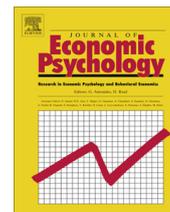


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Achievement goals in the workplace: Conceptualization, prevalence, profiles, and outcomes

Nico W. Van Yperen^{a,*}, Edward Orehek^b^a Dept. of Psychology, University of Groningen, The Netherlands^b Dept. of Psychology, University of Pittsburgh, Pittsburgh, PA 15260, USA

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ABSTRACT

The purpose of the present paper is to discuss an important component of workers' willingness to perform at their jobs, that is, their *achievement motivation*. More specifically, we will discuss the conceptualization of the four achievement goals from the 2×2 achievement goal framework and present original data on the prevalence of workers' dominant achievement goals (assessed with a forced-choice round robin measure) and the achievement goal profiles (assessed with goal strength ratings) associated with these dominant goals. In addition, the links between achievement goals (personally adopted and assigned) and job performance will be reviewed, as well as the links to other work outcomes, including interpersonal behavior and cheating. Finally, practical implications as well as the relation between the achievement goal framework and regulatory mode theory will be discussed.

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1. Introduction

A critical determinant of organizational effectiveness, productivity, and economic success is workers' job performance (e.g., Hunter & Hunter, 1984; Pfeffer, 2005). Therefore, in organizational psychology, enormous effort has been expended toward understanding job performance. In their landmark paper, Blumberg and Pringle (1982) defined three basic antecedents of job performance. The first factor, the *capacity to perform*, refers to the physical and cognitive capabilities that enable workers to perform their tasks effectively, and is represented by the individual's ability, health, intelligence, and so on. The second

* Corresponding author. Address: Department of Psychology, University of Groningen, Grote Kruisstraat 2/1, 9712 TS Groningen, The Netherlands. Tel.: +31 50 363 6332; fax: +31 50 363 4581.

E-mail address: N.van.Yperen@rug.nl (N.W. Van Yperen).

factor, the *opportunity to perform*, refers to the help or hindrance of uncontrollable events and actors in one's environment (e.g., working conditions, actions of coworkers, leader behavior, and organizational policies). The third factor, the *willingness to perform*, comprises the workers' psychological characteristics (e.g., achievement motivation, affectivity, cooperativeness, attitudes, norms, values) that affect the degree to which workers are inclined to perform their tasks.

The purpose of the present paper is to discuss an important component of workers' willingness to perform at their jobs, that is, their *achievement motivation*. Achievement motivation is fueled by the need for competence, which is generally considered to be a fundamental psychological need (Deci & Ryan, 2002). People feel competent (or not) on the basis of the standard(s) they use when evaluating their performance. In the psychological literature, two basic standards can be identified: an *interpersonal* standard (i.e., others) and an *intrapersonal* standard (i.e., the self). Hence, people may feel competent because they outperformed others, or because they improved relative to their own previous performance. Obviously, both standards may be used simultaneously, and individuals may consider one standard as more important than the other, which may differ across settings and achievement domains (e.g., Barron & Harackiewicz, 2001; Van Yperen, Hamstra, & Van der Klauw, 2011).

Interpersonal standards, or social comparisons (Festinger, 1954), may be perceived as important because excellence and success are often defined in terms of an individual's achievement relative to others, as exemplified by prizes, titles, bonuses, and honors (Harackiewicz, Barron, & Elliot, 1998). Athletes win gold medals after demonstrating to be the best at their sport, and salespeople's bonuses increase most substantially when they outperform their colleagues (cf., Becker, 1957). Alternatively (or simultaneously or subsequently), people may evaluate their own performance by focusing on their past selves, that is, through temporal comparison (Albert, 1977). Workers may feel competent because they learned new tasks and improved their performance on job-relevant dimensions, regardless of how others did.

In the achievement goal approach to achievement motivation (Dweck, 1986; Elliot, 2005; Nicholls, 1984), the focus on an *interpersonal* standard (i.e., others) is referred to as a performance goal. In contrast, mastery goals are grounded in an *intrapersonal* standard (i.e., the self). In Elliot and McGregor's (2001) 2×2 achievement goal framework, this *definition* dimension (performance versus mastery) is crossed with the *valence* dimension (approach versus avoidance). Approach goals are aimed at acquiring positive possibilities, whereas avoidance goals are aimed at avoiding negative possibilities. Accordingly, the four different achievement goals from the 2×2 achievement goal framework are the following: *performance-approach goals* (PAp), which entail striving to do better than others; *performance-avoidance goals* (PAv), which entail striving not to do worse than others; *mastery-approach goals* (MAp), which entail striving to do better than one has done before; and *mastery-avoidance goals* (MAv), which entail striving to avoid doing worse than one has done before (cf., Van Yperen, 2003a; Van Yperen, Elliot, & Anseel, 2009). Individuals' preference for a particular achievement goal not only influences how they define competence, but also how they experience and respond to the competence-relevant situations they encounter in the workplace and elsewhere.

