Article



The work-related well-being of social workers: Framing job demands, psychological well-being, and work engagement

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Abstract

- Summary: Social workers' occupational health has become a central theme in the psychosocial literature. This study aimed at exploring how specific job demands and psychological well-being are related to work engagement. A sample of 140 Italian social workers was analyzed in accordance with the job demands—resources model. Participants were asked to complete a written questionnaire containing several measurement scales.
- Findings: Multiple regression analyses showed that social workers' psychological well-being was positively related to work engagement. Moderation analyses also indicated that, when psychological well-being was high (vs. low), job demands were associated to higher levels of work engagement, thus highlighting the buffering role of psychological

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well-being as a specific personal resource. When job demands were high (vs. low), the psychological well-being appeared to be strongly related to lowest levels of work engagement, showing that high job demands could reduce the fostering role of psychological well-being on social workers' work engagement.

Applications: While administration of job demands may often be difficult in social work
contexts, managers should be encouraged, as part of a systemic approach to training, to
promote specific measures for improving social workers' psychological well-being as a
personal resource for promoting work engagement.

Keywords

Social work, health and social care, organisational structure, social workers, stress, job demands, psychological wellbeing, work engagement

Introduction

The work-related well-being of social workers

In recent years, numerous studies have focused on examining social work and health care practice within a psychosocial perspective (Ell, 1996), analyzing dimensions related to the occupational health of social workers. These studies showed that social workers presented a high risk of developing stress and burnout (Acker, 2012; Acker & Lawrence, 2009; Bamber, 2006; Lloyd, King, & Chenoweth, 2002), due to experiencing high job demands, such as excessive psychological workload and work pressure. Other studies also showed that social workers presented job insecurity, role conflicts, poor autonomy, and lack of social support and rewards (Acker, 1999; Bradley & Sutherland, 1995; Collins, 2008; Collings & Murray, 1996; Gilbar, 1998; Kim & Stoner, 2008; Sánchez-Moreno, Roldán, Gallardo-Peralta, & de Roda, 2015; Winstanley & Hales, 2015). As outlined by Brotheridge and Granadey (2002), social work is considered an emotional labor because social workers often experience burnout arising from high emotional demands from dealing with work and service users' unceasing requests. Other studies have confirmed that social workers reported high levels of emotional exhaustion and depersonalization (Hamama, 2012; Winstanley & Hales, 2015) when they experienced low self-esteem, had low incomes, were exposed to violence from users (Littlechild, 2005; Padyab, Richter, Nygren, & Ghazinour, 2013), and suffered impaired physical health (Kim, Ji, & Kao, 2011).

Particularly, in the last 20 years, social work services in Italy have been transformed, reflecting administrative, societal, organizational, and political change. In particular, processes of privatizing social work have been followed by an expansion of social services, strengthening the link between health care organizations and social workers' occupational opportunity. Social services have become even

more "fragmented" and specialized toward specific end-user categories (Borzaga, 2000). These changes have represented a real challenge for the Italian welfare system, which has dealt with these transformations switching from a perspective where end users are mere passive actors of health caring, to a perspective more focused on empowerment of the end users ("active citizenship" perspective; for a detailed review, see, Mazza, 2016; Ruggeri, 2013). In this context, social workers in Italy have reported poorer job satisfaction and worse job conditions (Borzaga, 2000). While demands placed on social services have increased, social workers have been exposed to an increased risk of developing work-related stress and burnout. Bergnoli, Nicoli, and Scatolini (2005) underlined that Italian social workers reported a high rate of burnout when they were unable to fruitfully deploy their competence, ability, and creativity, and when they, further, experienced an absence of social support and rewards. In particular, emotional exhaustion, the core dimension of burnout, was correlated with greater emotional involvement with social services users.

In recent years, partly influenced by the positive psychology paradigm (Seligman & Csikszentmihalyi, 2000), there has been a growing interest in studying the outcomes of work-related well-being (e.g., "occupational health psychology"; Quick, 1999), even in social work contexts, which has focused on job satisfaction, empowerment, coping strategies, and work commitment (e.g., Astvik & Melin, 2013; Collins, 2008; Hombrados-Mendieta & Cosano-Rivas, 2013; Landsman, 2008; Lee, 2013; Stalker, Mandell, Frensch, Harvey, & Wright, 2007).

However, such studies remain rare because the majority of researchers focused on negative occupational outcomes, studying, in particular, organizational, social, and personal predictors of work stress and burnout (e.g., psychological job demands, poor social support, role conflict, depression, relationship problems; Collins, 2008; Collings & Murray, 1996; Sànchez-Moreno et al., 2015). Despite a high risk of developing stress and burnout, little is known about the work engagement (WE) of social workers. To address this gap, the present study aimed to explore the role of a crucial personal resource—psychological well-being (PWB; Ryff, 1989) at work—in improving social workers' WE (Bakker, 2011). In particular, using the job demands—resources (JD-R) model (Bakker & Demerouti, 2007), our main objective was to identify interactions between three of the most influential specific types of job demands for social workers (psychological, physical, and emotional; e.g., Bakker & Demerouti, 2007; Kim et al., 2011; Lloyd et al., 2002; Padyab et al., 2013) and their PWB, as factors that could affect WE.

The promotion of social workers' WE could be central in order to improve the quality of social services and, thus, the well-being of service users (Lee, 2013).

Social workers' WE

Schaufeli, Salanova, González-Romá, and Bakker (2002) defined WE as a positive, fulfilling, work-related state of mind. In particular, WE was conceptualized as a pervasive and persistent energetic, affective, and cognitive state, based on three

dimensions: vigor, dedication, and absorption (Bakker, Schaufeli, Leiter, & Taris, 2008). Vigor is characterized by high levels of energy, persistence, and mental resilience, during work. Dedication refers to being strongly involved in one's job and experiencing a high sense of significance, enthusiasm, pride, challenge, and inspiration. Absorption is characterized by a feeling of being fully concentrated and deeply absorbed in one's work tasks (Bakker, 2011).

Specific job and personal resources can foster WE through a motivational process (Bakker & Demerouti, 2007). Job resources (e.g., task significance, feedback from colleagues, professional autonomy) are intended as psychological, social, and organizational dimensions that are functional in achieving work goals. Personal resources are aspects of the self that promote individuals' personal growth. They are also functional in achieving work—goals, operate successfully, gain control of the environment, and to cope with adverse stressful events (Hobfoll, Johnson, Ennis, & Jackson, 2003). Studies have shown that personal resources, such as self-esteem, optimism, self-efficacy, locus of control, problem-focused coping, positive reinterpretation of events, low avoidance, and low ventilation of emotions, are associated with WE (e.g., Bakker, 2011; Rothmann, Jorgensen, & Hill, 2011; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007, 2009).

