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Stress on board the educational ship
How can we prevent students from emotionally drowning?

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Student stress and burnout

A high proportion of secondary school students feel very stressed (*e.g.* Schraml et al., 2011). Stressors can be distinguished between internal causes, which are particularly related to pubertal changes and external causes, such as the transition from primary to secondary school or parental pressure (Colten & Gore, 1991).

Among chronic stressors – the ones that have the greatest impact on teenagers – those that are directly (*e.g.* having too much homework) or indirectly (*e.g.* having quarrels with peers) related to school are preponderant (Plancherel et al., 1997). All of them have a negative impact on psychological (Sim, 2000) and physical well-being (Meylan et al., 2015).

Just like in a professional context, the development of burnout can be a response to permanent stress at school (Salmela-Aro et al., 2011). In fact, while burnout syndrome has mainly been studied with workers in areas of care and services (such as teachers), it can also be present in pupils of all ages (Meylan et al., 2011). A three-dimensional model suggested by Maslach and Jackson (1981) is usually used to explain it:

- emotional exhaustion characterized by intense fatigue and an inability to get involved in work;

- cynicism or depersonalization, which accounts for the difficulty of maintaining empathy and distance in interpersonal relationships;

- the lack of personal accomplishment that brings an individual to a sense of failure in his work.

Protective factors

It's possible to attenuate the impact of stress on burnout. The two categories of protective factors are :

(1) personal factors such as having effective coping strategies or particular emotional skills (Genoud & Reicherts, 2009);

(2) contextual factors such as having supportive friends (Jacobs & Dodd, 2003) or a perception of a supportive school climate (Salmela-Aro et al., 2008).

Objectives

Bring a better understanding of the links between the stress and burnout, taking into account moderating factors (buffer) related to perceived classroom climate. We expect certain dimensions of the classroom climate to play a moderating factor in the development of student burnout.

METHODOLOGY

Sample

180 students (56% of girls)
at the end of compulsory schooling
Age: $M = 14.1$ ($SD = 0.5$)
53% French-speaking and 47% German-speaking

Questionnaires

(1) **Daily Troubles during Adolescence scale** (Plancherel et al., 1997); 19 items presenting stressful situations in the school context (*e.g.* having too many homework) as well as in the personal context (*e.g.* having acne).

(2) **School Burnout Inventory** (Meylan et al., 2015); 18 items
 - emotional exhaustion
 - cynicism
 - personal accomplishment

(3) **Classroom Environment Scale** (Moos & Trickett, 1987); French adaptation; 36 items
 - class cohesion
 - teachers' proximity
 - rules-organization
 - innovation
 - difficulty
 - task orientation

RESULTS

Correlations between stress and burnout are moderate to strong (Table 1) and only slightly differ according to gender.