2. Conceptualization of achievement goals

Many different conceptualizations of achievement goals can be found in the achievement goal literature (Deshon & Gillespie, 2005; Elliot, 2005; Elliot & Fryer, 2006). For example, the "goal" in "achievement goal" is represented as a standard (e.g., Elliot, Murayama, & Pekrun, 2011; Van Yperen, 2003a), a combination of a standard and a reason (e.g., Pintrich, 2000; Vandewalle, 1997), or an overarching orientation (e.g., Ames & Archer, 1988). However, only the conceptualization of the term "goal" as standard (as discussed above) is consistent with its prototypical use in the psychological literature (Elliot, 2005; Elliot & Fryer, 2006). In any given achievement context, pursuing a particular standard is typically undergirded by a more general reason (e.g., to demonstrate competence to others, to avoid the shame of failure, to get the promised reward). Obviously, both standards and reasons are important in accounting for job performance. However, for reasons of conceptual and interpretational clarity, it is optimal to keep standards conceptually separate from the many different reasons, dispositions, tendencies, processes, and outcomes with which aims are associated rather than define goals as an overarching orientation that includes several of these concepts (for a more elaborate discussion on this issue, see Elliot, 2005; Elliot & Fryer, 2006; Elliot et al., 2011).

Another conceptual ambiguity in the achievement goal literature is that mastery-based goals have typically been portrayed as based on both intrapersonal standards (focused on the self) and absolute standards (focused on task mastery; Elliot, 2005; Elliot et al., 2011). Although both standards are highly correlated and difficult to disentangle empirically (but see Elliot et al., 2011), it is conceptually more clear and elegant *not* to collapse both standards into one measure (Elliot et al., 2011; Van Yperen, 2003a; Van Yperen et al., 2009). Table 1 presents a measure, which will be discussed more elaborately in the next section, in which mastery-based goals are defined as grounded in an *intrapersonal* standard and performance goals as grounded in an *interpersonal* standard. Such a balance in the conceptualization of achievement goals bridges the achievement goal approach to temporal comparison theory (Albert, 1977) and social comparison theory (Festinger, 1954).

3. Dominant achievement goals: prevalence and profiles

In this section, we will present original data on the prevalence of achievement goals in the workplace. To assess the prevalence of achievement goals, one may ask individuals to rate the strength or intensity of each achievement goal in a particular achievement setting, and next, compare the means with each other. A more innovative and straightforward method is to

Table 1

The six-item round robin measure for assessing the individual's dominant achievement goal (cf., Van Yperen, 2006), and four items assessing strength of each achievement goal.

FOR EACH ITEM, circle either the letter "A" or "B"

In my work, my *most important* goal is ...

1. A ... to do <i>better</i> than others	or	B ... <i>not</i> to do <i>worse</i> than others
2. A ... to do <i>better</i> than I did before	or	B ... <i>not</i> to do <i>worse</i> than I did before
3. A ... to do <i>better</i> than others	or	B ... to do <i>better</i> than I did before
4. A ... <i>not</i> to do <i>worse</i> than I did before	or	B ... <i>not</i> to do <i>worse</i> than others
5. A ... <i>not</i> to do <i>worse</i> than others	or	B ... to do <i>better</i> than I did before
6. A ... <i>not</i> to do <i>worse</i> than I did before	or	B ... to do <i>better</i> than others

In my work, my goal is ...

