Easy and difficult performance-approach goals

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EASY AND DIFFICULT PERFORMANCE-APPROACH GOALS: THEIR MODERATING EFFECT ON THE LINK BETWEEN TASK INTEREST AND PERFORMANCE ATTAINMENT

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The purpose of this study was to demonstrate that the positive link between task interest and performance attainment can be negatively affected by the pursuit of difficult performance-approach goals. This was tested in a sample of 60 undergraduate students at a Dutch university. In line with expectations, for difficult performance-approach goals there was no link between task interest and performance attainment. Furthermore, among women this relation turned out to be negative. In an easy performance-approach goal condition, a positive link between task interest and performance attainment was found for both men and women, while in the control condition the same expected positive relation was not found. Theoretical and practical implications of these findings are discussed.

Task interest has been regarded as a robust and important predictor of performance attainment (Lepper & Henderlong, 2000; Renninger, 2000; Ryan & La Guardia, 1999; Van Yperen, 2003), as it plays an important role in the process of task appraisal, task engagement, and persistence, eventuating in superior performance attainment. As a motivational variable, interest can be gained, lost, developed, and maintained over time. Individuals that approach a task with high levels of interest are said to engage more cognitive resources, to sharpen their attention, and to persist in their commitment (Hidi, 2000), which in turn tends to positively impact performance levels (Klein, Wesson, Hollenbeck, & Alge, 1999; Klein, Wesson, Hollenbeck, Wright, & DeShon, 2001; Locke & Latham, 1990). In a recent study, Harackiewicz and her colleagues reconfirmed the link between interest and performance attainment (Harackiewicz, Durik, Barron, Linnenbrink-Garcia, & Tauer, 2008). However, this link may be vulnerable to external cues.

In organisations that tend to be governed by competition and normative evaluation, one such external cue may be the assignment of performance-approach goals. Individuals pursuing these goals are focused on doing well relative to others (e.g., colleagues, team-mates, peers, etc.; see Elliot, 2005).

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The focus on doing well relative to others is assumed to keep performance efforts channelled towards the normative standards that eventuate in high levels of performance. However, at the same time, performance-approach goals may involve some costs in terms of anxiety, worry, negative affect, dissatisfaction, and strained interpersonal relationships (e.g., Elliot, 2005; Harackiewicz, Barron, Pintrich, Elliot, & Thrash, 2002; Janssen & Van Yperen, 2004). In the present research, we argue and demonstrate that the link between task interest and performance attainment may be influenced by assigned performance-approach goals, and harmed by *difficult* performance-approach goals in particular.

The effects of performance-approach goals

Elliot and Moller (2003, p. 345) stated that "performance-approach goals are neither all good, nor all bad; rather, they represent valuable, yet vulnerable forms of regulation". Indeed, the extant research investigating the effects of performance-approach goals on performance and related outcomes yielded mixed results (for reviews, see Elliot, 2005; Payne, Youngcourt, & Beaubien, 2007).

On the one hand, performance-approach goals can be *valuable* forms of regulation as they may lead to adaptive patterns of learning. Performance-approach goals have been positively related to effort (Bouffard, Boisvert, Vezeau, & Larouche, 1995; Elliot & McGregor, 1999; Elliot, McGregor, & Gable, 1999), need for achievement, adaptive forms of perfectionism (Van Yperen, 2006), aspirations, self-efficacy, and ultimately performance attainment (Elliot & Moller, 2003). Particularly in educational settings, performance-approach goals were found to predict performance attainment (for a review, see Harackiewicz et al., 2002; Van Yperen & Renkema, 2008).

On the other hand, performance-approach goals may be *vulnerable* forms of regulation, leading to less beneficial outcomes. Some researchers disqualified performance-approach goals from being good for motivation, task interest, or performance attainment. For example, Van Yperen (2006) found that individuals with a performance-approach goal were relatively high in negative affectivity, extrinsic motivation, amotivation, and maladaptive forms of perfectionism. Furthermore, VandeWalle, Brown, Cron, and Slocum (1999) demonstrated that performance-approach goals may be detrimental as they might trigger threat appraisals in relation to the task, since task failure might demonstrate lack of ability in comparison to others. Van Yperen and Janssen (2002) found that job demands were negatively related to job satisfaction among employees holding strong performance-approach goals, but only when mastery-approach goals were weak. Also, Grant and Dweck (2003)

showed the vulnerability of performance-approach goals in the face of external setbacks, such as negative feedback about previous performance, which seemingly impaired the interest and subsequent performance for individuals with a performance-approach goal. Senko and Harackiewicz (2002) showed that in evaluative contexts, performance-approach goals may be harmful particularly for individuals low in achievement orientation (cf Harackiewicz & Elliot, 1993).

