Burnout Syndrome Profiles among Teachers
Perfiles del Síndrome de Burnout entre Profesores
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Abstract
Burnout Syndrome (BS) is a psychological reaction related to chronic occupational stress, both interpersonal and emotional. This study assessed three discriminant profiles of BS in teachers according to psychosocial factors. Profile 1 represents teachers with or without BS; Profile 2 represents teachers with BS or without BS in reference to the dimension guilt; and Profile 3 represents Profile 1 and Profile 2. The sample comprised 679 Brazilian primary school teachers. The instruments used were: sociodemographic data questionnaire; Spanish Burnout Inventory; and Battery of Psychosocial Risk Assessment to assess role ambiguity, social support, self-efficacy, autonomy, role conflict, and overload and intention to leave the profession. A discriminant analysis was used to assess the differences between the groups. Results show that the variables that compose the discriminant profiles (Profile 1 and Profile 2) were intention to leave the profession, overload, role conflict, and role ambiguity, with self-efficacy discriminating teachers without BS in Profile 1. Profiles 1 and 2 were discriminated by two determinant factors: role conflict, and intention to leave the profession. The results suggest a need for interventions on psychosocial stressors to prevent burnout.

Keywords: Burnout Syndrome; occupational stress; occupational health; teachers.

Resumen
Burnout es una reacción psicológica relacionada al estrés ocupacional crónico de naturaleza interpersonal y emocional. Este estudio tuvo como objetivo evaluar tres perfiles discriminantes de BS en profesores, de acuerdo con factores psicosociales. El primero es entre profesores con Perfil 1 (presentación / ausencia de BS). El segundo entre profesores con Perfil 2 (presentación / ausencia de BS con dimensión de culpabilidad). Y el tercero entre los dos tipos de perfiles (Perfil 1 y Perfil 2). La muestra fue de 679 profesores brasileños de escuelas de enseñanza básica. Los instrumentos fueron: cuestionario de datos sociodemográficos; Spanish Burnout Inventory; Bateria de Riesgos Psicosociales, que evaluó Ambigüedad de Papel, Apoyo Social, Autoeficacia, Autonomía, Conflicto de Papel y Sobrecarga y Intención de abandonar la profesión. Un análisis discriminante fue utilizado para evaluar las diferencias entre los grupos. Los resultados demostraron que las variables que componen los perfiles discriminantes (Perfil 1 y Perfil 2) son intención de abandonar la profesión, sobrecarga, conflicto de papel y ambigüedad de papel, y que la autoeficacia solamente discrimina los profesores sin burnout en el Perfil 1. En la discriminación entre Perfil 1 y 2, dos factores fueron determinantes: el conflicto de papel y la intención de abandonar la profesión. Los resultados indican la necesidad de intervenciones sobre los estresores psicosociales a fin de prevenir el Burnout.

Palabras-clave: Síndrome de Burnout; estrés ocupacional; salud ocupacional; profesores.

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Introduction

Burnout Syndrome (BS) is currently one of the most investigated themes in Occupational Health Psychology due to results that have been confirming its serious consequences when it comes to a worker’s health and organizations (Bakker & Costa, 2014), social and economics (Maslach, 2017). This syndrome has been recognized as an occupational hazard that affects various people-oriented professions, such as human services, education, and health care (Maslach & Leiter, 2016).

BS is a result of chronic stressors, typical of the work routine, especially when there is excessive pressure, many conflicts, little emotional reward and professional recognition (Harrison, 1999). From a psychosocial perspective, it consists of a response face sources of chronic occupational stress and linked to social relations established between service providers and receptors (Gil-Monte, 2008; Guidetti, Viotti, Gil-Monte & Converso, 2017). It is characterized as a subjective experience of negative character, encompassing negative cognitions, emotions, attitudes and behaviors developed by workers in work-related situations and concerning their professional role (Gil-Monte, 2011). BS is being given increasing attention for constituting an important problem to both those affected and society in general (Chirico, 2016). In this sense, is important to consider the burnout costs in personal, organizational, social and economic levels (Maslach, 2017).