1. ... to do *better* than others (*Performance-approach*)
2. ... *not* to do *worse* than others (*Performance-avoidance*)
3. ... to do *better* than I did before (*Mastery-approach*)
4. ... *not* to do *worse* than I did before (*Mastery-avoidance*)

Response scales range from 1 (*definitely not*) to 7 (*definitely*)

PS "In my work" can be replaced by "In my studies", "In my sport", etc.

identify individuals' *dominant* achievement goals. As shown in Table 1, in the forced-choice measure developed by Van Yperen (2006), each achievement goal from Elliot and McGregor's (2001) 2×2 framework contrasts in a pair-wise fashion with the other three achievement goals. If individuals consistently indicate a particular goal as their most important goal, it is considered to be their dominant achievement goal. In addition, we asked workers to respond to the four items assessing the intensity or strength of each achievement goal (see also Table 1) so that we could determine the ideographic achievement goal profile associated with each dominant achievement goal.

3.1. Procedure and sample

In the context of different research projects, workers were approached in a variety of ways: through announcements in newspapers and magazines, announcements in company letters, typically as part of broader audits or research projects, or face-to-face in the context of students' research projects. Participants filled out a hard copy of the questionnaire and returned it to the research assistant immediately, or at a specified later point in time, or the questionnaire was completed over the internet.

The final sample consists of 2158 workers (35.7% women), representing a wide range of professions (e.g., nurses, police officers, teachers, researchers, technicians, physicians, entrepreneurs), businesses (e.g., agriculture, industry, education, health), and private and public organizations. The mean age was 42.24 years ($SD = 11.29$, range: 18–67), and the average number of self-reported working hours per week was 34.59 hours ($SD = 7.84$, range: 8–60). Educational level varied from preparatory secondary general or vocational education (2.2%), senior general education or secondary vocational education (17.7%), higher professional education (52.6%), to university education (27.5%).

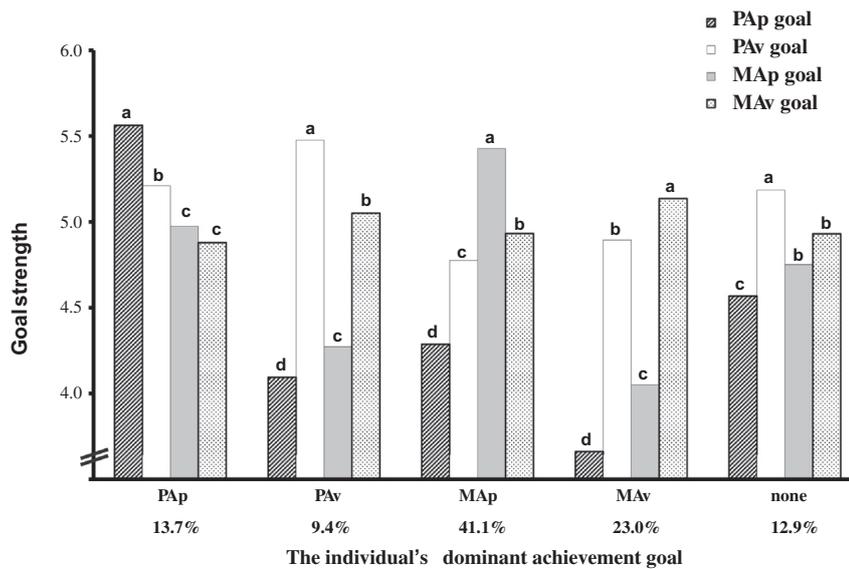
3.2. Measures

As indicated above, we asked workers to complete the six-item forced-choice round robin measure for assessing the individual's *dominant achievement goal* (Van Yperen, 2006), and to answer four items that measured the *strength or intensity* of each achievement goal from Elliot and McGregor's (2001) 2×2 framework (for all items, see Table 1). The round robin measure contrasts each achievement goal from Elliot and McGregor's (2001) framework in a pair-wise fashion. A goal is considered to be the individual's dominant achievement goal when the individual indicates one particular achievement goal as their most important achievement goal in each of the three comparisons. If one goal is *not* consistently chosen in each comparison with one of the other three goals, the individual is considered *not* to have a dominant achievement goal.

3.3. Prevalence of workers' dominant achievement goals

A great majority of workers (87.1%) indicated that they had a dominant achievement goal. This percentage, as well as the distribution of workers across the four achievement goals, was largely in line with previous findings in different achievement contexts (e.g., de Lange, Van Yperen, Van der Heijden, & Bal, 2010; Van Yperen, 2006; Van Yperen et al., 2011). Specifically (see also Fig. 1), most workers endorsed MAp goals (41.1%), followed by MAV goals (23.0%), PAp goals (13.7%), and PAV goals (9.4%).