These mixed effects of performance-approach goals indicate that these goals can be "good" or "bad" for performance attainment. Hence, we argue that performance-approach goals may affect the link between task interest and performance attainment in either a valuable or vulnerable way. Specifically, in the present research, we assumed that the effect of the performance-approach goal on the relation between interest and performance is a function of its perceived difficulty.

Perceived goal difficulty

The major finding derived from goal-setting research is that difficult and specific goals lead to higher levels of performance than do easy or vague goals (Locke & Latham, 1990). The reasoning behind this mechanism is that difficult goals, as long as specific and attainable, make people engage in higher levels of effort and make them persist longer on the task, which subsequently leads to better performance. However, when goals are perceived as too difficult, they may be detrimental for performance attainment (Latham & Locke, 2006). The belief that the highest standards of performance must be achieved may cause significant distress and dysfunction (for a review, see Flett & Hewitt, 2002), which may be particularly true when individuals are highly interested in the task and when the task is perceived as relevant to the self. Goals that are perceived as too difficult may channel away valuable cognitive resources needed to reach the goal (Latham & Locke, 2006). Previous research indicates that difficult goals may induce performance pressure, evoke negative affect, and weaken confidence and interest (e.g., Fortunato & Williams, 2002; Locke & Latham, 1990; Manderlink & Harackiewicz, 1984; Mossholder, 1980).

Perceived difficulty of performance-approach goals

Performance-approach goals may typically be perceived as difficult, since their accomplishment necessitates performing better than others (cf Senko & Harackiewicz, 2005). However, the difficulty of performance-approach goals

can be explicitly varied, for example by changing the percentage of people who are considered to be the best performers. Specifically, the performance-approach goal of ending up among the best 30% may be perceived as more difficult than the goal of ending up among the best 70%. Hence, performance-approach goals can be presented as relatively easy or as relatively difficult.

Previous research has demonstrated that assigned performance-approach goals tend to undermine the positive link between task interest and task performance (Van Yperen, 2003). It can be assumed that difficult performance-approach goals are particularly "bad" for the link between task interest and performance attainment, as these goals jointly emphasise social comparison and the difficult benchmark needed to be surpassed in order to be better than others. In contrast, the benchmark in the case of easy performance-approach goals may be perceived as attainable, and accordingly, may not harm the link between task interest and performance attainment. Hence, we expected that the positive link between task interest and performance attainment would *not* exist among individuals pursuing difficult performance-approach goals.

Sex differences

In the achievement goal literature, findings are inconsistent about the role of sex in the adoption of achievement goals, or about the impact of sex on the links between achievement goals and performance attainment. For example, some studies suggest that men are more likely than women to adopt and to adhere to performance goals (Bouffard et al., 1995), while others found that women tended to be either more performance goal oriented (Button, Mathieu, & Zajac, 1996), or more mastery goal oriented (Elliot & McGregor, 2001) than men. On the other hand, Patrick, Ryan, and Pintrich (1999) found mastery goals to be positively associated with performance, but for men only. With regard to assigned achievement goals, research has yet to agree on how characteristics such as sex might influence the interpretation and pursuit of such goals (cf Urdan, 2004). For example, among individuals with high skills, Butler (1993) found that men benefited more from assigned performance-approach goals, and women from assigned mastery goals when working on a complex computer task. Other studies found no significant sex effects regarding assigned performance-approach goals (Darnon, Harackiewicz, Butera, Mugny, & Quiamzade, 2007; Van Yperen, 2003). Due to these mixed findings, we could not exclude the possibility that the pursuit of performance-approach goals might have distinct outcomes for women and men. At this point, we do not propose definitive predictions about sex differences. However, as the above findings indicate, sex is a factor that cannot be

neglected in research on achievement goals, so that we included sex as a predictor in our model.

