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RESEARCH ARTICLE

Teachers' Burnout Profile: Risk and Protective Factors

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Abstract:

Background:

Burnout syndrome represents a factual risk for school teachers during their career. Several factors have been analyzed as stress sources enabled to menace teachers' general well-being; nevertheless, protective factors mostly related to their personal resources may differently characterize teachers' profiles.

Objectives:

The current study aimed to define different teachers' profiles based on their burnout levels and attitudes towards job (*i.e.*, job satisfaction, self-efficacy, attitudes toward professional growth, collective efficacy, positive and negative emotions, and hedonic balance).

attitudes towards job

Methods:

Participants were 266 school teachers (F=69.1%) ranging from 26 to 65 years old (M=48.95; SD=8.31), with teaching experience ranged from 1 to 41 years (M=21.72; SD=10.36). Data were collected by three self-report questionnaires: Copenhagen Burnout Inventory, Attitudes towards job questionnaires, School Collective efficacy.

Results:

Cluster analysis approach showed two distinct teacher's profiles named at-risk and non at-risk teachers. Main differences were due to burnout levels, attitudes toward job and extra-mansions at work. No differences were found related to teachers' socio-demographic characteristics and their years of experience.

Conclusions:

The two teachers' profiles resulting from the cluster analysis show several similarities, including collective efficacy and job satisfaction levels. Results are discussed in relation as to how teachers' positive emotions towards their job can work as protective factors against the risk of burnout.

Keywords: Teacher, Job Satisfaction, Self-Efficacy, Secondary School, Burnout, Protective Factors, Positive Emotions.

1. INTRODUCTION

1.1. Teachers' Burnout and Risk Factors

Psychological and educational research from the last twenty years have considered the role of teachers' burnout in theirdaily job at school [1 - 4]. According to Maslach [5 - 6], burnout is a multidimensional construct comprising

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emotional exhaustion, cynicism, and decrease of professional accomplishment. More specifically, it is a response to chronic emotional and interpersonal stressors at work, that significantly affects helping profession workers, as school teachers [1 - 3], [7 - 10]. Although the Maslach's approach on job burnout is widely adopted to analyze workers' strain, recently some authors have analyzed burnout as a work-related syndrome to be investigated with specific relation to its sources [11]. Effectively, teachers may experience suffering due to several reasons related to their personal life, work context, and relationships with students as well. By making distinction among sources, Kristensen and colleagues pointed out that the comparison of the personal burnout and work-related burnout scales may differentiate between people at risk for personal/family demands (*e.g.*, caring, daily life, personal health, etc.) and people at risk for work conditions (*e.g.*, conflicts with colleagues, students, etc.) [11]. With specific regard to teachers' work, it is important to note thatemotional requests are strongly involved in teaching profession and educational issues leading to consider caring-for-others the main part of their job [12 - 14]. With this regard, teachers-students relationships are significantly related with burnout risk. Students' misbehavior, indeed, was considered the main stressful events affecting teachers' well-being. According to several authors, teachers' negative emotional experience occurring when students misbehave was strongly related to teachers' burnout [1, 10, 15]. Consistently, some studies showed that the stronger the negative emotions, the more intense the burnout symptoms reported by the teachers [16 - 17] At the same time, teachers with high burnout levels differently perceive and express negative emotions, such as anger, shame and sadness, when compared to their colleagues with lower burnout [3]. Findings from a recent study showed that burned out teachers were more at-risk to mis-perceive negative emotions during a verbal conflict with their students [8 - 9]. More specifically, burned out teachers perceive one's own and students' negative emotions as more intense than non-burned out teachers.

Accordingly, teachers with low levels of social and emotional competence, as typically found out in burned out teachers, show low effectiveness in their daily job in terms of absenteeism, turnover, role conflict, low self-esteem and job satisfaction [18 - 21].

Furthermore, several authors have analyzed socio-demographic and career-related variables associated with at-risk teachers' profile [22 - 28]. Teachers' gender was the mainly studied variable, with mixed findings. While some studies didn't show significant associations, others reported that women had higher burnout risk than their men colleagues [16] [18] Furthermore, Shaheen and Mahmood found blended results showing that while female teachers were more exhausted, male teachers felt more depersonalized and less accomplished [27]. Similarly, teachers' age showed incoherent results: some studies showed that younger and less experienced teachers had higher burnout risk, conversely, others researchers showed the same findings for older and more experienced teachers [22, 25].

Regarding teachers' career, commonly studied variables included job roles and extra-mansions. Job roles, namely whether teacher is employed with regular class students' or with children with special needs, showed that special education teachers had high burnout risk and low job satisfaction when compared to regular class teachers. With regard to extra-mansions (or extra-role behaviors) it refers to behaviors and roles that go beyond the teaching role itself, usually not paid (teachers do not receive an extra reward for performing them) [29 - 30]. According to some authors the way teachers participate and respond to extra-mansions requests may be due to efficacy beliefs, work identification and personal engagement [29 - 30]. Extra mansions and related behaviors may influence (and be influenced by) how teachers perceive their own well-being and stress levels [29 - 30].

To sum up, the existing literature addressing teachers' burnout takes into account the role played by emotional demands in teaching profession, which may enhance their risk level to feel exhausted in their job. Moreover, there is a wide agreement to consider that teachers' burnout needs to be analyzed by considering their socio-demographic variables as well as job characteristics, even though findings remain inconsistent. At the same time, in order to deeply analyze teachers' risks, the recent research suggests taking into account teachers' positive resources able to protect them from risks factors. Effectively, it is possible to think that protective factors enhance teachers' abilities to cope with work-related stressors.

