Harming Others’ Task-Related Efforts

The Distinct Competitive Effects of Ranking Information on Performance and Mastery Goal Individuals

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Abstract. This paper demonstrates that, when individuals with mastery goals and their exchange partners occupy increasingly higher ranks on a task (#4 and #5 vs. #51 and #52 or #96 and #97, on a top-100), they display stronger interpersonally harmful behavior in order to interfere with exchange partners’ task performance. In contrast, performance goal individuals damage the task performance of others more when ranks are low or high rather than average (#4 and #5 or #96 and #97 vs. #51 and #52). These results signify that social comparison information is processed differently by mastery and performance goal individuals. The resulting interpersonally harmful behaviors depend on whether such behavior is instrumental for their particular achievement goal pursuit or not.

Keywords: mastery goals, performance goals, ranking information, interpersonally harmful behavior, competition

Social comparison lies at the heart of competition, though people are not equally competitive. Striving to outperform others – rather than striving for self-improvement – leads to fewer cooperation intentions, although reductions in cooperation are also driven by how salient competition is (Poortvliet, Janssen, Van Yperen, & Van de Vliert, 2009b). Ranking information is frequently available in achievement situations and may strongly provoke competition (Garcia, Tor, & Gonzales, 2006). The current investigation extends earlier research by focusing on interpersonally harmful behavior. Specifically, this paper argues that individuals’ competitive behaviors can be understood from the instrumental value of achievement goal attainment under specific ranking conditions.

Achievement goals are distinguished on the basis of how people define competence (Elliot, 2005). That is, persons who pursue performance goals compare their performances with those of others in order to monitor their goal progress toward outperforming others, thereby developing an other-referenced focus. By contrast, individuals with mastery goals compare their present performance predominantly with their previous performance, and, consequently, develop a self-referenced focus in achievement situations, namely, on self-improvement.

People typically pursue achievement goals in social environments and these goals may therefore have important social effects, because people may work with or against others to attain their goals. Exchange partners are both social comparison targets and potential sources of valuable information (Darnon, Butera, & Harackiewicz, 2007). Thus, people with performance and mastery goals adopt different orientations on exchanges with others (Poortvliet, Janssen, Van Yperen, & Van de Vliert, 2007).

Recently, interest has surged in the interpersonal consequences of achievement goals (Darnon, Dompnier, & Poortvliet, 2012; Poortvliet & Darnon, 2010) because achievement goals strongly affect the social dynamics and outcomes of achievement situations (for a concise overview of studies in this domain, see Table 1). For example, it was shown that, relative to mastery goals, performance goals lead to a reduced willingness to share task-related information with exchange partners (Poortvliet et al., 2007, 2009a).

However, noncooperation does not equal competition as the first is characterized by a lack of joint outcome anticipation, while the latter by anticipating relative outcome advantages (Van de Vliert, 1999). Moreover, a wealth of research

Performance goals and mastery goals have typically been portrayed as approach forms of regulation, that is, as goals directed toward desirable events (Elliot, 2005). Accordingly, performance-approach goals reflect the desire to do better than others, whereas mastery-approach goals reflect the desire to perform better than one has done before (Elliot & McGregor, 2001). Because of the focus in the present research on approach goals, for the remainder of this article the use of the terms performance goal and mastery goal is restricted to the approach versions of these goals.

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DOI: 10.1027/1864-9335/a000161
Table 1. Overview of empirical achievement goal studies that focus on social outcome variables

