

Are effects of classroom goal structures on student emotions mediated by personal goals?

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Introduction & Aim

Students' emotions at school play a key role in motivational processes, learning and psychological health (Pekrun, Elliot, & Maier, 2006).

Numerous studies have shown an association between **achievement goals** and student **emotions** (see Huang, 2011). More exactly, researches showed that mastery goal is mainly associated with enjoyment (+) and boredom (-) while performance-avoidance goal is mainly linked to student anxiety. Lastly performance-approach goal seems weakly linked to discrete emotions.

According to achievement goal theory (Midgley, 2002), these personal goals are influenced by goal emphasized by instructional practices in the learning environment, called **goal structures**.

Only two studies explored the mediational role of student achievement goals in the relationship between goal structures and student emotional outcomes (Gonida, Voulala, & Kiosseoglou, 2009; Roeser, Midgley, & Urdan, 1996).

However these two studies

- (1) used composite scores (positive and negative affects) while these measure confound different effects on different discrete emotions (Mouratidis, Vansteenkiste, Lens, & Auweele, 2009).
- (2) analysed the effect of goal structures perception at individual level and not the contextual effect (school or classroom).

The aim of this study is to analyse with multilevel models the mediational role of student achievement goals in the relationship between goal structures at classroom-level and student discrete emotions (enjoyment, anger, boredom and anxiety).

Method

- Sample**
 - 1232 Belgian French-speaking students (9th grade) from 72 classrooms (from 22 schools)
 - 13 – 18 years old
 - 49,1% girls
- Procedure**
 - Cross-sectional study & Self-reported questionnaire
- Measure** (Galand & Philippot, 2005)
 - Student characteristics
 - Gender (0 = girl, 1 = boy)
 - Track (comprehensive – vocational)
 - Achievement Goals
 - Mastery Goal (**MG**) ($\alpha = .76$)
 - Performance-Approach Goal (**PAPG**) ($\alpha = .74$)
 - Performance-Avoidance Goal (**PAVG**) ($\alpha = .56$)
 - Goal structure
 - Mastery Goal Structure (**MGS**) ($\alpha = .79$)
 - Performance Goal Structure (**PGS**) ($\alpha = .72$)
 - Class-related emotions (0 = never, 4 = all the time)
 - Enjoyment, Anger, Boredom, & Anxiety

Results

Multilevel analyses were performed with HLM6. Sex (at Level-1) and track (at Level-2) were controlled.

1. Preliminary analyses

	MGS	PGS
ICC	0,139***	0,119***

2. Goal Structures¹ (L-2) $\Rightarrow$ Goals (L-1)

	MG	PAPG	PAVG
ICC	0,040***	0,045***	0,001
MGS	0,34*		
PGS		0,29*	

3. Goal structures¹ (L-2) $\Rightarrow$ Emotions (L-1)

	Enjoyment	Anger	Boredom	Anxiety
ICC	0,044***	0,029***	0,005	0,027*
MGS	0,28*	-0,33**		-0,22*
PGS	-0,20*	0,25**		0,17*

4. Goals² (L-1) $\Rightarrow$ Emotions (L-1)

	Enjoyment	Anger	Boredom	Anxiety
MG	0,17***	-0,24***	-0,47***	-0,09**
PAPG	-0,01	0,04	-0,01	-0,01
PAVG	-0,05	0,08*	0,03	0,18***

5. Goal structures¹ (L-2) $\Rightarrow$ Goals² (L-1) $\Rightarrow$ Emotions (L-1)

See Figures.

Note. Unstandardized coefficients are shown in tables and figures.

* = $p < .05$; ** = $p < .01$; *** = $p < .001$; ¹ Introduced separately; ² Introduced together.

Discussion

Goals structures $\Rightarrow$ Goals

This multilevel study confirms the well-documented link between MGS and student MG and provides support for the thesis of an association between PGS and student PAPG. However, the level of student PAVG appears not to differ between classrooms.

