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Original Articles and Reviews

Performance Goals and Task Performance

Integrative Considerations on the Distraction Hypothesis

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Abstract: Recent years have seen an increased interest in understanding how high-stakes evaluative contexts, which are pervasive in the academic arena, may influence crucial outcomes such as performance and achievement. The salience of grades, as well as the importance to distinguish oneself in the eyes of teachers to have access to valued diplomas, encourages the adoption of performance-approach goals (i.e., the desire to outperform others). Consistent with literature documenting the cognitive costs of high-pressure situations, recent findings have highlighted the detrimental consequences of performance-approach goals on availability of working memory resources, pointing at distraction as the cause of this phenomenon. We review and discuss this result in the light of the achievement goal literature. We then present both methodological and theoretical arguments to clarify and reconcile the apparent contradictions between this emerging evidence and the well-documented positive impact of performance-approach goal pursuit on achievement in the classroom. Throughout, we highlight how the study of performance-approach goal-related interference has the potential to enrich our understanding of how evaluative contexts do generate distraction.

Keywords: performance-approach goals, evaluative pressure, distraction hypothesis, academic achievement

> "High school pressure is everything. And when you go to one of the top high schools in the Chicago suburbs, you'll do anything that you can to put yourself above the other 1200 students" (Schwarz, 2012).

These words belong to a 17-year-old American high school student commenting the recent and growing trend of taking "study drugs" (e.g., amphetamines) for academic advantage. This emerging tendency among students has raised concerns, be it in the United States (e.g., Luthar & Becker, 2002; Schwartz, 2012) or in Europe (see Cabut, 2015; Fraissard, 2013; Maier, Liechti, Herzig, & Schaub, 2013; Matlack, 2013), and clearly illustrates how striving for academic success can become synonymous with feelings of pressure: pressure to perform, pressure to rise above others, pressure to get access to valued diploma and competitive educational institutions (Pérez-Pena, 2014; Pope, 2001). These purposes have further been exacerbated by the world economic crisis, leading to an increase in students' drive to achieve at their best and distinguish themselves from their peers in order to approach job prospects in optimum conditions when they graduate (Leonard et al., 2015; Lewin, 2011). Indeed, a general trend in industrialized countries shows that job prospects are influenced by one's level of education (OECD, 2013), which implicitly suggests that professional success requires an educational advantage.

This growingly pervasive pressure to perform above others within the classroom promotes the adoption of performance-approach goals (i.e., striving to do better than others). However, is this trend good news? Does it carry the potential to favor or rather to endanger performance and learning? In this article, we examine this issue by focusing on the question of how the pursuit of a performance-approach goal can produce cognitive distraction. We first consider arguments and empirical evidence stemming from two relevant and prolific areas of research, namely achievement goals and evaluative pressure, before suggesting and discussing insights gained from the cross-fertilization between these two areas of work.

The Promotion of Performance-Approach Goals

Evaluative situations represent challenging opportunities to gauge one's competence and are thus likely to drive attention toward competence-related end states. Closely related

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to this is the achievement goal construct, designed to understand how competence-relevant motivation influences cognition and behaviors in the face of challenging tasks (Dweck, 1986; Elliot, 2005; Nicholls, 1984). In particular, a longstanding and widely supported conceptualization distinguishes between mastery-approach goals (i.e., striving for knowledge acquisition and task mastery), mastery-avoidance goals (i.e., aiming at avoiding learning failures), performance-approach goals (i.e., striving to outperform peers and demonstrate competences[1]), and performance-avoidance goals (i.e., aiming at avoiding doing worse than others; Elliot & McGregor, 2001). Within this framework, the pursuit of performance-approach goals has aroused particular interest, mainly because many institutional practices (e.g., ranking, normative grading, competitive exams) make their endorsement valuable.