<table>
<thead>
<tr>
<th>Study</th>
<th>Main outcomes</th>
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<tbody>
<tr>
<td>Chiaburu, Marinova, and Lim (2007)</td>
<td>MGs, unlike PGs are positively related to help-giving and help-seeking in a work context.</td>
</tr>
<tr>
<td>Daron, Muller, Schragel, Pannuzzo, and Butera (2006)</td>
<td>PGs positively predict competitive conflict regulation (doubting the viewpoint of others), MGs positively predict epistemic conflict regulation (trying to integrate different viewpoints).</td>
</tr>
<tr>
<td>Daron, Butera, and Harackiewicz (2007)</td>
<td>MGs lead to better learning outcomes than PGs when task-related disagreement occurs between exchange partners.</td>
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<tr>
<td>Dompien, Daron, and Butera (2009)</td>
<td>MGs predict academic achievement when individuals pursue those goals because they believe this promotes their success (social utility), but not when they hold MGs because of social desirability reasons.</td>
</tr>
<tr>
<td>Gehrman (2006)</td>
<td>Increases in MGs, unlike PGs, are positively related to social perspective taking in students.</td>
</tr>
<tr>
<td>Harris, Uyll, and Luckin (2008)</td>
<td>Primary schoolchildren with MGs engage in a more collaborative style of interaction when working on a computer problem, compared to schoolchildren holding PGs.</td>
</tr>
<tr>
<td>Janssen and Yperen (2004)</td>
<td>MGs are positively related to leader-member exchange, which in turn leads to better job performance and satisfaction. PGs were negatively related to leader-member exchange, resulting in mixed job outcomes.</td>
</tr>
<tr>
<td>Lemyre, Roberts, and Ommundsen (2002)</td>
<td>MGs are positively related and PGs are negatively related to sportspersonship in athletes.</td>
</tr>
<tr>
<td>Poortvliet, Janssen, Van Yperen, and Van de Vliert (2007)</td>
<td>MGs lead to less open information sharing than MGs, mediated by a stronger exploitation orientation and a weaker reciprocity orientation. PGs also lead to being more suspicious toward receiving information.</td>
</tr>
<tr>
<td>Poortvliet, Janssen, Van Yperen, and Van de Vliert (2009a)</td>
<td>MGs lead to more helpful task-related information sharing than PGs.</td>
</tr>
<tr>
<td>Poortvliet, Janssen, Van Yperen, and Van de Vliert (2009b)</td>
<td>PGs lead to less task-related cooperation intentions when ranks are low or high rather than intermediate. MGs lead to declining cooperation intentions when ranks increase.</td>
</tr>
<tr>
<td>Poortvliet, Anseel, Janssen, Van Yperen, and Van de Vliert (2012)</td>
<td>PGs lead to tactical deception considerations that shape harmful information sharing.</td>
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</tbody>
</table>

Note. MG = mastery goal; PG = performance goal.
cial comparison. Furthermore, people attach importance to dimensions on which they perform well (Audia & Brion, 2007; Kunda, 1987), so that higher rankings evoke more competition (Tesser, Millar, & Moore, 1988). The same principle applies to proximity to the bottom of a ranking: Being ranked lower implies being close to a relevant standard as well – albeit a negative standard.

For both the pursuit of performance and mastery goals, ranking information is informative as it signals how one is doing relative to others and gives indications how much room for improvement there is. The current research focuses on interpersonally harmful behavior resulting from the joint effects of achievement goals and ranking information. As this behavior intends to hurt the task performance of others, it is expected that performance goals (i.e., “beat others”) will lead to higher levels of harmful behavior than mastery goals (i.e., “improve oneself”; Hypothesis 1).

Striving for performance goals thus leads to more strongly harmful behavior, and being engaged in lateral social comparison while pursuing performance goals activates competitive tendencies as well. However, dimensions on which persons have intermediate rankings may be considered less important (Kunda, 1987). Consequently, it is expected that such rankings lead to relatively less behavior directed at sabotaging others’ performance (Hypothesis 2). Indeed, earlier research showed that performance goal individuals are less willing to engage in task cooperation when ranks were low or high, rather than average (Study 6 in Garcia et al., 2006; Poortvliet et al., 2009b).

For mastery goal persons the appraisal of ranking information is different in important ways. Mastery goals are inherently individualistic goals rather than competitive goals: The focus lies on self-improvement. However, social comparison leads to competition when the comparison dimension is relevant for the self (Tesser et al., 1988). Therefore, it is expected that ranking information boosts competitiveness, since exposure to ranking information increases social comparisons. So, ranking information puts mastery driven individuals in a mixed motive situation because mastery goals may promote constructive social behavior, but ranking information fuels competitive tendencies. Specifically, research demonstrated that cooperation intentions of mastery goal individuals decreased when ranks increased (Poortvliet et al., 2009b). Because mastery goals are concerned with self-improvement, it is asserted that, especially when ranks are low – given much opportunity for self-improvement – constructive social outcomes result. However, when ranks rise, the room for improvement shrinks while higher levels of task performance weakens individuals’ goal commitment (Érez & Zidon, 1984). Such decreases in goal commitment lead to shifts toward social comparison, which effectively fuels competition (Johnson, Johnson, & Tjosvold, 2000). It is therefore expected that increasing ranks lead to more interpersonally harmful behavior for mastery goal individuals (Hypothesis 3).