Table 1. – Correlations stress-burnout

	Stress
Emotional exhaustion	.50**
Cynism	.37**
Personal accomplishment	-.42**

* $p < 5\%$; ** $p < 1\%$

Correlations between classroom climate perception measures (except *Difficulty)* and the three dimensions of burnout are generally weak. However, the interpersonal relationships (*Class cohesion* and *Teachers' proximity*) play a moderating role between stress and burnout, but only in boys (Figures 1 and 2).
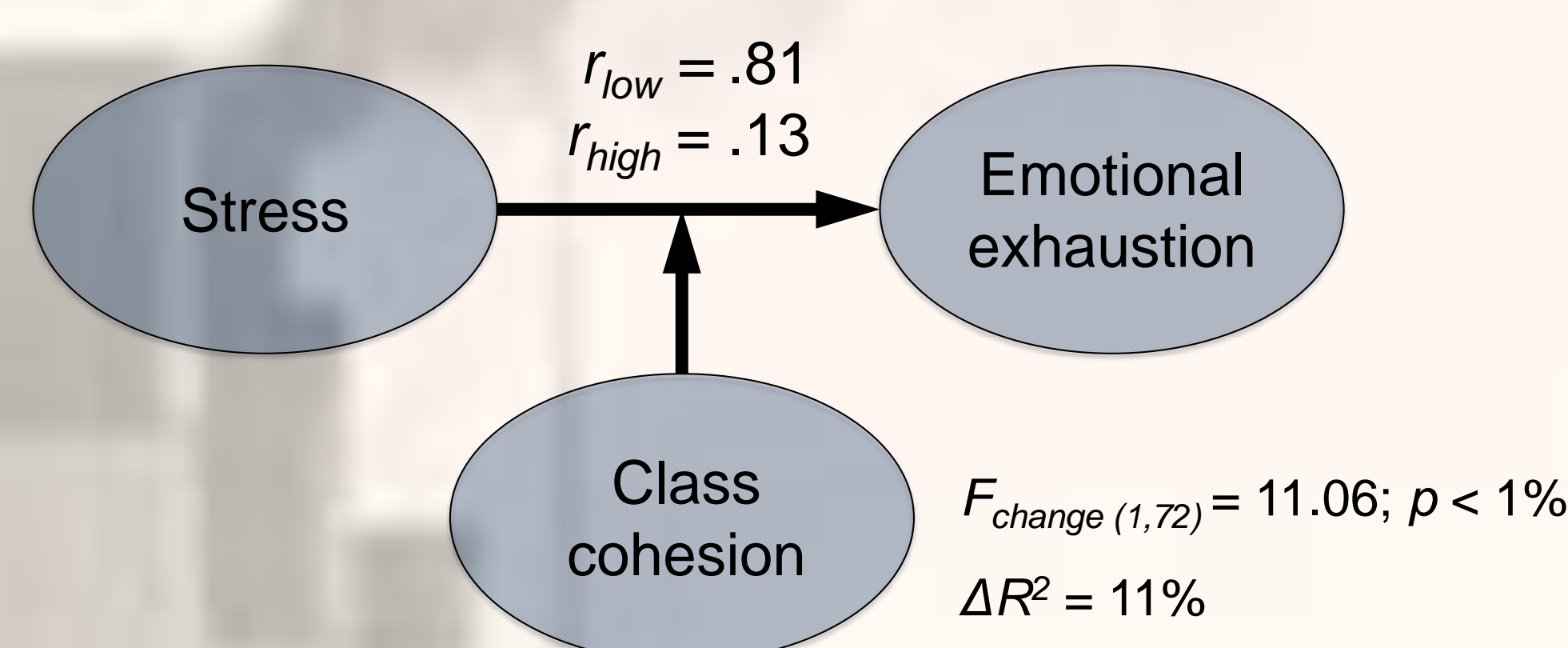

$r_{low} = .81$
$r_{high} = .13$

Stress → Emotional exhaustion

Class cohesion

$F_{change\,(1,72)} = 11.06$; $p < 1\%$
$\Delta R^2 = 11\%$

Figure 1. – Moderating effect of *Class cohesion* (in boys)