Although WE has been studied in many organizational contexts (Bakker, Albrecht, & Leiter, 2011), we have found few studies that have assessed WE, and its correlates, within specific social work contexts. Schaufeli, Bakker, and Salanova (2006) found that social workers experienced lower levels of WE compared to other professions (educators, managers, police officers). The promotion of WE among social workers could be central for social work practice, indeed, WE is linked with job satisfaction, organizational commitment, personal initiative, motivation to learn, and proactivity (Schaufeli, 2013), as well as with personal health (e.g., low levels of distress, depression, psychosomatic disorders) and work performance (Salanova, Agut, & Peiro, 2005). Overall, WE was considered to be one of the most influential indicators of work-related well-being (see, Bakker, 2011). Thus, high levels of WE could make an important contribution to social workers' occupational health.

Social workers' well-being

The well-being of social workers has been mostly conceptualized within a hedonic approach to subjective well-being (Graham & Shier, 2010; Shier & Graham, 2015). Within this paradigm, the well-being of social workers is depicted as an experience of maximum personal gratification, where people try to maximize positive affect, satisfaction, pleasure, and happiness, and to minimize negative affect (Diener, 2000). In particular, authors found that the subjective well-being of social workers was shaped by specific work conditions (i.e., work overload, type of work), characteristics of work environments (i.e., physical, cultural, organizational), and interrelationships at work (Shier & Graham, 2015). Happiness of social workers is

positively influenced by the availability of professional roles and opportunities; understanding of professional boundaries and limitations, practices associated with social work (social support, professional development, networking), social work principles, and values; and by the perception of their own professional self (Shier & Graham, 2011).

Ryff (1989) offered an alternative account in studying well-being (Ryan & Deci, 2001) conceptualizing the eudaimonic paradigm of PWB (Ryff & Keyes, 1995). The eudaimonic paradigm of PWB posits that the realization of human potential is a function of the extent to which people try to reach optimal psychological functioning and positive mental health (Ryff, 1989; Ryff & Keyes, 1995). The concept of eudaimonic PWB refers to a state where individuals personally express a sense of meaning related to their "true self" when performing behaviors or specific activities, such as working. Thus, a high level of PWB allows people to achieve their goals and self-realization, thereby enabling them to develop their full potential (Ryff, 2014). The PWB comprises six dimensions: self-acceptance positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth (Ryff, 1989; Ryff & Keyes, 1995). Such conditions foster a flourishing equilibrium in individuals, a state in which people grow and experience high levels of mental health. PWB has been linked to intrinsic motivation (Gastañaduy, Herrera, & Lens, 2014), self-enhancing cognitions, personal goals, and the use of effective coping strategies (Ryff & Singer, 2008). PWB further functions as a source of resilience in dealing with stressful life events (Ryff & Singer, 2003).

The eudaimonic paradigm of PWB has been applied in many fields of psychological and psychosocial research (e.g., clinical and health psychology, educational psychology, aging psychology; Ruini & Fava, 2012; Ryff, 2014; Ryff & Singer, 2008), however, few studies have assessed the role of PWB in promoting health in organizational environments (Wright, Cropanzano, Bonett, & Diamond, 2009). In particular, most of the studies on well-being conducted within social work contexts have focused on the hedonic approach to subjective well-being (Shier & Graham, 2011, 2015), and, as a result, little is known about the eudaimonic PWB of social workers and whether this dimension can contribute to their WE. The construct of PWB was specifically adopted in this study because this dimension could represent a specific personal resource tailored to be framed within the JD-R model (see next paragraph, Bakker & Demerouti, 2007). PWB could promote the WE of social workers by enabling them to focus on the self-perception of their human potential and optimal functioning (Ryff & Singer, 2008).

Job demands and PWB: Interaction hypotheses

According to the JD-R model (Bakker & Demerouti, 2007; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Schaufeli & Taris, 2014), different types of job demands are associated with negative organizational outcomes (e.g., exhaustion,

psychosomatic health complaints, high strain) through a progressive resource loss ("health impairment process"; Bakker, Demerouti, & Sanz-Vergel, 2014). Several studies have shown a direct association between job demands and burnout (Bakker & Demerouti, 2007). However, a negative association between job demands and WE must be addressed, since it may be moderated by job and personal resources, as predicted by the JD-R model (Bakker, 2011). Indeed, job demands are not necessarily negative. Job demands may become stressors when not adequately compensated by available job and/or personal resources suitable for coping with such types of demands (Schaufeli & Taris, 2014). Numerous studies have shown that job resources, as well as some specific personal resources (e.g., self-efficacy, optimism, organization-based self-esteem), may act as a buffer in moderating the negative effects of job demands on workers' WE; Bakker et al., 2008; Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007; Demerouti & Bakker, 2011; Garrosa, Moreno-Jiménez, Rodríguez-Muñoz, & Rodríguez-Carvajal, 2011; Xanthopoulou et al., 2007; Xanthopoulou, Bakker, & Fischbach, 2013). Whereas, the moderating role of job resources has been broadly confirmed (see Bakker & Demerouti, 2007), few studies have examined the buffering role of personal resources according to the theoretical framework of the JD-R model (see, Schaufeli & Taris, 2014). Framed in terms of the "buffer hypothesis" of the JD-R model, we considered the PWB of social workers as a personal resource suitable for coping with three of the most important types of job demands (psychological, physical, and emotional job demands; Bakker & Demerouti, 2007). Job demands could especially reduce social workers' WE when their PWB is low. Moreover, job demands could affect social workers' WE less when their PWB is high (Bakker & Demerouti, 2007).

The JD-R model also predicts that job resources are associated with WE, moderated by job demands (Bakker, 2011; Bakker et al., 2008), showing that job resources have motivational potential, and are related to higher levels of workers' WE when job demands are high (Bakker et al., 2007). Thus, job demands can also act as "challenging" requests (Schaufeli & Taris, 2014) in promoting the motivational potential of job resources ("coping hypothesis"; Bakker & Demerouti, 2007; Demerouti & Bakker, 2011). In spite of these results, the motivational role played by job demands is not adequately considered in the literature, in which personal resources, instead of job resources, are introduced as predictors of WE, highlighting a lack of studies aimed at verifying whether specific personal resources can contribute to WE moderated by job demands. In terms of the "coping hypothesis" of the JD-R model, the PWB of social workers could promote their WE, particularly when job demands are high (vs. low), functioning as "motivational challenges" for these professionals.