The BS model proposed by Gil-Monte (2005, 2011) consists of four dimensions: 1) enthusiasm towards the job: defined as the individual’s desire to achieve his or her work goals, with the latter being understood as a source of personal pleasure. Subjects perceive their job as attractive and achieving professional goals begins to be a source of personal accomplishment. Assessed inversely, low scores in this dimension indicates high BS levels; 2) psychological exhaustion: characterized by emotional and physical fatigue as a result of having to deal daily at work with people that present or cause problems; 3) indolence: presence of negative attitudes of indifference towards and detachment from clients, colleagues and organization. It is about individuals that show no sensibility and are not touched by the problems of those they need to assist while working; 4) guilt: defined as a social emotion linked to interpersonal relations and caused by negative behaviors and attitudes developed at work, especially towards people with whom they need to establish labor relations. This type of worker believes he or she is violating some sort of code of ethics or a norm derived from the prescription of his or her professional role.

For assessment effects, the theoretical model defends the existence of Burnout profiles: Profile 1, characterized by a set of feelings and attitudes linked to occupational stress, which generate a moderate form of malaise, without, however, making individuals unfit for their job, even though they could perform it better. These professionals may be professionally active for many years, blaming their lack of commitment on external factors. They behave defensively by means of cognitive strategies, compromising the quality of their relations and performance. In this profile, there is a cognitive deterioration (lack of enthusiasm towards the job) and an emotional deterioration (psychological exhaustion), which sets in as a first response to sources of chronic stress, thus developing negative behaviors (indolence) towards people they need to assist while working.

Profile 2 contains the very same dimensions, with the addition of the guilt dimension. Professionals are hard on themselves for feeling emotionally and physically fatigued, failing to perform properly their tasks at work. They belief they are violating norms and ethical aspects of their professional role, showing feelings of frustration and psychological suffering. This profile is characterized by a greater damage to workers, who may present serious problems in the execution of their job, along with long-term work leaves and psychiatric comorbidities.

Specifically about teachers, the literature has identified a relation between BS and diverse psychosocial stressors, including work overload (Beer, Pienaar, Rothmann, 2016; Yong & Yue, 2007), role conflict and ambiguity (Konukman, Agbuğa, Erdoğan, Zorba, Demirhan & Yılmaz, 2010; Lorente et al., 2008), interpersonal conflicts (Mallmann, Palazzo, Carlotto & Aerts, 2009), lack of social support (Mede, 2009) and self-efficacy (Carlotto, Dias, Batista, & Diehl, 2015; Shoji, Smoktunowicz, Rogala, Benight & Luszczynska, 2016). Its occurrence in teachers affects the educational environment and interferes with the achievement of pedagogical goals (Guglielmi & Tatrow, 1998). Teachers express feelings of frustration, demotivation at work (Friedman, 1993) and intention to leave the profession (Diehl & Carlotto, 2014; Guglielmi & Tatrow, 1998; Yong & Yue, 2007). Thus, this study aims to assess the discriminant profile of teachers classified into Profile 1 (presence/absence of BS), Profile 2 (presence/absence of BS), as well as among teachers with Profile 1 and Profile 2 burnout, according to psychosocial factors.
Method

Participants
This cross-sectional study was conducted with a calculated random sample of a population composed of 1,250 teachers distributed in all 37 elementary schools located in a large city in the metropolitan area of Porto Alegre (in the state of Rio Grande do Sul, Brazil). The parameters for sample size calculation were a 5% error, an 80% effect power and 20% of potential losses. The final sample was made up of 713 teachers. The collected sample consisted of 679 teachers, with loss of 34 participants.