Method

Participants and Design

One hundred twenty students (77 women; \(M_{age} = 21.36\) years) participated for payment or course credit. Participants were randomly assigned to a condition of the 2 (Goal: performance vs. mastery) × 3 (Ranking position: low vs. intermediate vs. high) experimental design.

Procedure

The participants were asked to order 12 items of an adapted version of the winter survival exercise (WSE; Johnson & Johnson, 2009; Poortvliet et al., 2009b). They were told that an ideal order existed to which theirs would be compared. It was further said that a top-100 had been construed based on earlier orders, and participants were informed that they occupied the 96th, 51st, or 4th position (low, intermediate, or high rank). Then the participants were informed that another participant had also carried out this assignment, and that information about the WSE would be exchanged with this other person, after which each had to make a second, definitive ordering. Furthermore, in order to achieve commensurability (see Garcia et al., 2006), it was mentioned that the other participant occupied the 97th, 52nd, or 5th position on the top-100. Then goal manipulation was induced by recommending the following goals: “Perform better than the other person on your second order” (performance goal), or “perform better on your second order than on your first order” (mastery goal; see Poortvliet et al., 2007).

The participants were asked to send an ordering of the items to the other person. They were free to choose whether they sent the actual order they had just drawn up or a different order. So, for instance, participants who were reluctant to share their original information could send a scrambled version of their ordering. After this, instructions were given that the purpose of the study was to investigate performance under noise pressure. Furthermore, it was com-

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2 Following outlier analysis procedures described by Cohen, Cohen, West, and Aiken (2003), two cases were deleted on the basis of their Cook’s D values and studentized residuals. The statistical analyses on the sample with all cases included compared to the sample in which two cases were excluded yielded substantially identical results, except for one contrast test. The contrast that tested the difference between performance goal participants in the intermediate ranking position condition relative to performance goal participants in the low and high ranking position conditions showed that performance goal participants with an intermediate ranking position also showed less interpersonally harmful behavior relative to performance goal participants with low and high ranking position conditions, but this difference was marginally significant.
municated that, due to a network malfunction, the other person would receive the actor’s original order – and not the order they just had selected for the other person. As exemplified above, this could create a problem for participants who were reluctant to share their original information. However, it was explained that the other participant would process the task information and make their definitive order under noise pressure. The participants were informed that they had to set the level of noise the other person would allegedly hear. While putting the noise at the desired level, the participants heard this noise themselves via the computer speakers and had the opportunity to vary it until they set the definitive noise level. Then, questions about competitive conflict regulation and manipulation checks were assessed, the participants were thanked for their participation and were thoroughly debriefed.

Measures

Manipulation Checks

Participants were asked to indicate which specific goal had been assigned to them. Participants could choose between a performance goal and a mastery goal. Ranking position manipulation was checked by asking which position they (own position; #1 to #100) and the other occupied (other’s position; #1 to #100).

Interpersonally Harmful Behavior

The participants adjusted the level of noise that the other participant allegedly would hear during subsequent task performance. This noise could be set on 16 different levels ranging from 1 (Very quiet) to 16 (Very loud).

Results

Manipulation Checks

A χ² test comparing observed frequencies of cases with expected frequencies revealed that goal manipulation was successful, χ²(1, N = 120) = 101.54, p < .001. Assigned achievement goals were correctly recalled by 95.8% of participants.

A 2 × 3 ANOVA on the own position manipulation check yielded only a main effect of ranking position, F(2, 114) = 1431.59, p < .001, as did a 2 × 3 ANOVA on the other’s position manipulation check, F(2, 114) = 29633.28, p < .001. Follow-up analyses (LSD tests) on both ranking position checks indicated that the ranking information conditions all statistically differed in the intended directions (ps < .001).

