Survey of the prevalence of burnout and depression among high school students

Dr. Nabil Alamí, Mounia Elhaddadi, Zaina El Mouden, Dr. Mohamed Latifi and Dr. Ahmed Omar Touhami Ahami

DOI: https://doi.org/10.22271/allresearch.2020.v6.i8e.7035

Abstract
This article analyses the relationship between burnout and depression among teenagers at secondary school. The objective of this study is to understand how this relationship affects the students’ mental health and behavior. The results reveal that 20% of students suffer from emotional school exhaustion while more than 50% have gone through disengagement and depersonalization of relationships. The study also demonstrates that 48% of students are affected by feeling of professional incompetence (Individual accomplishment). Additionally, 13 students among the 115 participants in the study are victims of the three factors with a percentage of 11.3%. We can say that more the school factor is important for adolescents, more they are vulnerable to depression and school burnout.

Keywords: Burnout, depression, mental health, secondary school

1. Introduction
This study deals with adolescent depression at the school environment. Recently, school factor related to depression and stress becomes a subject of great interest. School stress can be defined as a state of chronic stress among students who had set goals that they could not achieve either in terms of exam performance or relationships with adults (parents and teachers) or whose expectations were beyond their capabilities (Ang, R.P. et Huan, V.S. 2006) [1] This is studied through burnout syndrome or burnout. Several studies have emphasized the nuisance of "micro-stressors" and "daily hassles" on adolescent mental health, especially in relation to depression and stress.

This syndrome can be a precursor to a reactive depression, exogenous extending thereafter to all aspects of a person’s life (Bakker and al.2000) [2] and results in three dimensions: emotional exhaustion, depersonalization and reduced or lack of personal accomplishment (Maslach, C., Schaufeli, W.B. et Leiter, M.P.2001) [3]. There are two models to explain the emotional exhaustion: the first is related to the fact that this syndrome particularly affects individuals with high expectations and trying to achieve ideals they have set themselves without success. The second is based on vulnerability because of too much exposure to chronic stress and excessive pressure (Zakari, S., Walburg, V. and Chabrol, H. 2008) [4].

The term “Burnout” was coined in 1980 by an American psychoanalyst, Herbert J. Freudenberger in reference to an "inner fire": “As a psychoanalyst and physician, I realized that people are victims of fires, as well as buildings. Under tension produced by living in our complex internal resources come to be consumed as fire does, leaving a huge void inside, even if the outer shell is more or less intact”.

Actually, the different stressors that students experience during their studies are deeply related to total physical, mental and emotional commitment. Increasing pressure from teachers, colleagues and parents leads high school students to an increasingly high risk of experiencing states of psychological fatigue, progressive disgust, loss of interest and motivation for school, which can end up as burnout.

Furthermore, it seems important to better understand the process that leads to this emotional state in order to try to prevent its appearance among teenagers. In the same context, basing
our approach on certain aspects of personality such as anxiety, depression and intelligence, two hypotheses are proposed:

- The presence of depressive symptoms could cause exhaustion.
- School performance can be affected by burnout.

2. Methodology

2.1 Participants

This cross-sectional study was conducted among 115 students of a Moroccan public institution in the region of Zagora, Tamzmout community. The sample consists of 55 boys and 60 girls with an approximate age of 18 years old including 50 in common cores (first year of high school) and 65 in the second year of the Baccalaureate.

2.2 Material and procedure

Semi-structured interviews of an hour and half were conducted supported by the completion of questionnaires on school exhaustion and depression. Participants have been met during their classes according to their availability with a prior agreement from their school administration.