Thus, in line with previous studies, a large number of people (about one quarter) tend to opt in favor of a MAV goal, the achievement goal that, until the beginning of this millennium, was neglected in achievement goal research. Another remarkable robust and consistent finding is the low prevalence of dominant performance goals, despite the ubiquity of social



Note: Means adjusted for sex, age, educational level, and number of hours employed (n = 2158). Within each dominant achievement goal (i.e., within each cluster), means that differ significantly ($p < .05$) have different letters.

Fig. 1. Ideographic achievement goal profiles of workers with different dominant achievement goals: Differences within each dominant achievement goal.

comparison and competition in our society, including the workplace. Similarly, paired t-tests revealed that the intensity or strength of MAV goals ($M = 4.98, SD = 1.67$) was relatively high, albeit as high as PAV goals ($M = 4.98, SD = 1.68$), whereas PAP goals were relatively weak ($M = 4.34, SD = 1.60, ps < .001$). The strength of MAP goals ($M = 4.85, SD = 1.36$) was lower than MAV and PAV goals, and higher than PAP goals ($ps < .01$). Elliot et al. (2011) found a similar pattern: when MAV goals were defined and measured based on intrapersonal standards (focused on the self), they were perceived to be more important than performance goals (and more important than MAP goals, but only in Study 1).

Additional analyses revealed that men were more likely to adopt PAP goals (15.3% versus 10.6%) whereas women were more likely to adopt PAV goals (7.5% versus 12.7%); $\chi^2(4) = 22.63, p < .001$. Furthermore, Table 2 shows that workers with dominant MAV goals were older than workers with another dominant goal or no goal (cf., de Lange et al., 2010) whereas PAP goal individuals had the highest educational levels and they worked the largest number of hours per week. Also workers holding MAP goals had higher educational levels and worked more hours than workers with avoidance goals (either performance or mastery). The total number of working hours per week was lowest among PAV goal individuals.

3.4. Achievement goal profiles associated with each dominant goal

Clustered by dominant achievement goal, Fig. 1 displays the differences on achievement goal strength. The observed achievement goal profiles provide an answer on an important issue in contemporary achievement goal research, that is, the individual's single versus multiple goal perspective in achievement settings (Barron & Harackiewicz, 2001; Deshon, Kozlowski, Schmidt, Milner, & Wiechmann, 2004). Pairwise comparisons within each cluster, statistically controlling for sex, age, educational level, and numbers of hours employed, clearly suggest that the two perspectives are consistent with each other. That is, workers with (single) dominant achievement goals simultaneously hold other (multiple) achievement goals, but the intensity or strength of their own dominant achievement goal is higher relative to their other achievement goals. Specifically, Fig. 1 shows that among workers with a dominant PAP goal (first clustered column), PAV goal (second clustered column), MAP goal (third clustered column), or MAV goal (fourth clustered column), goal strength is highest for PAP goals, PAV goals, MAP goals, and MAV goals, respectively. Particularly among PAP goal workers (first clustered column in Fig. 1), goal strength for any achievement goal is relatively high. Accordingly, they tend to experience both the costs and benefits of all four goals more than individuals with another dominant achievement goal. Indeed, PAP goal individuals are

Table 2
Achievement goal preference as a function of age, educational level, and total number of working hours.

	PAP	PAV	MAP	MAV	None
Age	42.33 ^b	40.37 ^b	41.75 ^b	44.29 ^a	41.45 ^b
Educational level	3.23 ^a	2.96 ^c	3.11 ^b	2.96 ^c	2.91 ^c
Working hours	36.24 ^a	31.73 ^d	34.95 ^b	34.02 ^c	34.79 ^{bc}

Note: For each dependent variable, means that differ significantly ($p < .05$) have different letters.