Indeed, beyond the *educational* function of most academic structures, the pervasiveness of testing and grades (Butler & Nisan, 1986; Covington & Omelich, 1984; Ryan & Weinstein, 2009) makes their *selective* function particularly salient in the students' eyes (Darnon, Dompnier, Delmas, Pulfrey, & Butera, 2009). Grades not only provide a feedback about one's competence: they also provide information regarding one's ranking as compared to others (i.e., social comparison information) – entailing that some students will be more successful than others (Deutsch, 1979; Elliot & Moller, 2003). Superiority over the other students is commonly represented as the key that opens the door to future high-profile employment opportunities and social prestige. Consequently, students are fully aware of the importance of rising above their counterparts and distinguishing themselves to gain access to the most valued diplomas. For instance, psychology students do perceive the endorsement of performance-approach goals as positively associated with social utility – i.e., they are fully aware that success at university requires them to achieve above others and prove their abilities to the assessment body, and not merely to learn and progress (Darnon, Dompnier, et al., 2009; Dompnier, Darnon, Delmas, & Butera, 2008). Hence, even if students also pursue other goals, in particular social goals (see Urdan & Maehr, 1995), the selective function of academic institutions implicitly promotes the endorsement of performance-approach goals and leads students to pay significant attention to their grades and ranking.[2]

The Distraction Hypothesis in the Literature on Achievement Goals

Could attention for competence-related end states become intrusive? In particular, could the goal of outperforming others have the potential to generate distractive concerns? Academic training requires the acquisition and development of higher-order cognitive processes such as mathematical problem solving, text comprehension, and fluid reasoning. These mental activities necessitate the intervention of working memory – a dynamic memory system involved "in the control, regulation, and active maintenance of task-relevant information in the service of complex cognition" (Miyake & Shah, 1999, p. 450; see also Engle, 2002; Kane, Conway, Hambrick, & Engle, 2007) – and should thus suffer from the activation of distractive concerns.

This question emerges within the context of a major debate that is still ongoing in the achievement goal literature, namely regarding whether performance-approach goals may or may not be detrimental to learning outcomes and performance (Elliot & Moller, 2003; Senko, Hulleman, & Harackiewicz, 2011). Interestingly, this debate is fueled by empirical findings that highlight a somewhat mixed picture regarding the academic consequences of performance-approach goal pursuit. On the one hand, an abundant stream of research unambiguously pictures performance-approach goal adoption as a positive predictor of achievement and exam performance (see Church, Elliot, & Gable, 2001; Elliot & Church, 1997; Harackiewicz,

[1] Some conceptualizations of performance-approach goals further distinguish a normative ("outperform others") and an appearance ("demonstrate one's competences") sub-components – a distinction that has been subject to debate. In particular, some researchers argue that the self-presentation feature is not directly related to competence per se and should not be considered as central in the goal conceptualization (see Elliot & Thrash, 2001) – a view that concurs with other theorists' conception (see Senko et al., 2011, for a review). Based on (a) the consideration that the visibility of social comparison, as well as the preponderance of teachers' assessment in the grading system, renders appearance concerns closely linked to normative concerns, and (b) the fact that the literature on evaluative pressure does not contrast these features, we did not separate the two subcomponents here. However, in light of recent evidence suggesting that the appearance component carries more deleterious consequences than the normative component (Hulleman, Schrager, Bodmann, & Harackiewicz, 2010), we recognize that further research disentangling their respective effects on cognitive distraction would be desirable.

[2] This assumption, emphasizing the idea that performance-approach goal pursuit is widespread among students, potentially to the detriment of mastery-approach goal pursuit, may be challenged by the pattern often emerging from studies that measure achievement goal endorsement with self-reported questionnaires: students generally report high endorsement of mastery-approach goals while performance-approach goals are pursued to a lower extent (around the scale's midpoint). This should nevertheless be interpreted with caution, given the research that has emphasized the influence of self-presentation concerns, and especially social desirability motives, on students' answers (Dompnier, Darnon, & Butera, 2009, 2013). Students' self-reports are hence likely to be distorted by the desire to appear likeable and learning-oriented, rather than competitive.