1.2. Protective Factors in Teachers' Burnout

Current literature indicates several positive dimensions that could act as protective factors towards burnout enhancing teachers' well-being and lowering the risk to develop a stress/burnout condition. More specifically, several studies addressed the associations between teachers' burnout levels and such dimensions including job satisfaction, self- and collective efficacy, positive attitudes toward their profession. Job satisfaction, namely how content an individual is about his/her job experience, plays a crucial role in promoting well-being [8, 9]. Similarly, self-efficacy at work may positively influence teachers' job experience [31 - 35]. Indeed, teachers with high levels of self-efficacy are more able

to ask and receive support from their colleagues and principals and manage students' behaviors [33 - 35, 39].Consistently, several studies, showed that higher self-efficacy is inversely associated to burnout [31, 33, 36, 39 - 40]. Teachers with high self-efficacy are less at-risk for anxiety, burnout, suffering from job demands and work-related stress in general and are more likely to perceive themselves as satisfied, motivated and creative professionals [31, 32, 41].

Nevertheless, the role played by protective factors may be not directly related to teaches' positive outcomes. Some studies indeed, showed that collective efficacy (namely, the belief that one's own organization is able to manage daily demands and tasks) did not reduce teachers' burnout levels neither promote their well-being [36, 42 - 43]. Effectively, while self-efficacy is more related to teachers' personal and psychological resources, collective efficacy is significantly affected by school-related variables, such as leadership styles and schools' mission and vision [44].

With regard to teachers' positive attitudes toward their profession, previous studies have analyzed teachers' engagement with their work as well as their reported positive relationships with students and colleagues., Engaged teachers show high motivation toward their professional tasks as well as attitude to enhance their professional abilities [14, 45]. Finally, positive attitudes toward their profession can be evaluated by taking into account teachers' positive relationships at school. More specifically, teachers with higher scores in social and emotional competence are more effective in relationships at school, with students and colleagues [46]. Moreover, they are able to regulate their own emotions and behaviors in emotion-related events at school, as well as to modulate their teaching practices and strategies according to the characteristics and abilities of their students [4, 47 - 49]. According to Diener and colleagues emotion regulation could be synthesized in terms of hedonic balance which refers to the balance between positive and negative emotions [50 - 52]. This construct is currently considered as the affective component of subjective well-being [53].

Overall, despite current literature indicates several potentially protective factors, high levels of each mentioned dimension (*i.e.*, job satisfaction, efficacy beliefs, emotion regulation/hedonic balance) don't automatically lead to lower perceived of professional burnout. Consequently, it is not certain that positive factors act as protective factors. It is possible, for example, that other conditions (*e.g.*, macro-social changes, organizational context, etc.) modify the protective power of some of the mentioned variables [54]. For these reasons, studying burnout profiles may help shedding new light about what differentiates teachers at risk for burnout from their colleagues, and better understanding how they perceive their job experiences [6].

2. METHODS

2.1. Aims and Hypotheses

The current study aimed to define different teachers' profiles based on their burnout levels and attitudes towards job. More specifically, we expected that burned out teachers showed lower levels of job satisfaction, self-efficacy, attitudes toward professional growth, collective efficacy, positive emotions (regarding both students and professional role) and hedonic balance (regarding both students and professional role), and higher levels of negative emotions (regarding both students and professional role). Furthermore, we expected that higher age, higher experience and being involved in extra-mansions would characterize at-risk teachers.

2.2. Participants

Two hundred and sixty-six secondary school teachers (F=69.1%) were involved. Teachers' age ranged from 26 to 65 years old (M=48.95; SD=8.31). Teachers' years of experience ranged from 1 to 41 years (M=21.72; SD=10.36). The most part of them were regular (87.1%) and permanent (83.1%) teachers, while the rest of the sample was a special education teacher (around 13%), with a temporary contract (around 16%). Teachers were recruited in two ways: 1) at school, because the principal agreed to take part to the study as whole community; 2) online, via forum, facebook pages, and/or mailing lists. Consequently, data were gathered face-to-face, during collective meeting with teachers in each school, or online, by Google modules. In each situation, teachers were instructed by informed consent that they could leave the study at any time, and they could ask the researchers for further information either in personal contact, or using a specific online module. Data were gathered from September 2015 to March 2016.

2.3. Instruments

Copenhagen Burnout Inventory (CBI [11, 22]). The CBI evaluates three dimensions of burnout level: 1) Personal

burnout, namely how often teachers felt drained, or without energy (6 items; ex., How often do you feel tired?; How often do you feel worn out?); 2) Job burnout, namely how often teachers felt their job were stressing them out (7 items; ex., Do you feel that every working hour is tiring for you?; Does your work frustrate you?) Students-related burnout, namely how often teachers thought working with students was exhausting (6 items; ex., Do you feel that you give more than you get back when you work with students?; Do you find it hard to work with students?). Overall, it is, thus, composed by 19 items measured with a 5-points Likert scale (from 1= Never, to 5=Always). Alpha's Cronbach were respectively: .889, .858, .813.

Attitudes towards job [45]. For the current study, we used the following sub-scales: job satisfaction, emotions related to relationships with students and to the professional role, attitudes towards professional growth, and self-efficacy. Job satisfaction is measured by 5 items: teachers were asked to define how much they agreed with each item on a 7-point Likert scale (1=Strongly disagree, 7=Strongly agree). Emotions related to relationships with students, as well as emotions related to the professional role are measured by 30 items: teachers were asked to define how frequently they perceived certain emotions, by using a 5-point Likert scale (1=Almost never, 5=Almost always). Starting from these scales, two further scales were measured: Hedonic balance related to Students (HB-Student) and Hedonic balance related to Professional role (HB-Professional Role), both measured as the difference between positive and negative emotions [50 - 52]. Consequently, when the hedonic balance is high, the respondent perceives more positive than negative emotions. Attitudes towards professional growth are measured by a 16-item scale: teachers were asked to define how much they thought they could improve specific teaching abilities thanks to experience or training opportunities, using a 9-points Likert scale (1=not improvable, 9=totally improvable). Self-efficacy is measured by 24-item: teachers were asked to evaluate how much they felt effective when approaching daily teaching tasks, on a 10-points Likert scale (1=not effective, 10=totally effective). Alpha's Cronbach were .835 to .975.