Study objectives

In the present study, we investigated the relationships between job demands, PWB, and WE of social workers, using the JD-R model as theoretical framework.

In particular, we study the motivational functioning of PWB, hypothesizing that social workers' PWB could acts as personal resources that could contribute to social workers' WE (Hypothesis 1). Furthermore, our goal was to study the "buffer hypothesis" expecting that PWB moderates the association between job demands and WE; we expected that job demands (psychological, physical, and emotional job demands) would be strongly negatively associated with lower WE when social workers' PWB would be low (vs. high) (Hypothesis 2). Finally, we study the "coping hypothesis," expecting that job demands moderate the association between PWB and WE, and anticipating that PWB would be strongly associated with WE when social workers would perceive high (vs. low) job demands (Hypothesis 3).

Method

Participants and procedure

The participants come from ten Italian social cooperatives. Social cooperatives are specific Italian nonprofit organizations offering a wide range of social services to communities and to users who need assistance due to their precarious health or social conditions. Social cooperatives are rooted within the Italian welfare system and comprise a wide range of social workers. Our opportunistic sample was composed of social workers who work closely with people with physical or intellectual disabilities, thereby helping them to cope with their physical or cognitive frailties, as well as managing some of their specific educational activities. The professional health of disability support social workers is poorly studied, and, in choosing this specific sample, we also tried to contribute to addressing this issue (Vassos, Nankervis, Skerry, & Lante, 2013).

The sample's inclusion criteria anticipated that all the participants had achieved at least a three-year Italian university degree in social sciences and, thus, were specifically trained in social work theory and practice.

The sample (N = 140) was composed of 93 females and 47 males who joined the research on a voluntary basis. Twelve were younger than 30, 105 were between 31 and 55, and 23 were over 55 (mean age: 41.94 years; standard deviation [SD] = 8.44). On average, the participants had been performing their work for 8.63 years (SD = 5.50).

Researchers carried out the data collection, explaining to participants the main objective of the study and the instructions for completing a written questionnaire. Assurance was provided that the questionnaire was completely anonymous and that the data would be aggregated. Participants carefully read the study's general information, and were invited to sign their informed consent. Subsequently, participants were invited into suitable rooms, where they completed the questionnaire. Participants were asked to deposit the unsigned questionnaires into a box. Finally, the researchers asked for participants' feedback regarding the study and data

collection, in order to deal with possible emotional issues arising from completing the questionnaire.

Measures

Job demands. For measuring psychological and physical job demands, we used two specific scales of the Job Content Questionnaire (Karasek et al., 1998; Italian version by Baldasseroni et al., 2001). This scale has a 4-point Likert-type response format, ranging from 1 = strongly disagree to 4 = strongly agree. The psychological job demands scale (9 items; $\alpha = .72$) measures mental workload (e.g., "I have enough time to get the job done."). The physical job demands scale (5 items; $\alpha = .86$) measures physical workload (e.g., "My job requires a lot of physical effort"). We used a specific emotional demands scale (Xanthopoulou et al., 2013; Italian adaptation by Aiello & Tesi, 2017) for measuring the emotional workload, composed of six items ($\alpha = .79$) on a 5-point Likert scale, ranging from 1 = never to 5 = always (e.g., "Is your work emotionally demanding?").

PWB. For assessing PWB, we used the 18 item-Ryff PWB scale (Ryff & Keyes, 1995; $\alpha = .83$) in its Italian version provided by Sirigatti et al. (2009). The questionnaire presents a response format on a 4-point Likert-type scale, ranging from 1 = no, not really the case for me, to 4 = yes, that's right, it is the case for me (e.g., "I like most aspects of my personality").

Work engagement. WE was measured using the Utrecht WE scale (Schaufeli et al., 2006; $\alpha = .93$) in its Italian adaptation (Pisanti, Paplomatas, & Bertini, 2008). The questionnaire is composed of 17 items with a 6-point Likert-type scale response format, ranging from 0 = never to 6 = always (e.g., "At my work, I feel bursting with energy").

Analyses. Statistical analyses were executed using SPSS (v. 21) for Windows. Preliminary analyses were performed to ensure that there were no violations of normality, linearity, and homoscedasticity criteria. In order to investigate the correlation between variables, we used Pearson's R index. For testing the moderation hypotheses, we used the procedure proposed by Aiken and West (1991) that involves the use of multiple linear regression, where a dependent variable is regressed on a predictor variable, a moderator variable (both previously centered to reduce multicollinearity) and their interaction (predictor \times moderator variable). We also introduced age and gender as covariate control variables. We tested the significance (α = .05) of the interaction between predictor and moderator for confirming the moderation effect. We then applied the simple slope analysis (Schubert & Jacoby, 2004) and the ModGraph (Jose, 2013) to test the moderation hypotheses (Hypotheses 2 and 3), performing the graphical representation of the slopes corresponding to the three different levels (low: -1 SD, average: 0 SD, high: +1 SD) of the respective moderator variable.

Variable	М	SD	Range	α	I	2	3	4	5	6	7
Psychological Job Demands	22.40	2.72	16–30	.64							
2. Physical Job Demand	11.50	2.39	5-18	.85	.38**						
3. Emotional Demands	19.49	4.44	10-30	.73	.48**	.17*					
4. Psychological Well-Being	56.80	6.27	35–69	.75	08	04	.02				
5. Vigor	30.70	4.93	12-36	.78	18*	09	.00	.48**			
6. Dedication	28.04	5.18	8-30	.92	22**	.00	07	.30**	.73**		
7. Absorption	28.04	5.27	13-35	.79	20*	02	10	.22**	.75**	.73**	
8. Work Engagement	89.00	13.97	33-100	.92	−.22**	04	06	.36**	.37**	.91**	.91**

Table 1. Means, standard deviations, observed range, internal consistencies, and correlations among variables (N = 140).

Results

Descriptive statistics and correlations

Table 1 shows means, SDs, observed range, internal consistency (Cronbach's alpha observed in study), and correlations between variables.

