', *Mentálhigiéne és Pszichoszomatika* 7, 95–109 (<https://doi.org/10.1556/Mentál.7.2006.2.2>).
- SCHWARZER, R., G.S. SCHMITZ & C. TANG (2000) 'Teacher Burnout in Hong Kong and Germany: A Cross-Cultural Validation of the Maslach Burnout Inventory', *Anxiety, Stress, and Coping* 13, 309–26 (<https://doi.org/10.1080/10615800008549268>).
- SKAALVIK, E.M. & S. SKAALVIK (2011) 'Teacher Job Satisfaction and Motivation to Leave the Teaching Profession: Relations with School Context, Feeling of Belonging, and Emotional Exhaustion', *Teaching and Teacher Education* 27, 1029–38 (<https://doi.org/10.1016/j.tate.2011.04.001>).
- WEIQI, C. (2007) 'The Structure of Secondary School Teacher Job Satisfaction and Its Relationship with Attrition and Work Enthusiasm', *Chinese Education and Society* 40, 17–31 (<https://doi.org/10.2753/CED1061-1932400503>).