School collective efficacy scale [53]. This 9-item scale measures how much teachers feel their school is effective in managing daily educational tasks. Teachers were asked to evaluate their agreement with items on a 7-point Likert scale (1=Totally disagree, 7=Totally agree). Alpha's Cronbach was .952.

Finally, socio-demographic (*i.e.*, age and gender) and job-related characteristics were collected by *ad hoc* questions. With regard to job-related characteristics, teachers were asked about job role (regular class *vs*. special needs), enrollment positions (tenured *vs*. temporary), extra mansions at school (yes vs. no).

2.4. Analyses Plan

In order to distinguish two or more groups of teachers according to their burnout levels, a TwoStep Cluster analysis (SPSS, v. 20) was performed. TwoStep analysis is effective within social studies research, above all when inserted variables are continuous. This analysis unfolds in two steps. The first one forms pre-clusters of densely-packed records, by merging cases that have identical or very similar patterns of responding on the variables of interest. The main aim of this step is to reduce the number of records that will be compared in the formal clustering phase. The second step uses a standard agglomerative hierarchical clustering method to group these pre-clusters into distinct clusters. Each pre-cluster is merged with the two closest pre-clusters to create a single cluster. Subsequently, this cluster is merged with the next two closest pre-clusters to create a larger cluster, and so on, until all pre-clusters are merged into one cluster (that includes all the participants). The program then calculates Bayesian Information Criterion (BIC) values for all the produced cluster solutions, to identify how well each successive cluster solution includes distinctive clusters. Finally, it automatically calculates the optimal cluster number based on the point where an additional cluster does not appreciably improve the BIC value. The main benefits of the TwoStep method are that it manages large data sets more effectively than traditional methods (namely, k-means and expectation-maximization) (SPSS Inc., 2001).

In order to verify whether emerging cluster groups showed different profiles (*i.e.*, protective factors, demographic, and job-related variables) a set of ANOVAs (for continuous variables) and Chi-square analysis (for categorical variables) were run. Protective factors included: self and collective efficacy, job satisfaction, emotions related to job role and students, attitudes toward professional growth, hedonic balance. Demographic and job-related variables included: age, gender, years of experience, job role, job contract, extra mansions (other than teaching).

3. RESULTS

Table **1** shows means and standard deviations for the whole sample and for two teachers groups obtained by two-step cluster analysis which split sample in two groups: with low and high levels of personal, professional and student-related burnout which were labeled, respectively, "at-risk" teachers (N= 140) and "non-at-risk" teachers (N= 136).

Table 1. Burnout levels in the whole sample and by Cluster membership.

Scale	At-risk teachers (N=140)		Not-at-risk teachers (N=136)		Total	
	M	SD	M	SD	M	SD
Personal Burnout	20.15	3.55	12.32	3.50	16.29	5.27
Job Burnout	23.68	3.72	13.87	3.23	18.84	6.02
Student-related Burnout	20.26	4.31	12.98	4.35	16.67	5.66

Table **2** shows one-way ANOVA results. At-risk and not-at-risk teachers significantly differ for: self-efficacy ($F_{274,1}$=9.998; p=.002); positive emotions related to job role ($F_{274,1}$=5.846; p=.016); relationships with students ($F_{274,1}$=4.800; p=.029); and hedonic balance related to their professional role ($F_{274,1}$=2.189; p=.050). Moreover, at-risk and not-at-risk teachers didn't differ for: job satisfaction, attitudes toward professional growth, collective efficacy, negative emotions and hedonic balance regarding relationships with students and negative emotions regarding professional role (p>.05).

Table 2. Well-being perceptions by Cluster membership.

Scale	At-risk teachers (N=140)		Not-at-risk teachers (N=136)		ANOVA
	M	SD	M	SD	p
Job Satisfaction	4.16	1.11	4.43	1.29	n.s.
Self-efficacy	7.07	1.09	7.45	.85	.002
Attitudes toward professional growth	6.74	1.65	6.92	1.66	n.s.
Collective efficacy	38.07	12.37	40.38	13.16	n.s.
PE (relationships with students)	3.51	.69	3.68	.61	.029
NE (relationships with students)	1.71	.53	1.72	.53	n.s.
PE (professional role)	3.34	.81	3.56	.68	.016
NE (professional role)	1.92	.59	1.87	.61	n.s.
HB (relationships with students)	1.79	1.01	1.96	.96	n.s.
HB (professional role)	1.42	1.19	1.69	1.10	.050

Note. PE=Positive Emotions; NE=Negative Emotions; HB=Hedonic Balance.

Table **3** shows for each cluster group their means and frequencies differences for their socio-demographic and job-related variables obtained by one-way ANOVAs and Chi-Squares analysis.

Table 3. Demographic and job-related variables in the total sample and by Cluster membership.

Scale	At-risk teachers (N=140)		Not-at-risk teachers (N=136)		ANOVA
	M	SD	M	SD	p
Age	51.56	8.11	51.39	7.92	n.s.
Experience as a teacher (years)	22.55	9.87	20.86	10.85	n.s.
-	At-risk teachers (N=140)		Not-at-risk teachers (N=136)		X^2
Gender (F)	37.1%		35.2%		.239
Job role (class)	47.1%		44.5%		.896
Job contract (tenured)	45.6%		42.9%		2.343
Extra mansions (yes)	25%		22.8%		4.346*

Note. *=p<.05

No significant differences have been found for age and years of experience (p>.05). At the same time, Chi-Square analysis highlighted significant difference between at-risk and not-at-risk teachers for extra mansions (X^2=4.346, p<.05). Specifically, teachers which are employed in several professional mansions fall in at-risk cluster. Gender, job role and job contract, instead, did not significantly characterize teachers' profiles.

