

BURNOUT IN SPECIAL NEEDS TEACHERS AT KINDERGARTEN AND PRIMARY SCHOOL: INVESTIGATING THE ROLE OF PERSONAL RESOURCES AND WORK WELLBEING

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The purpose of the current study was to examine, within an integrative predictive model, the relative contributions of sociodemographic variables, personal resources, and work wellbeing to teacher burnout. The research was conducted with special education teachers at Italian preschools—a context in which few previous studies have been carried out—and primary schools. A cross-sectional survey-based study with a sample of 194 kindergarten and primary school teachers was conducted. The results indicated that teachers' happiness at school and job satisfaction incrementally predicted variance in personal, work-related, and student-related burnout, even after controlling for the effects of sociodemographic factors and personal resources. Furthermore, the final integrative predictive model was similar for both kindergarten and primary teachers. © 2017 Wiley Periodicals, Inc.

INTRODUCTION

The literature indicates that burnout is extensively experienced among professionals providing social and human services, including teachers at all levels of education (Benevene, & Fiorilli, 2015; Skaalvik & Skaalvik, 2010). The principal risk factors for teachers derive from being required to cope with learning difficulties and aggressive behavior on the part of their students, conflict among colleagues, problematic relationships with parents, time pressures, and large classes. Teachers experiencing high levels of burnout, display less sympathy toward their students, are less tolerant of disruption in the classroom, and are more likely to experience problems with their health, personal well-being, and commitment to their work (Fernet, Guay, Senécal, & Austin, 2012; Hakanen, Bakker, & Schaufeli, 2006; Swider & Zimmerman, 2010).

In relation to special needs teachers in particular, Küçüküleymanoğlu (2011) analyzed whether self-reported burnout in Turkish special education teachers working with students affected by mental disability was influenced by gender, family status, years' teaching experience, educational background, or school type. They found that these teachers experienced higher levels of burnout, reported additional stress, and felt more exhausted and depersonalized than their counterparts working in mainstream classrooms.

More broadly, a review of research conducted between 1979 and 2013 found that the most salient factors in the burnout reported by special education teachers included teaching experience, student disability, role conflict, role ambiguity, and lack of administrative support (Brunsting, Sreckovic, & Lane, 2014). Indeed, the nature of special education teaching is that it requires full use of specialized skills and resources to cater for different levels of ability and meet increasingly diverse socioemotional and learning needs on the part of students (De Stasio, Fiorilli, & Di Chiacchio, 2014).

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In the Italian education system, children with disabilities are placed in mainstream classes, and special education teachers co-teach in the classroom with mainstream colleagues. Programs and strategies for including children with special needs are part of the overall school curriculum. Integration of disabled children is achieved via projects involving teachers, experts, and practitioners. Nevertheless, there are few adequate and well-established trainings for teachers working with children with special needs to cope with these requirements (De Stasio, Fiorilli, Chiarito, & Uusitalo-Malmivaara, 2015). It should be noted that in Italy there is no real reward system for teachers. Career prospects are limited, and all teachers, regardless of whether they teach in a kindergarten or in a high school, have fixed salary increases, linked only to their seniority. Overall, the salary levels of Italian teachers are lower than the Organisation for Economic Co-operation and Development (OECD) average (OECD, 2013). Recently, two new perspectives have been introduced into the debate on the multiple sources of teacher burnout syndrome, both of which concern the role of positive and protective factors in reducing teachers' risk of burnout syndrome (e.g., Betoret, 2006). The first of these posits a role for teachers' personal resources, whereas the second examines the effects of work well-being (e.g., Schwarzer & Hallum, 2008; Skaalvik & Skaalvik, 2010; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). Nevertheless, to the best of our knowledge, no studies have analyzed the predictive role of personal resources and teacher well-being in relation to burnout, in a sample of kindergarten teachers assigned to children with special needs. Although U.S. teachers in preschool and Pre-K, after the implementation of the federal government's No Child Left Behind (NCLB) Act are experiencing increased pressure to improve student academic performance (Brown, & Lan, 2015), Italian kindergarten teachers are required to nurse and mother their students on top of their regular behavior management and instructional duties (Bullough, Hall-Kenyon, & MacKay, 2012; Tsai, Fung, & Chow, 2006).

Teacher Burnout Syndrome: Sociodemographic Variables

Burnout is characterized by emotional exhaustion, depersonalization, and reduced personal accomplishment and caused by long-term occupational stress (Maslach, Jackson, & Leiter, 1996; Schaufeli, Leiter, & Maslach, 2008). Kristensen, Borritz, Villadsen, and Christensen (2005) have conceptualized teacher burnout as a dynamic process affecting personal life, work context, and relationships with students. Personal burnout is the physical and psychological fatigue and exhaustion experienced by an individual—regardless of their work or occupational status. Work-related burnout is defined as the degree of physical and psychological fatigue and exhaustion perceived by the teacher specifically in relation to his/her work. Finally, student-related burnout refers to the physical and psychological fatigue and exhaustion that is perceived by the teacher in relation to his/her work with students.