Regression analyses. To test the first hypothesis (Hypothesis 1) and the two moderation hypotheses (Hypotheses 2 and 3), we performed three multiple linear regressions (Table 2).

In each regression, we entered the specific job demand, PWB, and their interaction (controlling for age and gender).

PWB was associated with WE in all regressions models, confirming the first hypothesis (Hypothesis 1).

Observing interaction coefficients in Table 2, we found no interaction between physical job demands and PWB. However, two significant interactions arose, firstly, between psychological job demands and PWB ($\beta = -.16$; p < .05) and, secondly, between emotional demands and PWB ($\beta = -.16$; p < .05). Thus, PWB moderates the association between psychological job demands and WE and between emotional demand and WE. Moreover, psychological and emotional job demands moderate the association between PWB and WE. The three models explained a significant amount of WE variance, respectively 20% for model a ($R^2 = .20$; p < .001), 16% for model b ($R^2 = .16$; p < .001), and 17% for model c ($R^2 = .17$; p < .001). In order to further test the second (Hypothesis 2) and third hypotheses (Hypothesis 3), we performed the simple slope analysis illustrated in Figures 1 to 4. Figure 1 shows that psychological job demands were most strongly negatively associated with lowest WE when social workers' PWB was low (vs. medium or high). Figure 2 shows the same pattern for emotional demands, which were

^{*}p < .05. **p < .01.

		Outcome Work engagement								
	Predictors	В	95% CI	β	F	R ²				
	Age	.48	-3.95, 4.92	.02						
	Gender	-1.96	-6.60, 2.68	−.07						
	Psychological job demands	81	-1.64, .01	I 6 *						
	Psychological well-being	.78	.44, 1.12	.35**						
	Psychological job demands × Psychological well-being	13	27,01	16*	6.60**	.20				
Ь	Age	1.14	-3.43, 5.70	04						
	Gender	-1.42	-6.23, 3.38	05						
	Physical job demands	—.5 I	-1.10, .08	14						
	Psychological well-being	.79	.43, 1.14	.37**						
	Physical job demands × Psychological well-being	02	19, .15	02	5.05**	.16				
С	Age	1.14	-3.35, 5.63	.04						
	Gender	-1.47	-6.24, 3.30	05						
	Emotional demands	19	−. 69 , .31	06						
	Psychological well-being	.82	.47, 1.17	.37**						
	Emotional demands × Psychological well-being	08	16,01	16*	5.41**	.17				

Table 2. Three regressions of work engagement on age, gender, different types of job demands, psychological well-being, and interactions (job demand \times psychological well-being; N = 140).

Note: **p < .01. *p < .05; age coding (<30 = 1; from 31 to 55 = 2; >55 = 3).

strongly negatively associated with lowest WE when social workers' PWB was low (vs. medium or high), thus confirming the second hypothesis (Hypothesis 2).

Figure 3 shows that PWB was associated with higher levels of WE when social workers were faced with low psychological job demands (vs. medium or high). Likewise, Figure 4 shows that PWB was associated with higher levels of WE when social workers experienced low emotional demands (vs. medium or high). Therefore, the third hypothesis (Hypothesis 3) was not confirmed.

Discussion

Aiming at studying social workers work-related well-being, we explored if social workers' PWB (Ryff, 1989, 2014; Ryff & Keyes, 1995) could contribute to theirs WE (Bakker, 2011). Furthermore, we used the JD-R model as a theoretical framework (Bakker & Demerouti, 2007; Schaufeli & Taris, 2014) for testing if social workers' PWB—as a personal resource—could buffer the effect of three classes of specific job demands (psychological, physical, and emotional) and WE, and to test

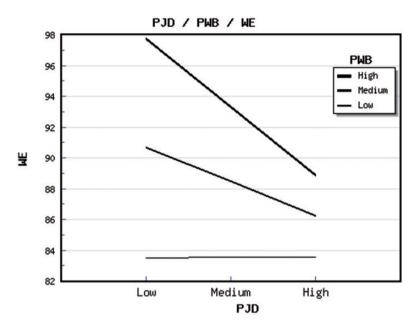


Figure 1. Social workers' work engagement (WE) as a function of their psychological job demands (PJD) and psychological well-being (PWB).

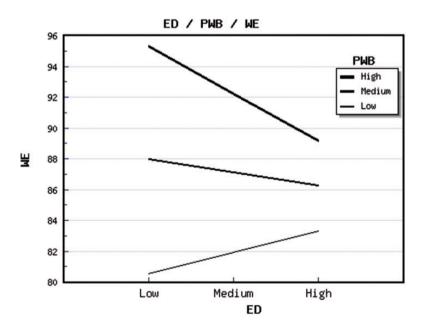


Figure 2. Social workers' work engagement (WE) as a function of their emotional demands (ED) and psychological well-being (PWB).

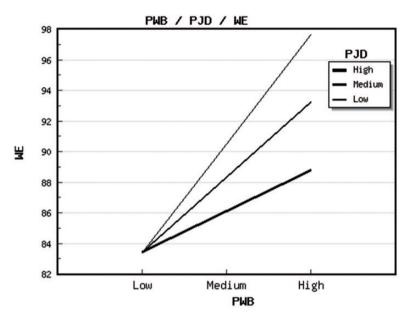


Figure 3. Social workers' work engagement (WE) as a function of their psychological well-being (PWB) and psychological job demands (PJD).

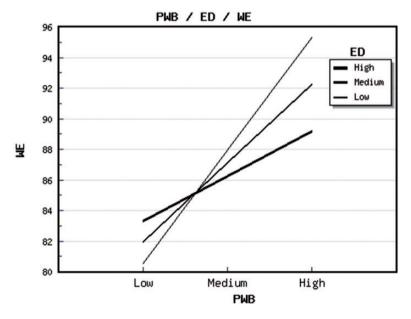


Figure 4. Social workers' work engagement (WE) as a function of their psychological well-being (PWB) and emotional demands (ED).

if job demands could act as motivational factors for enhancing the effect of social workers' PWB on their WE.

PWB and WE

As we expected, with respect to the first hypothesis (Hypothesis 1), the three regressions model (Table 2) confirmed that social workers' PWB was positively associated with their WE, controlling for age, gender, and, psychological, physical, and emotional demands. Thus, our results revealed that social workers' PWB could promote their WE, acting as a motivational factor originating in an optimal mental functioning and an individuals' flourishing condition (Ryff, 2014; Ryff & Singer, 2008).