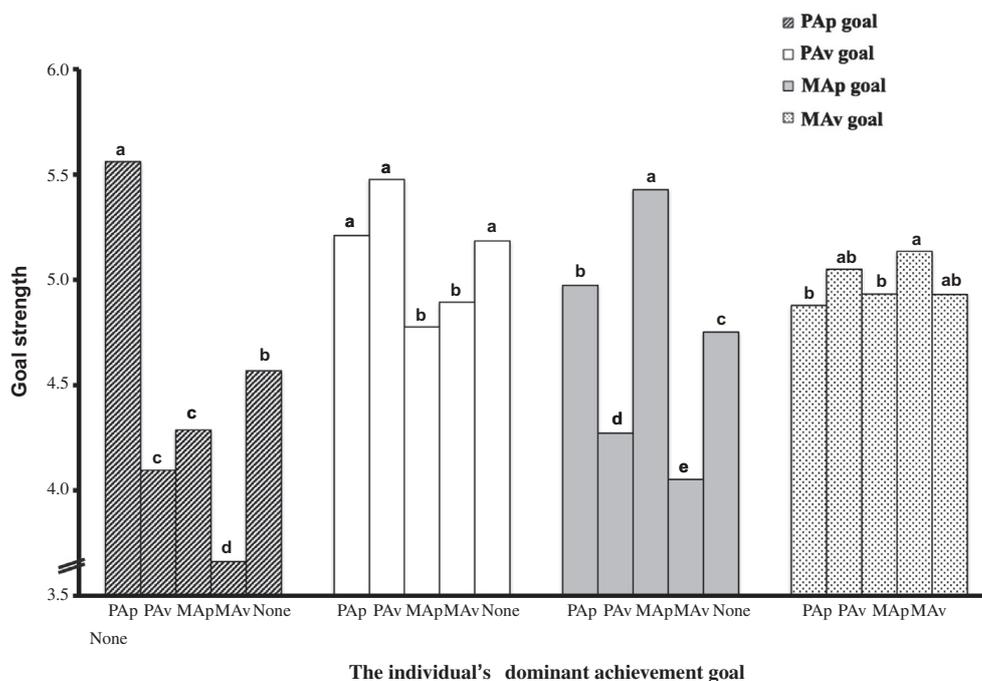
characterized by high scores on both positively and negatively valenced variables (e.g., Elliot & Moller, 2003; Van Yperen, 2006).

In contrast, workers with dominant PAV goals (second clustered column in Fig. 1) tend to be strongly focused on avoidance goals only, which is accompanied by a psychological profile that consists almost exclusively of negatively-valenced variables (Elliot, 2005; Elliot & McGregor, 2001; Van Yperen, 2006). Perhaps more surprisingly, workers with a dominant MAV goal (fourth clustered column) appeared to have a similar achievement goal profile. This finding adds to the accumulating empirical evidence suggesting that MAV goals are more negatively-valenced than initially thought (see also de Lange et al., 2010; Sideridis, 2008; Van Yperen et al., 2009). One likely reason is that among MAV goal individuals, PAV goal strength appears to be high as well, whereas approach goals are relatively weak. Furthermore, the anticipated outcome of performing worse than one did before may be perceived to be even more threatening than losing to others because there is less room for appropriate excuses for self-referenced failures relative to other-referenced failures, particularly when the conditions were the same as before (Van Yperen et al., 2009). For example, Sideridis (2008) showed that MAV goals were associated with enhanced negative affect and increases in cognitive and somatic anxiety (as indicated by both self-report and physiological measures).

The ideographic achievement goal profile of workers with a dominant MAp goal (third clustered column in Fig. 1) suggests that these workers tend to focus primarily on their dominant achievement goal. In combination with the consistent positive link between MAp goals and positively-valenced antecedents and outcome variables (e.g., Elliot, 2005; Elliot & McGregor, 2001; Van Yperen, 2006), this finding may explain why MAp goals seem to be the ideal form of competence-based regulation (e.g., Bell & Kozlowski, 2008; Elliot, 2005; Li & Bagger, 2008; Pintrich, 2000; VandeWalle, Cron, & Slocum, 2001).

Fig. 2 displays the same adjusted means on goal strength for each dominant achievement goal as in Fig. 1, but alternatively configured. Rather than the differences in goal strength *within* dominant achievement goals (see Fig. 1), Fig. 2 highlights the differences in goal strength *between* dominant achievement goals. For example, the first clustered column in Fig. 2 shows that relative to workers with another dominant achievement goal or no dominant achievement goal, PAp goal strength is highest among workers with a dominant PAp goal, and weakest among workers with a dominant MAV goal. The pattern of this first cluster suggests that only workers with a dominant PAp goal hold strong PAp goals. Pairwise comparisons further suggest (second and fourth clustered column) that both avoidance goals (either PAV or MAV) are relatively strong among workers with any (or no) dominant achievement goal, but weakest among workers with dominant MAp goals. Furthermore, MAp goals (third clustered column in Fig. 2) are strongest among workers with a dominant approach goal, particularly among those with a dominant MAp goal.

