



# Do you have an opportunity or an obligation to score well? The influence of regulatory focus on academic test performance



Emily Q. Rosenzweig<sup>a,\*</sup>, David B. Miele<sup>b,\*</sup>

<sup>a</sup> Department of Human Development and Quantitative Methodology, University of Maryland, College Park, MD, United States

<sup>b</sup> Department of Counseling, Developmental, and Educational Psychology, Boston College, Chestnut Hill, MA, United States

## ARTICLE INFO

### Article history:

Received 15 April 2015

Received in revised form 30 October 2015

Accepted 13 December 2015

### Keywords:

Regulatory focus

Academic testing

Standardized testing

Achievement motivation

## ABSTRACT

Three studies explored academic test performance in the context of regulatory focus theory (Higgins, 1997), which posits that individuals pursue goals with a focus on growth and advancement (i.e., a promotion orientation) or on safety and security (i.e., a prevention orientation). In Studies 1 and 2, we brought participants into the lab, induced them to hold a promotion or prevention orientation, and asked them to complete math and verbal sections from an SAT exam. Students induced to hold a prevention orientation performed significantly better than students induced to hold a promotion orientation. In Study 3, we measured individual differences in students' regulatory orientations and then examined their performance on actual college course final exams. The more prevention-oriented (and less promotion-oriented) participants were, the higher their exam scores. Together, these findings suggest that a prevention orientation may be adaptive for test performance in certain analytic testing situations that have minimal time pressure.

© 2015 Elsevier Inc. All rights reserved.

## 1. Introduction

Academic tests are a ubiquitous part of students' progression through primary and secondary education. In addition to high-stakes standardized exams (which are currently a source of much debate; e.g., Levesque & Welner, 2015), students take numerous classroom unit tests that serve as a primary determinant of their GPAs. Students' scores on tests exert an enormous influence on their entrance into high school and college, their ability to graduate, and whether or not they are considered for certain jobs after graduation. Yet relying so heavily on test scores is somewhat problematic, because there is not a perfect correspondence between students' academic abilities and their test scores. For example, one student might be very inquisitive and attentive in her classes but struggle when it comes to completing her course midterm exams, consistently scoring lower than her peers of similar academic ability. Another student might earn mediocre school marks, but score at the top of his age group when he takes the SAT. Because testing is a widespread determinant of educational outcomes, it is important to understand what causes discrepancies between students' test scores above and beyond differences in academic ability, and to try and utilize this information to benefit students who might

underperform on certain types of high-stakes or classroom tests (via interventions or other instructional techniques).

Both journalists (e.g., Bronson & Merryman, 2013) and researchers have explored why two students of similar ability may perform differently than each other on academic tests, focusing on such factors as working memory limitations (e.g., Beilock & Carr, 2001, 2005), stereotype threat concerns (e.g., Steele & Aronson, 1995), and genetically determined responses to stress (e.g., Yeh, Chang, Hu, Yeh, & Lin, 2009). However it is also critical to explore how students' motivation might affect these types of test performance discrepancies, because motivation is a critical determinant of students' academic performance above and beyond their intellectual abilities (see Wentzel & Miele, *in press*). One important motivational variable related to this issue is students' motivation to use certain strategies while they are pursuing their academic goals. If two students tend to prefer using different strategies in order to achieve a high test score, they may perform very differently on the test even if they have similar overall academic abilities.

This motivational explanation is derived from regulatory focus theory (Higgins, 1997), which has been the focus of much research in social psychology, but has received relatively little attention in educational psychology. As discussed in more detail in the next section, Higgins proposed that individuals tend to adopt one of two self-regulatory orientations while pursuing goals. Some individuals focus on advancement and achieving personal growth, whereas others focus on preserving their safety and security. These two regulatory orientations lead individuals to prefer different sets of cognitive and behavioral strategies for pursuing their goals. The aim of the present research was to explore how regulatory focus affects college students' academic test performance.