Most participants were women (91.8%), had a partner (60.8%) and children (68.6%). Their average age was 42 years (SD = 9) and their salaries were higher than three minimum wages, reference in Brazil (51.2%). Most participants held post-graduate degrees (61.8%). The majority of the professionals work exclusively at the school under investigation (74.2%). Participants had an average of 17 years of professional experience (range = 1-47, SD = 8.9) and 8.8 years of professional experience at the school (SD = 7.2). Workload varied between 16 and 57 hours per week, with an average of 34 hours per week (SD = 11.6). The amount of students they work with per day varied between 7 and 500, with an average of 77 students per day (SD = 74).

Instruments
Data were collected by means of a questionnaire specifically designed to investigate some sociodemographic factors (sex, age, marital status, children) and work-related variables (education, weekly workload at the institution, wages, time working at the institution, work in other activities, jobs at other schools). Additionally, the following self-report instruments were used:

1. Spanish Burnout Inventory, Education professionals’ version (SBI-Ed) (Gil-Monte, 2005), adapted to Brazil by Gil-Monte, Carlotto and Câmara (2010). This instrument contains 20 items distributed into four dimensions called: enthusiasm toward the job (5 items, alpha = .83), psychological exhaustion (4 items, alpha = .80), indolence (6 items, alpha = .80) and guilt (5 items, alpha = .82). Items were answered on a five-point frequency scale, ranging from 0 (Never) to 4 (Very frequently: every day). To identify Profile 1 and Profile 2, the SBI manual criteria (Gil-Monte, 2011) were applied. Thus, Profile 1 comprises participants with scores ≥ P90 (percentile 90) in the average score of the 15 items that compose the enthusiasm towards the job (inverted), psychological exhaustion and indolence subscales. Profile 2 includes cases with scores ≥ P90 (percentile 90) in the average score of the 15 items in Profile 1, with the addition of the guilt subscale.

2. Battery of Psychosocial Risk Assessment (Unidad de Investigación Psicosocial de la Conducta Organizacional- UNIPSICO), by Gil-Monte (2005), assessing: role ambiguity (5 items, α = .78); social support (5 items, α = .75); self-efficacy (8 items, α = .79); autonomy (6 items, α = .76); role conflict (5 items, α = .76); overload (6 items, α = .79); intention to leave the profession (4 items, α = .78). All items were assessed on a five-point Likert-type frequency scale, ranging from 0 (“Never”) to 4 (“Every day”).

Procedures
First, we contacted the City’s Educational Department and presented the object of the study in order to obtain authorization and support to implement the instruments. Teachers answered the instruments at their workplace. The instruments were collected after they were filled out. The application occurred from September to November 2013. The first author of this study collected the data. Research ethics committees of [institution name omitted for review] approved the study.

The statistical software PASW, version 17 (SPSS/PASW, Inc., Chicago, IL), was applied for data analysis. Initially, to identify Profile 1 and Profile 2, the SBI manual criteria (Gil-Monte, 2011) were applied. Thus, Profile 1 comprised participants with scores ≥ P90 (percentile 90) in the average score of the 15 items that compose the enthusiasm towards the job (inverted), psychological exhaustion and indolence subscales. Profile 2 included cases with scores ≥ P90 (percentile 90) in the average score of the 15 items in Profile 1, with the addition of the guilt subscale.

Descriptive statistics was used to calculate frequencies, mean scores and standard deviations for sample characterization. Afterwards, data were assessed by means of discriminant analysis, stepwise method, with which the discriminant profile of the independent variables was identified for both BS profiles and for the two profiles jointly. Discriminant analysis uses a grouping variable (BS) and seeks the linear combination of independent variables (predictors) that maximizes the distance (difference) between groups. Results were deemed significant for p<.05.
Results

