**Introduction**

A long tradition of research has shown that intrinsic motivation (i.e., learning for learning’s sake) is associated with adaptive behaviors in the classroom (Lepper & Henderlong, 2000; Ryan & Deci, 2000). Unfortunately, students’ intrinsic motivation tends to dissipate as they progress through the primary school years (Corpus, McClintic-Gilbert, & Hayenga, 2009; Harter, 1981).

Of course, not all students experience such a loss; some maintain intrinsic motivation and adaptive attitudes toward the learning process (Harter, Whitesell, & Kowalski, 1992). In the present study we asked what might distinguish these two groups of students.

Previous research has largely focused on motivational shifts at the level of the group and as a function of the learning context (e.g., at the middle school transition), but we used a person-centered approach to examine different developmental trajectories. Moreover, we went beyond contextual variables to study personal belief systems as sources of motivational change. In particular, we hoped to explain motivational trajectories over the course of an academic year via students’ beliefs about the malleability of intelligence and their ability-validation goals.

**Intelligence Beliefs**

Students who believe intelligence is fixed rather than malleable seek to protect perceptions of their competence and avoid challenges—approaches that are incompatible with the curiosity-driven engagement characteristic of intrinsic motivation. Perhaps holding such an entity theory would, over the year, erode intrinsic motivation. Indeed, an intervention to reduce such entity beliefs increased classroom motivation during junior high school (Blackwell, Trzesniewski, & Dweck, 2007).

**Ability-Validation Goals**

Students who pursue academic work in order to validate their abilities are arguably preoccupied with presentational concerns and distracted by fears of incompetence. Indeed, college students with such ability-validation goals reported that they would experience losses to intrinsic motivation when confronted with challenge (Grant & Dweck, 2003). We hypothesized that holding ability-validation goals would similarly lead to a loss of intrinsic motivation over the course of the year.

**Method**

900 4th through 8th-grade students twice completed a survey (fall, spring) that assessed their intrinsic motivation (Lepper, Corpus, & Iyengar, 2005), beliefs about the malleability of intelligence (Dweck, 1999), and ability-validation goals (Grant & Dweck, 2003).

**Results**

The difference between fall and spring levels of intrinsic motivation was used to form two groups of students:

1. **Decliners** (n = 249) lost more than one-half of the sample standard deviation of fall intrinsic motivation;

2. **Maintainers** (n = 395) stayed constant or reported increases in intrinsic motivation. Those students who did not fit in either group (n = 256) were dropped from the analysis in order to focus on cases of substantive loss versus maintenance of intrinsic motivation.

**Predicting Motivational Change**

Hierarchical logistic regression was used to test entity theories and ability-validation goals as predictors of Decliner versus Maintainer status.

**Controlling for students’ grade level and initial level of intrinsic motivation, the regressions revealed that students were more likely to become Decliners (versus Maintainers) to the extent they endorsed entity theories and ability-validation goals. See Table 1 and Figure 1.**

**Conclusions**

Although contextual factors are undoubtedly important sources of motivational change (Deci & Ryan, 2002; Sansone & Harackiewicz, 2000), the present study found that students’ personal beliefs and goals set them on distinct motivational trajectories.

In particular, students who viewed intelligence as a fixed entity and approached their schoolwork as a means for validating their ability were especially likely to experience losses of intrinsic motivation over the course of the academic year. Intervention efforts might fruitfully focus on altering these dangerous mindsets.

**References**


Presented at the 2009 biennial meeting of the Society for Research in Child Development in Denver, CO. This research was supported by a National Academy of Education/Spencer Postdoctoral Fellowship to the first author. Please direct correspondence to: fjc@reed.edu.