Since the first study on teachers' burnout syndrome (Maslach et al., 1996), demographic variables have emerged as key factors accounting for differences in teachers' levels of burnout. Studies on teacher burnout have not offered consistent or conclusive results concerning the role of gender in relation to either the three subscales or the overall Maslach Burnout Inventory (MBI) (exhaustion, depersonalization, and accomplishment). For example, two different studies (Anderson, & Iwanicki, 1984; Borg, & Riding, 1991) found that male teachers reported greater stress than female teachers on all three measures of MBI. On the contrary, Toker (2011) reported no significant difference between male and female teachers on the dimension of personal accomplishment, whereas both gender and age were salient differentiating variables for emotional exhaustion. With regard to other demographic variables, younger teachers have been reported to score significantly higher on burnout dimensions than older ones (e.g., Maslach et al., 1996). On the other hand, Anderson and Iwanicki (1984) found no age-related differences in exhaustion and depersonalization, an outcome

confirmed by several recent studies (e.g., Innstrand, Langballe, Falkum, & Aasland, 2011; Zabel & Zabel, 2001). Marital status and grade taught have also been identified as factors implicated in teacher burnout (e.g., Russell, Altmaier, & Van Velzen, 1987), with married persons reporting less exhaustion and depersonalization than single persons, and secondary school teachers perceiving themselves as more burned out than teachers from elementary schools. Inexperienced teachers, especially those who have been teaching for 5 years or less, score more highly on the emotional exhaustion dimension burnout than their more experienced counterparts. Furthermore, some studies have found that younger teachers are more vulnerable to burnout syndrome and its risk factors (Lau, Yuen, & Chan, 2005).

Recently, a large-scale survey of 1,494 Italian teachers (De Stasio, Di Chiacchio, Benevene, Fiorilli, & Iezzi, 2015; Fiorilli et al., 2015) found significant associations between burnout syndrome, as assessed by the Copenhagen Burnout Inventory (CBI) (Kristensen et al., 2005), and teachers' demographic variables. More specifically, teachers with higher levels of burnout syndrome were older, held a degree, had a longer number of years' teaching experience, and taught at secondary schools. Given the mixed results some authors have proposed analyzing other factors such as personal resources and work well-being (Evers, Tomic, & Brouwers, 2004).

Teachers' Personal Resources: Self-Efficacy and Self-Esteem

Despite the fact that special education teachers are at high risk of burnout syndrome, they may develop positive attitudes toward their jobs. Personal resources are aspects of the self that are often linked to resiliency and refer to individuals' sense of their ability to remain in control, cope with stressful situations, and contribute successfully to their environment (Cummins, & Nistico, 2002; De Caroli, & Sagone, 2012). According to Bandura (1989), personal resources also include self-efficacy and self-esteem, which have been recognized by Hobfoll (2002) as fundamental components of individual adaptability. More specifically, self-efficacy refers to teachers' perceptions of their own competence in carrying out their professional duties and achieving key educational objectives, such as learning facilitation and student development (Schwarzer, & Hallum, 2008; Skaalvik & Skaalvik, 2010). Tschannen-Moran and Hoy (2001) defined three domains of teacher self-efficacy (TSE): student engagement, which refers to teaching behaviors designed to elicit students' active engagement in the learning process; classroom management, which is the teacher's ability to support the flow of a class while respecting set learning objectives; and instructional strategies, meaning the teacher's competence in deploying appropriate educational skills so as to ensure student learning. With regard to self-esteem many studies have documented that the association with mental health problems such as depression and conditions lead to burnout syndrome (Collie, Shapka, & Perry, 2012; Schimmack, & Diener, 2003).

Self-esteem has been found to act as a key resource for coping with the challenges of teaching, playing both a main and a moderating role in teachers' well-being (Mäkikangas, & Kinnunen, 2003).

There is broad agreement about the conceptualization of self-efficacy and self-esteem as coping resources for dealing with workplace stressors (Betoret, 2006; Tsouloupas, Carson, Matthews, Grawitch, & Barber, 2010). This is particularly true in relation to the teachers of children with special needs. Low self-perceived efficacy may lead teachers to cut back on their efforts. Inversely, teachers who believe they have the ability to accomplish tasks and perceive themselves as highly efficacious are more likely to achieve higher levels of performance (Bandura, 1989).

Overall, in the literature just reviewed, TSE and self-esteem were found to explain a significant amount of variance in burnout, confirming the idea that they act as protective factors for burnout syndrome.

Well-Being at Work: Teachers' Happiness at School and Job Satisfaction

In addition to personal resources, the literature evidenced that well-being at work play an important role in stress and burnout development. In the case of teachers, well-being may be defined as their personal sense of wellness, satisfaction, and happiness in relation to their workplace (Chan, 2011).