$r_{low} = .80$
$r_{high} = .23$

Stress → Emotional exhaustion

Teachers' proximity

$F_{change\,(1,72)} = 15.96$; $p < 1\%$
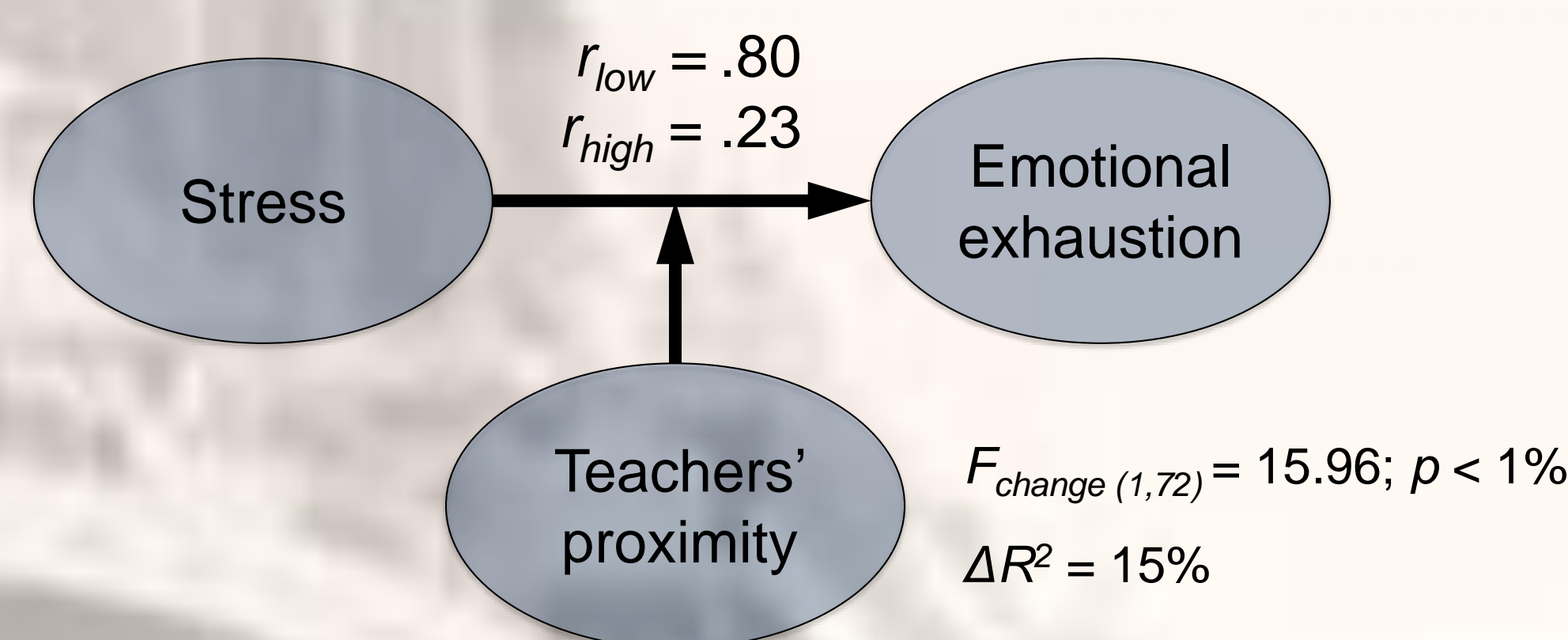$\Delta R^2 = 15\%$

Figure 2. – Moderating effect of *Teachers' proximity* (in boys)

The impact of stress on emotional exhaustion is strong when students perceive low *Class cohesion*; it becomes negligible when *Class cohesion* is high (see Fig. 1). The same pattern is found for *Proximity* with a pronounced correlation difference (see Fig. 2). These two variables can be considered therefore as buffers.

DISCUSSION

Although links between stress and burnout no longer need to be demonstrated given the abundance of publications in this area, the identification of ways to prevent students from experiencing emotional exhaustion remains an important goal. In addition to the effectiveness of different personal coping strategies to reduce the impact of stress (*e.g.* Seiffge-Krenke, 2011), some contextual factors may also have a significant influence. Indeed, our results show that classroom climate proves to be a moderating factor in the development of burnout in boys. More specifically, the quality of relations within the class (felt cohesion) as well as those developed with the teacher (including its perceived proximity).

Despite various limits that will be presented in parallel to the analyses, our results highlight the need for teachers to be attentive to the climate they establish in their classroom. Indeed, although students partially shape the atmosphere of the classroom, the influence of teacher behavior and classroom management (which in turn impacts interpersonal relationships) remains predominant in creating a climate conducive to student learning and well-being. Many approaches – especially those involving active participation of students (e.g. Makela et al., 2018) – can be implemented to improve the social climate in the classroom.

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