Method

Participants

The participants (N = 60, 55% women) have been recruited from a university in the Netherlands and participated for either course credit, or a small reward consisting of a chocolate bar and a can of fizzy drink. Their ages ranged from 18 to 39 (M = 21.8, SD = 3.2), and their majority was studying Social Sciences (48.3%), followed by Law or Arts Studies (23.3%), Business and Economics (18.3%), or were from other departments (10%).

Procedure

The participants were randomly assigned to one of the two experimental conditions (Goal difficulty: Easy performance-approach goal *vs.* Difficult performance-approach goal), or a control condition, in which no goal was imposed on the participants.

Upon arrival, participants were greeted by the experimenter and were told that they were going to work on an English Language Practice Test, developed for helping students with their preparation for university level English language proficiency. They were then taken to a cubicle equipped with a computer, which guided them through the experiment. Before they started, participants signed the informed consent form and acknowledged that they could quit the experiment at any time without any consequences.

It was explained to the participants that the English Language Practice Test comprised 12 items: four sentence completion items, four analogies, and four antonyms. The participants were informed that there was no time limit. Then they completed the task interest questionnaire, followed by the experimental manipulation. The participants were recommended for the test to: (1) perform better than the other participants and end up among the best 70% by solving eight questions correctly (Easy performance-approach goal), or (2) perform better than the other participants and end up among the best 30% by solving eight questions correctly (Difficult performance-approach goal). Participants in the control condition did not receive any goal recommendation.

Measures

Manipulation checks

At the very end of the exercise, the participants were asked to specify which goal, if any, they were recommended to adopt. Additionally, participants in the two experimental conditions had to indicate on a five-point Likert scale the degree to which they found their specific goal attainable, realistic, and difficult, with response categories ranging from (1) *not at all* to (5) *very* (Van Yperen, 2003). These three items on goal attainability (reversed coding), realism (reversed coding) and perceived goal difficulty were averaged to create an index of perceived goal difficulty ($\alpha = .95$).

Performance attainment

Performance attainment was assessed by calculating the number of correct answers on the English Language Practice Test (maximum 12).

Task interest

This measure was adapted from Van Yperen (2003). The scale consists of four items, with a sample item being "Are you interested in doing tests like this?". Response categories ranged from (1) *not at all* to (5) *very much*. The four items were averaged to create an index of task interest ($\alpha = .72$).

Results

Manipulation checks

At the end of the exercise, the participants were asked to indicate which specific goal they were recommended. The goal manipulation was successful, with all but one of the participants reporting their recommended goal correctly, $x^2(4, N = 60) = 120.00$, $p < .01$.

Perceived goal difficulty

An Analysis of Variance (ANOVA) with Goal difficulty (Easy performance-approach goal *vs.* Difficult performance-approach goal) as the independent variable, and perceived goal difficulty as the dependent variable, indeed revealed that the difficult performance-approach goal was perceived as more difficult ($M = 3.45$, $SD = 0.61$) than the easy performance-approach goal ($M = 2.76$, $SD = 1.00$, $F(1, 39) = 6.40$, $p = 0.01$).

Hypothesis testing

We expected no link between task interest and performance attainment only for individuals pursuing difficult performance-approach goals. To test this hypothesis, the procedure proposed by Aiken and West (1991) was followed. Task interest was centred by subtracting its mean from its value, which left us with deviation terms. Second, dummies were created following standard procedures (Cohen, Cohen, West, & Aiken, 1983). Thus, two dummies were created for the experimental conditions (D1: easy performance-approach goal = 1, difficult performance-approach goal = 0, control = 0; D2: difficult performance-approach goal = 1, easy performance-approach goal = 0, control = 0), and one dummy for sex. Third, the interaction terms between the dummy variables and task interest were calculated. Then performance attainment was hierarchically regressed on the two dummies for condition, the sex dummy, task interest, and their interactions. The main effects were entered first (Step 1), followed by the two-way interactions (Step 2), and the three-way interactions (Step 3). The results of the regression analysis are presented in Table 1.