Interactions between job demands, PWE, and WE

As in Table 2, physical job demands (perceived physical effort experienced during work–time) were not associated with social workers' WE. Even though physical job demands are considered an important concern for workers' health within the JD-R model (Bakker & Demerouti, 2007), it seems that, for our social workers' sample, physical job demands did not play an important role—either as predictor or as moderator—in contributing to their WE, perhaps, because these professionals were mostly concerned with psychological and emotional job demands. A series of studies highlight that social work is mostly characterized by the presence of psychological and emotional job demands, due to excessive workload, work pressure, and emotionally charged relationships that social workers experience with service users (Brotheridge & Granadey, 2002; Collings & Murray, 1996; Padyab et al., 2013).

The second hypothesis (Hypothesis 2) was also confirmed, highlighting that PWB moderates the association between psychological and emotional job demands and WE. More specifically, psychological and emotional job demands were associated with lowest levels of WE when social workers' PWB was low (vs. high), showing that PWB might function as a buffer (the "buffer hypothesis" within the J D-R model; Schaufeli & Taris, 2014) in mitigating the negative association between the job demands and WE of social workers. In line with a previous study conducted on social workers and health care professionals (Garrosa et al., 2011), our results depicted the buffering role of personal resources, thus confirming that PWB can be a specific source of resilience, empowering social workers to deal with stressful work events (i.e., Ryff & Singer, 2003). Furthermore, in our study, we observed that emotional demands did not show significant correlations with WE (Tables 1 and 2), however, the interaction between emotional demands and PWB seemed to be a predictor of WE in regression analysis (Table 2). A study by Xanthopoulou, Bakker, and Fischbach (2013) accords with our findings, by showing that an interaction between emotional demands and a personal resource (selfefficacy) was associated with employees' WE. The authors (Xanthopoulou et al., 2013) demonstrated that self-efficacy moderates the association between emotional demands and WE, acting as a buffering personal resource but, similarly to our study, they did not find a direct negative correlation between emotional demands and WE. Thus, we can argue that emotional demands are not necessarily negative, but they can turn into stressors when there are no available compensatory personal resources (Schaufeli & Taris, 2014). Consistent with these findings, we found that emotional demands were associated with lowers levels of WE when social workers' PWB was low (Figure 2).

Finally, the third hypothesis (Hypothesis 3) was rejected. Contrary to expectations, we found that social workers' PWB acquired higher motivational potential when they were faced with both low (vs. high) psychological and low (vs. high) emotional job demands, thus diverging from the assumption of a motivational process ("coping hypothesis") posited by the JD-R model (see Bakker, 2011; Demerouti & Bakker, 2011). Nevertheless, a study by Xanthopoulou et al. (2013) appears to partially cohere with our findings, emphasizing that high job demands do not boost the effect of a personal resource (optimism) in promoting WE. An explanation of null findings may concern the nature of these specific personal resources (PWB and optimism). Indeed, it was found that PWB and optimism are correlated dimensions (Augusto-Landa, Puido-Martos, & Lopez-Zafra, 2011). Optimistic employees, as well as high PWB workers, can believe that "whatever happens," everything will be positive (Scheier, Carver, & Bridges, 1994), thus overlooking the challenges posed by the job demands. Overall, we could argue that social workers' PWB mostly seemed to promote WE when psychological and emotional job demands were low (vs. high). These results suggest that high job demands could reduce the fostering role of PWB on social workers' WE.

Practical implications for social work practice

These findings could be applied to project-specific interventions aimed at improving social workers' WE. In particular, best practices suggest that it would be appropriate to use a systemic approach that takes into account the mutual impact of the organizational (job demands, job resources; e.g., Astvik & Melin, 2013; Collins, 2008; Collings & Murray, 1996; Stalker et al., 2007) and individual (personal resources; e.g., Goodman & Schorling, 2012) dimensions for promoting social workers' work-related well-being. Following this consideration, Wingerden, Bakker, and Derks (2016) propose a specific group intervention, based on the JD-R model, for improving WE and performance in a sample of health care professionals. This intervention is mainly targeted at improving workers' personal resources, as well as optimizing organizational job demands and resources. Social work managers could be encouraged to promote these kinds of interventions aimed at job demands management and job resources promotion (e.g., Hombrados-Mendieta & Cosano-Rivas, 2013; Landsman, 2008). However, the reduction of psychological and emotional job demands could be difficult to achieve

in a social work context, as these demands are intrinsic characteristics of social work (e.g., Brotheridge & Granadey, 2002; Collings & Murray, 1996; Padyab et al., 2013). For this reason, the promotion of social workers' PWB could be an important factor in enhancing their WE, also helping these professionals in dealing with stressful job demands (Ryff & Singer, 2003). Numerous forms of training for improving PWB have been suggested (i.e., Ruini & Fava, 2012; Ryff, 2014), and they can be tailored to the specific social work environments through specific group interventions (e.g., focus group, psychoeducational group training, role playing; Constance-Huggins & White, 2015; Romano, 1992).

Limitations of the study and prospects for future research

The present study has some limitations that raise possibilities for future research. The study's participants were distributed across a limited geographical area, which precludes the generalization of our results to other countries and cultures. Furthermore, the cross-sectional nature of the study limits conclusions about longitudinal relationships among variables, and calls for further investigation, in order to provide more information about causal relationships. In this study, we showed how social workers' PWB was associated with their WE. However, following adduction of empirical evidence revealing that personal resources and WE were mutually related, it follows that the possibility of an inverse association (between WE and PWB) must be investigated (Xanthopoulou et al., 2009). Furthermore, future studies could address if specific working conditions could affect or shape social workers' PWB (see, Shier & Graham, 2011, 2015). Moreover, in our study, in accordance with the JD-R model, we only considered the role of three influential job demands in social work practice, psychological, physical, and emotional, respectively (e.g., Bakker & Demorouti, 2007; Kim et al., 2011; Lloyd et al., 2002; Padyab et al., 2013). Future studies will need to consider others facets of job demands (e.g., role conflict, job insecurity). Overall, the role of personal resources in contributing to social workers' WE requires further study. For example, could be tested and compared differential types of personal resources (e.g., as personal skill, personality dimensions) in association with specific job demands, job resources, and WE, while further taking into account the characteristics of social work contexts using the heuristic power of the JD-R model (Schaufeli & Taris, 2014). Future studies could also assess how social workers' WE, as well as their job satisfaction (Smiths & Shields, 2013), promote assisted users' well-being (see, Lee, 2013).

