

# EMOTIONAL JOB DEMANDS WITHIN HELPING PROFESSIONS: PSYCHOMETRIC PROPERTIES OF A VERSION OF THE EMOTIONAL JOB DEMANDS SCALE

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People working in helping professions are particularly exposed to emotional demands at work, as emotional situations are a typical component of helping relationships with service users. The main aim of this study is to test the psychometric properties of the Emotional Job Demands brief scale proposed by Xanthopoulou, Bakker, and Fischbach (2013) in the Italian context. The sample consisted of 302 Italian healthcare professionals. Exploratory, confirmatory, and multigroup factor analyses showed that the scale had a two-correlated factor structure which was invariant across gender, age, and professional seniority. The first factor — called “emotional charge of job” — captures the perceived emotional charge of a job and the second factor — called “dealing with users’ complaints” — captures the emotional demands of dealing with negative relationships with service users. The two factors were correlated with other constructs, as expected. The practical implications, limitations of the study, and possible future research lines are discussed.

Key words: Burnout; Emotional job demands; Helping professions; Job demands-resources model; Organizational well-being.

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There are two main perspectives for the concept of “emotional labor” (Brotheridge & Grandey, 2002; de Jonge, Le Blanc, Peeters, & Noordam, 2008): i) the “employee perspective,” according to which emotional labor mainly refers to employees’ personal ability to manage the emotions arising from one’s job and, ii) the “profession perspective,” according to which emotional labor is largely a property of the emotional demands of the occupation. Here we draw mainly on the profession-oriented perspective, according to which the emotional job demands (EJDs) (Steinberg & Figart, 1999) are a consequence of workers (e.g., social workers, nurses, educators, psychologists, teachers, police officers, client-oriented work) having to constantly deal with users, clients, or patients who make heavy demands or present difficult issues (de Jonge et al., 2008). In other words, when EJDs are contingent on the occurrence of emotionally charged interactions within emotionally demanding jobs (Brotheridge & Grandey, 2002; Heuven, Bakker, Schaufeli, & Huisman, 2006). EJDs are associated with important negative outcomes (Hülshager & Schewe, 2011) for workers and organizations (e.g., job-related stress and burnout) (Hamama, 2012; Karimi, Leggat, Donohue, Farrel, & Couper, 2014; Le Blanc, Bakker, Peeters, van Heesh, & Schaufeli, 2001; Montgomery, Spânu, Băban, & Panagopoulou, 2015; Totterdel & Holman, 2003). Nevertheless, EJDs can take place in various work contexts, but employees in the service

sector show a high risk of dealing with this specific type of job demand due to the relational nature of this kind of work (Hülshager & Schewe, 2011). In particular, this study focused on the EJDs that take place in healthcare work settings (Morrison, 2007).

EJDs become particularly salient when workers in the helping professions experience job-related burnout arising from chronic exposure to very emotionally demanding working contexts (Blanco-Donoso, Garrosa, Demerouti, & Moreno-Jiménez, 2016; Lings, Durden, Lee, & Cadogan, 2014), dealing with conditions (i.e., users' death) that have a disruptive impact on work, with unceasing requests from service users and, in some cases, with forms of emotional abuse or physical violence (see, Littlechild, 2005; Padyab, Richter, Nygren, & Ghazinour, 2013). EJDs could act as "hindrance" job demands, potentially reducing the work-related well-being of healthcare professionals and exhausting employees' mental and physical resources (Schaufeli & Taris, 2014). This suggestion is corroborated by research that looks at job demands in the context of health impairment processes (e.g. Bakker & Demerouti, 2007; Lo Presti & Nonnis, 2014; Xanthopoulou, Bakker, & Fischbach, 2013).

Other studies have argued that EJDs can also have a positive influence on employees' well-being and job satisfaction, they can help workers to regulate interpersonal exchanges making them more predictable (Ashforth & Humphrey, 1993). Moreover, Côté and Morgan (2002) found that workers presented higher levels of job satisfaction when amplifying their positive emotions in order to cope with high EJDs.

In the context of the Job Demands-Resources (JD-R) model, EJDs are considered among the most significant job demands (psychological, physical, and emotional) (Bakker & Demerouti, 2007; Bakker, Demerouti, & Schaufeli, 2003). Also, this model assumes that EJDs act as a stressor and have detrimental effects if job or personal resources are absent or low, but may also have a motivational function (Schaufeli & Taris, 2014), in the presence of high specific jobs (e.g., professional autonomy, social support, job security) or personal resources (e.g., self-efficacy, optimism, organizational based self-esteem) (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). This is the "boosting hypothesis," which posits that, when EJDs occur in a context where job or personal resources can help, they may promote positive organizational outcomes and increase employees' engagement with their role (Xanthopoulou et al., 2013). In other words, in an environment where appropriate resources are available job demands can be perceived as a positive "challenge" (Schaufeli & Taris, 2014).