In sum, the intensity or strength of the individuals' own dominant achievement goal is obviously higher relative to their other achievement goals, but across individuals with different dominant achievement goals, the strength of avoidance goals is relatively high.



Note: Means adjusted for sex, age, educational level, and number of hours employed (n = 2158)
 Between dominant achievement goals (i.e., within each cluster), means that differ significantly ($p < .05$) have different letters.

Fig. 2. Ideographic achievement goal profiles of workers with different dominant achievement goals: Differences *between* the dominant achievement goals.

4. Outcomes of achievement goals

4.1. Personally adopted achievement goals and performance attainment

In achievement goal research, performance attainment is a core dependent variable because it provides information about the individual's potential to adapt to the achievement situation (cf., Elliot, Cury, Fryer, & Huguet, 2006). Several recent meta-analyses that included studies from the work domain, found that MAP goals are positively related to performance attainment (the average correlation is around $r = .14$, see Baranik, Stanley, Bynum, & Lance, 2010; Hulleman, Schrager, Bodmann, & Harkiewicz, 2010; Payne, Youngcourt, & Beaubien, 2007; Van Yperen, Blaga, & Postmes, submitted for publication), while the average correlation between performance attainment and the other three goals from Elliot and McGregor's (2001) 2×2 achievement goal framework are $r = .10$ for PAP goals, $r = -.12$ for PAV goals, and $r = .10$ for MAV goals. Similarly, individuals with dominant approach goals perform better than individuals holding dominant avoidance goals (Van Yperen, 2003a; Van Yperen, 2006). Accordingly, the general conclusion may be that across achievement domains, performance attainment and approach and avoidance goals are positively and negatively linked, respectively. In this regard, it is important to note that conclusions regarding MAV goals should be interpreted cautiously due to the very few observations that have been reported to date.

4.2. Assigned achievement goals and performance attainment

Findings from survey research on achievement goals are valuable and useful for providing ecologically valid information regarding the prevalence of achievement goals and their associations with affective, cognitive, and behavioral variables. However, in order to enhance organizational effectiveness, companies' productivity, and economic success, we should know what the actual *causal effects* are of assigned, dominant achievement goals on task performance and other outcomes of interest. That is, only findings from *experimental* achievement goal research provide a solid basis for the development of effective achievement goal interventions in organizations. Note that in an experimental setting or practical intervention, one particular achievement goal is assigned to the individual, which is assumed to be the individual's *dominant* achievement goal in that particular setting. However, similar to achievement settings in which individuals freely adopt a dominant achievement goal, assigning goals does not preclude the possibility that individuals pursue simultaneously, or subsequently, other, probably weaker achievement goals (cf., Figs. 1 and 2).

The observed patterns in the rather scarce number of experimental studies (Linnenbrink-Garcia, Tyson, & Patall, 2008; Van Yperen et al., submitted for publication) are generally in line with the overall pattern found in correlational research (Hulleman et al., 2010). Overall, assigned approach goals, either MAP or PAP, are generally beneficial for performance attainment (Elliot, 2005; Elliot et al., 2006; Linnenbrink-Garcia et al., 2008), whereas avoidance goals, either PAV or MAV, tend to be detrimental for performance attainment (e.g., Elliot, 2005; Van Yperen et al., 2009). In general, approach forms of regulation tend to evoke positive outcomes (e.g., enhanced effort and persistence), whereas avoidance forms of regulation tend to evoke negative outcomes (e.g., increased levels of anxiety, fear of failure, and self-handicapping). Important to note is that these overall effects may be qualified by boundary conditions that may attenuate or even reverse the relation between either form of regulation and positive or negative outcomes (cf., Freitas & Higgins, 2002; Keller & Bless, 2006). Although approach goals, either MAP or PAP, may generally lead to enhanced job performance (Van Yperen et al., submitted for publication), potential additional effects of PAP goals may be less welcomed by organizations, which will be discussed in the next section.