Based on the literature review, Jennings and Greenberg (2009) concluded that teachers' well-being is associated with a positive classroom environment and teachers–student relationships. As several authors have pointed out, happiness at work and job satisfaction are often associated with one other and both are good indicators of work-related well-being (Bowling, Eschleman, & Wang, 2010). Happy people perform better and help their colleagues more often than do their co-workers who are less happy (Boehm, & Lyubomirsky, 2008; Lyubomirsky, King, & Diener, 2005). In addition, there is a positive association between happiness at work and long-term well-being, both in the work context itself and in other life domains. Happiness at school predicts well-being, affecting not only the teacher's professional career, but also student motivation and the general atmosphere in the classroom (Duckworth, Quinn, & Seligman, 2009).

The role of job satisfaction in burnout is increasingly acknowledged (Skaalvik & Skaalvik, 2009). Job satisfaction may be defined as an overall feeling about one's job or career or in terms of specific facets of job or career (e.g., compensation, autonomy, co-workers) that may be related to specific outcomes such as productivity. Teachers' job satisfaction has implications for student learning, in that a satisfied teacher may provide better quality or more consistent instruction to his/her students. Researchers have also demonstrated that teachers who do not feel supported in their work may be less motivated to give their best in the classroom (Pillay, Goddard, & Wilss, 2005). Littrell, Billingsley, and Cross (1994) found out that special and mainstream teachers reporting higher levels of support from their principals were less stressed and more satisfied with their jobs than their colleagues receiving less support. Skaalvik and Skaalvik (2009) reported that teachers' job satisfaction was directly related to burnout syndrome and indirectly related to aspects of the school context such as supervisory support, time pressure, relations with parents, and autonomy. Among teachers with similar levels of salary and benefits, workplace conditions were also found to be related to turnover—with contributing factors including the degree of teaching staff influence over school policy, control over classroom decisions, and the level of student misbehavior (Foley, & Murphy, 2015). More in general, overall conditions of workplace have emerged as strongly affecting the teachers' well-being and their attachment to their job (Ingersoll, 2001).

The Current Study

Although the constructs of personal resources and burnout syndrome as well as demographic factors have been investigated in a variety of teacher samples (e.g., Schwarzer & Hallum, 2008; Skaalvik & Skaalvik, 2010; Xanthopoulou et al., 2007), there is still a lack of research on how these variables affect special education teachers at the kindergarten and primary school levels. Thus, the current study was designed to advance understanding of the protective factors for burnout syndrome with a view to informing training programs designed to enhance teachers' resilience and prevent professional dropout. Specifically, the aims of the current study were to explore the relationships among demographic variables, personal resources, and teachers' work well-being and to integrate a novel combination of teachers' aforementioned dimensions into a predictive model of burnout.

On the basis of the literature, we expected that teachers' personal resources, happiness at school, and job satisfaction were inversely correlated to all dimensions of burnout.

We hypothesized that teachers' happiness at school and job satisfaction would incrementally predict a significant proportion of variance in all dimensions of burnout, even after controlling for

the effect of demographic factors and personal resources. We also expected that teachers coming from different school contexts (kindergarten vs. primary school) might express different level of burnout. Indeed, the kindergarten environment is more informal than primary school settings, while the role of kindergarten teachers extends beyond mere teaching as observed earlier. Kindergarten teachers have additional stressors such as having to deal with parents who treat the school as a child-minding service and having to perform more nonteaching tasks, such as mothering a sick child or cleaning up after them. Furthermore, at the level of Italian public awareness, the professionalism of kindergarten teachers has not been fully determined, and the social recognition of the status, for example, is lower to that of primary teachers, an additional factor that might predispose kindergarten teachers to respond differently to primary school teachers in relation to similar stressors (Tsai et al., 2006).

METHOD

Participants and Procedure

Our sample was composed of 194 full-time in-service special education teachers (96.4 female) from Rome, Italy. Ages ranged from 26 to 52 ($M = 40.4$ years, $SD = 5.29$). In terms of marital status, 59.5% were married, 33.0% were single, 7.0 % were separated/divorced, and .5% were widowed. Sixty-nine percent of participants had children. Length of teaching experience ranged from 1 to 30 years ($M = 10.58$, $SD = 5.06$). With regard to level of school, 58.2% of participants taught in primary schools (for children aged 6–11 years), and 41.8% in kindergartens (for children aged 3–5 years). The study population was a convenience sample and may not be taken as representative of the entire population of Italian teachers given that all participants were based in Central Italy. The authors organized plenary assemblies in schools to inform the teachers about the aims of the research and the procedures for completion of the questionnaires. Participants received written information on Italian privacy regulations, signed informed consent, and subsequently took part in the study. The research was conducted following the APA's ethical principles and code of conduct (American Psychological Association, 2002). The original versions of questionnaires were initially translated from English into Italian and then back translated into English to check the alignment with the original versions.