- **Test MBI**

The MBI test known as the rating scale is adapted to answer the question "are you burnout?". Participants had to read the statements that describe their feelings. Then, they were asked to estimate how much burnout they feel. For each statement, they must give their answer by selecting one of the numbers from 1 to 6, which is next to the statement. The numbers range from:

1: Very few; 2: Enough; 3: Sometimes; 4: Many Times; 5: Strongly; 6: A lot

The results show three cases

- **Emotional exhaustion**: The score is by % which is significant if it is greater than 50%
- **Disengagement, depersonalization of relationships**: The score is by % which is significant if it is over than 33%.
- **Individual Achievement**: Score is by % which is significant if it is less than 66%

The International Neuropsychiatric Mini Interview (MINI) Developed for clinical research or for use by clinicians, psychiatrists and psychologists in the United States, the MINI is a diagnostic tool for depression maintenance. In addition, the questionnaire provides an assessment of the psychic state of the subject. The criteria for diagnosing a depressive episode according to ICD-10 (WHO, 1993) are as follows:

- General criteria (mandatory)
- The depressive episode must persist for at least 2 weeks.
- Absence of hypomanic or manic symptoms meeting the criteria of a manic episode or hypomanic at any point in the subject's life.
- Exclusion criteria are commonly much used: the episode is not attributed to the use of a psychoactive substance or an organic mental disorder.
- Presence of at least two of the following three symptoms:
  - Depressed mood to a marked degree abnormal for the subject, present practically all day and almost daily, largely unaffected by circumstances and persistent during at least 2 weeks.
  - Significantly decreasing interest or pleasure for usually enjoyable activities.
  - Reduction of energy or increase of fatigability.
- Presence of at least one of the following seven symptoms, to reach a total of at least four symptoms:
  - Loss of self-confidence or self-esteem.
  - Unjustified feelings of excessive or inappropriate guilt.
  - Recurrent thoughts of death or suicidal thoughts, or suicidal behavior of any type.
  - Decreased ability to think or concentrate (reported by subject or observed by others), manifested for example through indecision or hesitation.
  - Modification of psychomotor activity characterized by agitation or slowing down (reported or observed).
  - Disturbances of sleep of any type.
  - Modification of the appetite (decrease or increase) with corresponding weight variation.

3. Results

The results were analyzed using SPSS and Statistica software.

3.1. School exhaustion in general

3.1.1. Emotional Exhaustion

Emotional exhaustion (depression or anxiety syndrome) shows a fatigue experienced at the level of the work, chronic fatigue, sleep troubles and physical disorders. Through this study, the frequency of students who have no incentive to work with their classmates represents 20% of all students (Table 1).

<table>
<thead>
<tr>
<th>Subject</th>
<th>Male (n = 55)</th>
<th>Female (n = 60)</th>
<th>Total (N = 115)</th>
<th>χ²</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional exhaustion</td>
<td>16</td>
<td>7</td>
<td>23 (20 %)</td>
<td>5.445</td>
<td>0.02</td>
</tr>
<tr>
<td>Disengagement and depersonalization</td>
<td>33</td>
<td>25</td>
<td>58 (50.43 %)</td>
<td>3.859</td>
<td>0.04</td>
</tr>
<tr>
<td>Individual Accomplishment</td>
<td>29</td>
<td>26</td>
<td>55 (47.82 %)</td>
<td>1.014</td>
<td>0.3</td>
</tr>
<tr>
<td>School exhaustion</td>
<td>8</td>
<td>5</td>
<td>13 (11.30 %)</td>
<td>1.105</td>
<td>0.3</td>
</tr>
</tbody>
</table>

3.1.2. Disengagement Depersonalizations

The dimension of disengagement and depersonalization affects the majority of students in our study (50.4%): This dimension reflects a vision of the person as an opponent or an object, and it can go up to abusive behaviors (Freudenberger, H 1987) [3].

~ 349 ~
3.1.3. Individual Accomplishment
It is defined as a feeling of professional incompetence and lack of personal fulfillment in work and is accompanied by a decrease in self-esteem and sense of self-efficacy, it affects almost half of the participants, (47.8%). (Table 1)

3.1.4. Total school Exhaustion
Concerning students affected by the three burnout components, that is to say: emotional exhaustion more than 50%, disengagement, depersonalization of relations is greater than 33% and a personal accomplishment less than 66%, the valid number would be then 13 of 115 or 11.3%.

3.2. School Exhaustion according to gender
The percentage of students affected by emotional exhaustion is 29.1% for boys and 11.67% for girls. Disengagement and depersonalization affect more than half of the boys (60%), while it affects less than half of girls (41.67%). Moreover, 53% of boys are affected by feeling of professional incompetence (Individual accomplishment), while 43.3% of girls are affected by this feeling (Table 1).