4. DISCUSSION

The present study aimed to define teachers' profiles on the basis of their burnout risk and attitudes towards job. We expected to find different at-risk teachers' profiles distinguished by their job satisfaction, self-efficacy, attitudes toward professional growth, collective efficacy, positive emotions (regarding both students and professional role) and hedonic balance (regarding both students and professional role), and higher levels of negative emotions (regarding both students and professional role).

Results partially confirmed our hypotheses. We identified two different profiles, named "at-risk" and "not-at-risk", on the basis of their burnout levels. Starting from these profiles, we analyzed more deeply the differences and similarities between at-risk and not-at-risk teachers, in order to define protective factors that are differently associated with their profiles .Techers' profiles significantly differed with regards to measures of self-efficacy, positive emotions and hedonic balance towards their professional role, and positive emotions in relationships with their students, which were all higher in teachers with low burnout level (not-at-risk profile). These results confirmed our hypothesis that at-risk teachers showed lower levels of self-efficacy, positive emotions (regarding students and professional role) and hedonic balance (regarding professional role). Surprisingly, no differences have been found between the two profiles regarding: job satisfaction, attitudes toward professional growth, negative emotions (towards both relationships with students and professional role), hedonic balance regarding relationships with students and collective efficacy. Conversely to our hypothesis, indeed, teachers at risk show the same levels in these attitudes towards job than not-at-risk colleagues.

Furthermore, our hypothesis about the role of demographic and career-related variables was partially confirmed. Indeed, while no differences have been found regarding age, gender, years of experience, job role, and kind of enrollment., at-risk teachers were more frequently engaged in the extra mansions than not-at-risk colleagues. The following discussion will focus on similarities and differences as emerged in our findings.

4.1. At-Risk and Non-At-Risk Teachers: Two Different Profiles

Focusing on the different patterns resulting from the cluster analysis, the main result was that high levels of positive emotions at school, positive relationships with students, hedonic balance towards professional role and self-efficacy protects from burnout; conversely to previous research, factors usually considered as protective, including (lower) negative emotions, job satisfaction, collective efficacy and attitudes toward professional growth, do not have a protective role towards burnout levels. Particularly interesting is the difference between the profiles regarding the protective role of positive emotions, opposed to the neutral role of negative ones.

On one hand, this is consistent with previous research, stating that positive and negative emotions are not two opposite ends of a bipolar continuum, but two independent factors with differentiated biological and behavioral patterns, and consequently, have an independent role on people's perceptions, beliefs and behaviors [55 - 56]. On the other hand, the differentiated role of positive and negative emotions may inform about the impact of perceived emotions at school on teachers' burnout. Several studies underline that people tend to show a negativity bias when it comes to perceive and notice emotions [56 - 57]. This implies that, to overcome the perception of negative emotions in daily life, in favor of positive ones, a conscious effort should be made [12, 58 - 59]. People with high levels of self-reported positive emotions seem to be more able to buffer negative ones and acknowledge personal resources and well-being states [60 - 61]. With regard to student-related positive emotions, it may be that positive relationships with students protect teachers in the not-at-risk profile from developing burnout. This is consistent with the idea that burnout is not due to the people (clients, patients, students) with whom professionals primarily relate when they are at work, but to the work conditions they experience. With regard to professional role-related positive emotions, according to previous studies, when teachers notice social and organizational resources within their job context, their risk to develop burnout symptoms is reduced [2, 62] On the contrary, perceiving high job demands (such as high workload or role stress and ambiguity) increases the risk to develop burnout symptoms [2, 62].Therefore, positive emotions, related to both relationships with students and job conditions, could act as a protective mechanism against the risk of developing burnout, Moreover, hedonic balance regarding professional role (but not student-teacher relationships) distinguished not-at-risk from at-risk teachers. Therefore, it seems that teachers at-risk for burnout have more difficulties regulating emotions related to professional role than not-at-risk colleagues. Consistently, higher levels of perceived positive emotions are linked to higher emotion regulation, namely the ability to maintain, decrease and increase positive and negative emotions [63 - 66]. Teachers with higher emotion regulation report higher personal accomplishment (i.e., higher quality of social relationships and lower burnout [63, 67 - 68]). Therefore, it is possible that at-risk and not-at-risk teachers differ in terms of noticing and reporting positive emotions, but not negative ones, not-at-risk teachers are more engaged in positive interactions and positive attitudes toward their profession, than at-risk colleagues. Not-at-risk teachers could perceive and evaluate more positively their relational and professional experience at work.

Another interesting point that distinguished at-risk from not-at-risk teachers was the engagement in extra-mansions at work. Previous studies showed that teachers' positive emotions are strongly related to teachers' commitment at school, in terms of motivation to engage in extra-mansions behaviors, personal initiative and pursuit of professional

quality [69]. Despite this, at-risk teachers who took part in our study are specifically characterized for covering extra-mansions at school. Previous research showed a connection between work overload, and specifically extra-mansions, and job-related stress [29 - 30]. Moreover, feeling overloaded at work may have a role in reducing the ability to maintain hedonic balance and positive emotions related to professional role. Some authors, indeed, showed that professional identification and related emotions are related to how teachers manage their workload [29 - 30]. Despite needing further researches, this point may shed new light about the effect of job overload not only on teachers' emotions or burnout, but even on how teachers perceive themselves as professionals (for example, with regard to their motivation to engage in extra-mansions, and the efficacy beliefs related to them). Finally, this research indicates another protective factor: self-efficacy. Our results show, consistently with previous researches that feeling effective as a professional protects from developing burnout symptoms [10, 31, 35, 70 - 71]. More specifically, some studies report that teachers with high self-efficacy tend to perceive students' misbehavior and work conditions as less relevant for their stress levels [31].