Nevertheless, the present study constitutes a relevant advance in the field of social workers' work-related well-being. Firstly, it attempted to switch from a work health impairment paradigm to a positive paradigm (Seligman & Csikszentmihalyi, 2000) in a systemic study of social workers' occupational health (Quick, 1999), accounting for the role of job demands and PWB as factors that could contribute to social workers' WE. Many studies have been conducted to assess which organizational dimensions are possible antecedents of stress and burnout for social

workers (e.g., Acker, 1999, 2012; Acker & Lawrence, 2009; Bradley & Sutherland, 1995; Collings & Murray, 1996; Kim & Stoner, 2008; Sánchez-Moreno et al., 2015; Winstanley & Hales, 2015), but few studies have assessed which aspects may promote their work-related health (e.g., Collins, 2008; Hombrados-Mendieta & Cosano-Rivas, 2013; Landsman, 2008). Secondly, as far as we know, our study is the first, applying the JD-R model as a theoretical framework (Schaufeli & Taris, 2014) to attempt to assess the role of PWB as a relevant personal resource for social workers.

Conclusion

The promotion of WE of social workers could be important for: (i) fostering professionals' work-related well-being and (ii) to enhance the quality of social services dedicated to end users, thereby contributing to their well-being.

The results of our study showed that social workers' PWB could contribute directly and/or indirectly to promoting their WE. As predicted by the JD-R model, the moderation analysis showed that PWB acts as a potential buffer in mitigating the negative effects arising from job demands on WE. The moderation analysis also revealed that PWB was associated with greater WE when psychological and emotional job demands were low (vs. high). This result does not cohere with the assumption posited by the JD-R model that personal resources are associated with a higher WE when job demands are high, thereby suggesting that high job demands could reduce the fostering role of PWB on social workers' WE. Thus, this divergence exposes the need to further explore the role of social workers' specific job demands and personal resources within the JD-R model (Schaufeli & Taris, 2014).

Ethics

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References

Acker, G. M. (1999). The impact of clients' mental illness on social workers' job satisfaction and burnout. *Health & Social Work*, 24(2), 112–119. doi:10.1093/hsw/24.2.112

- Acker, G. M. (2012). Burnout among mental health care providers. *Journal of Social Work*, 12(5), 475–490. doi:10.1177/1468017310392418
- Acker, G. M., & Lawrence, D. (2009). Social work and managed care measuring competence, burnout, and role stress of workers providing mental health services in a managed care era. Journal of Social Work, 9(3), 269–283. doi:10.1177/1468017309334902
- Aiello, A., & Tesi, A. (2017). Emotional job demands within helping professions: psychometric properties of a version of the Emotional Job Demands Scale. *Testing, Psychometrics, Methodology in Applied Psychology*, 24, 167–183. doi: 10.4473/TPM24.2.2.
- Aiken, L. S., & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Newbury Park, UK: Sage.
- Astvik, W., & Melin, M. (2013). Coping with the imbalance between job demands and resources: A study of different coping patterns and implications for health and quality in human service work. *Journal of Social Work*, *13*(4), 337–360. doi:10.1177/1468017311434682
- Augusto-Landa, J. M., Pulido-Martos, M., & Lopez-Zafra, E. (2011). Does perceived emotional intelligence and optimism/pessimism predict psychological well-being? *Journal of Happiness Studies*, 12(3), 463–474. doi:10.1007/s10902-010-9209-7
- Bakker, A. B. (2011). An evidence-based model of work engagement. *Current Directions in Psychological Science*, 20(4), 265–269. doi:10.1177/0963721411414534
- Bakker, A. B., Albrecht, S. L., & Leiter, M. P. (2011). Key questions regarding work engagement. European Journal of Work and Organizational Psychology, 20(1), 4–28. doi:10.1080/1359432X.2010.485352
- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309–328. doi:10.1108/02683940710733115
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and work engagement: The JD–R approach. *Annual Review of Organizational Psychology and Organizational Behavior*, *I*(1), 389–411. doi:10.1146/annurev-orgpsych-031413-091235
- Bakker, A. B., Hakanen, J. J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of Educational Psychology*, 99(2), 274–284. doi:10.1037/0022-0663.99.2.274
- Bakker, A. B., Schaufeli, W. B., Leiter, M. P., & Taris, T. W. (2008). Work engagement: An emerging concept in occupational health psychology. Work & Stress, 22(3), 187–200. doi:10.1080/02678370802393649
- Baldasseroni, A., Camerino, D., Cenni, P., Cesana, G. C., Fattorini, E., Ferrario, M., . . . Tartaglia, R. (2001). La valutazione dei fattori psicosociali. Proposta della versione italiana del Job Content Questionnaire di RA Karasek [Evaluating psychosocial factors. The Italian version of Karasek Job Content Questionnaire]. *Fogli di Informazione ISPESL*, 14(3), 20–32.
- Bamber, M. R. (2006). CBT for occupational stress in health professionals: Introducing a schema-focused approach. New York, NY: Routledge.
- Bergnoli, S., Nicoli, M. A., & Scatolini, E. (2005). Fra burnout ed empowerment: un'indagine sugli operatori delle cooperative sociali di Parma [Between burnout and empowerment: A study on social cooperative operators of Parma]. *Risorsa Uomo*, 4, 493–509. doi:10.1400/67705