Although there is a large body of research on emotional labor, the assessment of EJDs has received little attention (Glomb & Tews, 2004); nevertheless, its role has been considered crucial for the work-related well-being of such categories of workers (Blanco-Donoso et al., 2016; Steinberg & Figart, 1999; Zapf, Seifert, Schmutte, Mertini, & Holz, 2001), and particularly those in helping professions (e.g., Karimi et al., 2014). To the best of our knowledge, there is no Italian-language scale for measuring EJDs, although helping professions are deeply rooted in Italian society (Borzaga, 2000).

#### EMOTIONAL JOB DEMANDS SCALE AND HELPING PROFESSIONS

Helping professions in Italy have been transformed following administrative, societal, and political changes. These changes have influenced the work-related well-being of various

types of healthcare professionals, who have to deal with several types of specific job demands experiencing, at the same time, an overall reduction in professional autonomy with a loss of available personal and organizational resources (Borzaga, 2000). As the healthcare sector represents a context in which EJDs are typically endorsed (Karimi et al., 2014), one of the aims of this study is to encourage further investigation of EJDs in Italian healthcare settings by studying the psychometric properties of a brief scale measuring EJDs. The scale was derived from an earlier study conducted by Bakker and colleagues (2003) and was validated by Xanthopoulou and colleagues (2013), in order to explore the association between EJDs and personal resources and work engagement in a sample drawn from the workforce of an electronics company (see next section, "Relationships with emotional job demands and other work-related dimensions"). We chose this specific scale because it addresses two different aspects concerning the evaluation and assessment of EJDs (for a description of items, see Table 1): the perceived emotional job charge and dysfunctional interactions occurring between professionals and end-service users. Nevertheless, in the original study the authors found a single-factor structure of the scale (Xanthopoulou et al., 2013); however, in our study we expected to find a two-factor structure mirroring the two underlying dimensions of EJDs because of the specificity of our sample (healthcare professionals). Indeed, as posited by several studies conducted in healthcare settings, EJDs underlay at least two dimensions related to the perceived emotional job charge and the emotional demands arising from conflictual relationships with clients or end-service users (e.g., Brotheridge & Grandey, 2002; de Jonge et al., 2008; Padyab et al., 2013).

#### RELATIONSHIPS WITH EMOTIONAL JOB DEMANDS AND OTHER WORK-RELATED DIMENSIONS

The EJDs were primarily viewed as specific job demands correlated with other dimensions linked with experienced work-related stress and burnout. Within the JD-R model (Bakker & Demerouti, 2007), EJDs can be viewed as a detrimental facet of work and related to other organizational aspects perceived as costs by workers (job demands). For example, EJDs were positively correlated with a high workload in a sample of customer service employees (Bakker et al., 2003). Also, EJDs and workload were correlated dimensions in a sample of nurses, and both contributed to nurses' emotional overload (Montgomery et al., 2015).

Since its first conceptualization, burnout has been viewed as an individual reaction to high emotional demands experienced in human service workplaces (Maslach, 1978). Burnout is a syndrome of emotional exhaustion, that is also characterized by detachment and cynicism toward users and coworkers, and by a low feeling of professional accomplishment (Maslach, 1978; 1982; Sirigatti & Stefanile, 1993b). In the present study we focused only on the emotional exhaustion and depersonalization dimensions that are conceptualized as the core constructs of burnout (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Numerous studies confirmed that EJDs are associated with emotional exhaustion and depersonalization (e.g., Montgomery et al., 2015). Especially in healthcare settings (e.g., Hamama, 2012; Lings et al., 2014; Montgomery et al., 2015) helping professionals have to cope with high EJDs which could be a predictor of burnout (Le Blanc et al., 2001).

The detrimental role of EJDs in contributing to workers' stress or burnout arises mostly when professionals are unable to regulate their emotions (Zapf & Holz, 2006). The ability to regulate one's own emotions refers to a personal resource called "emotional intelligence." Emotional

intelligence refers to a personal ability to process, regulate, and perceive emotions (see, Di Fabio & Saklofske, 2014). In particular, emotional intelligence is depicted as a constellation of emotion-related perceptions framed as a personality domain (Petrides & Furnham, 2001), and could be viewed as a personal resource for promoting health and facing stressful life events (Di Fabio & Saklofske, 2014). Emotional intelligence could help professionals to regulate emotions, manage interpersonal exchanges, and cope with emotionally demanding jobs (e.g., Ashforth & Humphrey, 1993; Côté & Morgan, 2002; Karimi et al., 2014). Emotional intelligence could be particularly salient in healthcare settings, helping social workers in dealing with high EJDs arising from problematic relationships with colleagues and service users (Morrison, 2007). Nevertheless, to our knowledge no studies have attempted to deepen the understanding of the relationship between EJDs and emotional intelligence.