4.2. Similarities Between Teachers' Profiles

With regard to neutral factors, these included collective efficacy, job satisfaction and attitudes towards professional growth. Concerning collective efficacy, previous studies state that the professionals' beliefs about the capacity of one's own organization to prevent and manage regular and special tasks influence well-being, preventing burnout from developing [71 - 72]. At the same time, recent studies showed that collective efficacy does not always have a role in promoting teachers' wellbeing [36]. Several considerations could be done with this regard. Firstly, according to Bandura context and circumstances may have a role in constructing efficacy beliefs, as the conditions in which a task is performed may influence the outcomes [42]. With regards to the specific contemporary context in which Italian teachers work, we launch the hypothesis that events at the macro-level within Italian education reforms might have somehow influenced these results. Data were gathered right after the implementation of a new educational reform (promulgated in July 2015) that highly impacted Italian schools both as regards the didactic programming and the schools' organization. Among the most important changes, schools have been required to find trainings (consistent with the studied subject) for the students from the last two years in firms, organizations or associations, to be done during school hours; school principals are asked to hire teachers autonomously; chairs are divided among a higher number of teachers. Secondly, as reported by Malinen and Savolainen the general organization of the school system may have a role in predicting the effects of collective efficacy on teachers' well-being perceptions [36]. Bracci reported that the increasing autonomy of public Italian schools from ministry and regional authorities is creating a confusion web of accountability, in which individualistic and collectivistic cultures and practices are merge together [73]. It is possible that the characteristics of the Italian educational system make individual-level efficacy more significant in influencing burnout perceptions. Further researches are needed in order to verify whether contextual variables may influence teachers' sense of community and, consequently, how effective they perceive their school as a community.

With regard to job satisfaction, it is well-established its association with burnout [74 - 75]. Effectively, the more teachers' experienced distress, the more they feel less involved and satisfied with their job. Despite this, in the current study at-risk teachers are not significantly less satisfied than not-at-risk colleagues. These findings suggest that, for this sample of Italian teachers, job satisfaction is not a discriminating variable for burnout risk. Again, information about the Italian social context may shed new light on this result. Apart from dissatisfaction coming from managing and implementing the recent reform, OECD TALIS report (2013) showed that Italian teachers perceive their professional role as underestimated within the society. Recent studies showed that when teachers perceive poor social recognition, they are dissatisfied about their job [76].

Teachers' attitudes toward professional growth do not have a role in differentiating at-risk from not-at-risk teachers, too. At the best of our knowledge, there are no previous studies acknowledging the role of this variable in preventing stress or burnout. Despite this, some authors suggest that professional education may influence teachers' well-being. Further researches are needed in order to better conceptualize teachers' interpretation of their professional growth [77].

Overall, this study suggests that when addressing teachers' burnout, it is necessary to take into account risk factors as well as positive and protective dimensions in a wider perspective, in which contextual variables may play a significant role. Recently, some authors have analyzed teachers' burnout from an ecological point of view [78 - 79]. In this perspective proximal and distal systems of teachers' job may differently impact teachers' burnout development. Future research should consider how teachers' characteristics (*e.g.*, socio-demographic variables, individual's emotional competence, professional career) interact with school-related factors (as proximal system) as well as society dimensions

linked to teaching profession (as distal system).

LIMITATIONS

This study has several limitations. A first consideration must be made about contextual influences. As stated above, some results could be better deepened and interpreted in light of the examination of contextual variables as, particularly important for the contemporary Italian teachers, the recent implementation of the educational reform. In this regard, a longitudinal study would inform better about the effects of the socio-political changes on teachers' perceptions of their profession and well-being at school. Moreover, it is possible that the multiple methods used to gather data may have had an impact on participants' answers to self-report questionnaires: a more homogeneous method would have eliminated this possible bias.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

Not applicable.

HUMAN AND ANIMAL RIGHTS

No Animals/Humans were used for studies that are base of this research.

CONSENT FOR PUBLICATION

Not applicable.

CONFLICT OF INTEREST

The authors declare no conflict of interest, financial or otherwise.

ACKNOWLEDGEMENTS

Declared none.

REFERENCES

[1]   Chang ML. Toward a theoretical model to understand teacher emotions and teacher burnout in the context of student misbehavior: Appraisal, regulation and coping. Motiv Emot 2013; 37(4): 799-817.
        [http://dx.doi.org/10.1007/s11031-012-9335-0]

[2]   Hakanen J, Bakker AB, Schaufeli WB. Burnout and work engagement among teachers. J Sch Psychol 2006; 43: 495-513.
        [http://dx.doi.org/10.1016/j.jsp.2005.11.001]

[3]   Sutton RE, Wheatley KF. Teachers' emotions and teaching: A review of the literature and directions for future research. Educ Psychol Rev 2003; 15(4): 327-58.
        [http://dx.doi.org/10.1023/A:1026131715856]

[4]   Weiner B. Intrapersonal and interpersonal theories of motivation from an attributional perspective. Educ Psychol Rev 2000; 12(1): 1-14.
        [http://dx.doi.org/10.1023/A:1009017532121]

[5]   Maslach C. Burnout. Hum Behav 1976; 9: 16-22.
        [http://dx.doi.org/10.1037/0033-2909.111.3.490]

[6]   Maslach C, Leiter MP. Understanding the burnout experience: Recent research and its implications for psychiatry. World Psychiatry 2016; 15(2): 103-11.
        [http://dx.doi.org/10.1002/wps.20311] [PMID: 27265691]

[7]   Fiorilli C, De Stasio S, Di Chiacchio C, Pepe A, Salmela-Aro K. School burnout, depressive symptoms and engagement: Their combined effect on student achievement. Int J Educ Res 2017; 84: 1-12.
        [http://dx.doi.org/10.1016/j.ijer.2017.04.001]

[8]   Fiorilli C, Albanese O, Gabola P, Pepe A. Teachers' emotional competence and social support: Assessing the mediating role of teacher burnout. Scand J Educ Res 2017; 61(2): 127-38.
        [http://dx.doi.org/10.1080/00313831.2015.1119722]

[9]   Fiorilli C, Pepe A, Buonomo I, Albanese O. At-risk teachers: The association between burnout levels and emotional appraisal processes. The Open Psychol J 2017; 10: 127-39.
        [http://dx.doi.org/10.2174/1874350101710010127]

[10]   Chang ML. An appraisal perspective of teacher burnout: Examining the emotional work of teachers. Educ Psychol Rev 2009; 21(3): 193-218.
        [http://dx.doi.org/10.1007/s10648-009-9106-y]

[11]   Kristensen TS, Borritz M, Villadsen E, Christensen K. The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. Work Stress 2005; 19: 192-207.
[http://dx.doi.org/10.1080/02678370500297720]

[12]   Johnson SM, Berg JH, Donaldson ML. Who stays in teaching and why?: A review of the literature on teacher retention Project on the Next Generation of Teachers. Harvard Graduate School of Education 2005.