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Barron, Tauer, Carter, & Elliot, 2000; Pekrun, Elliot, & Maier, 2009; Skaalvik, 1997; Wolters, Yu, & Pintrich, 1996). This link has been predominantly assessed through longitudinal designs, consistently reporting performance-approach goal adoption – as measured via self-reported questionnaires – as positively associated with academic performance at a later stage (Barron & Harackiewicz, 2003; Darnon, Butera, Mugny, Quiamzade, & Hulleman, 2009; Elliot & McGregor, 1999, 2001; Elliot, McGregor, & Gable, 1999; Harackiewicz, Barron, Tauer, & Elliot, 2002; Harackiewicz, Durik, Barron, Linnenbrink, & Tauer, 2008; for reviews, see Elliot, 2005; Senko et al., 2011).

However, on the other hand, some empirical findings come to taint this positive picture. This is the case of research on the interpersonal consequences of performance-approach goal pursuit, which highlights several maladaptive outcomes (see Poortvliet & Darnon, 2013, for a review): performance-approach goal-driven students are less inclined to cooperate and share information with exchange partners (Poortvliet, Janssen, Van Yperen, & Van de Vliert, 2007, 2009), and, in disagreement situations, rather reject the other's opinion in order to impose their own (Darnon, Muller, Schrager, Pannuzzo, & Butera, 2006), with the effect of hindering learning (Darnon, Butera, & Harackiewicz, 2007). Also worth underlining, performance-approach goals are poorly valued in terms of social desirability (Darnon, Dompnier, et al., 2009), since they are perceived as the expression of appetitive and ambitious aspirations. Moreover, they have sometimes been associated with cheating: for instance, Pulfrey and Butera (2013) showed that the more students adhered to self-enhancement values (i.e., the desire for normative success and dominance over others through achievement and power; Schwartz, 2007), the more they reported being motivated to gaining social approval and endorsing performance-approach goals – this in turn leading them to more cheating behaviors.

Within this debate, the more specific argument that performance-approach goal may produce distraction and jeopardize task focus has regularly been voiced among achievement goal researchers, such as Brophy (2005) who proposed that "concerns about peer comparisons or competition are likely to distract [students] from a focus on doing what is necessary to get ready for the test" (p. 167). In a similar fashion, McGregor and Elliot (2002) suggested that the "instrumental importance of the outcome and the threat appraisals these goals were hypothesized to generate may undermine total engagement in the study process" (p. 385), while Vansteenkiste, Matos, Lens, and Soenens (2007) stated that "when individuals are concerned with proving their self-worth in comparison with others, they are less likely to become fully immersed and absorbed in the activity at hand" (p. 786).

Notwithstanding these arguments, the distraction hypothesis has long failed to receive direct empirical support in the study of achievement goals, leading Senko et al. (2011) to the conclusion that there was so far a "dearth of evidence for the task distraction hypothesis" (p. 33). In their review, these authors notably mention a series of studies that included self-reported measures of distraction or task focus (e.g., a measure of *test anxiety* in Elliot & McGregor, 1999; of *mental focus* in Lee, Sheldon, & Turban, 2003; of *task-irrelevant thoughts* in Linnenbrink, Ryan, & Pintrich, 1999; of *absorption* in McGregor & Elliot, 2002), and consistently failed to find evidence that performance-approach goals lower perceived distraction, hence casting doubts regarding the relevance of this hypothesis.

The Distraction Hypothesis in the Literature on Evaluative Pressure

Another research area, which investigates the cognitive consequences of evaluative pressure, has also addressed the question of the possible distraction that ensues from evaluative settings, but independently from the literature of achievement goals. This research has tested the distractive potential of evaluative pressure by focusing on how such pressure impacts working memory resources. In particular, the distraction hypothesis tested the idea that pressure should constrain individuals to allocate their limited working memory resources both to the task solving and to the management of the high-stake situation and its associated outcome concerns.

