

WCES 2012

Professional Self representation and risk of burnout in school teachers

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Abstract

The study aims to explore the impact of Professional Self, Pupils, and Co-workers representation on the dimensions of burnout in 106 teachers serving in junior and secondary high schools of Catania. MBI and Semantic Differentials referred to Professional Self, Pupils, and Co-workers were used. Results showed that teachers with a more positive representation of Professional Self presented low levels of *emotional exhaustion* and high levels of *personal accomplishment*; teachers with a more positive representation of Pupils and Co-workers expressed low levels, respectively, in *emotional exhaustion* and *depersonalization*. In addition, the representation of Professional Self affected on *personal realization* and that of Pupils on *emotional exhaustion*.

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Keywords: Teachers, professional self, social climate, burnout.

1. Introduction

The recent literature has reported that a good representation of Self in a professional environment positively affects on the quality of social relations, the job performance, the self-efficacy at work, the individual work engagement, and reduces the risk of burnout for the helping professions. Therefore, it could constitute a valid element of intervention and prevention even in the school context (Hakanen, Bakker, & Schaufeli, 2006; Sagone, De Caroli & Falanga, 2010), where it has been underlined that teachers showed high levels of exhaustion and cynicism (Maslach, Jackson, & Leiter, 1996; Schaufeli & Enzmann, 1998), distress caused by disruptive pupils behaviors and disciplinary problems in classroom (Evers, Tomic, & Brouwers, 2004; Klusmann, Kunter, Trautwein, Lüdtke, & Baumert, 2008), conflicts in cooperating with colleagues and school leadership (Skaalvik & Skaalvik, 2009), high levels of vulnerability and neuroticism, and low levels of extraversion as personality traits (Zellars, Hochwarter, Perrewé, Hoffman, & Ford, 2004; Cano-García, Padilla-Muñoz, & Carrasco-Ortiz, 2005), and so on.

Burnout has been described as a type of interpersonal stress producing the separation by users (Maslach, 1976), a reaction to a state of tension and dissatisfaction which begins to develop when people believe that the stress they are experiencing can not be reduced with a positive solution of problems (Cherniss, 1980), and, as reported by Schaufeli and Enzmann (1998), “a persistent, negative, work-related state of mind in ‘normal’ individuals that is primarily characterized by exhaustion, which is accompanied by distress, a sense of reduced effectiveness, decreased motivation, and the development of dysfunctional attitudes and behaviours at work” (p.36). It is characterized by the coexistence of three dimensions (Maslach, 1993, pp.20-21): (i) the *emotional exhaustion*, that refers to the feeling of being emotionally unable to recover the energy necessary for the subject and to the feeling of exceeding personal limits (Leiter, 1993; Lee & Ashforth, 1996; Schaufeli & Buunk, 2003); (ii) the *depersonalization*, that refers to a

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sense of inadequacy to the job, the assumption of attitudes of detachment, and hostility towards the situations and co-workers/users of one's services or care, involved in the helping relationships (*cynicism*: Green, Walkey, & Taylor, 1991); finally, (iii) the *low personal accomplishment*, that is linked to the low self-efficacy on the job, a reduction in one's own feelings of competence and achievement in the work context and to distorted attribution of personal failure to external agents, with a subsequent existential collapse (Nindl, 2001; Tomic, Evers, & Brouwers, 2004).

Among the factors involved in decrease of burnout, psychologists have reported job control (Taris, Schreurs, & van Iersel-van Silfhout, 2001), perceived self-efficacy (Dick & Wagner, 2001), enthusiasm (Bakker, 2005), and 'work engagement' composed by the dimensions of *vigor* and *dedication* (Demerouti, Bakker, Janssen, & Schaufeli, 2001; Schaufeli, Salanova, González-Roma, & Bakker, 2002; Langelaan, Bakker, van Doorne, & Schaufeli, 2006; González-Roma, Schaufeli, Bakker, & Lloret, 2006; Bakker & Bal, 2010), and so on. In fact, the more teachers expressed high levels of mental resilience, energy, and persistence in the face of difficulties (that is, *vigor*) and willingness to challenge and enthusiasm for their job (that is, *dedication*), the less they reported risk of burnout; the more teachers were work engaged and use job resources (e.g., supervisor support, innovativeness, appreciation and organizational climate) the more they helped themselves to cope with demanding interactions with students (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007).