- Borzaga, C. (2000). Qualità del lavoro e soddisfazione dei lavoratori nei servizi sociali: un'analisi comparata tra modelli di gestione [Quality of work and workers satisfaction in social services: A comparative analysis of three gestational models]. *ISSAN Working Papers*, 9, 1–34. Retrieved from http://eprints.biblio.unitn.it/169/1/wp9.pdf
- Bradley, J., & Sutherland, V. (1995). Occupational stress in social services: A comparison of social workers and home help staff. *British Journal of Social Work*, 25(3), 313–331. doi:10.1093/oxfordjournals.bjsw.a056182
- Brotheridge, C. M., & Grandey, A. A. (2002). Emotional labor and burnout: Comparing two perspectives of "people work". *Journal of Vocational Behavior*, 60(1), 17–39. doi:10.1006/jvbe.2001.1815
- Collings, J. A., & Murray, P. J. (1996). Predictors of stress amongst social workers: An empirical study. *British Journal of Social Work*, 26(3), 375–387. doi:10.1093/oxfordjournals.bjsw.a011101
- Collins, S. (2008). Statutory social workers: Stress, job satisfaction, coping, social support and individual differences. *British Journal of Social Work*, *38*(6), 1173–1193. doi:10.1093/bjsw/bcm047
- Constance-Huggins, M., & White, K. (2015). Cognitive behavioral group training for welfare recipients: A psychoeducational approach to improving employment outcomes. *Journal of Social Welfare and Human Rights*, 3(1), 1–8. doi:10.15640/10.15640/jswhr. v3n1a1
- Demerouti, E., & Bakker, A. B. (2011). The job demands-resources model: Challenges for future research. SA Journal of Industrial Psychology, 37(2), 1–9. doi:10.4102/sajip. v37i2.974
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demandsresources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512. doi:10.1037// 0021-9010.86.3.499
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist*, 55(1), 34–43. doi:10.1037/0003-066X.55.1.34
- Ell, K. (1996). Social work and health care practice and policy: A psychosocial research agenda. *Social Work*, 41(6), 583–592. doi:10.1093/sw/41.6.583
- Garrosa, E., Moreno-Jiménez, B., Rodríguez-Muñoz, A., & Rodríguez-Carvajal, R. (2011). Role stress and personal resources in nursing: A cross-sectional study of burnout and engagement. *International Journal of Nursing Studies*, 48(4), 479–489. doi:10.1016/j. ijnurstu.2010.08.004
- Gastañaduy, K., Herrera, D., & Lens, W. (2014). Work motivation and psychological well-being of volunteers and non-volunteers. *Revista de Orientación Educacional*, 28(53), 37–50. Retrieved from http://www.roe.cl/index.php/roe/article/view/4
- Gilbar, O. (1998). Relationship between burnout and sense of coherence in health social workers. *Social Work in Health Care*, 26(3), 39–49. doi:10.1300/J010v26n03_03#. U1lb5lV sZk
- Goodman, M. J., & Schorling, J. B. (2012). A mindfulness course decreases burnout and improves well-being among healthcare providers. *The International Journal of Psychiatry* in Medicine, 43(2), 119–128. doi:10.2190/PM.43.2.b
- Graham, J. R., & Shier, M. L. (2010). The social work profession and subjective well-being: The impact of a profession on overall subjective well-being. *British Journal of Social Work*, 40(5), 1553–1572. doi:10.1093/bjsw/bcp049

Hamama, L. (2012). Burnout in social workers treating children as related to demographic characteristics, work environment, and social support. *Social Work Research*, 36(2), 113–125. doi:10.1093/swr/svs003

- Hobfoll, S. E., Johnson, R. J., Ennis, N., & Jackson, A. P. (2003). Resource loss, resource gain, and emotional outcomes among inner city women. *Journal of Personality and Social Psychology*, 84(3), 632–643. doi:10.1037/0022-3514.84.3.632
- Hombrados-Mendieta, I., & Cosano-Rivas, F. (2013). Burnout, workplace support, job satisfaction and life satisfaction among social workers in Spain: A structural equation model. *International Social Work*, 56(2), 228–246. doi:10.1177/0020872811421620
- Jose, P. E. (2013). ModGraph-I: A programme to compute cell means for the graphical display of moderational analyses: The internet version, Version 3.0. Victoria University of Wellington, Wellington, New Zealand. Retrieved from http://pavlov.psyc.vuw.ac.nz/ paul-jose/modgraph/
- Karasek, R., Brisson, C., Kawakami, N., Houtman, I., Bongers, P., & Amick, B. (1998). The Job Content Questionnaire (JCQ): An instrument for internationally comparative assessments of psychosocial job characteristics. *Journal of Occupational Health Psychology*, 3(4), 322–355. doi:10.1037/1076-8998.3.4.322
- Kim, H., Ji, J., & Kao, D. (2011). Burnout and physical health among social workers: A three-year longitudinal study. *Social Work*, 56(3), 258–268. doi:10.1093/sw/56.3.258
- Kim, H., & Stoner, M. (2008). Burnout and turnover intention among social workers: Effects of role stress, job autonomy and social support. *Administration in Social Work*, 32(3), 5–25. doi:10.1080/03643100801922357
- Landsman, M. J. (2008). Pathways to organizational commitment. *Administration in Social Work*, 32(2), 105–132. doi:10.1300/J147v32n02 07
- Lee, J. A. (2013). The empowerment approach to social work practice. New York, NY: Columbia University Press.
- Littlechild, B. (2005). The stresses arising from violence, threats and aggression against child protection social workers. *Journal of Social Work*, 5(1), 61–82. doi:10.1177/1468017305051240
- Lloyd, C., King, R., & Chenoweth, L. (2002). Social work, stress and burnout: A review. *Journal of Mental Health*, 11(3), 255–265. doi:10.1080/09638230020023642
- Mazza, R. (2016). Terapie imperfette: il lavoro psicosociale nei servizi pubblici [Imperfect therapies: The psychosocial work in public services]. Milano, Italy: Raffaello Cortina.
- Padyab, M., Richter, J., Nygren, L., & Ghazinour, M. (2013). Burnout among social workers in Iran: Relations to individual characteristics and client violence. *Global Journal of Health Science*, 5(4), 142–150. doi:10.5539/gjhs.v5n4p142
- Pisanti, R., Paplomatas, A., & Bertini, M. (2008). Misurare le dimensioni positive nel lavoro in sanità: un contributo all'adattamento italiano della UWES-Utrecht Work Engagement Scale [Measuring positive work dimensions in health organizations: A contribute to Italian adaptation of UWES-Utrecht Work Engagement Scale], *Giornale Italiano di Medicina del Lavoro ed Ergonomia*, 30(1), 111–119. Retrieved from http://www.aracneeditrice.it/aracneweb/index.php/rivista.html?col=gimle
- Quick, J. C. (1999). Occupational health psychology: Historical roots and future directions. Health Psychology, 18(1), 82–88. doi:10.1037/0278-6133.18.1.82
- Romano, J. L. (1992). Psychoeducational interventions for stress management and well-being. *Journal of Counseling & Development*, 71(2), 199–202. Retrieved from http://onlinelibrary.wiley.com/doi/10.1002/j.1556-6676.1992.tb02200.x/full#