Table 1
Results of regression analysis with unstandardised regression coefficients

		Performance attainment		
Step and variable		1	2	3
1	Task interest	.67	-.19	.05
	Sex	.63	1.14	1.9
	Easy goal	.23	.85	.81
	Difficult goal	.46	.76	.44
2	Task interest x Sex		2.07	-1.05
	Task interest x Easy goal		1.49	1.38
	Task interest x Difficult goal		-1.77	-4.75*
	Sex x Easy goal		-1.51	-2.17
	Sex x Difficult goal		-.45	-.99
3	Task interest x Sex x Easy goal			2.44
	Task interest x Sex x Difficult goal			6.75**
	R^2	.095	.237	.308
	ΔR^2	.095	.143	.070

Note. $N = 60$. * $p < .01$, ** $p < .05$

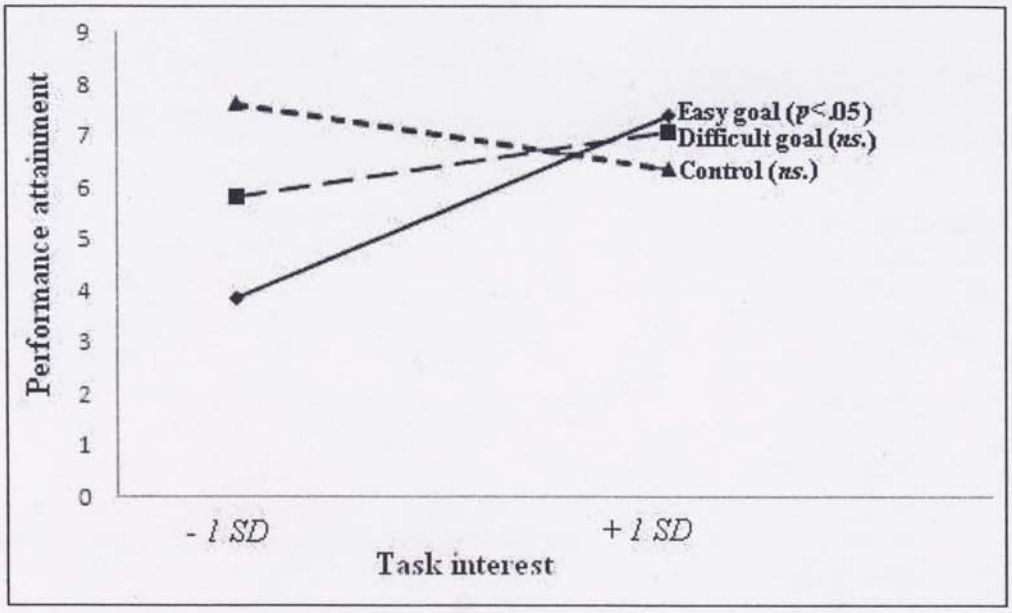

Figure 1
Interaction between task interest and goal difficulty on performance attainment for men

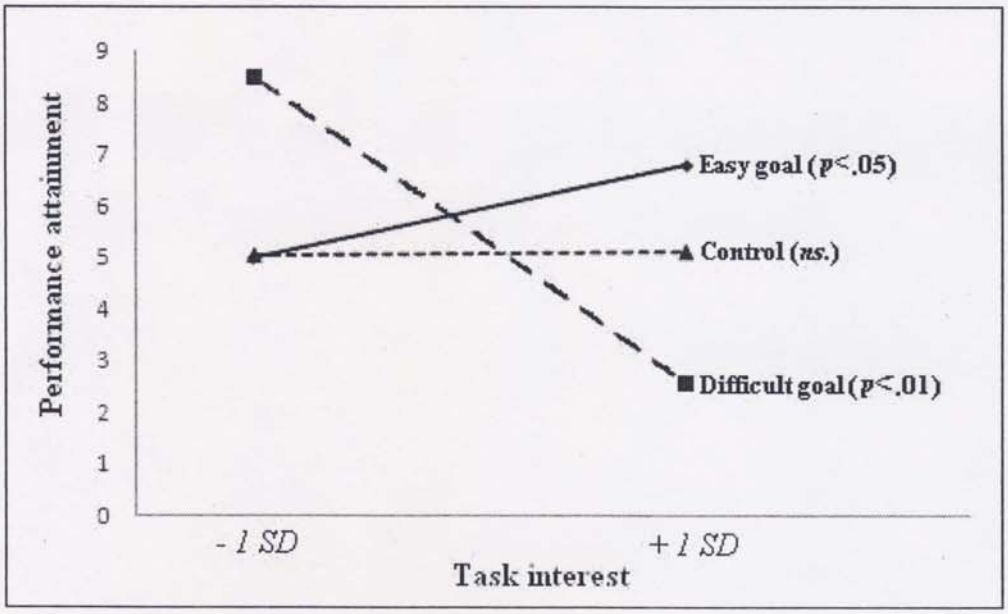

Figure 2
Interaction between task interest and goal difficulty on performance attainment for women