Measures

Copenhagen Burnout Inventory. The CBI comprises 19 items evaluating three subdimensions of burnout (Kristensen et al., 2005) (alpha coefficient: .85). We used the Italian adaptation of the CBI by Fiorilli et al. (2015). The first subscale assesses personal burnout and comprises six items concerning the physical and psychological fatigue, and overall exhaustion experienced by an individual. The second subscale, entitled work-related burnout, is made up of seven items concerning the physical and psychological fatigue experienced by respondents due to their teaching work.

Finally, the third subscale termed client-related burnout is composed of six items evaluating the physical and psychological fatigue experienced by people in relation to their work with clients, in our case specifically with students. All items were rated on a 5-point Likert scale with: (1) = *almost never*; (2) = *rarely*; (3) = *sometimes*; (4) = *often*; (5) = *always*.

Teacher Self-Efficacy. We devised a brief ad hoc scale for evaluating teachers' self-efficacy (alpha coefficient: .75). The instrument comprised five items constructed following the recommendations of Bandura (1989). Specifically, we used verbs such as "can" or "be able to," to make it clear that the item was assessing mastery expectations based on self-perceived personal competence. Each statement referred to one of the five core components of teacher's self-efficacy: management of difficult students; use of new technology; coping with educational challenges; collaboration with

colleagues; meeting teaching objectives and targets. Responses were given on a 5-point scale ranging from *not at all certain* (1) to *absolutely certain* (5).

Rosenberg Self-Esteem Scale (RSES). The RSES (Rosenberg, 1965) (alpha coefficient: .785) comprises 10 statements and is commonly adopted as an empirical measure of global self-esteem. The scale uses a 4-point Likert-like scale response format (from: *absolutely disagree* to *absolutely agree*). Five items are positively worded and five negatively worded. Negatively worded items are reverse scored.

Job Satisfaction Survey (JSS). The JSS (Spector, 1985) (alpha coefficient: .852) measures respondents' perceived satisfaction with their job situation. It comprises 36 items divided into nine subscales, namely: pay, promotion, supervision, fringe benefits, contingent rewards (satisfaction with rewards given for good performance), operating procedures (satisfaction with rules and procedures), co-workers, nature of work (satisfaction with one's type of work), and communication (satisfaction with communication within the organization). Items are rated on a 5-point Likert scale: (1) = *almost never*; (2) = *rarely*; (3) = *sometimes*; (4) = *often*; (5) = *always*.

Teacher's Happiness at School. Teacher's Happiness at School (alpha coefficient: .75) is a scale designed ad hoc to assess teachers' happiness at school. It was adapted from the School Children's Happiness Inventory (Ivens, 2007) given that—to the best of our knowledge—there were no existing Italian-language scales for measuring teachers' happiness at school. The questionnaire comprises 31 items and offers a simple response format with 18 positive items and 12 negative items (e.g., “I felt relaxed,” or “I wanted to give up”).

Participants are asked to rate their thoughts and feelings over the past week at school. Each response is scored from 1 to 4, with four indicating a high level of happiness. The negative items are reverse scored to yield a total happiness score. The composite score is computed by averaging all the items.

Data Analyses

Bivariate correlations between the study variables were assessed by calculating the Pearson correlation coefficient, with a number of significant correlations identified. To gain further understanding of the relationships between the independent and dependent variables, multiple regressions were used. Three separate multiple regression analyses were conducted by regressing each of the dimensions of burnout in turn onto the correlated independent variables. These multiple regressions were hierarchical, with sociodemographic variables (namely age, seniority, marital status, and children) entered first, followed by personal resources (namely self-efficacy and self-esteem), and finally by work well-being (namely teacher happiness, job satisfaction, and school). The increase in R^2 was computed to compare the relative contributions of each set of variables to the model. The assumptions of linearity, normality, independence of observations, multicollinearity, and homoscedasticity were assessed for each of the regression models and deemed to have been satisfactorily met.

RESULTS

Bivariate Analyses

Bivariate correlations among the studied variables are presented in Tables 1 and 2. In the kindergarten teachers subsample (Table 1), personal burnout was significantly correlated with teacher's happiness at school ($r = -.63$), with self-esteem ($r = -.44$) and job satisfaction ($r = -.41$). Work-related burnout was significantly correlated with teachers' happiness at school ($r = -.56$) and job satisfaction ($r = -.52$). The third dimension of burnout, or student-related burnout, was significantly

Table 1
Bivariate Correlations between Variables in the Kindergarten Teachers Sample

	1	2	3	4	5	6	7	8	9	10	11
1. Age	–	.22**	–.01	.22	.32**	.05	–.06	–.07	–.02	–.1	.13
2. Seniority		–	–.12	.06	.02	.09	–.08	.12	.11	.1	–.01
3. Marital status			–	.36*	–.17	.04	.03	.1	–.02	–.04	0
4. Children				–	–.07	.08	–.14	.01	–.05	–.09	.12
5. Self-efficacy					–	.28**	.06	–.21	–.12	–.15	.14
6. Self-esteem						–	.38*	–.44**	–.38*	–.41**	.21
7. Teacher happiness							–	–.63**	–.56**	–.48**	–.45**
8. Personal burnout								–	.64**	.76**	–.41**
9. Work-related B.									–	.54**	–.52*
10. Burnout with St.										–	–.35**
11. Job satisfaction											–

* Correlation is significant at the .05 level (two-tailed).