Work engagement has been defined as a positive, work-related state characterized by vigor, dedication, and absorption (Bakker, 2011; Schaufeli, Salanova, González-Romá, & Bakker, 2002). Xanthopoulou et al. (2013) revealed the relationship between EJDs and work engagement. The study explored the association between EJDs and work engagement, confirming that EJDs could both reduce work engagement — when employees' self-efficacy is low — or enhance work engagement — when EJDs act as a motivation to fulfilling job demands (Bakker, 2011), moderating the positive association between employees' self-efficacy and work engagement ("boosting hypothesis"; see Schaufeli & Taris, 2014). Nevertheless, to our knowledge the study published by Xanthopoulou et al. (2013) was one of the first attempts to explore the association between EJDs and work engagement, and the authors suggested that further investigations were needed.

#### THE AIM OF THE STUDY

The main aim of this study was to test the psychometric properties of the Emotional Job Demands scale proposed by Xanthopoulou et al. (2013), using a sample of Italian healthcare professionals in order to encourage further investigation of EJDs, particularly in emotionally demanding job contexts. Specifically, we hypothesized that the scale presents a two-factor structure measuring the emotional job charge and users' complaints, as core dimensions of EJDs. In addition, our objective was to study the relationship between EJDs and other variables that we expected to be associated with EJDs. In particular, we hypothesized that EJDs were positively associated with workload, emotional exhaustion, and depersonalization. In particular, we hypothesized that the dimension of emotional job charge was positively correlated with emotional exhaustion but not with depersonalization; indeed, the emotional job charge dimension is supposed to be related specifically with professionals' emotional overload instead of intercepting the interpersonal dysfunctional patterns of burnout related to cynicism toward users. Moreover, we hypothesized that the dimension of users' complaints was positively associated with emotional exhaustion and depersonalization. Dealing with users' complaints could exhaust helping professionals as well as contribute to the users' depersonalization. Furthermore, we hypothesized that EJDs were negatively associated with emotional intelligence and work engagement.

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## METHOD

### Participants

The participants consisted of 302 Italian healthcare professionals drawn from several Italian healthcare organizations (response rate of 72.1%). The sample consisted of 243 women (80.5%) and 59 men (19.5%). The age distribution was as follows: 55 participants were from 18 to 30 years (18.2%); 105 were from 31 to 40 years (34.8%); 85 were from 41 to 50 years (28.1%); 52 were from 51 to 60 years (17.2%); and, finally, 5 were from 61 to 70 years (1.7%). Educational attainment was distributed as follows: completed primary school ( $n = 21$ ; 7.0%); completed high school ( $n = 81$ ; 26.8%); university degree ( $n = 111$ ; 36.8%); second degree ( $n = 89$ ; 29.5%). The distribution of professional experience was as follows: 1 to 5 years ( $n = 88$ ; 29.1%); 6 to 10 years ( $n = 61$ ; 20.2%); 11 to 20 years ( $n = 95$ ; 31.5%); 21 to 30 years ( $n = 47$ ; 15.6%); 31 to 45 years ( $n = 11$ ; 3.6%). The occupations of participants were: social workers ( $n = 116$ ; 38.4%); healthcare assistants ( $n = 105$  were 34.8%); educators ( $n = 54$ ; 17.9%); nurses ( $n = 24$ ; 7.9%); psychologists ( $n = 3$ ; 1.0%).

### Procedure

The EJDs scale (Xanthopoulou et al., 2013) was translated and back-translated (from English to Italian and from Italian to English) by two independent experts (see Brislin, 1970). The research group (psychologists) and translators discussed the results in order to achieve consensus on the terminology that would be most appropriate for respondents in the healthcare professions (compared to the original scale, only the term “clients” was replaced by the term “utenti” [users]). The original scale and the translated version are reported in Table 1.

We contacted 10 organizations (social cooperatives) located in the north, center, and south of Italy to adhere to the study, collecting volunteer participations from their staff of healthcare professionals (snowball sampling). Within Italian social cooperatives, there are various types of healthcare professionals (e.g., social workers, healthcare assistants, educators, nurses). For this reason, we chose these particular organizations as targets of the study in order to collect data from a sample that would be representative of healthcare professionals in Italy. Every voluntary participant provided an informed consent after reading an ethical statement and information about the study. They then responded to an anonymous, web-based questionnaire consisting of the Italian version of the EJDs scale together with other investigated constructs. The study was approved by the Department of Political Sciences (University of Pisa) and conducted in accordance with the ethical standards of the Italian Psychological Association (AIP).

### Measures

*Emotional Job Demands scale.* EJDs were assessed using a six-item scale to which responses were given using a 5-point scale from 1 = *never* to 5 = *always*, translated from the original version (Xanthopoulou et al., 2013).