The significant two-way interaction between task interest and the difficult performance-approach goal was qualified by the three-way interaction between task interest, difficult performance-approach goal, and sex (b = 6.75, p = 0.04, R^2 = .30, ΔR^2 = 0.07). As discussed by Aiken and West (1991), we considered the higher order interaction for further analysis. To interpret this three-way interaction, additional analyses were conducted to test the significance of the simple slopes. As expected, for difficult performance-approach goals, there was no link between interest and performance among men (Figure 1), while this link was even negative among women (Figure 2). Also in line with expectations, the positive links between task interest and performance attainment were present among both men and women that were recommended an easy performance-approach goal. Unexpectedly, no links between interest and performance were observed in the control condition.

Discussion

The aim of the present study was to demonstrate that the link between task interest and performance attainment can be moderated by assigned easy and difficult performance-approach goals. As demonstrated in previous research (Harackiewicz et al., 2008; Lepper & Henderlong, 2000; Renninger, 2000; Ryan & La Guardia, 1999; Van Yperen, 2003), interest typically leads to better performance. However, assigned performance-approach goals, which make salient the competition with others, may harm this link. Indeed, among men with difficult performance-approach goals, no positive link between task interest and performance attainment was observed. Among women with difficult performance-approach goals, task interest was even negatively related to performance attainment.

Theoretical insights on evaluation anxiety (Zeidner, 1990; Zeidner & Matthews, 2005) and cognitive appraisal (Lazarus, 1991; Tomaka, Blascovich, Kelsey, & Leitten, 1993; Tomaka, Blascovich, Kibler, & Ernst, 1997) may help to explain why difficult performance-approach goals harmed the link between interest and performance particularly among women. On the one hand, interested individuals are concerned with mastering a specific task and may be less concerned with being evaluated (Deci & Ryan, 2000; Ryan & Deci; 2000). On the other hand, for individuals high in task interest, a testing situation is more self-relevant than for low interested individuals, and accordingly, may evoke evaluation anxiety. Evaluation anxiety is largely defined as anxiety triggered by personal evaluation in a variety of contexts, mostly when a person sees little chance in obtaining satisfactory evaluation (Leitenberg, 1990). Research suggests that women tend to report higher lev-

els of test anxiety, whereas men are thought to be socialised to be more competitive, to prove skills and abilities, and to prefer achievement situations (Cassady & Johnson, 2002; Zeidner & Matthews, 2005). Hence, relative to the interested men, the interested women with assigned difficult performance-approach goals may have perceived the situation as a threat rather than a personal challenge (Blascovich & Tomaka, 1996).

Another possible explanation is the existence of conflicting achievement goals. Previous research demonstrated that women tend to prefer mastery goals which focus individuals on developing and gaining competence (Elliot, 2005; Elliot & McGregor, 2001). As a consequence, women may have been more negatively affected by the assigned performance-approach goals. Relative to men, self-regulation may have been disrupted to a larger extent among women, particularly when difficult performance-approach goals were imposed on them.

Unexpectedly, the positive link between task interest and performance attainment previously demonstrated by others (cf Ford, 1992; Harackiewicz et al., 2008; Lepper & Henderlong, 2000; Van Yperen, 2003) was not confirmed. In this study, the positive link between task interest and performance attainment was observed only in the easy performance-approach goal condition. In the present context, only easy performance-approach goals may have met the prerequisites for optimal performance as proposed by goal-setting theory. In contrast, the no-goal context may have been equivalent to a "do your best" condition (Locke & Latham, 1990). No clues were provided about what was expected regarding one's performance on the new and rather complex task, and this in turn may have negatively affected the positive link between interest and performance.

Limitations of the present study

The present research is only the first step in addressing the moderating role of assigned performance-approach goals on the link between task interest and performance attainment. Therefore, cautious interpretations of the preliminary results are warranted. As a first limitation, the hypothesis was tested in a single context, among university students. Future research should be aimed at replicating these findings across domains and with diversified samples to allow for a refinement and generalisation of the current results.

