The Effects of Work Routine and Professional Satisfaction on Burnout among High-School Teachers

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ABSTRACT: The aim of this study was to analyze the relation between the teachers working conditions in the school and the incidence of teachers burnout in Brazil. One Hundred teachers participated (Age=39.08 years, SD= 10.04), time experience 12.11 years (SD= 8.5) working in the high school. For data collection was used the Maslach Burnout Inventory-ED. Data were collected once in second semester, 2014, in state schools of Minas Gerais. The descriptive statistics was used for sample analysis (Mean and Standard Deviation). The level of burnout was classified in lower, moderate and high. The teachers were divided into sub-groups depending on the work routine. It was identified high burnout levels in teachers with long work routine and lower professional satisfaction. It is concluded because the context of education in Brazil, some teachers are exposed to emotional exhaustion and increased predisposition to SB.

KEYWORDS: Emotional Exhaustion, MBI-ED, Professor, Stress, Teacher burnout

I. INTRODUCTION

The teacher’s work routine is composed of activities in the teaching-learning process and school management [1,2]. In addition, the teacher needs to develop organizational capabilities and emotional control to perform their weekly assignments. Thereafter, it has been observed that teachers are constantly exposed to conflicting environments with high demand for labor, what may result in loss in the quality of education [3–5]. Due to low wage, the teacher in Brazil tends to supplement their income by working in other activities, accumulating extra working hours [6]. His professional routine becomes overloaded, leading to a physical, mental and social tiredness [7].

Stress can be understood as a three-dimensional phenomenon [8]. Biological, psychological and social factors may interact to result in the generation of this phenomenon [8,9]. When this phenomenon is directed to maintaining or even develop functional capabilities, self-preservation and identification of limits, a certain stress level may be necessary for the individuals [9]. The literature suggest there is a good stress in teacher work routine. The good stress is capable to enhancing cognitive dimension and to prepare the body and physiology for situations the decision efficient. However, when the stressor-stimuli are too high in long-term, there is the appearance of negative products of stress, such as biological and behavioral impairments [8]. The physical and mental strength is weakened, resulting in chronic-stress [10-12].

The chronic-stress in teacher work routine can contribute to the onset of diseases, including the burnout [13]. Sadir, Bignotto and Lipp [14] showed the excess of teaching work, requires the teacher the ability of adapting to the context of the demands which may cause the imbalance of mental and physical condition of the body. In order to identify the level of stress, the symptoms and the main stressor-factors in Brazilian teachers of public school, Zille and Cremonezi [6] showed that approximately 69% of the teachers had typical characteristic of stress. In regarding to the main stressors-factors in teachers, other studies have pointed the indiscipline of students, low wages, excess workload and carrying out several activities simultaneously [6,15].

The most prevalent symptoms reported by teachers with stress are the physical and emotional fatigue, anguish, nervousness, anxiety, pain in the neck and shoulder muscles [6,16]. Note that, the anguish factors, anxiety, physical and mental fatigue, frustration are also associated with burnout [16-21]. The burnout appears to be linked to psychological disorders such as depression and anxiety, and these disorders are directly related with other psychological effects such as frustration, anguish and anger [22-25].

Burnout is syndrome, an exhaustion that arise from the excessive demands of energy, strength or resources [26]. Maslach and Jackson [27] reinforced the concept of burnout as an emotional exhaustion that often occurs among individuals who perform some kind of work to others. Maslach and Jackson [27] characterized the three basic dimensions of burnout: Emotional Exhaustion, Depersonalization and Reduced Personal Accomplishment. Emotional exhaustion is defined as lack or shortage of energy and enthusiasm, caused by overwork, in which there is a depletion of resources. There is a personal feeling of discouragement to
go to work due to exhaustion. The workers with burnout are unmotivated and they are at the limit of their physical and emotional resources, besides that, they consider the next day of work as a very exhaustive task [27]. Reduced personal accomplishment is characterized by a feeling of incapacity of working, there is a tendency of making a negative self-evaluation and an satisfaction with the professional performance accompanied with guilty feeling [27]. Finally, the despersonalization dimension, is characterized when the professional goes through a process of affective isolation [28], for example, the worker has a social isolation behavior in the workplace and develop negative attitudes about yourself and other people [27,29].

The teacher profession is one of the most important and necessary professions in the world in preparing reflective and educated individuals. It is known that in order to educate and be a good architect in the construction of positive human values, it is imperative that the teacher is well. Nevertheless, if the teacher is intensely exposed to work stressors and cannot face them effectively, he or she will wear out psychically and lose the enthusiasm with the work [30]. It is possible that some teachers become frustrated with their work to the harbor negative feelings about the profession [31].