*Workload.* Perceived workload was measured using three items to which responses were

TABLE 1  
Descriptive statistics, skewness, kurtosis from items and exploratory factor analysis; two-factor solution (ML extraction, promax rotation, Kaiser's normalization,  $N = 302$ )

Items	<i>M</i>	<i>SD</i>	Skewness	Kurtosis	Factors	
					Factor 1	Factor 2
1. Is your work emotionally demanding? [Il tuo lavoro è emotivamente impegnativo?]	4.14	0.93	−0.84	−0.22	<b>.80</b>	.02
2. In your work, are you confronted with things that personally touch you? [Nel tuo lavoro ci sono aspetti che ti toccano personalmente?]	3.25	1.14	−0.17	−0.94	<b>.58</b>	−.02
3. Do you face emotionally charged situations in your work? [Nel tuo lavoro affronti situazioni emotivamente cariche?]	3.96	0.96	−0.75	−0.13	<b>.87</b>	−.01
4. In your work do you deal with clients who incessantly complain, although you always do everything to help them? [Nel tuo lavoro hai a che fare con utenti che si lamentano incessantemente sebbene tu faccia di tutto per aiutarli?]	3.50	1.14	−0.32	−0.90	−.05	<b>.90</b>
5. In your work, do you have to deal with demanding clients? [Nel tuo lavoro hai a che fare con utenti esigenti?]	3.87	0.93	−0.55	−0.41	.10	<b>.69</b>
6. Do you have to deal with clients who do not treat you with the appropriate respect and politeness? [Hai a che fare con utenti che non ti trattano con il rispetto e la cortesia dovuta?]	2.75	1.16	0.42	−0.73	−.04	<b>.56</b>
<i>M</i>					3.78	3.37
<i>SD</i>					0.85	0.88

Note. Factor 1 = Emotional charge of job; Factor 2 = dealing with users' complaints. In bold are reported factor loadings > .50.



given with a 6-point scale from 1 = *completely disagree* to 6 = *completely agree* (Aiello, Deiting, & Nardella, 2012). An exploratory and a confirmatory factor analysis confirmed the single-factor structure of the scale. Reliability was satisfactory ( $\alpha = .84$ ). In the original study, the scale showed positive correlations with other dimensions of work-related stress (work-family conflict and group conflict) and negative correlations with variables linked to work-related well-being (e.g., leadership quality, role stability, quality of information shared in organization; Aiello et al., 2012). In the current study, alpha was .82.

**Burnout.** Burnout is mainly characterized by emotional exhaustion and depersonalization (Demerouti et al., 2001; Maslach, 1978, 1982). Burnout was measured using two scales of the Italian version (Sirigatti & Stefanile, 1993a) of the Maslach Burnout Inventory (Maslach, Jackson, & Leiter, 1996).<sup>1</sup> The scale measures respectively the two components of burnout: emotional exhaustion (nine items) and depersonalization (five items). The responses are given using a 6-point scale ranging from 0 = *never* to 6 = *always*. The two scales showed a satisfactory reliability: alpha is .87 for emotional exhaustion and alpha is .69 for depersonalization (Sirigatti & Stefanile, 1993a). The scales show positive correlations with psycho-physical problems, hostility, and impulsiveness, and negative correlations with prosocial motivation and job satisfaction (Sirigatti & Stefanile, 1993b). In this study, the emotional exhaustion scale had an alpha of .92 and the depersonalization scale an alpha of .74.

**Work engagement.** Work engagement is defined as a positive, fulfilling state associated with work, and characterized by three components: vigor, dedication, and absorption. We used the Italian version (Balducci, Fraccaroli, & Schaufeli, 2010) of the Utrecht Work Engagement Scale (Schaufeli & Bakker, 2004), which consists of nine items; responses are given using a 7-point scale from 0 = *never* to 7 = *always*. The work-engagement scale presents a three-factor structure: vigor, dedication, and absorption. Also, the internal consistency of the whole scale is excellent (Balducci et al., 2010). Work engagement is positively related to workaholism and with a work-related affective experience, and negatively related to all dimensions of job burnout (Balducci et al., 2010; Schaufeli & Bakker, 2004). In this study the alpha of the scale is .92.

**Emotional intelligence.** Emotional intelligence consists of a constellation of self-perceptions related to the control, expression, and awareness of emotions. Emotional intelligence was assessed using the Italian version (Di Fabio & Palazzeschi, 2011) of the Trait-Emotional Intelligence Questionnaire-Short Form (TEIQue-SF; Cooper & Petrides, 2010), which consists of 30 items; responses are given using a 7-point scale ranging from 1 = *completely disagree* to 7 = *completely agree*. A confirmatory factor analysis showed a four-dimension version of the scale (well-being, self-control, emotionality, and sociability). Alpha for the scale's total score was good ( $\alpha = .85$ ) (Di Fabio & Palazzeschi, 2011). The TEIQue-SF shows a positive correlation with other measures of emotional intelligence, such as, Bar-On Emotional Quotient Inventory (Bar-On, 2004) and the Mayer-Salovey-Caruso Emotional Intelligence Test (Mayer, Salovey, & Caruso, 2002) and appears to be partially overlapping with the Big-Five personality traits, although it is a distinct construct (Di Fabio & Palazzeschi, 2011). In this study, alpha is .87.