** Correlation is significant at the .01 level (two-tailed).

Table 2
Bivariate Correlations between Variables in Primary Teachers Sample

	1	2	3	4	5	6	7	8	9	10	11
1. Age	–	.39**	.22**	.33**	–.01	–.07	–.07	.02	.19	.15	–.05
2. Seniority		–	.19**	.22**	.12	.12	.12	–.05	.08	.07	–.22**
3. Marital status			–	.41**	.13	.2**	.21	–.17	–.03	–.23**	.23**
4. Children				–	.07	.21**	.27	–.3**	–.08	–.20**	.09
5. Self-efficacy					–	.32**	.28	–.19*	–.15	–.28**	–.08
6. Self-esteem						–	.47**	–.47**	–.4**	–.46**	.11
7. Teacher happiness							–	–.62**	–.62**	–.56**	–.4**
8. Personal burnout								–	.65**	.71**	–.34**
9. Work-related B.									–	.65**	–.4**
10. Burnout with St.										–	–.46**
11. Job satisfaction											–

* Correlation is significant at the .05 level (two-tailed).

** Correlation is significant at the .01 level (two-tailed).

correlated with a large number of variables, most notably teacher happiness at school ($r = -.48$) and self-esteem ($r = -.41$). In the primary school teachers' subsample (Table 2), personal burnout was significantly correlated with several variables, especially teacher's happiness at school ($r = -.62$) and self-esteem ($r = -.47$).

Working burnout was significantly correlated with personal resources and teachers' work well-being, most notably teachers' happiness at school ($r = -.59$), self-esteem ($r = -.46$), and job satisfaction ($r = -.40$). The third dimension of burnout, or student-related burnout, was also significantly correlated with a large number of variables, most notably teacher happiness at school ($r = -.56$), self-esteem ($r = -.46$), and job satisfaction ($r = -.40$).

Table 3
Regression Coefficients of Predictors of Personal Burnout

Variables	Step 1				Step 2				Step 3			
	<i>B</i>	<i>SE</i>	β	<i>p</i>	<i>B</i>	<i>SE</i>	β	<i>p</i>	<i>B</i>	<i>SE</i>	β	<i>p</i>
Age	.03	.06	.04	.56	.03	.05	.04	.55	.05	.04	.07	.25
Seniority	-.01	.06	-.01	.87	.01	.05	.02	.76	-.03	.04	-.04	.47
Children	1.42	.72	.16	.05	.86	.64	.1	.18	.66	.57	.07	.25
Marital status	-.55	.56	-.08	.33	-.56	.49	-.08	.25	-.25	.43	-.03	.56
Self-efficacy					-.16	.09	-.12	.07	-.11	.08	-.08	.16
Self-esteem					-.36	.05	-.45	0	-.2	.05	-.25	0
Teacher happiness									-.09	.01	-.39	0
Job satisfaction									-.03	.01	-.16	.01
School									-.16	.48	-.02	.74
<i>R</i>	.19				.53				.69			
<i>R</i> ²	.03				.28				.47			
ΔR^2					.25				.19			

Table 4
Regression Coefficients of Predictors of Work-Related Burnout

Variables	Step 1				Step 2				Step 3			
	<i>B</i>	<i>SE</i>	β	<i>p</i>	<i>B</i>	<i>SE</i>	β	<i>p</i>	<i>B</i>	<i>SE</i>	β	<i>p</i>
Age	.08	.05	.12	.13	.08	.05	.11	.12	.1	.04	.14	.02
Seniority	.04	.05	.06	.4	.06	.05	.09	.2	0	.04	0	.89
Children	1.23	.67	.15	.07	.78	.63	.09	.22	.35	.54	-.04	.51
Marital status	.03	.52	0	.94	0	.48	0	.98	.32	.41	.05	.43
Self-efficacy					-.1	.09	-.08	.26	-.07	.08	-.06	.34
Self-esteem					-.28	.05	-.37	0	-.11	.05	-.15	.02
Teacher happiness									-.09	.01	-.41	0
Job satisfaction									-.04	.01	-.25	0
School									.44	.46	.06	.33
<i>R</i>	.18				.44				.67			
<i>R</i> ²	.03				.19				.45			
ΔR^2					.16				.26			

Multivariate Analyses

Three separate multiple regression analyses were conducted to further investigate the contributions of the relevant, correlated independent variables to variance in the dimensions of burnout syndrome. Hierarchical multiple regression was performed to separately assess the contributions of each variable. In line with the literature reviewed in the Introduction, sociodemographic variables were block-entered at the first step, followed by personal resource variables at the second step, and work well-being variables at the third. The results of the regression analyses are presented in Tables 3–5.