In the professional performance of the teaching activity are several stressors, some related to the nature of their functions, others related to the institutional and social context where they are inserted. Poor working conditions, after school tasks, little social contact with friends and family are factors that when repeated and accumulative, could make teacher vulnerable to burnout [6,32]. Developing some considerations of burnout in teachers, it is possible that, due to the constant school overload, overwork and other demands, the teachers cannot get a good performance and impair the quality of the teaching-learning process. Studies with burnout in Brazil are still recent and show the need of understanding the complexity of this phenomenon, respecting the socio-economic and cultural diversity of Brazil.

II. AIM OF STUDY

Identify the predictive factors of burnout in high school teachers in Brazil.

III. METHODS AND PROCEDURES

The study complied with the ethical procedures of scientific research and it was approved by the Ethics Committee of the University of Minas Gerais – Brazil, under number protocol: 30344414.2.0000.5525. The study design is semi-experimental with quantitative analysis.

3.1 Population and sample:
The sample of this study was composed of seventy-two female and twenty-eight male teachers (Age=39.08 years, SD=10.04) of multiple subjects that worked in public high schools in Brazil.

3.2 Instrument:

For data collection, the Demographic Data Questionnaire and the Maslach Burnout Inventory-Educators Survey (MBI-ED) [33] were used. The use of the Demographic Data Questionnaire aimed to collect general information of the participants: sex, age, time of experience, salary satisfaction, academic degree and occupations. One last discursive question suggested the teachers to give us feedback about their perception about the work routine and professional satisfaction.

The MBI-ED was validated by Maslach and Jackson [33], and it was also validated to a Brazilian version [34]. The MBI-ED aims to quantify each dimension of burnout in teachers. The emotional exhaustion dimension was composed of nine items that aim to access the feelings of being emotionally overwhelmed and exhausted by working. The despersonalization dimension contains five items that measure the unfeeling and impersonal response directed by the teachers to their student. High index in these two dimensions means high level of burnout [27]. The reduced professional accomplishment dimension contains eight items which allow to access feelings of competence and success at work. The items were answered by using a Likert scale ranging from 0 = never; 1= a few times a year or less; 2 = once a month or less; 3 = a few times during the month, 4 = once a week; 5= a few times during the week and 6 = every day.

3.3 Procedures

Data collection occurred at the beginning of the second semester in 2014. Fifteen public state Schools were invited to participate with its respective teachers. However, only nine schools have signed an authorization form. Collections were performed at schools during the educational meetings or class intervals. Total of 250 teachers were invited, but only 105 teachers complete the questionnaire.

The teachers were grouped according to the time of teaching experience with five-year intervals: 2-7 years (32 teachers), 8-13 years (33 teachers), 14-19 years (17), 20-25 years (13), 25-or more years (5). About the work-routine, teachers were subdivided according to the hours working per week: less than 20 hours (06 teachers), 20-30 hours (45 teachers), 30-40 hours (17 teachers) and more than 40 hours (32 teachers).
3.4 Statistical treatment

Descriptive statistics were used for the analysis of mean and standard deviation. For the classification of the burnout and its respective dimensions the mean sum of the MBI-ED were used, following recommendation of Sinnott et al. [35]. The score of burnout dimensions were classified in: Burnout, low (0-18), moderate, (19-25), high (>25); Emotional Exhaustion, low (0-15), moderate (16-25) and high (≥26); Reduced Personal Accomplishment, low (0-33), moderate (34-42) and high (≥43); depersonalization, low (0-02), moderate (03-8) and high (≥09).

IV RESULTS

Table I shows the values for the dimensions of burnout in the studied teachers. The reduced personal accomplishment dimension obtained the higher mean value. The depersonalization was the only dimension that showed low means values among teachers.

Table I: Level descriptive of dimensions of the burnout in high school teachers of the metropolitan region of Minas Gerais

<table>
<thead>
<tr>
<th>Dimensions of Burnout</th>
<th>Mean</th>
<th>Std Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Exhaustion (9 itens)</td>
<td>27.4</td>
<td>11.7</td>
</tr>
<tr>
<td>Reduced Personal Accomplishment (8 itens)</td>
<td>31.1</td>
<td>5.9</td>
</tr>
<tr>
<td>Depersonalization (5 itens)</td>
<td>7.7</td>
<td>5.9</td>
</tr>
<tr>
<td>Burnout</td>
<td>2.8</td>
<td>0.45</td>
</tr>
</tbody>
</table>

The 59.2% teachers of this study showed high Emotional Exhaustion, 63.3% presented low Reduced Personal Accomplishment, and 40.8% of the teachers were at moderate level of Depersonalization. The results to burnout and burnout dimensions. The Table II showed the descriptive levels about burnout by time of experience. For the Brazilian high school teacher, the first decade it’s the most dangerous to develop the burnout.