Goals structures $\Rightarrow$ Emotions

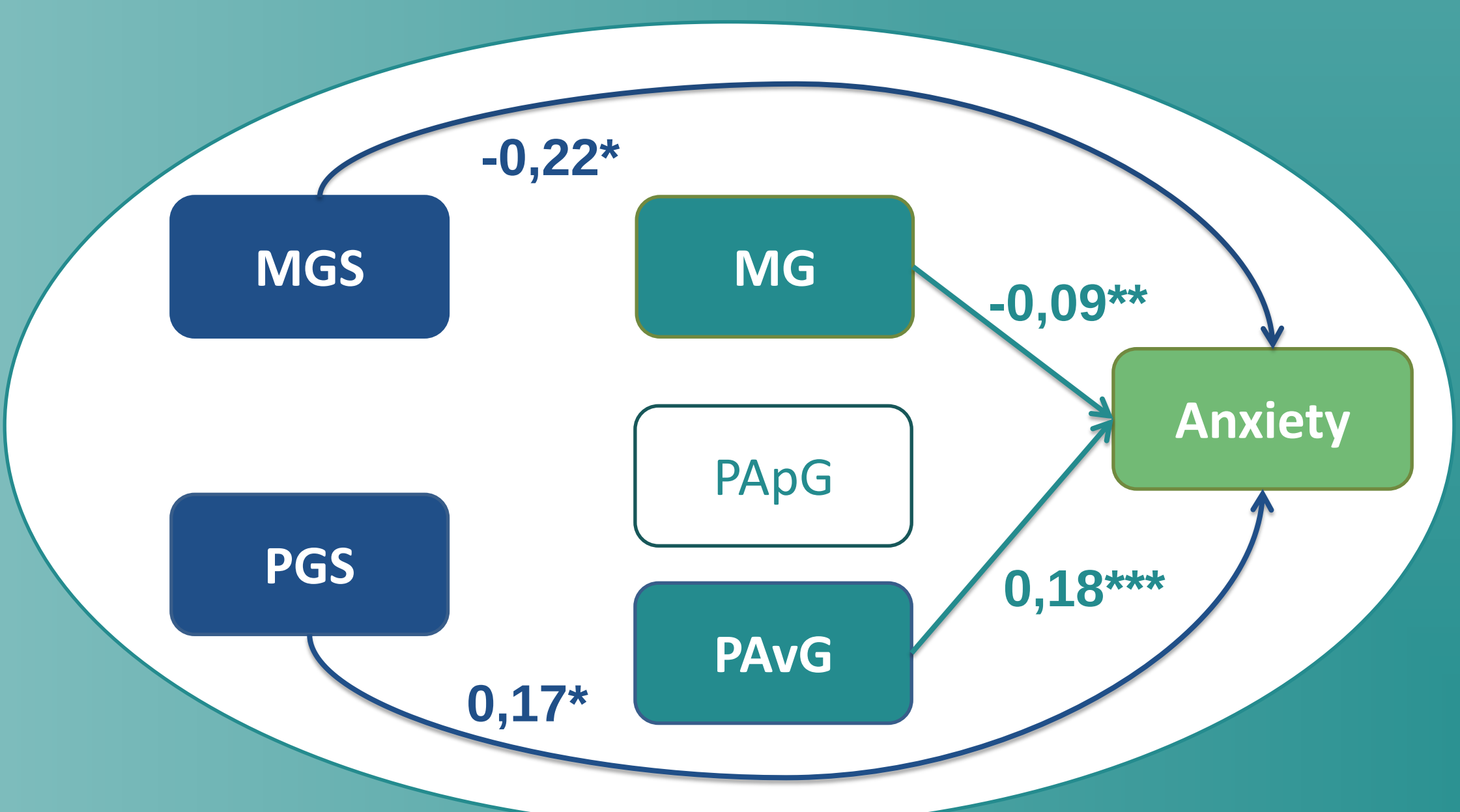
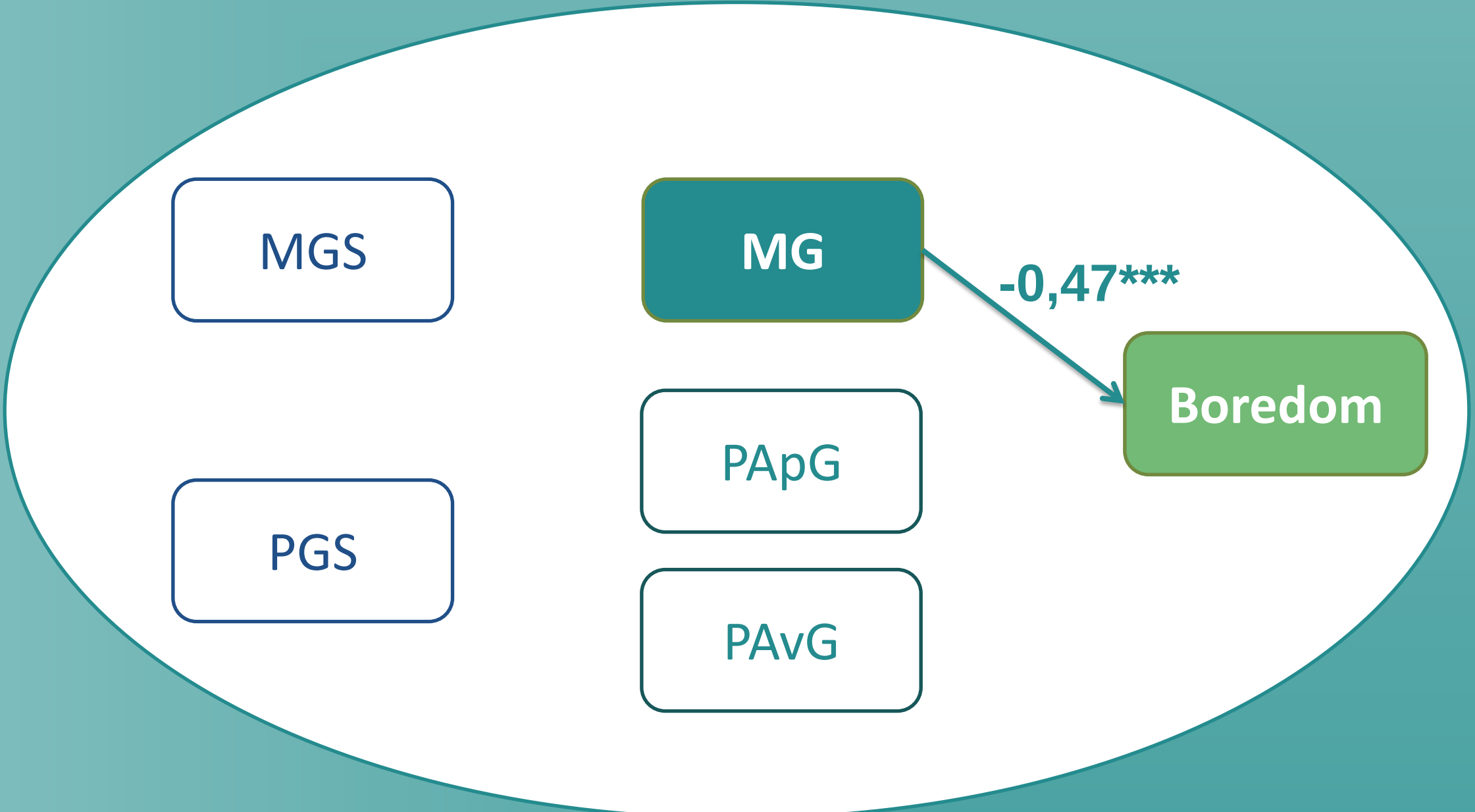
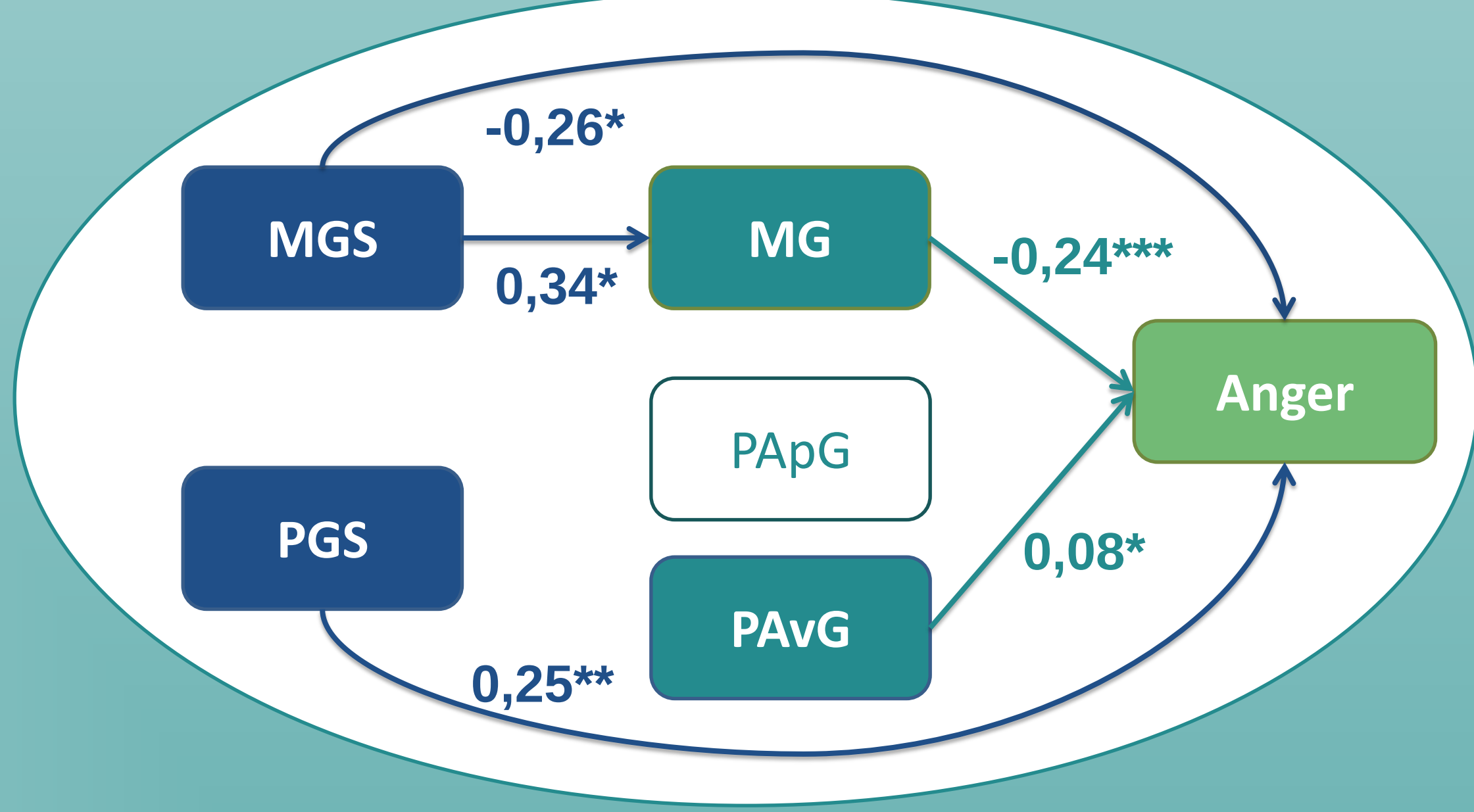
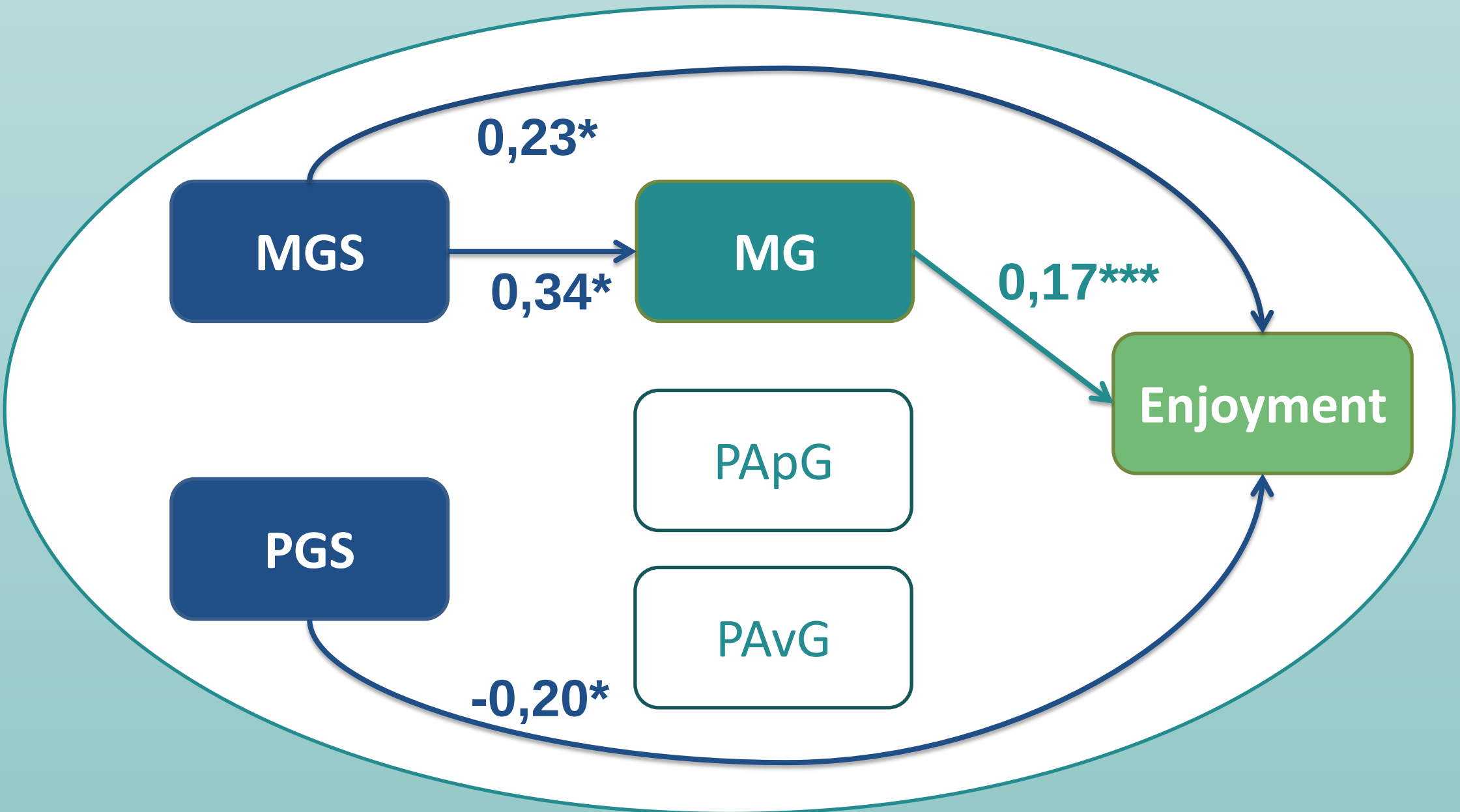
In a practical point of view, these results encourage teachers to adopt practices focus on mastery and improvement rather than on elitism and competition. Nevertheless boredom seems not to depend on classroom context.

Goal structures $\Rightarrow$ Goals $\Rightarrow$ Emotions

Results confirm that the association between classroom MGS and Enjoyment or Anger is partially mediated by student MG. Regarding classroom PGS, neither PAPG nor PAVG plays a mediational role in the link with any emotions. However, PGS has a direct effect on enjoyment (-), anxiety and anger (+).

This study underlines the relevance to consider simultaneously personal goals and classroom goal structures (Murayama & Elliot, 2009) but also the need to explore further the underlying process in goal structures effects.

Moreover these results show that it's hazardous to make practical recommendations to teachers only based on individual goals results. Indeed, it is not because performance-approach goal has no impact on emotions that performance goal structure in the classroom is harmless.



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