Table 5
Regression Coefficients of Predictors of Burnout with Students

Variables	Step 1				Step 2				Step 3			
	<i>B</i>	<i>SE</i>	β	<i>p</i>	<i>B</i>	<i>SE</i>	β	<i>p</i>	<i>B</i>	<i>SE</i>	β	<i>p</i>
Age	.13	.06	.18	.02	.14	.05	.19	0	.15	.04	.2	0
Seniority	.03	.05	.04	.6	.05	.05	.07	.26	0	.04	0	.93
Children	1.69	.7	.2	.01	1.28	.63	.15	.04	-.84	.58	.1	.15
Marital status	-.57	.55	-.08	.3	-.54	.48	-.08	.26	-.36	.43	-.05	.41
Self-efficacy					-.24	.09	-.18	0	-.23	.08	-.17	0
Self-esteem					-.31	.05	-.39	0	-.19	.05	-.24	0
Teacher happiness									-.05	.01	-.22	0
Job satisfaction									-.05	.01	-.27	0
School									.44	.49	.05	.37
<i>R</i>	.27				.54				.66			
<i>R</i> ²	.07				.3				.44			
ΔR^2					.23				.14			

Personal Burnout

Hierarchical multiple regression revealed that the sociodemographic variables entered at Step 1 explained 3%, $F_{(4,166)} = 1.4$; $p > .05$ of the variance in personal burnout and were not significant. When personal resources variables were included at Step 2, the total variance in personal burnout explained by the model was 28%, $F_{(7,159)} = 11.23$, $p < .001$ (F -change = 28.36; $p < .001$). Finally, when the work-related well-being variables were added at Step 3, the model as a whole accounted for 47% of the variance in personal burnout, $F_{(10,156)} = 15.28$, $p < .001$ (F -change = 18.82; $p < .001$). In the final model, the best predictors were: teacher well-being at school ($\beta = -.40$, $p < .001$; $sr^2 = .10$) and self-esteem ($\beta = -.24$, $p < .001$; $sr^2 = .05$).

Work-Related Burnout

As far as work-related burnout is concerned, the sociodemographic variables entered at Step 1, explained .3% of the variance, and the model was not statistically significant. The personal resources variables included at Step 2 explained an additional 16% of the variance ($F_{(7,159)} = 6.76$; $p < .001$; F -change = 16.80; $p < .001$). Finally, at Step 3 work well-being variables were included, with the final model explaining 45% of the variance in work-related burnout ($F_{(10,156)} = 13.66$, $p < .001$; F -change = 25.02; $p < .001$). In the final model, teacher happiness at school, job satisfaction, and self-esteem all negatively predicted work-related burnout ($\beta = -.41$, $p < .001$; $sr^2 = .10$), ($\beta = -.25$, $p < .001$; $sr^2 = .05$), ($\beta = -.16$, $p < .001$; $sr^2 = .02$). Finally, age was a significant positive predictor ($\beta = .14$, $p < .001$; $sr^2 = .02$) of work-related burnout.

Student-Related Burnout

A final hierarchical multiple regression was used to assess the independent variables' contribution to variance in student-related burnout. The sociodemographic variables entered at Step 1 accounted for 7% of variance ($F_{(4,166)} = 3.19$; $p < .05$). When the personal resource variables were entered at Step 2, the model explained 30% of the variance ($F_{(7,159)} = 11.53$; $p < .001$; F -change = 26.28; $p < .001$). The final model including both personal resources and work well-being variables

(Step 3) explained 44% of the variance in student-related burnout ($F_{(10, 156)} = 12.5, p < .001$; F -change = 14.29; $p < .001$). More specifically, four variables were found to be significant predictors of student-related burnout. These were teacher's job satisfaction ($\beta = -.26, p < .001$; $sr^2 = .06$), teacher happiness at school ($\beta = -.22, p < .001$; $sr^2 = .03$), self-esteem ($\beta = -.24, p < .001$; $sr^2 = .04$), and self-efficacy ($\beta = -.17, p < .001$; $sr^2 = .03$), all of which negatively predicted student-related burnout. Finally, age ($\beta = .20, p < .001$; $sr^2 = .04$) was a significant and positive predictor of student-associated burnout.

DISCUSSION

The main aim of the current study was to explore within an integrative model the contributions of three sets of teacher characteristics, which we may label as sociodemographic, personal resource, and work well-being variables, respectively, in predicting each of the three dimensions of burnout measured by the CBI. As we expected, the results confirmed what previous research evidenced: teachers' personal resources, happiness at school, and job satisfaction were inversely correlated to all dimensions of burnout in both school contexts. Furthermore, the results of our study showed that both teachers' happiness at school and their job satisfaction incrementally predicted variance in the dimensions of burnout, even when controlling for the effect of sociodemographic factors and personal resources. Contrary to our hypothesis teachers coming from different school contexts (kindergarten vs. primary school) did not express different level of burnout.