One of the most important psychological dimensions implicated in moderating levels of burnout is constituted by self-concept in teachers (Friedman & Farber, 1992; Villa & Calvete, 2001; De Caroli & Sagone, 2008; Rad & Nasir, 2010), mainly analyzed by means of explicit measures such as semi-structured questionnaires, in-deep interviews, and narrative approach. As found in Villa and Calvete's research (2001) carried out on the relation between self-concept and burnout in a sample of secondary school teachers, findings showed that teachers with a positive self-concept have experienced fewer symptoms of stress and burnout and have believed to have the ability to influence their students, while teachers with negative self-concept felt themselves dissatisfied with their work. Rad and Nasir (2010) found that (i) high levels of burnout produce feelings of worthlessness, dissatisfaction with work and, consequently, decrease in career self concept and that (ii) there are negative relations between the dimensions of teacher's burnout (specifically, *emotional exhaustion* and *depersonalization*) and their career self-concept, but positive relations with low personal accomplishment. Little evidences have been found with reference to the effects of professional self-representation and social climate (Pupils and Co-Workers) on the dimensions of this syndrome (according to Maslach's perspective), using a measure based on a technique that effectively reduces the acquiescence bias without lowering psychometric quality (that is, the semantic differential-type response format: see Friberg, Martinussen, & Rosenvinge, 2006) and this methodology has constituted the rationale for testing on a group of Italian school teachers.

2. Methodology

The purpose of the present study was to explore the impact of Professional Self-representation and social climate (that is, Pupils and Co-workers) on the dimensions of burnout in a group of school teachers of Grade I-II serving in Catania, Sicily (Italy). We hypothesized that the representation of Professional Self would be inversely related to burnout: (H₁) the more teachers will express a positive representation of Professional Self, the more they will report low levels of *emotional exhaustion* and *depersonalization*, and high levels of *personal accomplishment*. In addition, we hypothesized that the representation of social climate would be inversely related to burnout: (H₂) the more teachers will express a positive representation of their pupils and co-workers, the more they will reach low levels of *emotional exhaustion* and *depersonalization*, and high levels of *personal accomplishment*. Differences for sex and years of teaching will be analyzed. For the first variable, the literature on male-female differences in burnout has produced inconsistent results regarding the strength and direction of this relationship (see meta-analysis of Purvanova & Muros, 2010), but on the basis of results obtained in our previous research (Sagone et al., 2010), we expected that women report higher levels of burnout than men. For the second variable, teachers who had more

experience reported lower levels of burnout than teachers with less years of experience (Lau, Yuen, & Chan, 2005; Demirel, Güler, Toktamis, Özdemir, & Sezer, 2005; Mukundan & Khandehroo, 2009).

2.1. Participants

The sample was formed by 106 Sicilian school teachers, divided in 35 men and 71 women, serving in junior and secondary high schools from Central Sicily, aged between 29 and 67 years ($M = 46.5$, $sd = 8.9$) and divided in two balanced groups for age: 53 junior teachers (age range: 29-45 years) and 53 senior teachers (age range: 46-67 years). For the years of teaching, 40,6% of sample works in this field from one to 11 years ($N=43$), 34% from 12 to 23 years ($N=36$), and 25,5% over 24 years ($N=27$).

2.2. Measures

2.2.1. Demographic information. All participants completed background questions related to gender, age, and years of teaching.

2.2.2. Semantic Differential Technique (Osgood, Suci & Tannenbaum, 1957). It is a measure, consisting of 36 pairs of bipolar adjectives for each concept, each evaluable on a 7-points Likert (with the intermediate value equal to 4), referred to Professional Self, Pupils, and Co-Workers (see De Caroli & Sagone, 2008). Internal consistency reliability resulted to be satisfactory with Cronbach's alpha ranged from .84 to .93.

2.2.3. Maslach Burnout Inventory (Maslach & Leiter, 1997; De Caroli & Sagone, 2008). The Italian version of MBI for teachers is a questionnaire useful to analyze the three components of burnout (*emotional exhaustion*-EE; *depersonalization*-DP; *personal accomplishment*-PA) in school context and it consists of 22 items for each of which the subjects express how many times they have placed themselves in proposed circumstances on a frequency scale ranging from 0=*never* to 6=*every day*: i.e., for the *emotional exhaustion* subscale, "Working with people all day is really a strain for me"; for the *depersonalization* subscale, "I worry that this job is hardening me emotionally"; for the *personal accomplishment* subscale (reverse scoring), "I feel I'm positively influencing other people's lives through my work". Each dimension of burnout has been divided in three levels (high, medium, low): for the *emotional exhaustion*, the highest score of 23 indicates the high level, from 14 to 22 the medium level, and from 0 to 13 the low level; for *depersonalization*, the highest score of 6 expresses the high level, from 3 to 5 the medium level, and from 0 to 2 the low level; finally, for the *personal accomplishment*, the highest score of 29 represents the low level, from 32 to 28 the medium level, and from 0 to 31 the high level.