Table II: Analysis of burnout (Mean) by time of experience in high-school teachers

<table>
<thead>
<tr>
<th>Dimensions of burnout</th>
<th>Time of experience (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2-7</td>
</tr>
<tr>
<td>Emotional Exhaustion</td>
<td>35.9</td>
</tr>
<tr>
<td>Reduced Professional Accomplishment</td>
<td>36.7</td>
</tr>
<tr>
<td>Depersonalization</td>
<td>5.2</td>
</tr>
<tr>
<td>Burnout</td>
<td>25.9</td>
</tr>
</tbody>
</table>

The table showed the descriptive analysis levels (low, high and mean) about burnout and burnout of dimensions for teacher’s age. The age with the highest incidence of burnout was 26-30 years old.

Table III. Analysis of burnout levels and burnout dimensions by teacher’s age

<table>
<thead>
<tr>
<th>Age</th>
<th>Emotional exhaustion</th>
<th>Reduced personal accomplishment</th>
<th>Depersonalization</th>
<th>Burnout</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
</tr>
<tr>
<td>20-25</td>
<td>19.3</td>
<td>40.3</td>
<td>8.0</td>
<td>21.3</td>
</tr>
<tr>
<td>26-31</td>
<td>22.3</td>
<td>36.5</td>
<td>5.5</td>
<td>29.1</td>
</tr>
<tr>
<td>32-37</td>
<td>24.5</td>
<td>36.9</td>
<td>4.7</td>
<td>25.3</td>
</tr>
<tr>
<td>38-43</td>
<td>24.0</td>
<td>36.6</td>
<td>5.6</td>
<td>20.6</td>
</tr>
<tr>
<td>44-49</td>
<td>24.0</td>
<td>1.0</td>
<td>7.0</td>
<td>24.4</td>
</tr>
<tr>
<td>50-55</td>
<td>20.0</td>
<td>25.3</td>
<td>5.0</td>
<td>28.9</td>
</tr>
<tr>
<td>56-61</td>
<td>22.0</td>
<td>22.5</td>
<td>22.0</td>
<td>26.6</td>
</tr>
<tr>
<td>62-67</td>
<td>20.0</td>
<td>8.0</td>
<td>1.0</td>
<td>17.0</td>
</tr>
<tr>
<td>68-73</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>24.3</td>
</tr>
</tbody>
</table>

Analyzing the work routine, 49%, 45% and 6% corresponded to teachers who work more than 30 hours, up to 30 hours and up to 20 hours per week, respectively. Teachers who work more than 30 hour per week showed the most moderate results regarding the burnout (M=20.16).

The level of professional satisfaction with the career was also analyzed. It was observed that the 37% are “satisfied” and 35% “are somewhat satisfied” and 28% “non satisfied”. The highlights in the group of satisfied teachers, 35.9% teachers was found with high emotional exhaustion (M=35.2), 53.8% presented low reduced personal accomplishment (M=28.2), and 35.9% low Depersonalization (M=0.5). From the “somewhat satisfied” teachers, 74.3% presented high Emotional Exhaustion (M=34.7), 68.6% showed low Reduced Personal Accomplishment (M=28.2), and 42.9% with average level for Depersonalization (M=13.9). In the group of “Non-satisfied” teachers, 71% teachers was found with high Emotional Exhaustion (M=39.5), 71% presented low Reduced Personal Accomplishment (M=25.8), and 5.8% low Depersonalization (M=1.0).
V.Discussion

The results indicated the public high school teachers were exposed to factors that increase the level of mental exhaustion and there is a predisposition to burnout. This result was reinforced by Carlotto [16] that even at low levels of mental exhaustion the teacher is exposed to burnout, manifesting insecurity, tiredness, tension and fear in relation to their work. It is possible that the teachers of the presented study showed chronic stress due to the environment pressure and the constant charging, which increases exposure to burnout.

Among the identified and analyzed labor factors, teachers with less time of career were at high levels of emotional exhaustion. In the same observation, other studies found a negative relationship between time of experience and burnout [16,36]. For those authors, teachers with less time of career had higher levels of burnout due to the inexperience and unrealistic expectations of the profession. Therefore, younger teachers still do not know how to deal with different situations which result in stress and excessive tiredness.