![Fig 1: School Exhaustion and academic performance](image)

Ep= exhaustion, Acc = accomplishment, Des = Disengagement, Bien= with high honours, Medi = poor, Pass = with standard pass, AB = with honors.

3.3. Exhaustion and school achievement
The figure (Figure 1) below shows the relationship between burnout and academic achievement. It can be observed that there is a significant relationship between academic achievement and exhaustion, because students, who succeed with Honors (good academic performance), have a personal accomplishment as well emotional exhaustion more than students who have no Honors (pass marks). This confirms other results such as of Salmela-Aro, Kiuru and Nurmi (2008), or those of Sandra Zakari and Hossain Bendahman (2011) [7], who found that through various testimonies that the more education is central in the life of the subject - whether at the family level, in terms of its orientation or on a strictly personal self-esteem – the more punishment results will matter.

While depression is weakly correlated with personal achievement (PA), and emotional exhaustion (Ep). The correlation is positive for girls and negative for boys, which can be explained by the fact that girls are more affected by depression than boys.

Table 2: School exhaustion and depression

<table>
<thead>
<tr>
<th></th>
<th>EE</th>
<th>DES</th>
<th>PA</th>
<th>DEPRESSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>1.000</td>
<td>.191*</td>
<td>.261**</td>
<td>.054</td>
</tr>
<tr>
<td>DES</td>
<td>.191*</td>
<td>1.000</td>
<td>.200*</td>
<td>.204</td>
</tr>
<tr>
<td>Correlation</td>
<td>.041</td>
<td>.032</td>
<td>.054</td>
<td></td>
</tr>
<tr>
<td>PA</td>
<td>.261**</td>
<td>.200*</td>
<td>1.000</td>
<td>.039</td>
</tr>
<tr>
<td>Correlation</td>
<td>.005</td>
<td>.032</td>
<td>.717</td>
<td></td>
</tr>
<tr>
<td>DEPRESSED</td>
<td>.054</td>
<td>.204</td>
<td>.039</td>
<td>1.000</td>
</tr>
<tr>
<td>Correlation</td>
<td>.616</td>
<td>.054</td>
<td>.717</td>
<td></td>
</tr>
</tbody>
</table>

* The correlation is significant at level 0.05 (bilateral)
** The correlation is significant at level 0.01 (bilateral)

EE= emotional exhaustion, DES = Disengagement, PA = accomplishment
4. Discussion
The purpose of this study is to shed additional light on the role of the school factor in the school exhaustion syndrome and its relationship to depression in adolescents. A study such as the one carried out here allows to note that similar to what is observed in adults in relation to professional activity, adolescents who report having gone through an episode of exhaustion relate it in their answers to their schooling. Other studies have dealt with the issue among students (Gan, Y., Shang, J. et Zhang Y. 2007) and similarly observed links between stress, burnout and depression. With regard to the same links in adolescents, the qualitative approach allows retrospectively through the various testimonies to deepen the understanding of the nature of these links in terms of causality.
It has also been noted that the schooling factors are central to the issue of burnout in adolescence and to a lesser extent to any issue related to depression. In fact, we can observe, through the different results derived from the theme of depression in relation to schooling, that the more important these issues are, the more vulnerable the adolescent will be to school exhaustion. The fear of failure or failure as such can make, in this case, the common core of a multitude of daily “micro-stressors” and obscures any possibility of development of the adolescent. It is quite common that a depression at school level is necessarily synonymous to long-term failure and that “good school health” is instead the prerogative of “good students”.

5. Conclusion
We have attempted, in this article, to show the relationship between burnout and depression. The issue of symptoms and structural characteristics of the personality are clearly demonstrated through a cross-sectional analysis. Excellent or good academic performance is tightly linked to the degree of stress or school exhaustion experienced by students. Thus, the subjectivity of the notions of failure or success are related to a certain extent to the subjectivity of the issues that constitute schooling and to the feeling of well-being or uneasiness that students go through during their education process. The role of extracurricular activities (sports, art,..) and the promotion of students’ interests can contribute in the engagement and motivation of the learners and positively affect academic success.

6. References