### Data Analyses

We conducted descriptive statistics on individual items to preliminarily examine the properties of the EJDs scale. We also conducted an exploratory factor analysis (EFA; maximum

likelihood, eigenvalues  $> 1$ , inspection of scree-test diagram, promax rotation) to explore the factorial structure of the scale using SPSS 21 software. Furthermore, based on EFA results we carried out confirmatory factor analysis (CFA) using IBM AMOS 21 software. We tested a one-factor model, a factor model with two independent factors, and a factor model with two correlated factors. The goodness-of-fit of the models was checked using relative chi-square ( $\chi^2/df$ ), the Tucker-Lewis index (TLI), the comparative fit index (CFI), the root square mean error of approximation (RMSEA), and the standardized root mean square residual (SRMR).

Good model fit is indicated by values of relative chi-square between 0 and 3 (Kline, 1998); TLI and CFI values greater than .90 and .95, respectively, reflect acceptable and excellent fit to the data, and values smaller than .08 or .06 for RMSEA and SRMR, respectively, reflect acceptable and good model fit (Bentler, 1990, 1995; Hancock & Mueller, 2006; Hu & Bentler, 1999; Steiger & Lind, 1980). In addition, the scale's convergent validity was tested using the average variance extracted (AVE) statistics. A scale presents an acceptable convergent validity when the scores are above the threshold of .50 (Fornell & Larcker, 1981). We also performed a multigroup analysis, testing the structure of the EJDs scale for invariance as a function of three variables that could plausibly influence results: gender (male, female), age (above or below median age in years), and work experience (above or below median) (see Hamama, 2012). We compared a baseline configural invariance model (MB), where factor loadings were allowed to differ across groups, with a model in which factor loadings were constrained to be equal across groups (ML; metric invariance), and finally with a model in which the intercepts of items were constrained to be equal across groups (MC; scalar invariance) (see Milfont & Fischer, 2010). We tested the fit of the model using relative chi-square index ( $\chi^2/df$ ) and CFI index. We compared the models checking the significance of the chi-square difference and testing whether that the  $\Delta CFI$  of the compared models did not exceed the threshold of .01 (Chen, 2007). Scale reliability was assessed using Cronbach's alpha (Barker, Pistrang, & Elliot, 1994) and the item-total correlation matrix. In addition, we calculated the composite reliability score that takes into account the standardized factor loadings and unique variances (Raykov, 1997). A score above .70 is recommended (Hair, Anderson, Tatham, & Black, 1998).

We used *t*-test to evaluate differences related to gender, age, and work experience in EJDs scores. Finally, in order to test the association between EJDs and other variables such as workload, emotional exhaustion, depersonalization, emotional intelligence, work engagement, and to deepen the scale's concurrent and discriminant validity, we used Pearson's *r*.

## RESULTS

### Descriptive Statistics

Table 1 reports means, standard deviations, skewness, and kurtosis. All values of skewness and kurtosis ranged between norms  $-1.00$  to  $+1.00$ , confirming that the distribution of items approximated normality (Barbaranelli, 2003).



### Exploratory Factor Analysis

The result of the Kaiser-Meyer-Olkin sampling adequacy test ( $KMO = .71$ ), showed the adequacy of the sampling procedure (Kaiser, 1974), and the result of the Bartlett (1950) sphericity test was significant ( $p < .001$ ), indicating that the R matrix was not an identity matrix and, hence, that the dataset was appropriate for EFA (Barbaranelli, 2003). The results of the EFA are shown in Table 1. A two-factor solution emerged explaining 69.17% of the total variance. The two factors were correlated ( $r = .39$ ). We labeled the first factor “emotional charge of job” (ECJ), corresponding to the degree of emotional charge experienced by healthcare professionals when working; the second factor was labeled “dealing with users’ complaints” (DUC) and related to experience of problematic relationships with service users.

### Confirmatory Factor Analysis

The results of CFA are shown in Table 2. The one-factor model (M1) did not explain the data well, while the two-independent-factor model (M2) showed a satisfactory fit according to some indexes. However, the two-correlated-factor model (M3) showed a better fit ( $M2 - M3: \Delta\chi^2 = 30.54, \Delta df = 1, p < .05$ ). Factor loadings ranged from .55 to .86 (Figure 1). The average variance extracted (AVE) statistics for ECJ and DUC were .58 and .53, respectively. These results confirmed that each ECJ and DUC scale had acceptable convergent validity inasmuch as the scores were above the threshold of .50 (Fornell & Larcker, 1981).

TABLE 2  
Results of confirmatory factor analysis ( $N = 302$ )

Model	$\chi^2$	$df$	$\chi^2/df$	TLI	CFI	RMSEA	SRMR	$\Delta\chi^2$	$\Delta df$
M1: One-factor model	202.36***	9	22.49	.43	.66	.27	.16		
M2: Two-independent-factor model	39.26***	9	4.36	.91	.95	.11	.14		
M3: Two-correlated-factor model	8.72	8	1.09	.99	.99	.02	.03	M2 – M3 = 30.54***	1

Note. TLI = Tucker-Lewis index; CFI = comparative fit index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual.