In order to test this hypothesis, Beilock, Kulp, Holt, and Carr (2004) asked participants to solve a series of arithmetic problems in a laboratory context, under either low or high evaluative pressure. In particular, the high-pressure manipulation instructions they relied on were based on three distinct sources of pressure supposedly at play in academic arenas, namely monetary rewards, peer pressure, and social evaluation: Participants were told they would have to improve their performance by 20% relative to their preceding score if they wanted to earn $5 and to avoid depriving their partner from the same reward, and it was also made explicit that performance was videotaped and would be later assessed by math experts and professors. The authors justified the use of many sources of pressure by arguing that "in academic arenas, monetary consequences for test performance are manifested in terms of scholarships and future educational opportunities, and social evaluation of performance comes from mentors, teachers, and peers" (Beilock et al., 2004, p. 588). Results confirmed that the high-pressure scenario, as compared

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to the non-pressure condition, taxed a significant part of working memory resources, resulting in a decrement of performance for the most resource-demanding arithmetic problem. This finding has been replicated in several other studies (Beilock & DeCaro, 2007; Gimmig, Huguet, Caverni, & Cury, 2006; Markman, Maddox, & Worthy, 2006). Furthermore, in an attempt to specify the content and nature of this interference, DeCaro, Rotar, Kendra, and Beilock (2010) showed that pressure to perform consumes verbal resources; indeed, it generates a phonological inner language focused on concerns about the evaluative situation and its consequences, which lowers task-related considerations and impairs cognitive performance.

Evaluative contexts most often entail the presence of coactors – individuals who are simultaneously performing the same task or taking the same test – who represent potential sources of social comparison (Baron, Moore, & Sanders, 1978). Experimental research carried out by Muller and Butera (2007; Muller, Atzeni, & Butera, 2004) pointed out the potential costs of such social comparison processes, revealing that the direction of social comparison during coaction can generate a threat to self-evaluation that can impact task processing. More specifically, they tested whether considerations regarding the coactor's level of competence as compared to one's own could be at play during coaction and consequently divert attention away from the task at hand. In line with this hypothesis, they found evidence that the presence of a more competent (i.e., upward comparison) or potentially more competent coactor (i.e., mere coaction with no information relative to the other's performance) indeed activated concerns and ruminative thoughts about one's self-competence that consumed attentional resources otherwise available for the task. This phenomenon was not observed when dealing with a less competent, and thus not threatening, coactor (i.e., downward comparison).

The Effects of Performance-Approach Goals on Working Memory

The research reviewed in the previous section provides a clear picture: Under high-stake situations, the pressure to excel, or the danger to be outperformed by a coactor or an equally competent peer, has the potential to generate distractive concerns and doubts regarding self-evaluation, which divert part of working memory away from the task. Interestingly, this research suggests an alternative way to test the distraction hypothesis for performance-approach goals: the study of the possible interference of these goals with working memory. Such test would allow studying the distraction hypothesis on a process measure, beyond the self-report measures reviewed by Senko et al. (2011).

Following this suggestion, in a set of experimental studies, Crouzevialle and Butera (2013) asked students to solve modular mathematic problems of various difficulties (those of Beilock et al., 2004) following either a control (no-goal) or a performance-approach goal manipulation. Participants solved both low-demand (soliciting only limited resources to be efficiently solved) and high-demand (requiring higher working memory resources) problems; this is an important feature allowing to directly test the distraction hypothesis, since a divided-attention situation should harm performance only for the most resource-demanding problem solving. The instructions designed to engender performance-approach goal endorsement urged participants to try to excel at the task and demonstrate competences by outperforming other students who had already completed it; they were told they would be given both their score and ranking information at the very end of the experiment. These instructions aimed to imitate the normative evaluative structure in place in most educational environments. By contrast, participants of the control condition were merely instructed to try to do their best at the problem solving.