[13]   Morse G, Salyers MP, Rollins AL, Monroe-DeVita M, Pfahler C. Burnout in mental health services: a review of the problem and its remediation. Adm Policy Ment Health 2012; 39(5): 341-52.
[http://dx.doi.org/10.1007/s10488-011-0352-1] [PMID: 21533847]

[14]   Schaufeli WB, Taris TW, Van Rhenen W. Workaholism, burnout, and work engagement: three of a kind or three different kinds of employee well‐being? Appl Psychol 2008; 57(2): 173-203.
[http://dx.doi.org/10.1111/j.1464-0597.2007.00285.x]

[15]   Tsouloupas CN, Carson RL, Matthews R, Grawitch MJ, Barber LK. Exploring the association between teachers' perceived student misbehaviour and emotional exhaustion: The importance of teacher efficacy beliefs and emotion regulation. Educ Psychol 2010; 30(2): 173-89.
[http://dx.doi.org/10.1080/01443410903494460]

[16]   Di Chiacchio C, De Stasio S, Fiorilli C. Examining how motivation toward science contributes to omitting behaviours in the Italian PISA 2006 sample. Learn Individ Differ 2016; 50: 56-63.
[http://dx.doi.org/10.1016/j.lindif.2016.06.025]

[17]   Curchod-Ruedi D, Doudin P A, Moreau J. La compréhension des émotions à l'école. Approches affectives, métacognitives et cognitives de la compréhension 2010; 149-67.

[18]   Benevene P, Fiorilli C. Burnout syndrome at school: A comparison study with lay and consecrated Italian teachers. Mediterr J Soc Sci 2015; 6(1): 501.

[19]   Cano-García FJ, Padilla-Muñoz EM, Carrasco-Ortiz MÁ. Personality and contextual variables in teacher burnout. Pers Individ Dif 2005; 38(4): 929-40.
[http://dx.doi.org/10.1016/j.paid.2004.06.018]

[20]   Goddard R, Goddard M. Beginning teacher burnout in Queensland schools: Associations with serious intentions to leave. Aust Educ Res 2006; 33(2): 61-75.
[http://dx.doi.org/10.1007/BF03216834]

[21]   Maslach C, Schaufeli WB, Leiter MP. Job burnout. Annu Rev Psychol 2001; 52(1): 397-422.
[http://dx.doi.org/10.1146/annurev.psych.52.1.397] [PMID: 11148311]

[22]   Borrelli I, Benevene P, Fiorilli C, D'Amelio F, Pozzi G. Working conditions and mental health in teachers: a preliminary study. Occup Med (Lond) 2014; 64(7): 530-2.
[http://dx.doi.org/10.1093/occmed/kqu108] [PMID: 25145485]

[23]   Braun AC, Carlotto MS. Burnout Syndrome: Comparative study between teacher of special education and regular education. Psicol Esc Educ 2014; 18(1): 125-32.
[http://dx.doi.org/10.1590/S1413-85572014000100013]

[24]   Embich JL. The relationship of secondary special education teachers' roles and factors that lead to professional burnout. Teach Educ Spec Educ 2001; 24(1): 58-69.
[http://dx.doi.org/10.1177/088840640102400109]

[25]   Lau PY, Yuen MT, Chan RC. Do demographic characteristics make a difference to burnout among hong kong secondary school teachers? Soc Indic Res 2005; 71(1-3): 491-516.
[http://dx.doi.org/10.1007/s11205-004-8033-z]

[26]   Pas ET, Bradshaw CP, Hershfeldt PA. Teacher- And school-level predictors of teacher efficacy and burnout: Identifying potential areas for support. J Sch Psychol 2012; 50(1): 129-45.
[http://dx.doi.org/10.1016/j.jsp.2011.07.003] [PMID: 22386082]

[27]   Shaheen F, Mahmood N. Demographic variables as determinants of emotional burnout among public school teachers. J Res & Ref in Edu 2016; 10(1): 37-50. [JRRE].

[28]   Stempien LR, Loeb RC. Differences in job satisfaction between general education and special education teachers: Implications for retention. Remedial Spec Educ 2002; 23(5): 258-67.
[http://dx.doi.org/10.1177/07419325020230050101]

[29]   Somech A, Drach-Zahavy A. Understanding extra-role behavior in schools: The relationships between job satisfaction, sense of efficacy, and teachers' extra-role behavior. Teach Teach Educ 2000; 16(5): 649-59.
[http://dx.doi.org/10.1016/S0742-051X(00)00012-3]

[30]   Hannam RL, Jimmieson NL. The relationship between extra-role behaviours and job burnout for primary school teachers: A preliminary model and development of an organisational citizenship behaviour scale. Abstracts of Papers to be. 1-17.

[31]   Betoret FD. Stressors, self-efficacy, coping resources, and burnout among secondary school teachers in Spain. Educ Psychol 2006; 26(4): 519-39.