Table 1 displays results of the eigenvalues and multivariate descriptive statistics of the final model of each of three discriminant functions – the first one referring to Profile 1 (presence/absence of BS), the second referring to Profile 2 (presence/absence of BS) and the third one discriminating Profile 1 from Profile 2. Each function, for being unique, explained 100% of the total variability found between each pair of groups. From the eigenvalues and the canonical correlations obtained in each function, it’s possible to consider that the discriminant functions of Profile 1 and Profile 2 allow a good distinction between the groups, since the eigenvalues are far from zero and the canonical correlations are moderate. In the discriminant function between Profile 1 and Profile 2, the eigenvalue is close to zero and the canonical correlation is low, which indicates that the variables contained in the function do not allow a good differentiation. These results are endorsed by the statistic Wilk’s Lambda, which varied from moderate (Profile 1) to high (between Profiles 1 and 2). However, the transformed value of lambda to chi-square was significant at p <.005 in the three functions obtained, rejecting the hypothesis that the compared groups had equal means in the discriminant variables.

<table>
<thead>
<tr>
<th>Function</th>
<th>Eigenvalue</th>
<th>Variance %</th>
<th>Canonical Correlation</th>
<th>Wilk’s Lambda</th>
<th>$\chi^2$</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – Profile 1</td>
<td>.490</td>
<td>100</td>
<td>.574</td>
<td>.671</td>
<td>254.692</td>
<td>5</td>
<td>.000</td>
</tr>
<tr>
<td>2 – Profile 2</td>
<td>.348</td>
<td>100</td>
<td>.508</td>
<td>.742</td>
<td>190.817</td>
<td>4</td>
<td>.000</td>
</tr>
<tr>
<td>3 – Profile 1 and 2</td>
<td>.079</td>
<td>100</td>
<td>.271</td>
<td>.927</td>
<td>8.971</td>
<td>2</td>
<td>.011</td>
</tr>
</tbody>
</table>

Table 2 displays results of the discriminant functions referring to Profile 1 (presence/absence of BS) and Profile 2 (presence/absence of BS). Table 3 presents the discriminant function between Profile 1 and Profile 2. The results in both tables show that the discriminant variables contained in the three functions contribute to the differentiation between the studied groups, since for each inserted variable there is a decrease of the Wilk’s Lambda values, as well as the statistic F, which refers to the difference between the means of the groups.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Profile 1</th>
<th>Profile 2</th>
<th>Function</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>Wilk’s Lambda</td>
</tr>
<tr>
<td>Intention to leave the profession</td>
<td>3.00</td>
<td>0.64</td>
<td>1.83</td>
<td>0.82</td>
</tr>
<tr>
<td>Overload</td>
<td>2.35</td>
<td>0.56</td>
<td>1.73</td>
<td>0.60</td>
</tr>
<tr>
<td>Role ambiguity</td>
<td>0.84</td>
<td>0.62</td>
<td>0.47</td>
<td>0.38</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>2.30</td>
<td>0.73</td>
<td>2.85</td>
<td>0.60</td>
</tr>
<tr>
<td>Role conflict</td>
<td>1.72</td>
<td>0.77</td>
<td>1.06</td>
<td>0.66</td>
</tr>
<tr>
<td>Profile 2</td>
<td>Intention to leave the profession</td>
<td>3.05</td>
<td>0.63</td>
<td>1.90</td>
</tr>
<tr>
<td>Role conflict</td>
<td>1.84</td>
<td>0.80</td>
<td>1.08</td>
<td>0.67</td>
</tr>
<tr>
<td>Overload</td>
<td>2.42</td>
<td>0.50</td>
<td>1.75</td>
<td>0.60</td>
</tr>
<tr>
<td>Role ambiguity</td>
<td>0.86</td>
<td>0.66</td>
<td>0.50</td>
<td>0.45</td>
</tr>
</tbody>
</table>

* p < .05 ; ** p < .01

Table 3

Table 3 displays results of the discriminant functions referring to Profile 1 (presence/absence of BS) and Profile 2 (presence/absence of BS). Table 3 presents the discriminant function between Profile 1 and Profile 2. The results in both tables show that the discriminant variables contained in the three functions contribute to the differentiation between the studied groups, since for each inserted variable there is a decrease of the Wilk’s Lambda values, as well as the statistic F, which refers to the difference between the means of the groups.

