

Influence of perceived social climate on the motivation of university students

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The social climate and its impact on learning

The influence of teaching style, quality of classroom relations and organization of study on students' cognitive (knowledge, learning results) and emotional behaviors (self-esteem, motivation, rate of absenteeism, pleasure or satisfaction felt during class, etc.) has been reported in many research projects (Cohen, 1981; Wong, Young & Fraser, 1997; etc.).

While the higher education tries to offer more particularly thorough teaching about academic subjects, failures are not only to be attributed to the students, but also to the contexts. They really do have a considerable part of influence (Biggs, 2003).

These contexts take place on various levels (Gurtner, Monnard & Genoud, 2001): the **Macro-Level** (external to the institution); the **Exo-Level** (for example, programs' structure and organization); the **Meso-Level** (corresponding to the social climate, the classroom relational aspects); and the **Micro-Level** (like the school subjects, the type of work, etc.).

In spite of important transformation in higher education – particularly with the increasing use of new technologies and e-learning (Goodison, 2001) – the Meso-Level remains a very topical research domain (Walker & Fraser, 2005; Logan, Crump & Rennie, 2006). On the basis of the results coming from scientific publications, we can reasonably expect that an improvement of the social climate is conceivable, aiming at the satisfaction of or cohesion between students, as well as the congruence between actual and preferred classroom learning environment (Yarrow & Millwater, 1995).

Research aims

The main purpose of this research is to underline the correlations between the social climate (such as perceived by the high school students) and the various indicators of the motivation. We can't state causality here, but we can conceive that change in the social climate dimensions have an influence on the correlated students' motivation indicators.

Other objectives like considering the possible discrepancies related to the high school environment, and comparing the results with other studies led in secondary schools, are also a part of this research project.

Methodology*

Subjects

The participants in this study were 112 university students from diverse academic domains. The sample included 27 (24%) male and 85 (76%) female, with a mean age of 23.5 years (SD = 4.6). The measurement time was January and February 2006.

Measures

The **social climate** was measured using the **CEU** questionnaire (Climat des Etudes à l'Université). This instrument is based on the *College and University Classroom Environment Inventory* (CUCEI, Fraser & Treagust, 1986). We have translated and adapted the four dimensions related to the "interpersonal relation" domain (see Table 1). All factors comprise 5 items based on a 7-point Likert scale and explain – according to the factorial analysis – 59% of variance.

Table 1. – Dimensions of **university social climate**

| Subscale | Example | Alpha |
|-----------------|---|-------|
| Personalization | The instructor talks gladly with students in the corridors. | .82 |
| Involvement | The students get involved during courses. | .75 |
| Cohesiveness | Students work gladly together. | .79 |
| Satisfaction | Students enjoy going to courses. | .84 |

The second instrument, the **EMME** (Echelle Multidimensionnelle de Motivation pour les Etudes) was also developed for this research (Table 2). It is an adaptation for the university setting of the *Echelle Multidimensionnelle de Motivation pour les Apprentissages Scolaires* (EMMAS, Ntamakiliro, Monnard & Gurtner, 2000). Based on a 7-point Likert scale, the four retained factors explain 60% of variance. The additional subscale (*work avoidance*) comes from a motivational goals scale.

Table 2. – Dimensions of **student motivation**

| Dimension | Example | Alpha |
|--------------------|--|-------|
| Learning intention | I am ready to devote much time to studying. | .83 |
| Self confidence | I have good ability to study. | .79 |
| Studies attraction | What I learn during in courses is interesting. | .85 |
| Anxiety | I worry about the exams. | .88 |
| Work avoidance | I am really happy when the work is easy. | .72 |

Results

The exploratory results (Figure 1) indicate meaningful correlations between facets of the social climate and those of the motivation.

It clearly appears that the *studies attraction* is significantly correlated with the four subscales of the social climate, and even strongly with the *satisfaction* as perceived by the students. Our results are consistent with previous research (Gurtner, Monnard et Ntamakiliro, 2000). These authors have shown – in a sample of teenagers – that school attraction is correlated with all social climate variables, whatever the school grade.

| | | University social climate | | | |
|------------|--------------------|---------------------------|-------------|--------------|--------------|
| | | Personalization | Involvement | Cohesiveness | Satisfaction |
| Motivation | Learning intention | .11 | .17 | .20* | .30** |
| | Self confidence | .12 | -.09 | .08 | .03 |
| | Studies attraction | .28** | .34** | .20* | .58** |
| | Anxiety | .05 | .13 | -.07 | -.19 |
| | Work avoidance | -.13 | -.12 | -.19 | .03 |

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

Figure 1. – Correlations between perceived social climate and motivation

In the sample, no gender difference could be underscored, neither for social climate and nor motivation. Coll, Taylor and Fisher (2002) report that, in higher education, women perceive the environment more favorably than men. It could be relevant to continue this research with a larger and randomly selected sample in order to provide results, which can perhaps explain cultural differences.

If the results only indicate a small number of significant correlations – Gurtner et al. (2000) quantitatively and qualitatively report some more – the setting (university) can explain the patterns of correlations. For university students (young adults), the social climate seems to have an influence on some facets of the motivation. *Self confidence* and *anxiety* are independent of the perceived social environment in which the students work. These facets point out internal and somewhat stable appraisals; in fact, they shouldn't be influenced by the context.

On the other hand, *satisfaction* mainly focuses on teaching quality and pleasure during courses. It is associated with more dynamic facets such as *studies attraction* and – to a lesser degree – *learning intention*.

Conclusion

Factors influencing motivation for learning are not always easy to identify and to analyze. However, several research studies report about the impact of contextual components such as classroom social climate or interactions with teachers on motivation and especially on motivational evolution during schooling (Gurtner, Gulfi, Monnard & Schumacher, 2006).

In higher education, the correlations between social climate and motivation provide a specific pattern. The context seems to have an influence on studies attraction and learning intention only. At this age, some students' motivational facets could already be fixed by learning habits and previous school experiences, but adult students are – to some extent – sensitive to experienced social environment, too.

A positive change in university social climate – as perceived by students – could make studies more attractive and have an impact on reducing the drop-out-rate.

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