

**COMPARISON OF OCCUPATIONAL STRESS IN RESPONSE TO CHALLENGING
BEHAVIOURS BETWEEN GENERAL AND SPECIAL EDUCATION PRIMARY TEACHERS
IN NORTHERN ITALY**

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In the Italian education system, pupils with special education needs (SEN) are fully included in mainstream education and receive extra support from special education teachers (SET). Starting from this point, it is reasonable to expect some degree of difference between special education teachers (SETs) and general education teachers (GETs) in term of occupational stress stemming from job demands as well as students' challenging behaviours. The study explored the connection between *students' challenging behaviours* and *teachers' occupational stress* in a sample of Italian in-service primary teachers (N= 306). Data from the Italian version of the *Challenging Students Standard Questionnaire* were analysed to understand the impact of six different categories of *challenging students' behaviours* on eliciting *occupational stress* responses in SETs and GETs. Descriptive, comparative t-test analyses and effect sizes for all measures were reported. Results were consistent with the idea that SETs and GETs experience different degrees of occupational stress as a result of experiencing different *challenging students' behaviours*. Recommendations for planning more targeted in-service training for primary teachers are discussed.

Empirical research on teachers' perceptions of undesirable classroom behaviours is a common topic in educational psychology (Langfeldt, 1992) because teachers are often called upon to address students' behaviours to maintain an adequate classroom climate in which students can be motivated to achieve more. For this reason, students with *challenging behaviour* are frequently mentioned as a major concern by special and regular teachers (Forest & Pearpoint, 1990; Hitzig, 1992) and school administrators (Borelli, 1997). Many researchers have already shown that high levels of classroom *challenging behaviour* contribute to climate of mutual fearfulness and mistrust that dissolves the relationship between teachers and students (Charles & Senter, 2005). However, both general and special education teachers reported they are not adequately trained to handle with misconducts that they witness every day (Merrett & Wheldall, 1993). The failure of managing misconduct results in several negative outcomes, such as: the disruption of students' rights to learn, the disruption of teachers' rights to teach and wasting time for both students and teachers. Kyriacou (2001) suggested that the relationship between stress from exaggerated job-demands (i.e., disruptive or challenging misconducts) and teachers' work performances must be investigated because of its practical importance in affecting effective learning processes. This describes the main rationale justifying the study of the effect of *challenging behaviour* on teachers' performance: the link between greater frequency of challenging behaviour and the lack of academic outcomes (i.e. learning cannot occur when students neither in their seats nor engaging with academic material, although this is not a sufficient condition for learning). Therefore, when pupils' misconducts are not correctly detected or addressed, teachers may experience high levels of occupational stress.

Unfortunately, identifying the extent to which students' behaviours contribute to teachers' strain is still a challenge for educational psychology. The main difficulty with the concept of *challenging behaviour* is that the social and cultural background of an individual affects the appraisal of who can be considered a disruptive student (Bibou-nakou, Kiosseoglou & Stogiannidou, 2000; Langfeldt, 1992). Teachers and people in general, tend to judge behaviours as troublesome, challenging or desirable based on their own cultural patterns, social norms or personal habits (Weisz, Somsong, Chaiyasit, Weiss, Achenbach & Eastman, 1993). The label challenging behaviours is thus a socially-constructed and cultural concept: in

a plain way a behaviour becomes problematic when it is troublesome to someone (Jones, Charlton & Wilkin, 1995).

Based on these premises, we conducted a local research in the field of primary students' *challenging behaviours* both to replicate effects documented in different cultural milieu and to gain insight from different educational settings. As suggested by Leung and Ho (2001), *to increase the applicability of findings, it pays to explore most relevant students' behavioral categories in local settings* (p. 232). Starting from prior research in the analysis of pupils' *challenging behaviours*, the present study investigated the relationship between disruptive classroom behaviours and occupational stress in a sample of in-service Italian primary teachers. As Kokkinos and Davazoglou (2009) stated, *one of the variables that has been taken into consideration in teacher stress research is within-occupation variance, which assumes that different occupational titles subsume many heterogeneous work functions, which are associated with different degrees of job strain* (p.407). It must be remarked, however, that the present study is looking to examine challenging behaviours effect on teacher occupational stress rather than zeroing in on the definition of a challenging behaviour as a construct. To this end, the study used the six-model of *challenging behaviours* (Wolf, Van der & Everaert, 2003) to test whether Special Education Teachers (SET) and General Education Teachers (GET) differ in perceived stress associated with, and frequency of students' *challenging behaviours* in the Italian education system. Our research hypothesis stated that as a result of different job demands SETs' and GETs' scores would differ in the frequency of *challenging behaviours* they encounter, as well as the consequent occupational stress they experience.