With respect to Profile 1, it was found that the function pulls the burnout group, with a centroid of 1.482, away from the No burnout group, with a centroid of -3.30. The centroid works as a central point of the degree of dispersion of the cases in the discriminated groupings. Analyzing the structural matrix of the discriminant variables in the function, it was identified that what most differentiates both groups is tendency to abandonment (.816), which, together with overload (.572), role conflict (.531) and role ambiguity (.389), discriminates the group of teachers with burnout. self-efficacy (-.479), in turn, discriminates the group of teacher without it (Table 2).
About Profile 2, the function pulls the burnout group, with a centroid of 1.519, away from the No burnout group, with a centroid of -.228. The psychosocial factor that most discriminates the groups is tendency to abandonment (.801). In addition to it, overload (.641), role conflict (.636) and role ambiguity (.398) are factors related to the group of teachers with BS (Table 2).

In terms of psychosocial factors that discriminate teachers with Profile 1 and Profile 2 BS, the function pulls Profile 2 group, with a centroid of .185, away from Profile 1 group, with a centroid of -.420. Since both groups present BS, only two factors were discriminant: role conflict (.751) and intention to leave the profession (.635), with both discriminating the group of teachers with Profile 2 (Table 3).

About prediction capacity, in terms of correct classification in the groups discriminated in each function, the first one (Profile 1) classified correctly 81.6% of the cases, the second (Profile 2) 79.2% and the third one (between Profiles 1 and 2) 62.8% of the cases in the discriminated groups.

**Discussion**

The present study aimed to identify the discriminant profile of elementary school teachers in terms of their classification into Profile 1 and Profile 2 BS, as well as the differentiation between teachers with Profile 1 and Profile 2 BS, according to work-related psychosocial factors.

The results allow verifying, by the distance of the centroids in the functions, that there is a greater discrimination between teachers with presence and absence of BS in Profile 1, although in Profile 2 as well there is a very evident discrimination. When it comes to teachers presenting BS, the discrimination between Profile 1 and Profile 2 is lower. It was possible to identify that the same psychosocial factors discriminate the groups in the functions referring to Profile 1 and Profile 2, except for self-efficacy, which differentiates the group of teachers without burnout in the function relating to Profile 1.

In this sense, the variables that compose both discriminant profiles (Profile 1 and Profile 2) are related to the group of teachers thinking about abandoning the classroom context, temporarily or permanently, who feel overburdened by work demands, experience role conflicts, in the sense of having to do their job in a way that is different from what they believe it should be and who are not sure about their roles, attributions and evaluation criteria. Intention to leave the profession is the most discriminant variable, confirming studies that have found that this is an important consequence in teachers suffering from BS (Federici & Skaalvik, 2012; Leung & Lee, 2006). It is worth highlighting that the thought of abandoning their profession can be taken as a special abandonment, with this one being one of its more problematic forms, as it represents a discontinuance of teaching even though these individuals have not stopped working. In this type of abandonment, teachers go to school, teach their classes, comply with bureaucratic duties, but perform these activities within a limit that represents the minimum necessary for keeping their job (Lapo & Bueno, 2002). However, their performance is very poor in comparison with their professional potential, showing issues in the quality of their job (Maslach & Goldberg, 1998).

As a differentiator, of protective character, self-efficacy in Profile 1 is related to teachers without burnout. Self-efficacy is about a set of beliefs an individual has about his or her capacity to organize and execute actions to produce certain goals, in a constructive manner, with professional demands (Bandura, 1977). In teachers, it is an important matter to the extent that everyday situations, if taken as challenges, result in a better professional performance (Xu, 2012).

Nevertheless, in the discriminant function of Profile 2 self-efficacy no longer represents a discriminant variable, indicating that, in the presence of the guilt dimension, external pressure overlap internal resources. The category of teachers is harshly criticized, pressured face failures and rarely recognized by their successes. Although this is common in all professions, no other category has been so harshly evaluated and pressured by the population in general over the last decades the way teachers have bee (Faber, 1991; León, 2011).