[http://dx.doi.org/10.1080/01443410500342492]

[32]   Aldridge JM, Fraser BJ. Teachers' views of their school climate and its relationship with teacher self-efficacy and job satisfaction. Learn Environ Res 2015; 19(2): 291-307.
[http://dx.doi.org/10.1007/s10984-015-9198-x]

[33]   Briones E, Tabernero C, Arenas A. Job satisfaction of secondary school teachers: Effect of demographic and psycho-social factors. Rev Psicol Trab Organ 2010; 26(2): 115-22.
[http://dx.doi.org/10.5093/tr2010v26n2a3]

[34]   Brouwers A, Evers WJ, Tomic W. Self-efficacy in eliciting social support and burnout among secondary-school teachers. J Appl Soc Psychol 2001; 31(7): 1474-91.
[http://dx.doi.org/10.1111/j.1559-1816.2001.tb02683.x]

[35]   Evers WJ, Brouwers A, Tomic W. Burnout and self-efficacy: a study on teachers' beliefs when implementing an innovative educational system in the Netherlands. Br J Educ Psychol 2002; 72(Pt 2): 227-43.
[http://dx.doi.org/10.1348/000709902158865] [PMID: 12028610]

[36]   Malinen OP, Savolainen H. The effect of perceived school climate and teacher efficacy in behavior management on job satisfaction and burnout: A longitudinal study. Teach Teach Educ 2016; 60: 144-52.
[http://dx.doi.org/10.1016/j.tate.2016.08.012]

[37]   Choy D, Wong AF, Goh KC, Ling Low E. Practicum experience: Pre-service teachers' self-perception of their professional growth. Innov Educ Teach Int 2014; 51(5): 472-82.
[http://dx.doi.org/10.1080/14703297.2013.791552]

[38]   Spector PE. Job satisfaction: Application, assessment, causes and consequences. Thousand Oaks, CA: SAGE 1997.

[39]   Schwarzer R, Hallum S. Perceived teacher self☐efficacy as a predictor of job stress and burnout: Mediation analyses. Appl Psychol 2008; 57(s1): 152-71.
[http://dx.doi.org/10.1111/j.1464-0597.2008.00359.x]

[40]   Skaalvik EM, Skaalvik S. Teacher self-efficacy and teacher burnout: A study of relations. Teach Teach Educ 2010; 26(4): 1059-69.
[http://dx.doi.org/10.1016/j.tate.2009.11.001]

[41]   Canrinus ET, Helms-Lorenz M, Beijaard D, Buitink J, Hofman A. Self-efficacy, job satisfaction, motivation and commitment: Exploring the relationships between indicators of teachers' professional identity. Eur J Psychol Educ 2012; 27(1): 115-32.
[http://dx.doi.org/10.1007/s10212-011-0069-2]

[42]   Bandura A. Self-efficacy: The exercise of control. Basingstoke, UK: Macmillan 1997.

[43]   Maddux JE. Self-efficacy: The power of believing you can. In: Snyder CR, Lopez SJ, Eds. Oxford handbook of positive psychology. Oxford, UK: Oxford University Press 2009; pp. 277-87.
[http://dx.doi.org/10.1093/oxfordhb/9780195187243.013.0031]

[44]   Lowenstein LF. Teacher stress leading to burnout: Its prevention and cure. Education Today 1991; 41: 12-6.

[45]   Moè A, Pazzaglia F, Friso G. Metacognitive questionnaires for teachers. Trento, Italy: Erickson 2010.

[46]   Jennings PA, Greenberg MT. The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. Rev Educ Res 2009; 79(1): 491-525.
[http://dx.doi.org/10.3102/0034654308325693]

[47]   Fiorilli C, Gabola P, Pepe A, *et al.* The effect of teachers' emotional intensity and social support on burnout syndrome. A comparison between Italy and Switzerland. Revue Européenne de Psychologie Appliquée. Eur Rev Appl Psychol 2015; 65(6): 275-83.
[http://dx.doi.org/10.1016/j.erap.2015.10.003]

[48]   Lasky S. A sociocultural approach to understanding teacher identity, agency and professional vulnerability in a context of secondary school reform. Teach Teach Educ 2005; 21(8): 899-916.
[http://dx.doi.org/10.1016/j.tate.2005.06.003]

[49]   Efklides A. Metacognition and affect: What can metacognitive experiences tell us about the learning process? Educ Res Rev 2006; 1(1): 3-14.
[http://dx.doi.org/10.1016/j.edurev.2005.11.001]

[50]   Diener E. Assessing subjective well-being: Progress and opportunities. Soc Indic Res 1994; 31(2): 103-57.
[http://dx.doi.org/10.1007/BF01207052]

[51]   Diener E, Suh EM, Eds. Culture and subjective well-being. US: MIT press 2000.

[52]   Diener E, Suh EM, Lucas RE, Smith HL. Subjective well-being: Three decades of progress. Psychol Bull 1999; 125(2): 276-302.
[http://dx.doi.org/10.1037/0033-2909.125.2.276]

[53]   Caprara GV, Steca P. The contribution of self–regulatory efficacy beliefs in managing affect and family relationships to positive thinking and hedonic balance. J Soc Clin Psychol 2006; 25(6): 603-27.
[http://dx.doi.org/10.1521/jscp.2006.25.6.603]

[54]   Burke N J, Bird J A, Clark M A, *et al.* Social and cultural meanings of self-efficacy. Health Education & Behavior 2009; 36: 111S-28S.(suppl 5)

[55]   Watson D, Pennebaker JW. Health complaints, stress, and distress: Exploring the central role of negative affectivity. Psychol Rev 1989; 96(2): 234-54.
[http://dx.doi.org/10.1037/0033-295X.96.2.234] [PMID: 2710874]

[56]   Baumeister RF, Bratslavsky E, Finkenauer C, Vohs KD. Bad is stronger than good. Rev Gen Psychol 2001; 5(4): 323.
[http://dx.doi.org/10.1037/1089-2680.5.4.323]

[57]   Rozin P, Royzman EB. Negativity bias, negativity dominance, and contagion. Pers Soc Psychol Rev 2001; 5(4): 296-320.
[http://dx.doi.org/10.1207/S15327957PSPR0504_2]