2.3. Data analyses

The examination of the statistical significance of results was carried out using the SPSS 15.0 software (Statistical Package for Social Science) with the following tests: Chi-Square test, One-way ANOVA and *stepwise* linear regression. The statistical analyses compared scores by sex (men vs. women), age groups (junior vs. senior teachers), and years of teaching (1-11 years; 12-23 years; over 24 years) as independent variables using scores on the three dimensions of burnout and the semantic differentials as dependent variables.

3. Results

Professional Self and Social Climate Representation. Descriptive analyses have indicated that school teachers expressed a more positive representation of Professional Self ($M = 5.40$, $sd = .52$) than that of Co-workers ($M = 4.75$, $sd = .70$) and their Pupils ($M = 4.21$, $sd = .70$), $F_{(2,104)} = 115.31$, $p < .001$. A 2 (age groups) \times 2 (sex of teachers) \times 3 (years of teaching) analysis of variance was carried out on the mean scores obtained by participants on semantic differentials. There were no interactions of (i) sex and age groups and of (ii) sex and years of teaching, but there was significant interaction of (iii) age groups and years of teaching, $F_{(6,190)} = 2.95$, $p = .009$; $\eta^2 = .08$) only for

the representation of Pupils. These data showed that senior teachers with over 24 years of teaching valued more positively their pupils than junior and other colleagues.

Levels of burnout. As shown in Figure 1, results reached by the sample in the three dimensions of burnout (without significant differences for years of teaching and age) have indicated that:

- for EE – 17,9% of teachers expressed high levels ($N = 19$), 23,6% medium levels ($N = 25$), and 58,5% low levels in *emotional exhaustion* ($N = 62$) ($\chi^2=30,70$, $df\ 2$, $p<.001$); significant differences by sex were found ($\chi^2=8,86$, $df\ 2$, $p=.012$), since in low levels (men: 24,5% vs. women: 34%), the percentage of women and men was almost balanced, while in high (men: 0,9% vs. women: 17%) and medium levels (men: 7,5% vs. women: 16%) the percentage of women was markedly higher than that of men;
- for DP – 18,9% of teachers displayed high levels ($N = 20$), 12,3% medium levels ($N = 19$), and 68,8% low levels in *depersonalization* ($N = 73$) ($\chi^2=60,93$, $df\ 2$, $p<.001$), without significant differences for sex;
- for PA – 11,3% of teachers showed low levels ($N = 12$), 21,7% medium levels ($N = 23$), and 67% high levels in *personal accomplishment* ($N = 71$) ($\chi^2=55,72$, $df\ 2$, $p<.001$), also in this dimension without appreciable differences in relation to sex.

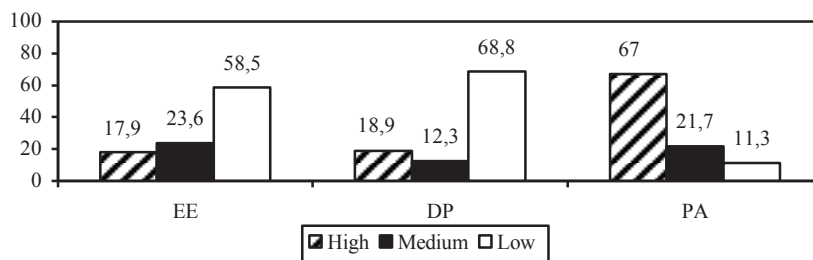


Figure 1. Distribution of sample in the three dimensions of burnout

Relations between Professional Self and Social Climate Representation and Levels of Burnout. As showed in Table 1, a 3 (concepts) x 3 (levels of EE) analysis of variance showed that teachers with a more positive representation of Professional Self and their pupils presented low levels in *emotional exhaustion* than those with high levels in this subscale.

Table 1. Burnout levels in EE and concepts – Total Sample ($N=106$)

Concepts	Burnout levels in EE	N	Mean	sd	Anova	Sum of Squares	df	Mean Square	F	Sig.
Pupils	High level	19	3.84	.78	Between Groups	3.517	2	1.758	3.822	.025
	Medium level	25	4.20	.61	Within Groups	47.380	103	.460		
	Low level	62	4.33	.67	Total	50.896	105			
	Total	106	4.21	.70						
Professional Self	High level	19	5.38	.58	Between Groups	2.968	2	1.484	6.036	.003
	Medium level	25	5.11	.47	Within Groups	25.325	103	.246		
	Low level	62	5.52	.48	Total	28.293	105			
	Total	106	5.40	.52						
Co-workers	High level	19	4.78	.87	Between Groups	2.419	2	1.209	2.516	.086
	Medium level	25	4.48	.57	Within Groups	49.504	103	.481		
	Low level	62	4.84	.68	Total	51.923	105			
	Total	106	4.74	.70						

A 3 (concepts) x 3 (levels of DP) analysis of variance showed that teachers with a more positive representation of Co-workers displayed low levels in *depersonalization* than those with medium levels in this subscale (Table 2).