\* Corresponding authors at: Department of Human Development & Quantitative Methodology, University of Maryland, 3304Y Benjamin Building, College Park, MD 20742, United States (E. Q. Rosenzweig), Department of Counseling, Developmental, and Educational Psychology Department Lynch School of Education, Boston College, 239E Campion Hall, Chestnut Hill, MA 02467, United States (D.B. Miele).

E-mail addresses: [erose@umd.edu](mailto:erose@umd.edu) (E.Q. Rosenzweig), [d.miele@bc.edu](mailto:d.miele@bc.edu) (D.B. Miele).

<sup>1</sup> Both authors contributed equally to the production of this manuscript.

### 1.1. Regulatory focus theory

Regulatory focus theory (see Higgins, 1997; Molden & Miele, 2008; Molden & Rosenzweig, in press; Scholer & Higgins, 2012, for reviews) builds on a distinction made by previous researchers (see Bowlby, 1969; Higgins, 1987; Maslow, 1955) between two fundamental motives that guide goal pursuit: the motive for growth and advancement and the motive for safety and security. All individuals are thought to possess both of these motives; however, individuals who are predominantly focused on growth concerns (i.e., who are promotion-oriented) tend to represent their goals as ideals they hope to attain and seek opportunities for gain that will move them closer to these ideals. In contrast, individuals who are more focused on security concerns (i.e., who are prevention-oriented) tend to represent their goals as responsibilities that they must uphold and vigilantly protect against potential losses that threaten these responsibilities.

Although all individuals possess both promotion and prevention motives, their behavior is likely to be influenced by whichever set of concerns is more salient or relevant at a particular moment (see Eitam, Miele, & Higgins, 2013). Salience is in some cases driven by environmental cues that temporarily strengthen growth or security concerns (e.g., Forster, Grant, Idson, & Higgins, 2001; Forster, Higgins, & Bianco, 2003; Higgins, 1997; Shah & Higgins, 1997). For instance, a student who notices that there are heavy deductions for wrong answers on a take-home test may adopt a prevention orientation on that test in order to guard against the threat of losing points (cf. Friedman & Forster, 2001).

Salience can also be determined by an individual's history of pursuing goals that have involved gains versus losses (e.g., Forster et al., 2001, & Forster et al., 2003; Higgins, 1997; Higgins et al., 2001; Moretti & Higgins, 1999; Shah & Higgins, 1997). For example, people's experiences of harsh punishment during childhood might lead them to perceive potential threats across a variety of contexts, even when environmental cues signaling threat are not overt (e.g., Manian, Papadakis, Strauman, & Essex, 2006). Thus, if a student's previous teachers frequently penalized her for bad quiz scores but did not reward her for good outcomes, she might become very concerned with classroom situations that could cause her to quiz performance to decrease, even when she finds herself in a classroom not focused on quizzes. Such people are said to have a *chronic* prevention orientation. Individual differences in people's chronic regulatory orientations are assumed to influence their behavior unless environmental cues make a particular orientation temporarily more relevant; if such cues occur, people will tend to act according to the orientation that has been activated by the environment instead of according to their chronic preferences (see Lisjak, Molden, & Lee, 2012, for more information about the interactions between temporary and chronic regulatory focus). In the present set of studies we explored the effects of both temporary regulatory focus (by inducing students to hold a particular orientation; Studies 1 and 2), and chronic individual differences in regulatory focus (by conducting a correlational study; Study 3).