In order to address this issue, the paper first outlined theoretical underpinnings of the study (as well as the description of the main psychometric proprieties of the *Challenging Students Standard Questionnaire* and its measures), and then reported the results of ANOVA which was conducted to compare the two groups of teachers (N= 306). Descriptive, comparative t-test analyses and effect sizes for all measures were reported.

The present study represents an attempt to fill previous gaps in the investigation of students' *challenging behaviours* in elementary schools because, despite its importance, little research has focused on the middle years, five to nine, of schooling (Arbuckle & Little, 2004; Sun & Shek, 2012). From this viewpoint, this study collected information from teachers with different years of teaching experiences and institutional tasks (e.g. SETs and GETs), in order to portrait a more accurate glimpse of such issue. Academically, the study's findings would increase local literature since a general paucity of recent researches on this topic can be found (Addimando, 2010). Practically, it was aimed at helping teachers to understand what is currently occurring in their classrooms about the most frequent and stressful behaviour in order to improve the learning environment through an active management of such misconducts.

Prior studies

Research on teachers' stress

The topic of *teacher stress* has long been investigated and has become a research area with worldwide interest (Kyriacou, 2001). The international literature consistently describes the teaching profession as an occupation beset by high level of stress (Beer & Beer, 1992; Johnson, Cooper, Cartwright, Donald, Taylor & Millet, 2005). Roughly, one-third of all interviewed teachers referred to themselves as *very* or *extremely* stressed due to high work demands (Chan & Hui, 1995; Gevin, 2007; Kyriacou, 1987).

On a theoretical level, the *transactional model of stress* (Lazarus, 1966; Lazarus & Folkman, 1984) asserts that the feeling stress occurs when people experience *imbalances* between personal life demands and the availability of resources to cope with such demands (Sapolsky, 1998). According to this model, Kyriacou and Sutcliffe (1978) refers to *teacher stress* as: a response syndrome of negative affects (such as anger or depression) resulting from aspects of the teacher's job and mediated by an appraisal of threat to the teacher's self-esteem or well-being and by coping mechanisms activated to reduce the perceived threat (p. 159).

From this point of view, *occupational stress* is the result of a situation in which teachers are afflicted by *negative affects* resulting from exposure to various *job stressors*. A job stressor is a work-related environmental condition that affects the psychological, social and physiological health of an individual (Hurrel, Nelson, & Simmons, 1998).

Excessive workload, poor school climate, lack of support from colleagues (Chan, 1998; Durham, 1992; Wilson, 2002), lack of professional recognition, diversity of tasks required, excessive bureaucracy, time pressure and the amount of paperwork required of teachers are recognised as *job stressors* (Burke & Greenglass, 1995; Pithers, 1995). Other sources of *occupational stress* included large class size, social isolation, fear of violence and role ambiguity (Travers & Cooper, 1996). Particularly severe consequences of *job stressors* included: physical illness, early retirement from the profession (Chaplain, 2008), cardiovascular disease, decline in quality of relationships with peers, anxiety, feelings of inadequacy (Punch & Tuetman, 1990), chronic fatigue, depression and *burn-out syndrome* (Betoret, 2006). The influence of job stressors on teachers' lives can be classified into two categories: *external-environmental* and *internal-emotional*. The first set, external-environmental, is directly linked to the academic facet of teachers' work and teaching processes (i.e., the efficacy of learning), the second set, internal-emotional, is more connected to inner states and feelings that teachers experience as a result of handling job stressors: anxiety, anger, annoyance, irritation, frustration, low sense of efficacy, low motivation and distress. The internal-emotional and external-environmental spheres are extremely interwoven (Schutz & Zembylas, 2009) and both contribute to shape teachers' performances.

Students' challenging behaviours in primary schools

Since the early stages of research on teachers' occupational stress, students' *challenging behaviours* have been shown to increase levels of distress for both qualified and novice teachers (Head, Hill & McGuire, 1996). Dealing with classroom misconduct prompts acute psychological distress in teachers (Finlay-Jones, 1986), sometimes causing them to leave the profession early (Priyadharshini & Robinson-Point, 2003). But what should be considered challenging behaviour in an educational context? We have already mentioned that, in some ways, the label *challenging behaviour* is no longer anchored to the intrinsic characteristic of the phenomenon, but even still it can be useful to propose some shared definitions of *misbehaviour* that underlie the social aspect of the phenomenon.