Secondly, in the present study, predictions about sex differences were not made and process variables were not assessed. Accordingly, we could only speculate about possible underlying mechanisms. Valuable insights may be gained from future research that independently manipulates achievement goals and perceived goal difficulty, while assessing variables such as self-

reported anxiety and coping abilities, as well as measuring physiological anxiety indicators, such as heart rate and skin conductance (Fowles, 2000; Hopko, Crittendon, Grant, & Wilson, 2005).

The performance-approach goals and goal difficulty were operationalized in terms of a fixed numerical target and a variable percentage target. The target goal, set to eight correct items (out of 12) was the same across experimental conditions. Perceived goal difficulty was manipulated by percentage levels that needed to be reached in order to attain one's performance-approach goal. Our results showed that identical target goals framed as either easy (best 70%) or difficult (best 30%) performance-approach goals were differently perceived in terms of goal difficulty, indicating that the manipulation of perceived goal difficulty was successful. However, a third limitation lays in judging how easy, or how difficult the goals were perceived by the participants. This perception is likely to be a function of the individuals' level of perceived competence, so that in future research this variable may be examined as an additional moderator.

Fourthly, we recognise that only the effect of one particular achievement goal was examined. Although the present study is among the few that links the achievement goal approach to goal-setting theory (cf Seijts, Latham, Tasa, & Latham, 2004), future research could link other achievement goals from the 2 x 2 framework (Elliot & McGregor, 2001) with goal-setting theory as well. For example, the same target may be framed in either an approach or an avoidance manner. That is, the easy goal may be presented as either the goal of being among the best 70% (performance-approach), or the as the goal of not being among the worst 30% (performance-avoidance).

Practical implications

As emphasised above, cautious interpretations of the preliminary results are warranted. Having said this, the findings may suggest that in a variety of domains (including the work place, the classroom, or the sport field), task interest should be fostered. Therefore, supervisors, teachers, and coaches should be careful with assigning performance-approach goals to individuals, and in particular assigning difficult performance-approach goals to women. If performance-approach goals are assigned to people, the present findings suggest that these goals should not be too difficult, especially when working on a new and rather complex task (cf Winters & Latham, 1996).

Concluding remarks

The results of this study provided some evidence that the positive relationship between task interest and performance attainment can be negatively affected by the assignment of difficult performance-approach goals. Specifically, only under the condition of easy performance-approach goals, there was a positive link between interest and performance. For difficult performance-approach goals, this link was non-existing (among men), or even negative (among women). However, further research is obviously needed to better understand the distinct influence of easy and difficult performance-approach goals on the positive relationship between task interest and performance attainment.

References

Aiken, L.S., & West, S.G. (1991). *Multiple regression: Testing and interpreting interactions.* Newbury Park, CA: Sage.

Blascovich, J., & Tomaka, J. (1996). The biopsychosocial model of arousal regulation. In M.P. Zanna (Ed.), *Advances in experimental social psychology* (pp. 1-51). New York: Academic Press.

Bouffard, T., Boisvert, J., Vezeau, C., & Larouche, C. (1995). The impact of goal orientation on self-regulation and performance among college students. *British Journal of Educational Psychology, 65*, 317-329.

Butler, R. (1993). Effects of task- and ego-achievement goals on information seeking during task engagement. *Journal of Personality and Social Psychology, 65*, 18-31.

Button, S.B., Mathieu, J.E., & Zajac, D.M. (1996). Goal orientation in organizational research: A conceptual and empirical foundation. *Organizational Behavior and Human Decision Processes, 67*, 26-48.

Cassady, J.C., & Johnson, R.E. (2002). Cognitive test anxiety and academic performance. *Contemporary Educational Psychology, 27*, 270-295.

Cohen, P., Cohen, J., West, S.G., & Aiken, L.S. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences.* Hillsdale, NJ: Lawrence Erlbaum Associates.

Darnon, C.D., Harackiewicz, J.M., Butera, F., Mugny, G., & Quiamzade, A. (2007). Performance-approach and performance-avoidance goals: When uncertainty makes a difference. *Personality and Social Psychology Bulletin, 33*, 813-827.

Deci, E.L., & Ryan, R.M. (2000). The "what" and "why" of goal pursuit: Human needs and the self-determination behavior. *Psychological Inquiry, 11*, 227-268.