- Rothmann, S., Jorgensen, L. I., & Hill, C. (2011). Coping and work engagement in selected South African organisations. *SA Journal of Industrial Psychology*, *37*(1), 01–11. doi:10.4102/sajip.v37i1.962
- Ruggeri, F. (2013). Stato sociale, assistenza, cittadinanza. Sulla centralità del servizio sociale [Social state, assistance, citizenship: on centrality of social service]. Milano, Italy: Franco Angeli.
- Ruini, C., & Fava, G. A. (2012). Role of well-being therapy in achieving a balanced and individualized path to optimal functioning. *Clinical Psychology & Psychotherapy*, 19(4), 291–304. doi:10.1002/cpp.1796
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52(1), 141–166. doi:10.1146/annurev.psych.52.1.141
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, *57*(6), 1069–1081. doi:10.1037/0022-3514.57.6.1069
- Ryff, C. D. (2014). Psychological well-being revisited: Advances in the science and practice of eudaimonia. *Psychotherapy and Psychosomatics*, 83(1), 10–28. doi:10.1159/000353263
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. Journal of Personality and Social Psychology, 69(4), 719–727. doi:10.1037/0022-3514.69.4.719
- Ryff, C. D., & Singer, B. (2003). Flourishing under fire: Resilience as a prototype of challenged thriving. In C. L. Keyes & J. Haidt (Eds.), *Fluorishing: Positive psychology and the life well lived* (pp. 15–36). Washington, DC: American Psychological Association.
- Ryff, C. D., & Singer, B. H. (2008). Know thyself and become what you are: A eudaimonic approach to psychological well-being. *Journal of Happiness Studies*, 9(1), 13–39. doi:10.1007/s10902-006-9019-0
- Salanova, M., Agut, S., & Peiro, J. M. (2005). Linking organizational resources and work engagement to employee performance and customer loyalty: The mediation of service climate. *Journal of Applied Psychology*, 90(6), 1217–1227. doi:10.1037/0021-9010.90.6.1217
- Sánchez-Moreno, E., Roldán, I. N. D. L. F., Gallardo-Peralta, L. P., & de Roda, A. B. L. (2015). Burnout, informal social support and psychological distress among social workers. *British Journal of Social Work*, 45(8), 2368–2386. doi:10.1093/bjsw/bcu084
- Schaufeli, W. B. (2013). What is engagement?. In C. Truss, K. Alfes, R. Delbridge, A. Shantz, & E. C. Soane (Eds.), *Employee engagement in theory and practice* (pp. 15–35). London, UK: Routledge.
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement*, 66(4), 701–716. doi:10.1177/0013164405282471
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, *3*(1), 71–92. doi:10.1023/A:1015630930326
- Schaufeli, W. B., & Taris, T. W. (2014). A critical review of the Job Demands-Resources Model: Implications for improving work and health. In G. F. Bauer & O. Hämmig (Eds.), *Bridging occupational, organizational and public health* (pp. 43–68). Amsterdam, NL: Springer.
- Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A reevaluation of the

- Life Orientation Test. Journal of Personality and Social Psychology, 67(6), 1063–1078. doi:10.1037/0022-3514.67.6.1063
- Schubert, T., & Jacoby, J. (2004). SiSSy: Simple slope syntax for test of moderation and simple slopes for one dichotomous or continuous moderator candidate of one centered IV in SPSS. Retrieved from http://www.johannjacoby.de/stattools/SiSSy1.12.5.html
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5–14. doi:10.1037/0003-066X.55.1.5
- Shier, M. L., & Graham, J. R. (2011). Work-related factors that impact social work practitioners' subjective well-being: Well-being in the workplace. *Journal of Social Work*, 11(4), 402–421. doi:10.1177/1468017310380486
- Shier, M. L., & Graham, J. R. (2015). Subjective well-being, social work, and the environment: The impact of the socio-political context of practice on social worker happiness. *Journal of Social Work*, 15(1), 3–23. doi:10.1177/1468017313503449
- Sirigatti, S., Stefanile, C., Giannetti, E., Iani, L., Penzo, I., & Mazzeschi, A. (2009). Assessment of factor structure of Ryff's Psychological Well-Being Scales in Italian adolescents. *Bollettino di Psicologia Applicata*, 56(259), 30–50. Retrieved from http://www.giuntios.it/bpa/archivio/
- Smith, D. B., & Shields, J. (2013). Factors related to social service workers' job satisfaction: Revisiting Herzberg's motivation to work. *Administration in Social Work*, 37(2), 189–198. doi:10.1080/03643107.2012.673217
- Stalker, C. A., Mandell, D., Frensch, K. M., Harvey, C., & Wright, M. (2007). Child welfare workers who are exhausted yet satisfied with their jobs: How do they do it? *Child & Family Social Work*, 12(2), 182–191. doi:10.1111/j.1365-2206.2006.00472.x
- Vassos, M., Nankervis, K., Skerry, T., & Lante, K. (2013). Work engagement and job burnout within the disability support worker population. *Research in Developmental Disabilities*, 34(11), 3884–3895. doi:10.1016/j.ridd.2013.08.005
- Wingerden, J. V., Bakker, A. B., & Derks, D. (2016). A test of a job demands-resources intervention. *Journal of Managerial Psychology*, 31(3), 686–701. doi:10.1108/JMP-03-2014-0086
- Winstanley, S., & Hales, L. (2015). A preliminary study of burnout in residential social workers experiencing workplace aggression: Might it be cyclical? *British Journal of Social Work*, 45(1), 24–33. doi:10.1093/bjsw/bcu036
- Wright, T. A., Cropanzano, R., Bonett, D. G., & Diamond, W. J. (2009). The role of employee psychological well-being in cardiovascular health: When the twain shall meet. *Journal of Organizational Behavior*, 30(2), 193–208. doi:10.1002/job.592
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2007). The role of personal resources in the job demands-resources model. *International Journal of Stress Management*, 14(2), 121–141. doi:10.1037/1072-5245.14.2.121
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009). Reciprocal relationships between job resources, personal resources, and work engagement. *Journal* of Vocational Behavior, 74(3), 235–244. doi:10.1016/j.jvb.2008.11.003
- Xanthopoulou, D., Bakker, A. B., & Fischbach, A. (2013). Work engagement among employees facing emotional demands. *Journal of Personnel Psychology*, 12(2), 74–84. doi:10.1027/1866-5888/a00003