In general, the term students' *challenging behaviour* refers to any behaviour that threatens the flow of academic performance in a particular context (Turnuklu & Galton, 2001). A similar way to describe a *challenging behaviour* could be *any student behaviour that is perceived by the teacher to compete with or threaten the academic actions at a particular moment* (Burden, 1995, p.15). In a survey of British teachers' perceptions of students' classroom behaviour, Houghton, Wheldall, and Merrett (1988), defined a *challenging conduct* as: *an activity which (a) annoys, upsets or distresses teachers (b) is disruptive of good order in the classroom and causes trouble and (c) leads teachers to comment continually* (p. 299). An alternative definition was proposed by Emerson (1995): *a culturally abnormal behaviour(s) of such intensity, frequency or duration that the physical safety of the person is likely to be placed in serious risk* (p.3).

In all proposed definitions, authors underlined both the cultural features and the disruptive nature of *challenging behaviours*: misconduct plays an active role in teachers' activities by threatening academic progress and work performance. Although many studies have examined the issue of *challenging behaviour*, few studies have tried to categorise the wide range of *challenging behaviours* in classroom in order to obtain a synthesized view of the phenomenon through the adoption of more comprehensive categories.

In an attempt to categorise students' misconducts, the Individuals with Disabilities Education Act Amendments (IDEA, 1997) briefly described two *clusters*: *externalized behaviours* and *internalized behaviours*. Externalized behaviours include under-socialized conduct disorders (i.e. antisocial behaviour with both physical and verbal aggression), over-socialized conduct disorders (such as truancy, running away from home and opposition to authority) and motor excess conducts. Internalized behaviours include anxiety, social withdrawal and clinical depression (Cullinan, 2004). These two categories are not mutually exclusive (Gresham & Kern, 2004); for instance a verbal aggression from a pupil can occur with a more pervasive feeling of anxiety.

An alternative model based on four different categories of students' conduct has been recently proposed by Evertson, Emmer and Worsham (2006): 1) no problem consists of behaviours that did not interrupt learning; 2) minor problems are those that do not occur frequently and do not interfere with learning process (i.e. eating candy); 3) major problems interfere with the teaching process (they include failing to follow rules or hitting classmate); 4) escalating problems are cases where minor problems escalate and result in a menace to the classroom climate.

Along with models that try to categorise pupils' *challenging behaviour* according to its impact on the teaching process, other approaches emphasise the need to specifically report the type of behaviour that is most troublesome for teachers. In these studies, disruptive classroom misconducts and students' *challenging behaviours* are studied in terms of the most frequent disruptive behaviour and the most troublesome disruptive behaviour that occurred in classrooms (Stephenson, Martin, & Linfoot 2000).

Merret and Wheldall (1984) carried out a relevant survey among British primary teachers concerning students' misbehaviour; talking out of turn, disturbing others, non-attendance and disobedience were reported as most problematic. Wheldall and Merret (1988) replicated the same study in another random sample of British in-service teachers (N=198) in which talking out of turn was again the most troublesome and most frequent misconduct followed by hindering other children. A modified version of Wheldall's questionnaire was used by Leung and Ho (2001) in a sample of Hong Kong primary school teachers. In this Chinese sample, teachers emphasised that talking out of turn was the most disruptive and the most frequent *challenging behaviour*, but non-attentiveness ranked second.

Italian Educational System: Special and General Education Teachers

In Italy, schools for pupils with special education needs do not exist and students with different abilities usually attend traditional schools with other students. Since 1977, law 517 (Official Government Gazette, 224, 18/08/1977) has provided a fully-functional framework to address the job of Special Education Teacher (SETs). In order to achieve standard curriculum goals, students are helped by SETs through one-on-one relationships or by arranging small group work setting within the classrooms.

To become a SETs, *novices* must undergo the same academic training of GETs, but must also earn a degree in Educational Science, in which they pass a 400 hours specialisation course (law 104, Official Government Gazette 05/02/1992). SETs fieldwork chiefly pertains to two domains: 1) providing direct teaching to special needs students (i.e., setting out academic goals and planning activities) and 2) interacting with other professionals and parents to coordinate students' full academic development. Thus, the main differences between SETs and GETs can be expressed in terms of the relationship they have with their students: SETs direct their work to a single student (or to a small group), GETs are called to deal with a whole class of pupils (up to twenty or more).

Despite the fact that SET and GET share the macro-cultural framework (they actually work in the same educational system), evidence indicates that GETs may be less tolerant in dealing with problematic behaviour than SETs (Safran & Safran, 1985). Unfortunately, in the international literature a *demarcation line* about what differences exist between the two groups, in terms of experienced stress, can't be traced: from this point of view results are still far from being conclusive (Kokkinos & Davazoglou, 2009). For instance, Cherkes and Fimian (1982) reported an higher levels of stress in SETs, Kyriacou (1987) and Trendall (1989) reported lower levels of stress in SETs and Williams and Gersch (2004) found no significant differences between groups. It must be mentioned that all proposed studies were conducted in educational contexts in which SETs are employed in Special Education Schools rather than in an inclusive setting. To our knowledge, in Italian milieu there are few studies that investigated the differences between SETs and GETs in terms of stress-inducing students' behaviour. In general, Italian SETs reported a more favourable attitude towards students with disabilities (Vianello & Moalli, 2001), they tend to adopt more *innovative* learning strategies (Besio & Chinato, 1997) and, finally, SETs perceived GETs less prepared to deal with *problematic* students (Miller, Brownell & Smith, 1999).