Teacher's working-routine was analyzed and 49% of teachers who work more than 30 hours/week presented higher levels of burnout. Carlotto [16] showed similar results, in which the time spent (per week) by working was associated with higher levels of emotional exhaustion and depersonalization. Brunsting, Sreckovic, Lane [31] through a systematic review showed a negative correlation between the hours spent by working and the Emotional Exhaustion. The literature states that teachers with constant contact with stressor agents as high number of students and the continuous increases of demands and charges, lead to physical and emotional exhaustion [16,37]. These factors facilitate the emergence of burnout. In addition, other teachers activities as bureaucratic of the educational system and preparation of classes may contribute to burnout appearance [16,37].

Regarding the variable professional satisfaction with the career, the proportion of somewhat satisfied teachers is justified by the poor schools infrastructure, low salaries, excessive working hours and precarious public education system. Reinforce these results, Fontana et al. [38] show that job satisfaction may be associated with efficient physical infrastructure, good working relationships and fair remuneration. In some cases, as mentioned by Andrade et al [39], job satisfaction occurs mainly in relation to the work environment and the remuneration. Agreeing with others authors, Esteves-Ferreira, Santos and Rigolon [36] affirm the absence of a consistent remuneration lead these professionals to accumulate positions/works, increasing the activities in the day. Therefore, job satisfaction exerts a direct influence on the teacher's work and can affect not only their professional performance but their physical and mental health.

The age with the highest incidence of burnout was 26-30 years old. A similar result was found in a study of Valerius, Amorim and Mosér [40]. In Esteves-Ferreira, Santos and Rigolon [36] 40 years old teachers were more likely to develop burnout. Brunsting, Sreckovic, Lane [31] found that older teachers had lower levels of emotional exhaustion and depersonalization and higher levels of reduced personal accomplishment. It is believed that younger teachers with little experience can suffer from frustration of facing the reality of their work and thus, manifest insecurity in the performance its function. These factors may contribute to increased burnout rate in younger teachers who are beginning the career [3,5,13].

By the analysis of the dimensions of burnout, the emotional exhaustion received the highest value. Similar results were found in other studies [17,18,37,39] in which this dimension was related to excessive working time, dissatisfaction and disinterest for the profession. Considering the teachers have high levels of emotional exhaustion, it is inferred that there is an excessive increase in the effort to carry out the activities in the workplace, resulting in physical and mental tiredness. In addition, the emotional exhaustion is the first dimension to be manifested in the burnout [5,37].

In relation to the dimension reduced personal accomplishment, teachers were classified at low level. The reduced personal accomplishment has been identified in other studies [18,35,41,42] and associated to younger teachers, frustration with the teaching career, dissatisfaction with their results and demotivation. It should be noted the reduced personal accomplishment is inversely proportional to the burnout [5,43], because the higher level of personal teacher achievement, the less is the likelihood of emergence burnout. In this study, the Reduced Personal Accomplishment was the dimension with the highest rates, which indicates the presence of burnout in teachers.

For the depersonalization dimension was found a moderate level, indicating the presence of burnout in the population studied. In a study by Carlotto and Palazzo [37], the Depersonalization was the dimension with lower scores, but it was associated with affective detachment from teachers to students due to lack of family and school support and bad students behavior. This lack of affection was also seen in other studies [28,43]. Carlotto [16] also states that this is a defensive behavior in relation to excessive tiredness and disappointment with their outcomes. The depersonalization is an essential dimension for identification of burnout, where an average level was found in this study, indicating greater attention in order to avoid the distance and the precariousness of the teaching/learning process.
VI. CONCLUSION

It is concluded that work-routine and professional satisfaction is a predictive factors of burnout in public high school teachers. For the group of teachers with high levels of burnout is recommended to search for experts who may treat the burnout adequately. In addition, the age and time of experience can be variables that influence the level of the syndrome during the teaching career. It is also recommended that the government agencies responsible for the education system promote public policies capable of reversing the high level of burnout identified in this population studied.

This study has some limitations. There were no questions regarding the physical activity. It is understood that for further studies it is an important factor related to the quality of life. A higher number in the sample would be needed for more reliable results in relation to teacher characteristics and burnout, but the difficulty of access to schools reduced the sample number. The resistance of schools and some teachers were also a limiting factor in this study.

Preventing burnout is critical to maintaining teacher’s health what may reflect in their work performance. Thus, new studies that seek to investigate strategies for prevention and treatment of burnout can bring benefits, both of personal life and for the professional environment within the classroom and school environment.

VII ACKNOWLEDGEMENTS

Source of support: Fapemig (Fundação de Amparo a Pesquisa do Estado de Minas Gerais), PRPq (PróReitoria de Pesquisa e Pós-Graduação da UEMG), PAPq/UEMG (Programa Institucional de Apoio a Pesquisa da UEMG). Special Acknowledgements to the volunteering teachers who took part in this study.

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