Elliot, A.J. (2005). A conceptual history of the achievement goal construct. In A.J. Elliot & C.S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 52-72). New York: The Guilford Press.

Elliot, A.J., & McGregor, H.A. (1999). Test anxiety and the hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology, 76*, 628-644.

Elliot, A.J., & McGregor, H.A. (2001). A 2 x 2 achievement goal framework. *Journal of Personality and Social Psychology, 80*, 501-519.

Elliot, A.J., McGregor, H.A., & Gable, S. (1999). Achievement goals, study strategies, and exam performance: A mediational analysis. *Journal of Educational Psychology, 91*, 549-563.

Elliot, A.J., & Moller, A. (2003). Performance-approach goals: Good or bad forms of regulation? *International Journal of Educational Research, 39*, 339-356.

Flett, G.L.E., & Hewitt, P.L. (2002). *Perfectionism: Theory, research, and treatment* (14th ed.). Washington, DC: American Psychological Association.

Ford, M.E. (1992). *Motivating humans: Goals, emotions, and personal agency beliefs*. Newbury Park, CA: Sage.

Fortunato, V.J., & Williams, K.J. (2002). The moderating effects of dispositional affectivity on performance and task attitudes in a goal-setting context. *Journal of Applied Social Psychology, 32*, 2321-2353.

Fowles, D.S. (2000). Electrodermal hyporeactivity and antisocial behavior: does anxiety mediate the relationship? *Journal of Affective Disorders, 61*, 177-189.

Grant, H., & Dweck, C.S. (2003). Clarifying achievement goals and their impact. *Journal of Personality and Social Psychology, 85*, 541-553.

Harackiewicz, J.M., Barron, K.E., Pintrich, P.R., Elliot, A.J., & Thrash, T.M. (2002). Revision of the achievement goal theory: Necessary and illuminating. *Journal of Educational Psychology, 94*, 638-645.

Harackiewicz, J.M., Durik, A.M., Barron, K.E., Linnenbrink-Garcia, L., & Tauer, J.M. (2008). The role of achievement goals in the development of interest: Reciprocal relations between achievement goals, interest, and performance. *Journal of Educational Psychology, 100*, 105-122.

Harackiewicz, J.M., & Elliot, A.J. (1993). Achievement goals and intrinsic motivation. *Journal of Personality and Social Psychology, 65*, 904-915.

Hidi, S. (2000). An interest researcher's perspective: The effects of extrinsic and intrinsic factors on motivation. In C. Sansone & J.M. Harackiewicz (Eds.), *Intrinsic and extrinsic motivation: The search for optimal motivation and performance* (pp. 309-339). San Diego, CA: Academic Press.

Hopko, D.R., Crittendon, J.A., Grant, E., & Wilson, S.A. (2005). The impact of anxiety on performance IQ. *Anxiety, Stress, and Coping, 18*, 17-35.

Janssen, O., & Van Yperen, N.W. (2004). Employees' goal orientations, the quality of leader-member exchange, and the outcomes of job performance and job satisfaction. *Academy of Management Journal, 47*, 368-384.

Klein, H.J., Wesson, M.J., Hollenbeck, J.R., & Alge, B.J. (1999). Goal commitment and the goal setting process: Conceptual clarification and empirical synthesis. *Journal of Applied Psychology, 84*, 885-896.

Klein, H.J., Wesson, M.J., Hollenbeck, J.R., Wright, P.M., & DeShon, R.P. (2001). The assessment of goal commitment: A measurement model meta-analysis. *Organizational Behavior and Human Decision Processes, 85*, 32-55.

Latham, G.P., & Locke, E.A. (2006). Enhancing the benefits and overcoming the pitfalls of goal setting. *Organizational Dynamics, 35*, 332-340.

Lazarus, R.S. (1991). *Emotion and adaption*. New York: Oxford University Press.

Leitenberg, H. (1990). Introduction. In H. Leitenberg (Ed.), *Handbook of social and evaluative anxiety* (pp. 1-6). New York: Plenum Press.

Lepper, M.R., & Henderlong, J. (2000). Turning "play" into "work" and "work" into "play": 25 years of research on intrinsic versus extrinsic motivation. In C. Sansone & J.M. Harackiewicz (Eds.), *Intrinsic and extrinsic motivation: The search for optimal motivation and performance* (pp. 257-307). San Diego, CA: Academic Press.