Research questions

As a part of a larger cross-national project, the aim of the present study was to investigate in-service primary teachers' perception of pupils' *challenging behaviour* in Italian schools, as well as the relationship between misconduct and teachers' *occupational stress*. According to Lazarus's *transactional model* (1966), individual distress cannot be depicted as a static element, but instead represents the results of dynamic process between the characteristics of the person and the characteristics of the environment (Lazarus, 1990). In relation to Italian educational system, researches should expect that SETs and GETs will rate the frequency at which behaviours occur and the related distress from such behaviours in different ways due to their different job tasks. Although the study of stress can be extricated separated from the study of the process of exchange between individuals and their environment, in the present paper *occupational stress* is primarily used as an outcome variable of the occupational context: a measure of the subjective psychological distress experienced by teachers in response to students' *challenging behaviours*. Three main research questions were addressed:

- 1 – What are the most frequent and most stressful students' *challenging behaviours* for Italian primary GETs ?
- 2- What are the most frequent and most stressful students' *challenging behaviours* for Italian primary SETs ?
- 3 – Are there any detectable differences between GETs and SETs in terms of which behaviours they regard as the most frequently challenging or most stress-inducing?

Method

Sample and procedure

A sample of 306 full-time in-service primary school teachers from the city of Milano, as well as other urban and sub-urban areas of the Lombardy (Italy), participated. Since data have been collected in the northwestern part of the country, the sample is a convenience sample and does not claim to be representative of the whole population of Italian teachers. Participation in the study was on a voluntary basis: participants were recruited on-site and interviewed during their working time. All questionnaires were completed anonymously and handed in collectively. Authors decided to organize plenary assemblies in schools so that the teaching staff was quickly informed about the aims of the research and about the procedures for properly filling in the questionnaire. The data included 26 different school locations in the area of Milano and its suburbs. Only teachers in charge of their own class for at least one full year at the time of the study participated. The research had been conducted following the APA's ethical principles and code of conduct (American Psychological Association, 2010).

Table 1 shows the distribution of participants by sex, role, and teaching experience. Most are women with 15 to 30 years of teaching experience; 79.7 % are GETs.

Table 1: Teacher Characteristics: Demographic Variables

Sex	%	Role	%	Experience (years)	%
Women	93.5	SETs	20.3	from 1 to 5	22.5
Men	6.5	GETs	79.7	from 6 to 15	29.3
				from 15 to 30	35.5
				from 31 to 40	12.7

Due to the rate of missing data during the pilot study (approximately 10%), authors decided to organize plenary assemblies in schools, at which the whole teaching staff was quickly informed of the aims of the research and the procedure for properly filling in the questionnaire. The data includes 21 different school locations. Only teachers in charge of their own class for at least one full year at the time of the study participated. The research was conducted following APA's ethical guidelines and code of conduct. There were no commercial interest and conflict of interest for any of the authors of the present work.

Measures: the Challenging Students Standard Questionnaire

The *Challenging Students Standard Questionnaire* (Wolf, van der & Everaert, 2003) is a measurement tool that assesses both perceived stress and frequency of students' classroom behaviours that teachers found most challenging during the school year. In the *Standard Questionnaire*, occupational distress is methodologically operationalized as the informants' reported experience of being bothered by pupils' *challenging behaviours* in the classrooms.

Inspired by Brophy's work (1996), the questionnaire asks teachers to rate 23 items, spread over six different dimensions of student's *challenging behaviour*: *against the grain (AG)*, *full of activity/easily distractible (FA)*, *need a lot of attention/weak (WS)*, *easily upset (EU)*, *excessive perfectionism (EP)*,

aggressive/hostile (AH). Each item is a behavioural descriptor and is rated twice: once for the frequency (to what extent does the student show this behaviour?) and then for the experienced stress (how stressful is it for you if the students engage in these behaviours?). The response format is Likert-style with five categories ranging from 0 (It doesn't happen at all) to 4 (It happens a lot) for frequency ratings and from 0 (not stressful at all) to 4 (very stressful) for stress ratings. The 23 items cover six different categories of students' misconducts:

Against the grain (AG): The most common contemporary meaning of *against the grain* is to describe something that fails to follow social or cultural expectations. Even if behaving counter to social norms is not necessarily misconduct *per se*, the impact of such behaviours in educational settings is remarkable. In the framework of the questionnaire this subscale includes behaviours such as breaking classroom rules, seeking conflict with adults and undermining the role of the teacher;

Full of activity/Easily distractible (FA): In spite of referring to ADHD syndrome (which requires an objective use of DSM-IV-RT criteria developed by trained specialists), this measure simply describes situations in which a student is more active than other students (i.e., he/she is unable to sit still or leaves his/her seat very often);

Needs a lot of attention/Weak student (WS): This subscale described those circumstances in which teachers are asked to spend extra time with a particular student to facilitate his/her achievement of educational goals. This student is generally considered *weak* because he/she has learning difficulties or has trouble following class instructions.

Easily upset (EU): Some students misbehave because they come to school with emotional problems that originate in other contexts. As a result, some their emotional responses lead to inappropriate behaviours. Some examples include: being overly sensitive to mood, crying very often or being difficult to reassure when upset;

Failure syndrome/Excessively perfectionist (EP): In educational literature two types of perfectionism exist: *normal* and *neurotic* (Parker & Adkins 1994). *Normal perfectionists* are pupils that naturally derive a sense of pleasure when their tasks are accomplished, but perfectionism is a more complex set of behaviours which can also include compulsiveness in work habits. *Neurotic perfectionists* are mostly unable to feel satisfaction because, in their own eyes, they never seem to do things well enough (Roedell, 1984). Adderholth-Elliot (1989) proposed that perfectionist students may underachieve because of procrastination and fear of failure;

Aggressive/Hostile (AH): Hostile-aggressive misconduct is frequently encountered (and sometimes dreaded) by many teachers. Students who engage in such behaviours are classically labelled as *problem students* due to the impact they have on classroom management. Two major categories of these behaviours are: *verbal* and *physical aggression*. The former includes being rude, arguing, sarcasm and teasing, the latter includes kicking, hitting, fighting, spitting, throwing objects and biting. Aggressive/hostile behaviours undermine learning process when the main target is the teacher, or when directed toward other classmates. From teachers' point of view, an aggressive misconduct is a severe threat because can escalate when incorrectly managed or underestimated.

As in previous research into students' misbehaviour (for instance Wheldall & Merret, 1988), the *Standard Questionnaire* offers the opportunity to detect differences between the two scores by examining both the frequency and severity of students' *challenging behaviour*. It is not surprising that enduring physical aggression may be perceived as very troublesome even if it occurred only once in a decade. In the same manner, the most frequent behaviours might be relatively minor (i.e. talking out of turn, playing with pencils) yet cause concern because of how often they occur (Little, 2005) but, on the contrary, their impact on stress levels might be limited in intensity.

As reported in other works (Castelli, Pepe & Addimando, 2012; Addimando, 2010) the six-factor structure of the *Standard Questionnaire* can be regrouped in a second-order underlying structure that in some way resembles the well known differentiation between internalised and externalised behaviours. The second order solution accounted for 65.9% of the explained variance. Internalised behaviours were WS (.794), EP (.762) and EU (.750) while externalised behaviours were AG (.860), FA (.812) and AH (.751) (original factor loadings in parentheses). This alternative conceptualisation is helpful in framing the topic of students' *challenging behaviours* because it offers a further glimpse into the phenomenon

under analysis. To this end, in the present paper, scores for frequency and stressfulness were analysed separately for internalised and externalised behaviours separately.

Before discussing the results, it must be explained how the Standard Questionnaire scores are analysed. Apart from the distinction between internalized and externalised behaviours, two other methods are adopted. The first approach provides more accuracy in indentifying teachers' major sources of stress by using a *predominance scale*. Among the set of six factors, the *predominance scale* is the highest-rated behaviour in frequency or degree of stress. For instance, if a respondent provided the following scores: AG = 3.12, FA = 2.45, WS = 1.23, EU = 0.97, EP = 0.43, AH = 2.96, its *predominance scale* is *against the grain*. By using this method, the scores can be ranked in term of percentages of teachers that handle a particular *challenging behaviour* and results can be profitably compared with other studies that adopted a similar percentage-based approach (see for example Ding, Li, Li & Kulm, 2007; Leung & Ho, 2001; Merret & Wheldall, 1984; Stephenson, Martin & Linfoot, 2000).

The second approach computes incidence and stress scores to identify the values of each scale in terms of descriptive statistics and sample distribution (i.e. mean, standard deviation, asymmetry and variance). This means that the ranking of most *challenging behaviours* is simply obtained by arranging the behaviour ratings in numerical order. This method allowed to apply common statistical techniques (i.e., one-way analysis of variance) and to calculate differences between subgroups using effect size measures. These results can also ready to be meta-analysed by future researchers.