Results revealed that performance indeed suffered from performance-approach goal pursuit as compared with a control group (Crouzevialle & Butera, 2013, Experiment 1). This impairment was only observed for highly demanding problems, thus allowing to point at *distraction* as the mechanism responsible for this impairment, and implying that performance-approach goals can distract participants from full cognitive engagement in the task solving. Moreover, a second experiment that relied on Wegner's theory of mental control and thought suppression (Wegner, 1994; Wegner & Erber, 1992) obtained direct evidence that performance-approach goals by default elicit goal-related hyper-accessibility – an hyper-accessibility involved in task performance impairment (Crouzevialle & Butera, 2013, Experiment 3).

In follow-up research, the same authors tested whether this performance-approach goal-related interference could be even amplified for high-working memory capacity students, that is, those students who are used to be high achievers. The pursuit of performance-approach goals should indeed represent a high-stakes opportunity to reaffirm their positive status (Crouzevialle, Smeding, & Butera, 2015). The authors manipulated the presence versus absence of a bogus ranking feedback – either average or very high – in order to generate uncertainty versus confidence regarding the chance to subsequently get a high score and outperform others, in other words the expectation of success given their goals (cf., Wigfield & Eccles,

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2000). Results revealed that under performance-approach goal pursuit, the higher the students' working memory capacity, the lower their performance at the modular arithmetic task, but only in the condition suggesting uncertainty regarding chances to outclass others and excel at the task. Moreover, an accessibility measure pointed to the role of status-related concerns in the distraction experienced by high-working memory capacity participants.

Experimental work carried out by Avery and colleagues (Avery & Smillie, 2013; Avery, Smillie, & de Fockert, 2013) provided convergent evidence by investigating the influence of achievement goals on working memory resources through a different perspective, namely that of the impact of goal pursuit on the availability of cognitive resources. These authors indeed found that performance-approach goals (as manipulated through instructions) led participants to a lower performance as compared with both mastery-approach goals and a control (no-goal) manipulation, but only when the task to be solved was highly demanding (Avery & Smillie, 2013). This implies that fewer cognitive resources were available in the former as compared with the latter goal conditions. In follow-up research, Avery et al. (2013) used a dual-task paradigm and found that under high cognitive load, mastery-approach goal participants experienced a greater performance decrement than performance-approach goal participants on the primary task. Along with this finding, results highlighted greater reliance on highly demanding problem-solving strategies among mastery-approach goal participants while performance-approach goals allegedly directed participants toward less costly solving strategies. Hence, taken together, these findings consistently highlight the reduced availability of cognitive resources for task focus under performance-approach goal pursuit.

Methodological Considerations

There are important methodological differences distinguishing the research on whether performance-approach goals interfere with task focus reviewed by Senko et al. (2011) from the recent work on the effects of performance-approach goals on working memory (Avery et al., 2013; Crouzevialle & Butera, 2013). First, assessing working memory impairment in the laboratory, rather than in classroom settings, allows isolating the cognitive processing of the task from any influence of specific strategies most likely to occur in long-term contexts and likely to influence achievement. Second, opting for an objective measure of task focus (i.e., task performance) rather than for self-reports of perceived distraction after task completion (e.g., Lee et al., 2003) allows a direct assessment of the cognitive resources individuals actually implement during a cognitive activity. Third, and relatedly, using a cognitive task difficult enough so as to be affected by a divided-attention situation is also a crucial point allowing to efficiently put the distraction account to the test.