Interestingly, this unexpected result that is in contrast with previous studies (e.g., Tsai et al., 2006), leads future research with special education teachers to differently consider the kindergarten environment supposed to be more demanding in terms of emotional labor compared with primary teachers experience. Furthermore, in line with previous research (Toker, 2011; Zhao, & Bi, 2003), teachers' sociodemographic variables were found to slightly predict each of the CBI burnout subscales. Consequently to several findings (e.g., Anderson & Iwanicki, 1984; Borg & Riding, 1991; Innstrand et al., 2011; Toker, 2011; Zabel, & Zabel, 2001) our study confirms the contradictory role played by teachers' background dimensions (e.g., age, marital status) on their burnout levels. Accordingly with some scholars' arguments (e.g., Cherniss, 1995; Hakanen et al., 2006) teachers' burnout levels should be read in light of their personal traits and organizational variables able to deeply explain differences among employees in dealing with job stressors. Indeed our results suggest that the factors accounting for most variance in teachers' levels of burnout were their personal resources and work-related variables.

Overall, teachers' happiness and job satisfaction proved to be the variables with the strongest potential to prevent burnout syndrome, while controlling for sociodemographic characteristics and personal resources. Below we discuss our findings and their implications for the dimensions of the CBI.

Predictors of Personal Burnout

Personal burnout, as defined by Kristensen et al. (2005), refers to the feelings of physical and psychological fatigue and exhaustion experienced by an individual. The personal burnout subscale of the CBI is entirely focused on general life context (Kristensen et al., 2005). Conversely, the Teachers' Happiness at School and Job Satisfaction scales mainly assess teachers' well-being and satisfaction in relation to their work experience. From our results, it emerged that among the variables included in the model, teachers' happiness at school, self-esteem, and job satisfaction played the strongest predictive effect on personal burnout. Indeed, it is to be expected that teachers with a low level of happiness at school and poor job satisfaction will display a higher risk of developing burnout in their personal lives, and not just in relation to their work context. This is in line with Seligman's theory

(2012) that experiencing positive emotions enables individuals to develop additional resources in four main spheres: intellectual (developing problem-solving skills), physical (developing physical strength and cardiovascular health), social (facilitating quality and quantity in friendships and other relationships and connections), and psychological (developing resilience and optimism). From our data, job satisfaction also emerged as a key factor in reducing teachers' personal burnout. It is well known in the literature that teachers with high levels of job satisfaction display a strong sense of commitment both in life and in their work, a strong belief in control and a greater openness to change and challenges in life (e.g., Wangari, & Orodho, 2014). Overall, self-esteem, happiness, and job satisfaction at school appear to improve teachers' resilience (Buragohain & Hazarika, 2015), better equipping them to manage the kind of critical events and stressful situations to which special needs teachers are often exposed.

Predictors of Work-Related Burnout

Work-related burnout was defined by Kristensen (Kristensen et al., 2005) as the degree of physical and psychological fatigue and exhaustion perceived by a person that can be related to his/her work. The corresponding scale is designed to explore the individual's own attribution of symptoms to her/his work, rather than assess this dimension in terms of causality. This dimension is context related, unlike the personal burnout dimension. Previous research has already found burnout to be indirectly related to school context variables (Skaalvik & Skaalvik, 2009). Our results showed work-related burnout to be strongly predicted by teachers' happiness at school, job satisfaction, and self-esteem. Teachers who are less likely to report higher levels of work burnout are those who report more happiness with their daily work, more satisfaction with their job, and higher self-esteem. To fully understand these findings and explain the relationship between teacher happiness, job satisfaction, and self-esteem on the one hand, and work burnout on the other, it is crucial to examine the structure and nature of these constructs. As scholars have demonstrated, a teacher's working environment may not only represent a source of burnout, but may also provide a resource for dealing with issues such as workload, students, administrative, and educational tasks (Foley & Murphy, 2015; Pyhältö, Pietarinen, & Salmela-Aro, 2011). Wang and Xu (2008) for instance found that the level of organizational support perceived by teachers was positively correlated with the dimensions of happiness and negatively correlated with burnout. Moreover, factors associated with work, such as recognition, acknowledgment, development, as well as achievement or advancement, may generate job satisfaction (Buragohain & Hazarika, 2015). Vice versa, the strong relationship between teacher burnout and psychological well-being enables teachers with positive emotions to cope better with stressful events at school (Pillay et al., 2005). Poor job satisfaction among teachers has emerged as directly related to dimensions of burnout, namely emotional exhaustion and feelings of reduced personal accomplishment (Skaalvik & Skaalvik, 2009). Finally, teachers' happiness at school, as measured in the current study, focused on the joy of teaching, in terms of experiencing positive thoughts and emotions while engaged in teaching-related tasks, and on the opportunity to enjoy positive relationships with colleagues, parents, and students.