\*\*\*  $p < .001$ .

### Multigroup Analysis

We performed multigroup analysis (Table 3) in order to test the structure of the ECJ and DUC subscales as a function of gender, age, and work experience. The factor structure did not vary with gender (MB – ML:  $\Delta\chi^2 = 1.40, \Delta df = 4, p > .05$ ; MB – ML + MC:  $\Delta\chi^2 = 16.77, \Delta df = 10, p > .05$ ), age (MB – ML:  $\Delta\chi^2 = 5.58, \Delta df = 4, p > .05$ ; MB – ML + MC:  $\Delta\chi^2 = 8.89, \Delta df = 10, p > .05$ ), or work experience (MB – ML:  $\Delta\chi^2 = 7.73, \Delta df = 4, p > .05$ ; MB – ML + MC:  $\Delta\chi^2 = 13.72, \Delta df = 10, p > .05$ ).

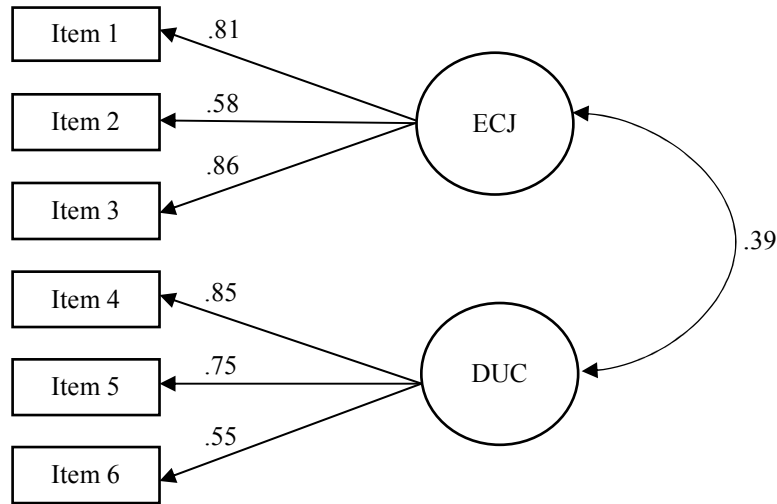


FIGURE 1  
Confirmatory factor analysis: Factor loadings.  
ECJ = emotional charge of job; DUC = dealing with users' complaints.

TABLE 3  
Multigroup analysis ( $N = 302$ )

	$\chi^2$	$df$	$\chi^2/df$	$\Delta\chi^2$	CFI	$\Delta CFI$
<i>Gender</i>						
MB	26.85	16	1.68		.981	
ML	28.25	20	1.41	1.40, $p > .05$	.986	.006
MC	43.62	26	1.68	15.37, $p > .05$	.979	.007
<i>Age</i>						
MB	13.50	16	.84		1.00	
ML	19.07	20	.95	5.58, $p > .05$	1.00	–
MC	22.39	26	.86	3.32, $p > .05$	1.00	–
<i>Work experience</i>						
MB	22.22	16	1.39		.989	
ML	29.95	20	1.50	7.73, $p > .05$	.983	.006
MC	35.94	26	1.38	5.99, $p > .05$	.983	–

Note. MB = configural invariance model; ML = metric invariance model; MC = scalar invariance model; CFI = comparative fit index.

### Reliability

Internal consistency was assessed using Cronbach's alpha (Barker et al., 1994) and the item-total correlation. Alphas were good for both ECJ ( $\alpha = .79$ ) and DUC ( $\alpha = .75$ ). The correct-

ed item-total correlations were adequate and ranged from .86 to .84, for ECJ, and from .78 to .87 for DUC. The composite reliability (CR) scores of the two scales were above the suggested threshold of .70 (Hair et al., 1998). Specifically, the CR score for ECJ was .80 and for DUC was .77.

### Differences between Subgroups

Independent *t*-tests were performed to evaluate gender, age, and work experience related to differences in ECJ and DUC scores. There was a gender difference in the ECJ score,  $t(300) = -2.27$ ;  $p < .05$  (men:  $M = 3.56$ ,  $SD = 0.93$ ; women:  $M = 3.84$ ,  $SD = 0.93$ ), but not in DUC scores,  $t < 1$  (men:  $M = 3.46$ ,  $SD = 0.81$ ; women:  $M = 3.35$ ,  $SD = 0.90$ ). Workers above and below the median age had similar ECJ scores,  $t < 1$ , and DUC scores,  $t < 1$  (workers aged from 18 to 40 years: ECJ,  $M = 3.84$ ,  $SD = 0.84$  and DUC,  $M = 3.41$ ,  $SD = 0.87$ ; workers aged more than 40 years: ECJ,  $M = 3.73$ ,  $SD = 0.85$  and DUC,  $M = 3.32$ ,  $SD = 0.90$ ). Workers with more or less than the median amount of work experience also had similar ECJ scores,  $t < 1$ , and DUC scores,  $t < 1$  (less than 20 years' work experience: ECJ,  $M = 3.78$ ,  $SD = 0.84$ , and DUC,  $M = 3.40$ ,  $SD = 0.87$ ; more than 20 years' work experience: ECJ,  $M = 3.80$ ,  $SD = 0.87$  and DUC,  $M = 3.26$ ,  $SD = 0.92$ ).