As for differentiation between teachers with Profile 1 and Profile 2 BS, it is necessary to take into account that both groups are affected by the syndrome and, therefore, share certain similarities, although Profile 2 means greater compromise. In this sense, two psychosocial factors discriminating teachers with Profile 2 burnout were identified: role conflict and tendency to abandonment. In this discriminant function, role conflict is the most discriminating variable, showing difficulties inherent to the exercise of this job. Professionals oftentimes take on some roles with which they do not agree, but which are requested by the organization, causing conflicts between the individual’s values and institutional orientations, making teachers consider they are not being ethical (Maslach & Leiter, 1999). They end up taking on many tasks and playing roles that are frequently contradictory, such as dealing with academic instructions, discipline in the classroom, social and emotional aspects of students, as well as with conflicts generated by the expectations of parents, students, administrators and community (Burke et al., 1996; Vercambre et al., 2009).
The fact that Intention to leave the profession is present in both Burnout profiles is not a surprise, since it has been seen by the literature as one of the main BS consequences. However, it is possible to think that there are levels between the profiles. In Profile 1, the presence of this intention may be incipient, characterized by psychological abandonment and, in Profile 2, present itself more persistently and with greater impairment of a worker’s health conditions, being manifested in the form of increased absenteeism and leaves for health problems, with depression being one of the most present comorbidities (Gil-Monte, 2012).

A strength the present study has is the use of a clearly defined theoretical construct that contains an assessment instrument that has been adapted and validated for use in Brazil. It is worth highlighting the fact that the sample is probabilistic, enabling the generalization of its results to the study population.

As limitations to be considered for the reading of results, the use of self-reported measures stand out, which may lead to a response bias, of minimization or maximization. Although the results can be generalized to the study population, they come from school institutions located in a specific region in Southern Brazil and cannot be generalized to all regions and school contexts. In this sense, new studies should be conducted in different regions in the country, including longitudinal ones in order to keep track of an individual’s Intention to leave the profession. Qualitative studies are recommended as well, as they can apprehend the complexity of the discriminant variables present in each one of the BS profiles.

With respect to professional practice, actions targeting the development of self-efficacy can be carried out soon when teachers are being trained, and maintained in the course of their professional lives. Self-efficacy among teachers has been shown to be related to their performance in relation to the teaching-learning process, as well as their emotional aspects, regarding emotional exhaustion and satisfaction towards work (Mahler, Großschedl, & Harms, 2017). A study with Korean teachers demonstrated that the sense of efficacy positively correlates with persistence, self-directedness, cooperativeness, and self-transcendence, acting as a protective resource against stress (Park et al., 2016).

With regard to the context of work, there should be actions, on the part of managers, aimed at reducing occupational stressors such as work overload, making activities to be performed and the proper time for their execution compatible. Job redesign has been implemented in suboptimal work environments, which consists of a measure of systematic reorganization of the functional structure of the work context and consequential improvement of the organization’s results, as well as the workers’ welfare (Bakker & Demerouti, 2017). This is an alternative for the improvement of work conditions that must be performed by means of participatory process in the workers-managers dialogue (Bakker & Demerouti, 2014). This measure aligns with what is expected of school management, which benefits from democratic and decentralized processes of participation of all actors involved in the school community. It is a paradigm that contributes to collective work, developing shared responsibility and autonomy (Lück, 2007).

The debate on the attributions of teachers and social expectations should be part of the technical/institutional agenda. In this sense, it is worth pointing out that measures for the prevention and eradication of Burnout in teachers are not a solitary task to be performed by these professionals but should contemplate a joint action involving teacher, students, education institution and society (Carlotto, 2012). It is about the implementation of health in the school community as a whole, in a perspective that aligns with the purpose of the educational process, which incorporates diversity, continuous change and social commitment in a health context (Barbosa & Brito, 2016).

References


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