Table 2. Burnout levels in DP and concepts – Total Sample (N=106)

Concepts	Burnout levels in DP	N	Mean	sd	Anova	Sum of Squares	df	Mean Square	F	Sig.
Pupils	High level	20	4.10	.83	Between Groups	2.024	2	1.012	2.133	.124
	Medium level	13	3.90	.68	Within Groups	48.873	103	.474		
	Low level	73	4.29	.65	Total	50.896	105			
	Total	106	4.21	.70						
Professional Self	High level	20	5.34	.62	Between Groups	.582	2	.291	1.082	.343
	Medium level	13	5.24	.56	Within Groups	27.711	103	.269		
	Low level	73	5.45	.48	Total	28.293	105			
	Total	106	5.40	.52						
Co-workers	High level	20	4.79	.62	Between Groups	4.669	2	2.334	5.088	.008
	Medium level	13	4.20	.83	Within Groups	47.254	103	.459		
	Low level	73	4.92	.77	Total	51.923	105			
	Total	106	4.74	.70						

A 3 (concepts) x 3 (levels of PA) analysis of variance showed that teachers with a more positive representation of Professional Self reached high-medium levels in *personal accomplishment* than those with low levels in this subscale (Table 3).

Table 3. Burnout levels in PA and concepts – Total Sample (N=106)

Concepts	Burnout levels in PA	N	Mean	sd	Anova	Sum of Squares	df	Mean Square	F	Sig.
Pupils	High level	71	4.23	.67	Between Groups	2.609	2	1.305	2.783	.067
	Medium level	23	4.35	.81	Within Groups	48.287	103	.469		
	Low level	12	3.79	.49	Total	50.896	105			
	Total	106	4.21	.70						
Professional Self	High level	71	5.45	.45	Between Groups	4.952	2	2.476	10.926	.000
	Medium level	23	5.55	.55	Within Groups	23.341	103	.227		
	Low level	12	4.81	.50	Total	28.293	105			
	Total	106	5.41	.52						
Co-workers	High level	71	4.77	.74	Between Groups	2.542	2	1.271	2.651	.075
	Medium level	23	4.88	.58	Within Groups	49.381	103	.479		
	Low level	12	4.33	.63	Total	51.923	105			
	Total	106	4.74	.70						

Liner regressions with stepwise method were used to analyze the effects of the positive representation of Professional Self and social climate (Pupils and Co-workers) on the three dimensions of burnout. Results showed that a good representation of Professional Self positively affected on the levels of *personal accomplishment* ($\beta=.287$, $t=3.05$, $p=.003$) and that of Pupils on the levels of *emotional exhaustion* ($\beta=-.254$, $t=2.67$, $p=.009$).

4. Conclusion

The findings of this investigation have provided a further contribution for a deeper knowledge of one of the most important factors which affect on the reduction of burnout in school context (De Caroli & Sagone, 2008). In fact, our results are partially supportive of hypotheses (H_1 and H_2), in sense that the more teachers expressed a positive representation of Professional Self-concept, the more they showed low levels of *emotional exhaustion* and high levels of *personal accomplishment* and the more teachers expressed a positive representation of Pupils and Co-workers the more they showed low levels of *emotional exhaustion* and *depersonalization*. These evidences confirmed the direction of phenomenon investigated by Friedman and Farber's research (1992) in elementary school teachers: the authors analyzed the relationship between levels of burnout and the various ways that teachers view themselves professionally, revealing negative correlations between professional self-concept and burnout.

Differences for sex and years of teaching have been analyzed, noticing that female teachers expressed higher levels of *emotional exhaustion* than male teachers, without significant differences on other dimensions. This datum is consistent with Maslach's research in which "women tend to experience more emotional exhaustion and to experience it more intensely than men" (2003, p.96): this evidence has been explained with the idea that "women are expected to be more oriented toward people than are men – they are supposed to be nurturing, sociable, and sensitive to people's feelings. Women are also supposed to be very emotional people themselves, while men are supposed to be hard, tough, and unemotional" (pp.96-97), according to gender stereotypes. For the years of teaching, results partially confirmed the data of previous studies (Lau et al., 2005; Demirel et al., 2005; Mukundan & Khandehroo, 2009), in sense that teachers with over 24 years of experience valued more positively their pupils than other colleagues.

From this study, therefore, it is possible to notice a further confirmation of the positive value of self-image as a defensive strategy against the risk of burnout at school.

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