Confirmatory factor analysis and reliability of sub-scales.

In the context of scales development, an appropriate Confirmatory Factor Analysis (CFA) reflects a measurement models in which observed variables (e.g. items of *Challenging Students Standard Questionnaire*) define a set of constructs or latent variables (Hoyle, 2000) by providing strong evidence in regard to the best factor structure of the measure (Jöreskog, 1993). A given measurement model can be defined as 'appropriate' when the variance - covariance matrix (Σ) reproduced (or model implied) by the hypothetical measurement model fits with the real variance - covariance matrix (S). The degree to which the model fits data can be determined by assessing model fit criteria. The most commonly adopted fit indexes are Chi square statistic (χ^2), Normed Chisquare (NC), Rootmeansquare residual error of approximation (RMSEA), Goodness of fit (GFI), Adjusted goodness of fit (AGFI), and Normative fit index (NFI) (for further details about the characteristics of fit indexes and their normative bound, see Browne & Cudek, 1993; Hu & Bentler, 1999; Jöreskog, 1969; Schumacker & Lomax, 2004).

The results of CFA performed on 23 frequency items of the questionnaire are as follows: χ^2 (202) = 514.72, NC = 2.54, RMSEA = .058 (90th C.I. .053 - .062), GFI = .94, AGFI = .91, NFI = .94; the results strongly confirmed the existence of a measurement model based on the six different hypothesized dimensions.

To test internal consistency of both frequency and stress scales, reliability analysis (based on Cronbach's α ; Cronbach, 1951) has also been applied to 23 items. The values are as follows: against the grain (f) = .79, full of activity/easily distractible (f) = .82, need a lot of attention/weak (f) = 0.82, easily upset (f) = .74, excessive perfectionism(f) = .61, aggressive/hostile (f) = 0.81; against the grain (s) = .79, full of activity/easily distractible (s) = .83, need a lot of attention/weak (s) = .80, easily upset (s) = .76, excessive perfectionism(s) = 0.67, aggressive/hostile (f) = 0.78.

Results

What are the most frequent and the most stressful *challenging behaviours*, in the eyes of Italian in-service primary teachers? Descriptive results are listed in Table 2.

Perhaps due to differences in job demands, predominance stress scale (i.e. the highest-rated behaviour in degree of stress) results were different between SETs and GETs. When Italian GETs were asked to think of the most *challenging students* they generally referred to a students with FA behaviour (41%), followed AG (20%) and AH (19%). As one can easily compute, 80% of GETs indicated that the most *challenging student* was characterised by *externalised behaviours*. Results from SETs reveal that the most *challenging behaviours* were FA (34%), WS (26%) and AH (17%). Therefore externalised behaviours accounted for only 57% of SETs' answers for this measure.

Table 2: Challenging Behaviors: Mean and Standard Deviation (scores range 0-4)

	SETs		GETs	
	Frequency m (ds)	Stress m (ds)	Frequency m (ds)	Stress m (ds)
Against the grain (AG)				
Full of activity/easily distractible (FA)				
Need a lot of attention/Weak(WA)	1.80 (1.14)	1.61 (1.07)	2.07 (1.08)	2.07 (1.13)
Easily upset (EU)	2.59 (1.08)	2.05 (1.08)	2.82 (1.04)	2.50 (1.06)
Excessive perfectionism (EP)	2.71 (0.99)	1.82 (1.01)	2.15 (1.14)	1.64 (1.06)
Aggressive/hostile (AH)	2.23 (0.88)	1.48 (1.01)	1.77 (0.96)	1.35 (0.97)
	1.49 (1.03)	1.19 (0.99)	1.35 (1.00)	1.09 (0.96)
	1.86 (1.23)	1.68 (1.32)	1.76 (1.31)	1.81 (1.31)