### Correlations Analysis

Zero-order Pearson's correlation (*r*) was used to assess whether ECJ and DUC were correlated with psychological workload, emotional exhaustion, depersonalization, emotional intelligence, and work engagement. ECJ was found to be positively correlated with workload ( $r = .15$ ,  $p < .05$ ) and emotional exhaustion ( $r = .21$ ,  $p < .001$ ), and negatively correlated with emotional intelligence ( $r = -.12$ ,  $p < .05$ ). ECJ was not correlated with depersonalization ( $r = .08$ ,  $p > .05$ ), and work engagement ( $r = -.08$ ,  $p > .05$ ). DUC was positively correlated with workload ( $r = .15$ ,  $p < .01$ ), emotional exhaustion ( $r = .38$ ,  $p < .001$ ), and depersonalization ( $r = .34$ ,  $p < .001$ ), and negatively correlated with emotional intelligence ( $r = -.20$ ,  $p < .01$ ), and work engagement ( $r = -.21$ ,  $p < .01$ ).

### DISCUSSION AND CONCLUSION

The main goal of this study was to evaluate the psychometric properties of a scale (Xanthopoulou et al., 2013) for measuring EJDs in a sample of healthcare professionals. We performed exploratory factor analysis, confirmatory factor analysis, and multigroup confirmatory factor analyses. These analyses indicated that the scale was articulated in a two-dimension structure (with correlated factors) which was invariant across gender, age, and work experience. In our sample the scale did not show the single-factor structure observed by Xanthopoulou et al.; however, the main goal of the original study was to explore how EJDs were associated with personal resources and work engagement rather than to measure the psychometric properties of the scale. We investigated the EJDs scale in a sample of healthcare professionals, because the healthcare sector represents a context in which EJDs are typically high (Karimi et al., 2014); our sample was

thus different from that used in the original study (Xanthopoulou et al., 2013), which was drawn from the workforce of an electronics company. The two-correlated-factor structure we observed (emotional charge of job; dealing with users' complaints) is consistent with the literature referring to a two-dimension EJDs construct, concerning in particular the assessment and evaluation of EJDs in helping professions (Brotheridge & Grandey, 2002; de Jonge et al., 2008; Padyab et al., 2013).

Findings showed that women had a higher score in ECJ than men, although DUC scores were similar. There were no age- or work experience-related differences in ECJ and DUC scores. Overall, our findings are consistent with other studies reporting that women and men differ in sensitivity toward EJDs, but do not differ in sensitivity toward endorsing emotional job demands arising from relationships with service users. Hamama (2012) posited that women are more sensitive to burnout and emotional job charge, attributing this finding to a prevalence of females in emotionally demanding social work. Moreover, Steinberg and Figart (1999) posited that males and females do not show differences in handling EJDs. These authors found that men and women are similar in their sensitiveness toward emotionally demanding jobs and that, in healthcare settings, male and female workers equally deal with users' complaints. Considering these contrasting findings, further research is needed in order to understand if men and women endorse EJDs in a different way.

Values of Cronbach's alpha, item-total correlations, and composite reliability indicate that the scales have good reliability. The AVE scores also show that ECJ and DUC subscales have a good convergent validity.

In addition, we explored the correlations between ECJ and DUC and other variables that one would expect to be correlated with EJDs. We found that both the ECJ and the DUC dimensions were positively associated with workload. Bakker et al. (2003) revealed that EJDs and workload were correlated configuring both dimensions as specific job demands. Thus, both EJDs and workload could influence the work-related well-being of healthcare professionals (see Montgomery et al., 2015). In particular, consistently with the Job Demands-Resources model (Bakker & Demerouti, 2007), EJDs could be depicted as a specific job demand tailored to emotionally demanding contexts.

Another result that is consistent with previous studies is the positive correlation between both ECJ and DUC with burnout dimensions (see Hamama, 2012; Le Blanc et al., 2001; Lings et al., 2014; Montgomery et al., 2015; Totterdel & Holman, 2003). Specifically, the results are coherent with the two-dimension structure of the EJDs scale. Both ECJ and DUC were positively associated with emotional exhaustion, which is the core dimension of burnout syndrome (Maslach, 1978, 1982). If ECJ focuses only on the emotional overload, DUC was also correlated with depersonalization indicating that this specific subdimension captures the extent of dysfunctional emotional interactions with service users that could have a highly disruptive impact on the workers as well as on the service users involved (see Hamama, 2012; Le Blanc et al., 2001; Lings et al., 2014; Montgomery et al., 2015; Totterdell & Holman, 2003).

