In achievement goal theory, the different goals adopted by students have been related to different patterns of behavior, cognition and affect which may enhance or debilitate learning and performance (e.g. Ames, 1992; Dweck & Elliott, 1983; Harackiewicz et al., 1997; Kaplan & Maher, 1999; Middleton & Midgley, 1997, Nicholls, 1984, Pintrich, 2000).

Mastery goals, representing a focus on task and on development of competence and understanding, are related to various positive outcomes as intrinsic motivation, engagement and effort, use of learning strategies (Anderman & Midgley, 1997; Ames, 1992; Dweck & Leggett, 1988; Pintrich & Schunk, 1996).

The motivational role of performance goals, that represent a focus on demonstration of ability, is not so consistent. Research has documented that these goals may have either a positive or a negative influence on academic outcomes.

In particular, mastery goals have been associated with self-efficacy and attributions to effort. By contrast, performance goals have been related to capacity attributions and related positively, negatively or not-related to self-efficacy.

A distinction between an approach form and an avoidant form of performance goals has been advocated to clarify these mixed effects (Elliot & Harackiewicz, 1996). In this line of research, a three-factor structure was confirmed, and negative associations previously found for performance goals were only related to performance-avoidant goals which orient the individual to avoid the demonstration of lack of ability.

However, some studies found very high correlations between approach- and avoidance-performance goals indicating a considerable overlap of these two types of goals (Ross et al., 2002; Midgley et al., 1998) and, in other studies, the distinction between performance-approach and avoidant goals has failed to be found (Gregoire et al., 2001; Murphy et al., 2001; Urdan et al., 1997). Recently, Urdan and Mestas (2006) using
interview methods also evidenced that students often fail to distinguish between the approach and avoidant components of performance goals.

Additionally, the hypothesized positive role of performance-approach goals remains controversial. While in some studies positive effects of performance-approach goals on achievement were found (Baron & Harackiewicz, 2001), in other studies this type of goals evidenced null or negative effects on achievement outcomes (Greene & Miller, 1996; Greene et al., 2004; Kaplan & Midgley, 1997).

The aim of the present study was to contribute to highlight the nature of achievement goals, exploring their relations with school-control beliefs. To examine in detail these differential relations with perceived-control, we used a multidimensional concept of control-beliefs from an action-theoretical framework (Skinner, Chapman & Baltes, 1988). In this perspective, action is thought to be a function of three related action-control beliefs: control-expectancy beliefs, agency beliefs and means-ends beliefs. Moreover the model separately considers specific agency and means-ends beliefs, corresponding to different types of causes of school performance: effort, ability, powerful others and luck.

In particular, we expected that distinct achievement goals showed a different pattern of relations with specific action-control dimensions. These differential relations might contribute to clarify the nature of the different achievement goals, through testing their construct validity.

Method

The sample consisted of 484 9th grade students, approximately equally divided by sex, who completed the personal goals subscale of PALS (Midgley et al., 2000) and the Portuguese reduced version (Lemos & Gonçalves, 1998) of the Control, Agency, and Means-ends Interview (CAMI) instrument (Skinner, Chapman, & Baltes, 1988).

Questionnaires were completed by participants in their classrooms, during school time, in the absence of the teacher, and were administered by trained interviewers.
This study used correlational analysis to explore the relations of mastery, performance-approach and performance-avoidant goals with the 10 control-beliefs dimensions, both at the scale level and at the item level.

**Results** showed that mastery and performance goals are differently related to expectancy beliefs, agency beliefs and means-ends beliefs for different causes.

When students are focused in developing their competences (mastery goals), they also hold generalized expectations of control beliefs, they see themselves as capable of exerting effort, as having access to capacity, to teachers’ help and of being lucky in school contexts. Moreover they see effort as the main cause of achievement. Mastery goals scale was very consistent with all the individual items of PALS’ personal goals showing the same positive pattern of relations with specific control beliefs.

By contrast, the focus in demonstrating competence was associated with students’ perceived ability and with attributions to ability and luck, both for approach and avoidance performance goals. However, at the item level, these scales showed less consistency in comparison to the mastery goal scale.

Performance-approach and performance-avoidance items shared a similar pattern of relations with agency for capacity and the belief in capacity and luck in producing outcomes. Performance-approach but not performance-avoidant items were negatively related to agency for teachers.

In sum, mastery goals evidenced a highly consistent pattern of correlations with a perceived-control profile that is thought to maximally promote achievement while performance approach and avoidant goals evidenced very similar relations with less positive control beliefs.

Those results support a clear distinction between mastery and performance goals and stress similarities of performance approach and avoidance goals in their relations to perceived competence. Moreover results suggest a unidimensional view of mastery goals but a more complex nature of performance goals.