With regards to the frequency of *challenging behaviours* (the results are ranked in descending order), SETs rated *need a lot of attention/weak* ($m = 2.71$, $sd = 0.99$) highest, followed by *full of activity/easily distractible* ($m = 2.59$, $sd = 1.08$), *easily upset* ($m = 2.23$, $sd = .88$), *aggressive/hostile* ($m = 1.86$, $sd = 1.23$), *against the grain* ($m = 1.80$, $sd = 1.14$) and *excessive perfectionism* ($m = 1.49$, $sd = 1.49$). GETs rated *full of activity/easily distractible* ($m = 2.82$, $sd = 1.04$) highest, followed by *need a lot of attention/weak* ($m = 2.15$, $sd = 1.14$), *against the grain* ($m = 2.07$, $sd = 1.08$), *easily upset* ($m = 1.77$, $sd = 0.96$), *aggressive/hostile* ($m = 1.76$, $sd = 1.31$) and *excessive perfectionism* ($m = 1.35$, $sd = 1.00$). Teachers also indicated their degree of stress as a consequence of *challenging behaviours*. The most stressful misconduct for SETs was *full of activity/easily distractible* ($m = 2.05$, $sd = 1.08$), followed by *need a lot of attention/weak* ($m = 1.82$, $sd = 1.01$), *aggressive/hostile* ($m = 1.68$, $sd = 1.32$), *against the grain* ($m = 1.61$, $sd = 1.07$), *easily upset* ($m = 1.48$, $sd = 1.01$) and *excessive perfectionism* ($m = 1.19$, $sd = 0.99$). GETs rated *full of activity/easily distractible* ($m = 2.50$, $sd = 1.06$) as most stressful, followed by *against the grain* ($m = 2.07$, $sd = 1.13$), *aggressive/hostile* ($m = 1.81$, $sd = 1.31$), *need a lot of attention/weak* ($m = 1.64$, $sd = 1.06$), *easily upset* ($m = 1.35$, $sd = 0.97$) and *excessive perfectionism* ($m = 1.09$, $sd = 0.96$). Among GETs in general, the most frequent areas of misconduct were FA followed by WS. But the most stressful behaviours were FA, AG and AH. On the contrary, the least frequent and least stressful behaviour was EU. Some differences existed between the most frequently occurring behaviour and the most stressful in GETs group. Among the SETs in general, the most frequent areas of misconducts were WS, FA and EU. The most stressful behaviour were FA, WS and AH. Once again, EU was the least frequent and the least stress-generating area of misconduct. Results of the predominance stress scale are presented in Table 3.

Table 3: Predominance Stress Scale

	SETs Predominance scale (%)	GETs Predominance scale (%)
FA	34	41
WS	26	20
AH	17	19
EP	11	13
AG	6	4
EU	6	3

Table 4: ANOVA results for Comparison of Means by frequency and stress of behaviours

	SETs		GETs		Effect size <i>d</i>
	m	m	t-test	sig.	
<i>Frequency</i>					
Against the grain (AG)	1.80	2.07			
Full of activity/easily distractible (FA)	2.59	2.82			
Need a lot of attention/Weak (WS)	2.71	2.15	3.56	***	0.51
Easily upset (EU)	2.23	1.77	3.42	***	0.49
Excessive perfectionim (EP)	1.49	1.35			
Aggressive/hostile (AH)	1.86	1.76			
Tot. externalised behaviours	6.24	6.65			
Tot. internalised behaviours	6.37	5.26	3.52	***	0.51
<i>Stress</i>					
Against the grain (AG)	1.61	2.07	2.87	**	0.41
Full of activity/easily distractible (FA)	2.05	2.50	2.96	**	0.43
Need a lot of attention/Weak (WS)	1.82	1.64			
Easily upset (EU)	1.48	1.35			
Excessive perfectionism (EP)	1.19	1.09			
Aggressive/hostile (AH)	1.68	1.81			
Tot. externalised behaviours	5.38	6.37	2.41	*	0.34
Tot. internalised behaviours	4.41	4.07			

Note: * $p < .02$, ** $p < .01$, *** $p < .001$

SETs vs. GETs: a comparative perspective

Are there any differences between SETs and GETs in occupational stress in response to *challenging behaviours*? In order to explore data variability between SETs and GETs, the result of one-way analysis-of-variance are reported in Table 4 (externalised and internalised measures were examined separately).

As expected, Italian elementary SETs and GETs scores differed significantly. As a consequence of the heterogeneity of their job demands, the frequency and the degree of experienced stress from *challenging behaviours* is different between the groups. For each pairwise comparison, Cohen's effect size (*d*) is reported. Cohen (1992) addressed the topic of interpreting effect size estimates and labeled an effect size small if *d* is lower than .20. According to Cohen, large magnitudes of effects are reported when *d* = .80 or more. Finally, if *d* ranges between .21 to .79 the effect should be considered medium. The frequency of students' challenging behaviours differed between SETs and GETs with regard to WS, $F(1,306) = 3.56$, $p < .001$ and EU, $F(1,306) = 3.42$, $p < .001$. Cohen's effect sizes were medium (.51 and .49 respectively). The perceived level of stress among SETs differed from GETs with regard to AG, $F(1,306) = 2.87$, $p < .01$, and FA, $F(1,306) = 2.96$, $p < .01$. Cohen's effect sizes were medium (.41 and .43 respectively). Finally, the distinction between internalised and externalised behaviours revealed that the two groups differed. SETs rated the frequency of internalised behaviours $F(1,306) = 3.52$, $p < .001$ higher, while GETs stress scores were significantly higher with regards to externalised behaviours, $F(1,306) = 2.41$, $p < .02$. The Cohen's effect sizes were again medium (.51 and .34 respectively).