In addition to the nature of the dependent variable, these lines of research also differ in terms of the nature of the independent variable, with the research by Crouzevialle and Butera (2013) and Avery et al. (2013) manipulating performance-approach goals, and the studies on self-reported distraction from task focus (e.g., Lee et al., 2003) measuring them. Manipulating goals presents the advantage of circumventing self-presentation biases, which can motivate students to refrain from reporting high levels of performance-approach goal endorsement. It can nonetheless raise other concerns, such as the efficiency of the manipulation. For instance, it may be argued that performance-approach goal instructions, coupled with the challenging and somehow unfamiliar laboratory setting, may elicit more performance-avoidance than performance-approach goal-related concerns, through generating anxiety and fear of failure. Given that performance-avoidance goals are unanimously depicted as detrimental to achievement, this would provide an alternative account to the distraction effect described above. Indeed, recent research by Murayama and Elliot (2012) showed that competition may elicit both performance-approach and performance-avoidance goals, which in turn yield positive and negative effects, respectively, on performance. Even if this sounds like a reasonable assumption, we believe this explanation is unlikely to account for the aforementioned findings. Indeed, the manipulations that were used to prime achievement goals have been validated in previous research, which showed that the instructions used for performance-approach goals specifically elicit performance-approach goal endorsement (Darnon, Harackiewicz, Butera, Mugny, & Quiamzade, 2007). Furthermore, the presence of manipulation checks (self-reports in Avery and colleagues' studies, accessibility tasks in Crouzevialle and Butera's studies) attests to the effectiveness of the manipulations.

When Performance-Approach Goals Activation Is Distracting and When It Is Not

Above and beyond these methodological considerations and concrete features that account for the differences in the abovementioned results, we now discuss some theoretical arguments that, in our view, allow reconciling

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them. We believe that, in light of the literature documenting the cognitive consequences resulting from goal setting and goal pursuit, evidence that performance-approach goal pursuit heightens the accessibility of goal-related thoughts (hence generating distraction) should come as no surprise. For instance, Klinger's (1975, 2009) Current Concerns Theory claims that once set, goals become *current concerns* that will remain active in memory until they are reached or abandoned. This results in an increased sensitivity to material, constructs, or environmental stimuli that are related to these goal concerns – a "pervasive biasing of cognitive processing" (Klinger & Cox, 2004, p. 10) designed to enhance chances to successfully attain the goal. Hence, as Förster, Liberman, and Higgins (2005, p. 221) put it, "heightened accessibility of goal-related constructs helps to detect stimuli in the environment that are necessary for efficient goal pursuit, and thus contributes to the likelihood of goal achievement." Similarly, in his work on mindsets, Gollwitzer (1996; Gollwitzer & Moskowitz, 1996) posits that once individuals become committed to a given goal, they will activate relevant cognitive orientations and procedures that will help them to easily detect goal-associated cues in the environment; this will ultimately support goal attainment.

However, and interestingly for our contention, McVay and Kane (2010) – consistently with Watkins (2008) – underlined that because the activation of goal-related thoughts and concerns consumes attention, their admittance into awareness has to be regulated in a top-down manner, "at least in some contexts, so that environmental cues are not unopposed in their influence on thought content" (McVay & Kane, 2010, p. 189). Indeed, current concerns related to the pursued final end state (i.e., high-level considerations) might disrupt concrete task execution and intense concentration – sometimes labeled *flow* – and thereby jeopardize performance (Leary, Adams, & Tate, 2006; Freund & Hennecke, 2015). In line with this assumption, Vallacher and Wegner's (1989) Action Identification Theory posits that the activation of high-level thoughts (i.e., the action's effect and implications) should not disturb the execution of automatized, non-resource consuming activities such as car driving or handwriting (since such actions only require minor mobilization of attention to be efficiently implemented). Low-level thinking (i.e., the action's details) should by contrast be more appropriate when facing complex or novel activities or contexts.

Likewise, we contend that the activation of performance-approach goals creates a distraction that can be problematic under immediate and demanding testing situations, because the pursuit of this goal, whose attainment carries important implications for self-esteem, interferes with the low-level processes that are necessary to deal with the completion of a complex task. Given the preponderance of cognitive activities implying working memory in educational contexts (language comprehension, language production, reasoning, learning, arithmetic abilities; see Engle, 2002), this can represent a major impairment.