Locke, E.A., & Latham, G.P. (1990). *A theory of goal setting and task performance.* Englewood Cliffs, NJ: Prentice Hall.

Manderlink, G., & Harackiewicz, J.M. (1984). Proximal versus distal goal setting and intrinsic motivation. *Journal of Personality and Social Psychology, 47*, 918-928.

Mossholder, K.W. (1980). Effects of externally mediated goal setting on intrinsic motivation: A laboratory experiment. *Journal of Applied Psychology, 65*, 202-210.

Patrick, H., Ryan, A.M., & Pintrich, P.R. (1999). The differential impact of extrinsic and mastery goal orientations on males' and females' self-regulated learning. *Learning and Individual Differences, 11*, 153-171.

Payne, S.C., Youngcourt, S.S., & Beaubien, J.M. (2007). A meta-analytic examination of the goal orientation nomological net. *Journal of Applied Psychology, 92*, 128-150.

Renninger, K.A. (2000). Individual interest and its implications for understanding intrinsic motivation. In C. Sansone & J.M. Harackiewicz (Eds.), *Intrinsic and extrinsic motivation: The search for optimal motivation and performance* (pp. 373-404). New York: Academic Press.

Ryan, R.M., & Deci, E.L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*, 68-78.

Ryan, R.M., & La Guardia, J.G. (1999). Achievement motivation within a pressured society. In T.C. Urdan (Ed.), *Advances in motivation and achievement: The role of context* (pp. 45-85). Stamford, CT: JAI Press.

Seijts, G.H., Latham, G.P., Tasa, K., & Latham, B.W. (2004). Goal setting and goal orientation: An integration of two different yet related literatures. *Academy of Management Journal, 47*, 227-239.

Senko, C., & Harackiewicz, J.M. (2002). Performance goals: The moderating roles of context and achievement orientation. *Journal of Experimental Social Psychology, 38*, 603-610.

Senko, C., & Harackiewicz, J.M. (2005). Achievement goals, task performance, and interest: Why perceived goal difficulty matters. *Personality and Social Psychology Bulletin, 31*, 1739-1753.

Tomaka, J., Blascovich, J., Kelsey, R.M., & Leitten, C.L. (1993). Subjective, physiological, and behavioral effects of threat and challenge appraisal. *Journal of Personality and Social Psychology, 65*, 248-260.

Tomaka, J., Blascovich, J., Kibler, J., & Ernst, J.M. (1997). Cognitive and physiological antecedents of threat and challenge appraisal. *Journal of Personality and Social Psychology, 73*, 63-72.

Urdan, T. (2004). Using multiple methods to assess students' perceptions of classroom goal structures. *European Psychologist, 9*, 222-231.

VandeWalle, D., Brown, S.P., Cron, W.L., & Slocum, J.W. Jr. (1999). The influence of goal orientation and self-regulation tactics on sales performance: A longitudinal field study. *Journal of Applied Psychology, 84*, 249-259.

Van Yperen, N.W. (2003). Task interest and actual performance: The moderating effects of assigned and adopted purpose goals. *Journal of Personality and Social Psychology, 85*, 1006-1015.

Van Yperen, N.W. (2006). A novel approach to assessing achievement goals in the context of the 2 x 2 framework: Identifying distinct profiles of individuals with different dominant achievement goals. *Personality and Social Psychology Bulletin, 32*, 1432-1445.

Van Yperen, N.W., & Janssen, O. (2002). Fatigued and dissatisfied or fatigued but satisfied? *Academy of Management Journal, 45*, 1161-1171.

Van Yperen, N.W., & Renkema, L.J. (2008). Performing great and the purpose of performing better than others: On the recursiveness of the achievement goal adoption process. *European Journal of Social Psychology, 38*, 260-271.

Winters, D., & Latham, G.P. (1996). The effect of learning versus outcome goals on a simple versus a complex task. *Group and Organization Management, 21*, 236-250.

Zeidner, M. (1990). Does test anxiety bias scholastic aptitude test performance by gender and sociocultural group? *Journal of Personality Assessment, 55*, 145-160.

Zeidner, M., & Matthews, G. (2005). Evaluation anxiety. In A.J. Elliot & C.S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 141-163). New York: The Guilford Press.

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