Discussion

The starting point of this project was the peculiarity of Italian education system in which students with special education needs are fully-included in mainstream classrooms. As a result of this inclusive model of education, SETs are called to work directly with an individual or a very small group of students exhibiting behavioural, emotional or learning difficulties. Given this kind of job organization, we

expected to find differences between SETs and GETs with regard to the most frequently-occurring students' *challenging behaviours* and related occupational stress. The results revealed that the most frequent *challenging behaviour* experienced by GETs was *full of activity/easily distractible* followed by *need a lot of attention/weak*. The SETs show the opposite result: the *need a lot of attention/weak* ranks first and *full of activity/easily distractible* ranks second. Some interesting effects on occupational stress appear when examining the stress measures more closely: both groups claimed that the behaviour that generated the largest amount of stress was *full of activity/easily distractible*. This suggests that students distracting other pupils, when they are unable to stay sitting and leave their seats and that this represents the most stressful behaviour for both SETs and GETs. If we analyze the second most stressful behaviour, some differences appear based on the teachers' role: the student with learning difficulties (i.e., *need a lot of attention/weak*) do not cause as much occupational stress for GETs as SETs. These results should be considered with caution, but it appears that the work done by SETs in supporting students with special education need may reduce this source of occupational stress for GETs. Further, *against the grain* behaviours were the second most stressful behaviours among GETs. These results fit with previous research documenting that the most troublesome misconduct is usually minor behaviour, such as poor attention or continuous violation of class procedures and rules (Little, 2005). The analysis of what we labeled *predominance scale* provided a closer look into the phenomenon. About 40% of GETs and 34% of SETs claimed to encounter *full of activity/easily distractible* behaviours during the school year. But, by adopting a distinction between internalised and externalised behaviours, a pattern emerged: the students with externalised behaviours were the most stressful for the 80% of GETs but only 57% of SETs. Moreover, behaviour directed to break the rules (*against the grain* dimension) characterized the most *challenging student* for 20% of GETs but only 6% of SETs, perhaps due to their physical proximity and emotional closeness with students.

In the third analysis, we compared both frequency and perceived stress of the six *challenging behaviours* as well as values of internalised and externalised behaviours between groups. Results supported the hypothesis that SETs and GETs significantly differed in terms of stress experienced in response to students' *challenging behaviour*. SETs were exposed to a higher level of *weak* and *easily upset* behaviours but compared to GETs they experience the same level of stress, statistically. On the contrary, GETs were subjected to high level of stress from *against the grain* and *full of activity* behaviours although the frequency of those behaviours does not significantly differ from SETs. At a higher level of abstraction, SETs experienced a higher frequency of internalised behaviours but in term of perceived stress the two groups did not differ. On the contrary, GETs experienced more stress from externalised behaviours but when the frequency was considered the values were statistically similar. Our data do not furnish direct evidence on reasons for explaining differences between GETs and SETs, but several possibilities deserve attention. For example, the way in which SETs are trained could be a possible explanation of the differences that arise in their rankings of the most *challenging behaviours*. They may be better prepared to manage both minor and major emotional problems and learning difficulties, thereby reducing the amount of stress experienced from internalised behaviors. Alternatively, SETs may experience stress differently based on the fact that the Italian educational model includes one-to-one relationships between SETs and students with special education needs. For example, when teachers pay individualized attention to pupils and build a trust-based relationship with them, stress associated with the severity of *against the grain* behaviours may be reduced.

Conclusion

The present paper explored how different job demands affect teachers' occupational stress in response to students' *challenging behaviours*. The main limits of the present study included not having a sample that was fully representative of the entire Italian teacher population: in fact, results are specific to a sample of urban and sub-urban in-service Italian primary teachers.

A second important limitation was connected to the research methodology. We surveyed teachers' perceptions of *challenging behaviours* using a self-report quantitative questionnaire and, even though they were direct witnesses of the way in which pupils behave in classrooms, the appraisal of misconduct is, in some way, rooted in social, cultural and personal characteristics of teachers and their heritage. The practical importance of exploring the experiences of SETs and GETs with *challenging behaviours* encountered in their work can assist in planning pre-service and in-service training programs. From this point of view, the results offered a useful overview of the most frequent and most stressful behaviours in Italian elementary schools. In the eyes of Italian elementary teachers in our sample (both SETs and GETs), *full of activity/easily distractible* behaviours comprise were rated as the most challenging and this fact should be considered when designing training courses for them. Based on these results, we strongly

advise that educational policy makers and head-teachers should be more attentive to these topics in order to correctly address custom stress-reducing intervention programs.

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