4.3. Approach goals, interpersonal behavior, and cheating

In organizations, workers' job performance is typically a function of teamwork, collaboration, and the willingness to share information and knowledge. Hence, to obtain a more complete understanding of the effects of achievement goals in organizations, interpersonal effects of achievement goals should be taken into account (Janssen & Van Yperen, 2004). In the last decade, researchers began to examine the interpersonal consequences of achievement goals by exploring how these goals affect feedback-seeking behavior (VandeWalle, 2003), leader–member exchange (Janssen & Van Yperen, 2004), team adaptation (LePine, 2005), social support (Porter, 2005), socio-cognitive conflict regulation (Darnon, Muller, Schrager, Pannuzzo, & Butera, 2006), and knowledge sharing (Matzler & Mueller, 2011). Experimental research by Poortvliet and colleagues showed that dominant performance goals, relative to dominant mastery goals, led to a reduced willingness to share valuable information and knowledge with exchange partners (Poortvliet, Janssen, Van Yperen, & Van de Vliert, 2007, 2009; cf., Matzler & Mueller, 2011), and even to interpersonally harmful behavior, that is, thwarting the other's task-related performance by increasing the level of noise that the other would (allegedly) hear during task performance (Poortvliet, Anseel, Janssen, Van Yperen, & Van de Vliert, 2012). Darnon and colleagues (2006) found that when students have different task-related solutions, performance goals predict relational conflict regulation, that is, by insisting that one is right and the other party is wrong. On the other hand, mastery goals predict epistemic regulation, which means that one tries to find out whether both points of view can be integrated into a joint solution. This line of research consistently suggests that performance goals, relative to mastery goals, are less constructive and can even be destructive for social relationships, which may be explained by a stronger exploitation orientation and a weaker reciprocity orientation among performance goal individuals relative to mastery goal individuals (Poortvliet et al., 2009).

Similarly, cheating has been found to be more strongly related to performance goals (either approach or avoidance) than to mastery goals (either approach or avoidance; for a review, see [Murdock & Anderman, 2006](#)). In cheating, mastery goal individuals do not develop intrapersonal competence or avoid intrapersonal incompetence. In contrast, performance goal individuals are focused on how they perform relative to others. They may care neither about learning nor about how they actually attain their goal. Their goal is to win, or not to lose, possibly at any cost. They may find cheating a viable means to reach their performance-based goals (cf., [Schwieren & Weichselbaumer, 2010](#)). In a recent study, [Van Yperen et al. \(2011\)](#) demonstrated that, within and across achievement settings (work, sport, and education), individuals with dominant performance goals (either approach or avoidance) had stronger intentions to cheat relative to their counterparts with dominant mastery goals (either approach or avoidance). Even more interestingly, in an experimental setting in which people's actual cheating behavior during task performance was assessed, assigned dominant performance goals (either approach or avoidance) caused more actual cheating behavior than did assigned dominant mastery goals (either approach or avoidance; [Van Yperen et al., 2011](#)).

5. Practical implications

Both survey and experimental achievement goal research suggests that, overall, approach goals (either mastery or performance) enhance job performance whereas avoidance goals (either mastery or performance) tend to be disadvantageous for workers' job performance ([Hulleman et al., 2010](#); [Linnenbrink-Garcia et al., 2008](#); [Van Yperen et al., submitted for publication](#)). Furthermore, relative to MAp goals, performance goals (either approach or avoidance) are less constructive and can even be destructive for social relationships (e.g., [Poortvliet et al., 2012](#)), and they lead to more actual cheating behavior ([Van Yperen et al., 2011](#)). In particular, the findings from *experimental* achievement goal research provide a solid basis for the development of effective achievement goal interventions in organizations. These findings suggest that practitioners should primarily focus on promoting MAp goals in organizations because of their positive effects on job performance, interpersonal behavior, and ethical behavior. PAp goals may have positive effects on job performance, but the undesirable social and ethical consequences of performance goals may caution practitioners against promoting PAp goals in the workplace.

Promoting MAp goals in organizations focuses workers on self-referenced standards, effort, interest, cooperativeness, respect, and honesty. Such a MAp goal-oriented motivational climate can be created, for example, by emphasizing evaluation more in terms of progress and effort, by defining success more in terms of progress and improvement, by accepting errors or mistakes as part of the learning process, particularly in training programs, and by emphasizing enjoyment, interest, and collaboration (e.g., [Ames, 1992](#); [Van Yperen, 2003b](#)). In this regard, it is important to note that an emphasis on MAp goals does not imply the absence of other-referenced standards, social comparison, or competition. In contrast, in any organization and any achievement setting, some form of normative evaluation is apparent and even necessary, which is articulated in economic theory in particular (e.g., [Becker, 1957](#)). The key is the extent to which management *emphasizes* self-referenced versus other-referenced evaluation by linking it, for example, to feedback procedures and pay systems. This insight may help business leaders, organizations, and their workers to create effective, successful, and ethical organizations.