Albeit contributing less than work-related factors, one of the personal resource variables was found to be a significant predictor of burnout: self-esteem. This result is in line with the existing literature on the role of individual difference in coping with stress and burnout (Halbesleben & Buckley, 2004). In fact, there is a large corpus of research indicating that self-esteem is negatively correlated with teacher burnout (Xu, Zhu, & Huang, 2005), as well as playing a mediating role between organizational determinants (such as role conflict, work overload, classroom atmosphere, decision making, and peer support) and teacher burnout syndrome.

Predictors of Student-Related Burnout

Student-related burnout is a dimension of burnout that concerns the physical and psychological fatigue and exhaustion that is perceived by a teacher to be related to his/her work with students specifically. This subscale is designed to evaluate the extent to which respondents subjectively attribute their fatigue to their work with their pupils, rather than objectively assess how their levels of exhaustion are impacted by working with students.

In the current study, student-related burnout was significantly predicted by a combination of teachers' personal resources and their perceptions of their work environment. In terms of individual resources, as expected, self-efficacy and self-esteem were negative predictors of student-related burnout. In other words, teachers with a positive view of their own teaching capabilities were more likely to positively rate their personal accomplishments with their students. This is in keeping with numerous earlier studies of teacher burnout (Schwarzer & Hallum, 2008; Skaalvik & Skaalvik, 2009). In terms of work well-being, teachers' happiness at school and job satisfaction were found to significantly and negatively predict student-related burnout. Bassi, Bacher, Negri, and Delle Fave (2013) reported that participants who were happy at work experienced higher mastery in dealing with the environment. Teachers' happiness at school, as measured in the current study, mainly consisted of the joy of teaching, in terms of experiencing positive emotions and thoughts while engaged in teaching-related tasks and of enjoying positive relationships with colleagues, parents, and students.

Interpersonal relationships play a key role in the work of teachers, especially in the case of special education teachers who are required to interact with, and are made accountable to, an increasing number of actors. They must maintain relationships not only with their students, but also with colleagues, supervisors, parents, and experts. Not surprisingly, then, previous research has revealed that positive interpersonal relationships at school can act as a buffer against the risk of burnout (Skaalvik & Skaalvik, 2009; Van Droogenbroeck, Spruyt, & Vanroelen, 2014). Overall, the findings of the current study support the hypothesis that teachers' perceptions of their work environment in terms of happiness at school and job satisfaction are key protective factors for burnout risk in the area of special needs education. Teachers with a positive view of their work and positive relationships with their colleagues, students, and students' families are more likely to report high levels of personal accomplishment in relation to their work with students.

Limitations

Our study presents limitations that will need to be addressed in future research. First, given that all our participants came from Central Italy, they cannot be considered representative of the Italian teacher population, and future research should have the aim of replicating the present findings with a nationally representative, and larger, sample. Further research should also involve teachers from countries other than Italy, to assess whether and to what extent the present findings also pertain to other educational systems, especially those in which children with special needs are not included in mainstream classes.

A second limitation concerns the Teachers Happiness at School scale. Given that it was adapted from the School Children Happiness Inventory (Ivens, 2007) for the purposes of this study, it is not yet a validated instrument. Finally, although the instruments worked well from a psychometric point of view, an in-depth qualitative analysis of teacher reports concerning self-perceived personal resources, subjective well-being and subjective perception of the risk of burnout might shed light on why teachers think in a particular way and what kind of dynamics might be shaped by this thinking.

Concluding Remarks and Implications for Practice

Among the main outcomes of our study, it emerged that self-esteem, teachers' happiness at school, and job satisfaction were the factors that most strongly predicted personal, work-related, and student-related burnout. From these preliminary findings, it is possible to draw some practical guidelines for improving rates of teacher retention. First, focused teacher training is critical to promoting teachers' well-being and longevity. A number of studies have found that well-designed mentoring programs improve retention and also lead to gains in teachers' attitudes, feelings of efficacy, and instructional skills. There is much evidence that teacher retention rates improve when effective principals are actively involved in teacher induction, providing "professional socialization" in the form of frequent discussion, monitoring, and feedback (Billingsley, 2004; Krasnoff, 2015). Furthermore, school principals may reduce the risk of burnout syndrome by adopting a more collaborative leadership style that promotes and supports teachers. Sharing the challenges faced by the teachers of children with special needs and reducing conflicting work demands are both possible approaches that school principals may be able to implement with a view to reducing the risk of burnout.

A second key finding to be noted is that the final integrative predictive model for burnout was similar for both the kindergarten and primary subsamples. In other words, for the purposes for our study, being a kindergarten or a primary school teacher did not make any difference. Rather, our data show that both groups of teachers are more inclined to defend their well-being by drawing on positive, context-related relationships than by relying on their individual and professional characteristics. Ultimately, our findings suggest the importance of investing in the quality of the working environment. Positive interpersonal relationships experienced in the school context can protect teachers from the risk of work-related burnout.

Based on these findings, we strongly advocate that educational policy makers and head teachers pay close attention to the areas of personal resources and work-related well-being, with a view to effectively addressing stress and burnout among special needs teachers.

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