[58]   Fredrickson BL, Mancuso RA, Branigan C, Tugade MM. The undoing effect of positive emotions. Motiv Emot 2000; 24(4): 237-58.
[http://dx.doi.org/10.1023/A:1010796329158] [PMID: 21731120]

[59]   Garland EL, Fredrickson B, Kring AM, Johnson DP, Meyer PS, Penn DL. Upward spirals of positive emotions counter downward spirals of negativity: insights from the broaden-and-build theory and affective neuroscience on the treatment of emotion dysfunctions and deficits in psychopathology. Clin Psychol Rev 2010; 30(7): 849-64.
[http://dx.doi.org/10.1016/j.cpr.2010.03.002] [PMID: 20363063]

[60]   Fredrickson BL. What good are positive emotions? Rev Gen Psychol 1998; 2(3): 300-19.
[http://dx.doi.org/10.1037/1089-2680.2.3.300] [PMID: 21850154]

[61]   Fredrickson BL. The role of positive emotions in positive psychology. The broaden-and-build theory of positive emotions. Am Psychol 2001; 56(3): 218-26.
[http://dx.doi.org/10.1037/0003-066X.56.3.218] [PMID: 11315248]

[62]   Lorente Prieto L, Salanova Soria M, Martínez Martínez I, Schaufeli W. Extension of the Job Demands-Resources model in the prediction of burnout and engagement among teachers over time. Psicothema 2008; 20(3): 354-60.
[PMID: 18674427]

[63]   Brackett MA, Palomera R, Mojsa Kaja J, Reyes MR, Salovey P. Emotion regulation ability, burnout, and job satisfaction among British secondary□school teachers. Psychol Sch 2010; 47(4): 406-17.

[64]   Gross JJ. The emerging field of emotion regulation: An integrative review. Rev Gen Psychol 1998; 2(3): 271-99.
[http://dx.doi.org/10.1037/1089-2680.2.3.271]

[65]   Gross JJ, John OP. Wise emotion regulation.The wisdom of feelings: Psychological processes in emotional intelligence. New York: Guilford 2002; pp. 297-318.

[66]   Sutton RE, Harper EM. Teachers' emotion regulation.The new international handbook of teachers and teaching. New York: Springer 2009; pp. 389-401.
[http://dx.doi.org/10.1007/978-0-387-73317-3_25]

[67]   Lopes PN, Salovey P, Coté S, Beers M. Emotion regulation abilities and the quality of social interaction. Emotion 2005; 5(1): 113-8.
[http://dx.doi.org/10.1037/1528-3542.5.1.113] [PMID: 15755224]

[68]   Ghanizadeh A, Royaei N. Emotional facet of language teaching: Emotion regulation and emotional labor strategies as predictors of teacher burnout. International Journal of Pedagogies and Learning 2015; 10(2): 139-50.
[http://dx.doi.org/10.1080/22040552.2015.1113847]

[69]   Jo SH. Teacher commitment: Exploring associations with relationships and emotions. Teach Teach Educ 2014; 43: 120-30.
[http://dx.doi.org/10.1016/j.tate.2014.07.004]

[70]   Schwerdtfeger A, Konermann L, Schönhofen K. Self-efficacy as a health-protective resource in teachers? A biopsychological approach. Health Psychol 2008; 27(3): 358-68.
[http://dx.doi.org/10.1037/0278-6133.27.3.358] [PMID: 18624601]

[71]   Skaalvik EM, Skaalvik S. Dimensions of teacher self-efficacy and relations with strain factors, perceived collective teacher efficacy, and teacher burnout. Journal of Educational Psychology, 99, 611–625. Skaalvik, E. M., & Skaalvik, S. (2009). Does school context matter? Relations with teacher burnout and job satisfaction. Teach Teach Educ 2007; 25(3): 518-24.
[http://dx.doi.org/10.1016/j.tate.2008.12.006]

[72]   Caprara GV, Barbaranelli C, Borgogni L, Steca P. Efficacy beliefs as determinants of teachers' job satisfaction. J Educ Psychol 2003; 95: 821-32.
[http://dx.doi.org/10.1037/0022-0663.95.4.821]

[73]   Bracci E. Autonomy, responsibility and accountability in the Italian school system. Crit Perspect Account 2009; 20(3): 293-312.
[http://dx.doi.org/10.1016/j.cpa.2008.09.001]

[74]   Klassen RM, Usher EL, Bong M. Teachers' collective efficacy, job satisfaction, and job stress in cross-cultural context. J Exp Educ 2010; 78(4): 464-86.
[http://dx.doi.org/10.1080/00220970903292975]

[75]   Skaalvik EM, Skaalvik S. Teacher job satisfaction and motivation to leave the teaching profession: Relations with school context, feeling of belonging, and emotional exhaustion. Teach Teach Educ 2011; 27(6): 1029-38.
[http://dx.doi.org/10.1016/j.tate.2011.04.001]

[76]   Okeke CI, Mtyuda PN. Teacher Job Dissatisfaction: Implications for Teacher Sustainability and Social Transformation. J of Teach Edu

Sustainability 2017; 19(1): 54-68.
[http://dx.doi.org/10.1515/jtes-2017-0004]

[77]   Block AA. Why should I be a teacher? J Teach Educ 2008; 59(5): 416-27.
[http://dx.doi.org/10.1177/0022487108324327]

[78]   Brunsting NC, Sreckovic MA, Lane KL. Special education teacher burnout: A synthesis of research from 1979 to 2013. Educ Treat Child 2014; 37(4): 681-711.
[http://dx.doi.org/10.1353/etc.2014.0032]

[79]   Betoret FD. Self-efficacy, school resources, job stressors and burnout among Spanish primary and secondary school teachers: a structural equation approach. Educ Psychol 2009; 29(1): 45-68.
[http://dx.doi.org/10.1080/01443410802459234]