6. The achievement goal framework and self-regulatory modes

The 2×2 achievement goal framework provides a clear picture of the way in which framing of goals according to different standards of performance evaluation can produce performance, interpersonal, and ethical outcomes. Yet, other goal theories have also proven effective for predicting performance. While a complete integration of the multiple existing theories is beyond the scope of this paper, a discussion about links to regulatory mode theory is especially relevant because several novel hypotheses can be generated by considering how the two theories may be combined.

Regulatory mode theory ([Higgins, Kruglanski, & Pierro, 2003](#); [Kruglanski et al., 2000](#)) distinguishes between the assessment and locomotion aspects of goal pursuit. The *assessment* component refers to the critical evaluation of goals and means via comparisons among alternatives. In this sense, assessment reflects an orientation aimed at determining the best course of action. Yet, simply evaluating and planning a course of action does not, in and of itself, produce goal attainment. The *locomotion* component refers to the movement toward or away from relevant standards. In this sense, locomotion reflects an orientation aimed at making swift and steady progress toward one's goals (for a recent review, see [Kruglanski, Orehek, Higgins, Pierro, & Shalev, 2010](#)). The assessment and locomotion dimensions are conceptually and empirically distinct and independent. Therefore, it is possible for one or the other orientation to predominate, for both to be high, or for both to be low. Assessment and locomotion represent relatively stable traits ([Kruglanski et al., 2000](#)) and can be induced situationally ([Avnet & Higgins, 2003](#); [Orehek, Mauro, Kruglanski, & van der Bles, 2012](#)). The best performance outcomes have been found to result from the joint operation of both strong assessment and strong locomotion tendencies in educational, military, and traditional working environments ([Kruglanski et al., 2000](#)).

The achievement goal framework outlined in this paper is specifically focused on the assessment aspect of goal pursuit. The contribution to predicting performance is specifically based on understanding the way in which actors create standards and critically evaluate their performance. The framework, therefore, elucidates specific ways in which the assessment component of goal pursuit is carried out. The achievement goal framework is less abstract than regulatory mode theory in the sense that it differentiates different ways of assessing. Regulatory mode theory does not distinguish between mastery versus

performance standards, nor does it distinguish between approach versus avoidance framing. Regulatory mode theory makes apparent that even among individuals who ultimately set the same standard, more or less attention can be paid to that standard both before and after it is set. Therefore, it seems likely that the relation between achievement goals and outcomes would be stronger when assessment tendencies are strong.

Moreover, even though general assessment tendencies and locomotion are only mildly correlated (Kruglanski et al., 2000), the specific standards that define achievement goals may differentially produce locomotion tendencies. For example, it is possible that because a mastery orientation can only be achieved through self-improvement, while performance orientations can be attained through poor performance on the part others or through one's own successful performance (genuine or cheated), mastery orientations may induce greater locomotion tendencies. In other words, performance orientations may produce greater uncertainty in the extent to which action is necessary in cases where the performance of others is unknown, thereby reducing the drive to act.

In addition, some outcomes of the way in which achievement goals are adopted in the 2×2 framework point to different ways of locomoting toward a standard. For example, performance goals have been shown to increase cheating (Van Yperen et al., 2011), an action that seems to hold more value with respect to interpersonal standards than intrapersonal standards. Therefore, it is clear that it is possible to locomote relative to interpersonal standards, while remaining idle with respect to intrapersonal standards (as may be the case when cheating occurs). It is also possible to locomote on intrapersonal standards while remaining idle with respect to interpersonal standards (as when other people also improve, or when one does not improve enough to overcome another person). Just as the 2×2 achievement goal framework provides a more specific outline of the types of assessments that can be made, future research could explore specific ways in which one can locomote toward goals.

At least three directions for future research have been suggested by the foregoing analysis. First, research could investigate whether increasing locomotion or assessment tendencies produces stronger or weaker relations between achievement goals and outcomes. A general orientation toward assessment may help to generate appropriate standards and to keep them in mind. A general orientation toward locomotion may help translate the specific performance standards into action. Second, research could test for links between achievement goals and assessment and locomotion tendencies. For example, are the four achievement goals differentially correlated with assessment and locomotion tendencies? Finally, akin to the way in which the achievement goal framework has explicated specific ways of forming assessment standards, theorists could develop a model that outlines the ways in which individuals locomote.

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