Recent research investigating how achievement goals influence students' study strategies (Senko, Hama, & Belmonte, 2013; see also Senko & Miles, 2008) also points to an alternative path. Senko et al. (2013) indeed demonstrated that performance-approach – unlike mastery-approach – goal pursuit predicted a vigilant approach regarding teachers' expectations and most valued materials. Such vigilance was in turn positively related to study flexibility, that is, the extent to which students reported strategically adapting their studying approach in order to fit the course-specific demands. Furthermore, vigilance was found to partly mediate the positive relationship between goal endorsement and students' grades. We believe this pattern suggests the more adaptive consequences that the very same performance-approach goal hyper-accessibility may have in less immediate evaluations that authorize planning and tactical preparation. In particular, performance-approach goal frequent activation in mind should result in students allocating a high degree of attention to clues and indications associated with teachers' expectations; this should eventually help the most clear-sighted of them to accurately focus their work and efforts on what is valued by the examiners. In a similar vein, keeping the goal activated in mind is also likely to facilitate the implementation of self-control (i.e., regulatory mechanisms) in the face of opposing action tendencies and distractions stemming from more trivial goals (Fujita, Trope, Liberman, & Levin-Sagi, 2006), which represents a major benefit in the course of a long-term goal pursuit (Emmons, King, & Sheldon, 1993).

This suggests that performance-approach goal pursuit has fairly distinct consequences on students' cognition and behaviors depending on whether one focuses on an immediate testing situation or on the longer period of an academic semester, and that a similar mechanism – namely, the goal's recurrent activation in mind – may be at play in both cases. This activation would create a divided-attention situation that generates goal attainment concerns in a short-term setting, while favoring the emergence of tactical planning in the other, when the implementation of strategies is possible.

Conclusion

The present article proposes a series of theoretical arguments as well as empirical findings demonstrating that

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striving to outperform others is susceptible to override task focus. These findings take place within the context of a debate that is currently active within the achievement goal literature, namely regarding whether performance-approach goals may or may not be considered as detrimental to task focus (Brophy, 2005; Senko et al., 2011), and bring new arguments into this controversy. By bringing the literature on evaluative pressure (e.g., Beilock et al., 2004) into the picture, the present discussion promotes a reflection on what differentiates laboratory settings, where evidence for such distraction was found, from classroom contexts, where a beneficial influence of performance-approach goal endorsement is generally well established. The most obvious and crucial difference appears to be the time frame: As performance-approach goals elicit the hyper-accessibility of competence-related concerns (Crouzevialle & Butera, 2013), such concerns can be distractive during immediate evaluations that require full attention on the task, but can also promote strategic planning when evaluation is in the future.

As an important limitation, it should be noted that the present article focuses on research that showed why institutional practices strongly promote the endorsement of performance-approach goals, and in this respect it focuses on external factors of pressure, that is, those stemming from the evaluative context. Performance-approach goal pursuit, however, may also be influenced by internalized feelings of pressure, such as pride or introjected motivation (Ryan & Deci, 2000). Vansteenkiste et al. (2010; see also Vansteenkiste, Lens, Elliot, Mouratidis, & Soenens, 2014) underlined the importance of taking into account the reasons underlying goal pursuit, and showed that pursuing performance-approach goals for autonomous reasons (e.g., for challenge seeking) leads to more positive outcomes than pursuing it for controlling reasons (e.g., to satisfy parents' pressure). In particular, Vansteenkiste et al. (2010) observed that the former led to higher self-reported concentration and time management when studying, as well as lower anxiety, than the latter. This suggests that controlled regulation of performance-approach goal pursuit could play a major role in the distraction and the activation of goal-related concerns discussed in the present article, and argues in favor of an approach that gives weight not only to the pursued goal, but also to the underlying reason for pursuing it (see Senko, 2016). Another question that future research should address is that of distraction in nonevaluative situations, although such situations might be difficult to simulate in the laboratory, where evaluation is always present, even if implicitly.

As a concluding comment, we believe the research reported in this article emphasizes the insights that can be gained from cross-fertilization between research areas (here, achievement goals and evaluative pressure), and adopting this approach may offer innovative avenues for the study of how motivational processes influence performance.

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