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**Research Domain: Learning, Teaching and Assessment**

**A comparison of French-students' emotional experience  
from upper sixth to third-year of Bachelor's degree (0140)**

**Introduction**

Research on emotions experienced in the academic domain has been slow to emerge. With the exceptions of research on test anxiety, little is known about state emotions experienced during class lessons, taking tests and exams and completing homework assignments (Pekrun, Goetz, Titz & Perry, 2002). The Pekrun's control-value theory of achievement emotions (Pekrun, 2006) offers a theoretical framework for analyzing the antecedents and effects of emotions experienced in academic contexts. Pekrun's control-value theory organises achievement emotions in a three-dimensional (object focus x valence x activation) space. Object focus refers to the differentiation between activity (enjoyment, boredom, and anger) versus outcome emotions, such as hope, anxiety, hopelessness (prospective outcome emotions) and pride, relief, and shame (retrospective outcome emotions). Two groups of appraisals are of specific relevance for triggering achievement emotions: subjective control over achievement activities and their outcomes and the perceived importance of success (subjective value).

The study of emotions in academic contexts is relevant to better understand students' achievement. The emotions being experienced when attending class, studying at home or taking test have an impact on cognitive functioning by means of two mechanisms: 1) task-irrelevant thinking, triggered by anxiety, anger, boredom or hopelessness, curtail cognitive

resources and undermine a flexible use of cognitive strategies; 2) positive emotions, such as enjoyment or pride enhance both intrinsic and extrinsic motivation and help student make effort (Pekrun, 2006).

### **Aim of the study**

The aim of the paper is to analyze French students' emotional experience by comparing different groups of students from high school (upper sixth) to third year of Bachelor's degree. Given that control value theory posits that achievement emotions are context sensitive, one can assume that emotional experience will change according to students' position. Thus, the research question is the following: are there specific trends and specific profiles of emotional experience from upper sixth level to third-year of Bachelor's degree?

### **Research method**

The Academic Emotions Questionnaire (AEQ) has been translated into French. The questionnaire incorporates 246 items clustered in three learning contexts, class, learning and test. Each scale assesses eight emotions: enjoyment of learning, hope, pride, boredom, anger, anxiety, hopelessness and shame. In the class-related emotions scale, relief replaces boredom. Respondents had to indicate their responses on a five-point Likert-scale ranging from “strongly disagree” to “strongly agree”. Participation in the study was voluntary and the questionnaire was answered anonymously.

The sample consisted of 316 French undergraduate and upper sixth students (N= 84, upper sixth students; N= 99, first-year students; N= 72, second-year students; N = 61, third year students). Undergraduate students were enrolled in study programs at different faculties including the faculties of Arts and Foreign languages (other than English language) (14%), Law (41,5%) and Social Sciences (44,5%). The AEQ was used to assess emotions being experienced in the domain of English language while studying and taking test.

## Results

The reliability and the validity of the French-AEQ have been analyzed in a previous study including 476 undergraduate students. A confirmatory factor analysis showed that the internal structure of the French translation of the AEQ is the same as the German and the English versions of the AEQ.

### *Similarities between groups*

Whatever achievement context, anger and hopelessness are the emotions less often experienced and hope is the emotion more often experienced. In addition, mean scores in learning-related context are higher than those in test-related context.

### *Differences between groups*

The comparison between the mean scores for each category of students enhances four patterns.

- *Pattern 1*: Increase from upper sixth to first-year and then waning until third-year.

Differences are statistically significant ( $p < .001$ ) for ten emotions: anger, anxiety, hopelessness and shame in learning-related context; anger, anxiety, hopelessness, pride, enjoyment and shame in exam-related context.

- *Pattern 2*: gradual increase from upper sixth to third-year.

Differences are statistically significant between upper sixth students and third-year students for enjoyment (mean scores: 2,75 vs 3,20) and hope (3,20 vs 3,56) in learning-related context.

- *Pattern 3*: gradual decrease from upper sixth to third-year.

This pattern only refers to boredom that waning significantly upper sixth to third-year (3,15 versus 2,49).

- *Pattern 4*: no statistically significant differences for pride (learning-related context) and relief as well as hope (exam-related context).

## **Discussion and implication for teaching**

The results showed that French students experience a great deal of emotions during when studying at home or taking tests. Among these emotions, it is well worth noting that (1) anxiety is not the major one and (2) hopelessness is the less frequently emotion being experienced irrespective of the achievement context. Moreover, the emotional experience during studying is significantly more intense than the emotional experience during taking test except for anxiety. These results are in line with Pekrun's previous research on German, Canadian and American students (Pekrun & al., 2011; Pekrun, Elliot & Mayer, 2006). The present results also extend previous research by demonstrating that the transition from secondary education to higher education makes the emotional experience more intense. Ten out of the sixteen emotions being assessed, first-year undergraduate students display mean scores that are significantly higher compared to those displayed by upper sixth students and third-year university students. Further elaboration and further research are needed to get a better integration of these findings into transition models such as Torenbeek, Jansen and Hofman (2010)'s model.

Implications for teaching are twofold. First, in which way teachers can influence positively students' emotions during class delivery or home assignments? Second, how teachers can help students self-regulate of their negative emotions? Reducing boredom, anxiety, anger and hopelessness implies altering the students' subjective control over the learning activities. Promoting self-efficacy might be a promising way to achieve this goal. We propose to capitalize on self-determination theory to address this issue and, more specifically, on research about teacher's motivational styles (autonomy-supporting vs controlling, Reeve, 2009).

## References

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