We also found negative correlations between ECJ, DUC, and personal emotional intelligence traits (Petrides & Furnham, 2001); this finding replicates previous research which shows that emotional intelligence represents a personal resource for coping with emotionally stressful situations (Di Fabio & Saklofske, 2014) even in social work contexts (see Morrison, 2007). The harmful effect of EJDs takes place when workers are unable to regulate their emotions (Zapf &

Holz, 2006). High emotional intelligence may help healthcare professionals to process, regulate, and perceive emotions, thereby contributing to coping with detrimental EJDs (Karimi et al., 2014). Emotional intelligence could also help healthcare professionals in regulating interpersonal exchanges when EJDs are high (Ashforth & Humphrey, 1993) by amplifying their positive emotions and ameliorating helping relationships when providing services to end-users (Côté & Morgan, 2002).

Finally, we found a negative correlation between DUC and work engagement, but we did not find an association between ECJ and work engagement. This discrepant finding supports our results regarding the two-dimension nature of the scale, indicating that ECJ and DUC correlate differentially with work engagement, thus acting as two different dimensions. Moreover, this result could be discussed in relation to EJDs and the development of work engagement theories (e.g., Schaufeli & Taris, 2014). The negative association between DUC and work engagement could be further developed in light of the association between work engagement and burnout. Indeed, work engagement is negatively related to burnout (Schaufeli & Bakker, 2004). Burnout arises as a result of high emotional demands characterized by dysfunctional, emotionally charged relationships with service users (Maslach, 1978, 1982). Thus, the negative relationship between DUC and work engagement could mirror the positive correlation between DUC and the two burnout dimensions (emotional exhaustion and depersonalization). The lack of association between ECJ and work engagement is also consistent with the assumption made by the Job Demands-Resources model which posits that, although job demands are often correlated with work-related stress or burnout, they may not have a directly negative impact on workers' engagement (Bakker & Demerouti, 2007). Several studies showed that job resources (positive environmental aspects that could enhance work engagement) may have their best effect in promoting workers' engagement when interacting with specific quantitative, cognitive, or *emotional* demands (Bakker, 2011). The lack of a *direct* association between ECJ and work engagement in our sample of healthcare professionals could be explained if we consider that ECJ can have a combined effect in conjunction with particular job resources: an interaction that could not be captured by the variables used in this study. If DUC can effectively have a detrimental effect on work engagement (due to frequent harmful relationships that occurred with end-users in healthcare settings; Padyab et al., 2013), the ECJ could not, when ECJ are compensated by the presence of high job resources (Schaufeli & Taris, 2014; Xanthopoulou et al., 2013).

This study shows some limitations. First, the cross-sectional nature of the study prevents us from drawing conclusions about causal relationships and temporal stability among the constructs investigated, which were assessed only once, using a single self-report instrument. Longitudinal studies would address this limitation. Moreover, we underline that our sample shows a higher presence of women. Although this is a typical situation in healthcare settings (Steinberg & Figart, 1999), this aspect represents a limit that needs to be addressed in future research. Furthermore, although EJDs are prominent within social work and in healthcare settings, recent studies suggest that EJDs could take place in other work environments on a daily basis (e.g., Hülshager & Schewe, 2011). In order to increase the scale validity, future studies could test the psychometric properties and invariance of the two-factor structure in different labor contexts where EJDs might be high (e.g., among teachers, police officers, call center operators, hotel frontline workers, or retail store employees).

These limitations notwithstanding, this study is a first step toward developing a brief Italian measure of EJDs. The scale, which shows adequate psychometric properties, could be used to deepen the role of EJDs as “hindrances” or “challenging” job demands as outlined within the Job Demands-Resources model (Bakker & Demerouti, 2007; Schaufeli & Taris, 2014; Xanthopoulou et al., 2013). For instance, future studies could show whether EJDs could contribute — alone or in interaction with other specific job demands (e.g., workload) or job resources — respectively to burnout or work engagement among helping professionals. The scale could also be used to assess the EJDs between working roles in healthcare organizations through a multi-systemic approach that encompasses the management of job demands, job resources, and personal resources (Blanco-Donoso et al., 2016; Giannetti & Tesi, 2016). In addition, specific interventions aimed at reducing EJDs could encompass the promotion of emotional intelligence as an important personal resource (Di Fabio & Saklofske, 2014) for healthcare professionals (Morrison, 2007). Emotional intelligence is linked with social support and resilience, and could help in regulating interpersonal exchanges when EJDs are high (e.g., Di Fabio, 2015). In particular, specific training (Di Fabio & Kenny, 2010) for promoting emotional intelligence could be adapted and tailored to healthcare work settings through specific group interventions.

#### NOTE

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