Promotion and prevention orientations are related to, but distinct from, other constructs in the achievement motivation literature. Higgins (1997) and other regulatory focus theorists are concerned with individuals' motivations to pursue their goals in a particular manner, rather than the contents of the goals themselves or people's reasons for pursuing them. Thus, the promotion/prevention dimension posited by regulatory focus theory is distinct from the approach/avoidance dimension posited by achievement goal theory and other motivational frameworks, which is defined in terms of approaching desirable goal outcomes or avoiding undesirable outcomes (see Eliot, 1997; Moller & Elliot, 2006). That is, individuals can exhibit a promotion or prevention orientation when pursuing any type of goal, whether it involves approach or avoidance (see Molden & Miele, 2008, for a review). For example, two students who are both motivated to approach a desirable academic outcome, such as getting an A in a class, may actively move

toward this desired end-state in different ways: One may vigilantly work to complete every course assignment with maximum accuracy and care (i.e., adopt a prevention orientation), while the other may prefer to eagerly seek out non-required readings or extra credit opportunities (i.e., adopt a promotion orientation). Researchers have shown that chronic regulatory focus is only modestly correlated with approach versus avoidance sensitivity (promotion and approach,  $r_s < .32$ ; prevention and avoidance,  $r_s < .20$ ; Haws, Dholakia, & Bearden, 2010; Summerville & Roese, 2008).

Promotion and prevention orientations can also be distinguished from performance and mastery goal orientations, even when these orientations are crossed with approach and avoidance goals (see Maehr & Zusho, 2009). While performance and mastery orientations address the reasons why students pursue specific academic outcomes, regulatory focus refers to how students would prefer to regulate themselves once an outcome has been chosen (for either a performance or mastery reason; see Molden & Miele, 2008, for review). For example, individuals who have a goal to develop and improve their abilities in an academic domain (i.e., who have a mastery approach goal) can pursue this by trying to learn new skills that relate to their interests (i.e., a promotion strategy) or by trying to make fewer mistakes when completing homework in that domain (i.e., a prevention strategy). Similarly, individuals who are more concerned with *demonstrating* that their abilities are as good or better than their classmates' abilities (i.e., who have a performance approach goal) may pursue this goal by looking for opportunities to say something smart in front of their peers (i.e., a promotion strategy) or by making sure that they answer questions carefully and accurately when they volunteer an answer (i.e., a prevention strategy). And, individuals who are concerned with not looking dumb in front of their classmates (i.e., who have a performance avoidance goal) may pursue this goal by trying to actively steer the topic toward something they know more about (i.e., a promotion strategy), or by refusing to participate in class in order to not say anything that is incorrect (i.e., a prevention strategy). In many contexts, the same promotion or prevention strategies could be pursued to help individuals accomplish either a performance approach or performance avoidance goal.

To date, there has been very little work that directly examines whether holding a promotion or prevention orientation leads to better performance on educationally-relevant tasks. Avnet and Sellier (2011), Grimm, Markman, and Maddox (2012), and Keller and Bless (2006) all considered regulatory focus and test performance from the perspective of regulatory fit theory (Higgins, 2000, 2005). According to this theory, people will be more engaged in a task (and perform better on it) if they are allowed or encouraged to approach the task with a strategy that matches and sustains their current motivational orientation (e.g., if they vigilantly approach a task while holding a prevention orientation). However, these studies did not focus on the potential advantages of the promotion- and prevention-oriented strategies themselves for taking tests (i.e., the advantages of solving problems in a particular way), irrespective of any increased engagement students may experience due to fit. In another study, Seibt and Forster (2004) implicated regulatory focus as a mechanism by which stereotypes affect test performance without measuring regulatory focus directly. Beyond this work, a few researchers examined the effects of holding promotion or prevention orientations on aspects of students' academic performance (e.g., proofreading and reading comprehension; Forster et al., 2003; Miele, Molden, & Gardner, 2009); however, none of these laboratory studies explored how regulatory focus might affect performance in realistic educational environments, with typical academic tests.

### 1.2. The effects of regulatory focus on information processing

Although few researchers have directly explored how regulatory focus affects educational outcomes, regulatory focus has been shown to affect many of the *cognitive* processes that underlie test performance and academic achievement. Numerous studies (mostly conducted on

Download English Version:

<https://daneshyari.com/en/article/364508>

Download Persian Version:

<https://daneshyari.com/article/364508>

[Daneshyari.com](https://daneshyari.com)