Figure 1. The effect of ranking position on interpersonally harmful behavior as a function of achievement goal. Error bars represent standard errors.

Participants were asked to imagine that they would receive an order and accompanying arguments from their exchange partner and were then asked to react to this hypothetical situation by responding to three competitive conflict regulation statements. They answered the Dutch version of the competitive conflict regulation scale (Darnon, Muller, Schragel, Pannuzzo, & Butera, 2006; see also Sommet et al., in press), translated and validated by Poortvliet (2009). These items were: “To what extent did you try to show you were right?”, “To what extent did you try to resist by maintaining your initial position?”, and “To what extent did you try to show your partner was wrong?” (1 = not at all, 7 = completely; α = .74). Given the focus of the present paper on actual harmful behavior rather than harmful intentions, the competitive conflict regulation measure was not included in subsequent analyses.

Each possible higher level corresponded with an increase in magnitude of 2 dB. The decibel scale is logarithmic; an increase of 3 dB equals a doubling of the sound intensity.

Excluding participants who recalled a different goal than the one that was assigned to them did not change the results of the experiment.
Interpersonally Harmful Behavior

The means and standard deviations of the dependent variable are displayed in Table 2 and Figure 1. A 2 (Goal: performance vs. mastery) × 3 (Ranking Position: low vs. intermediate vs. high) ANOVA revealed a main effect of Goal, \( F(1, 112) = 11.54, p < .01, \eta^2 = .09 \), which was qualified by a marginal interaction effect, \( F(2, 112) = 2.81, p = .06, \eta^2 = .05 \). The Ranking Position main effect was not significant, \( F(2, 112) = .50, ns, \eta^2 = .01 \). Confirming Hypothesis 1, participants with performance goals behaved more harmfully (\( M = 8.22, SD = 4.71 \)) than mastery goal participants (\( M = 5.56, SD = 3.74 \)).

The interaction between goals and ranking position was interpreted by contrast tests. These showed that the goal effect was highly significant in the low ranking position condition, \( t(112) = 3.77, p < .001 \), but not in the intermediate ranking position condition, \( t(112) = .39, ns \), and marginally significant in the high ranking position condition, \( t(112) = 1.77, p = .08 \). Furthermore, a directional contrast showed that performance goal participants in the intermediate ranking position condition behaved less harmful relative to performance goal participants in the low and high ranking position conditions, \( t(112) = 1.74, p = .04 \), supporting Hypothesis 2. Two other contrasts indicated that individuals in the mastery goal – low ranking position condition displayed more interpersonally harmful behavior than did individuals with intermediate and high ranking positions, \( t(112) = 1.98, p = .03 \), whereas the intermediate and high ranking mastery conditions did not differ, \( t(112) = .03, ns \). In line with Hypothesis 3, this indicates that mastery goal participants responded to the content of ranking information, but not similarly at all levels.

General Discussion

Research on social effects of achievement goals has largely found that performance goals lead to less interpersonally constructive outcomes relative to mastery goals (Poortvliet & Daron, 2010). The present investigation extends these findings by focusing on the adverse effects of achievement goals in terms of interpersonally harmful behavior. Specifically, the present investigation replicates the findings by Poortvliet and colleagues (2009b) by extending it to harmful behavior. Specifically, performance goals lead to less interpersonally harmful behavior under intermediate ranking conditions (see Garcia et al., 2006). Perhaps even more interesting, it was found that mastery goal individuals may act in a more competitive way toward others when ranks increase.

These outcomes emphasize that the occurrence of interpersonally harmful behavior depends crucially on its functional value for attaining specific achievement goals (see Yagish, 1986). From a performance goal perspective, sabotaging others’ task performance is functional for trying to outperform those others and this was accordingly moderated by ranks. For mastery goal individuals, these dynamics are fundamentally different: When they have low ranks, exchange partners are valuable because it is possible to team up with them in order to attain the self-improvement goal (Poortvliet et al., 2009b). This tendency has been shown to become smaller with increasing ranks. The present research significantly extends this finding by showing that mastery goal individuals are also willing to harm others’ task efforts. So the assumption that mastery goals typically lead to prosocial outcomes must be revised, and these outcomes can be better understood by looking at the instrumental value of establishing constructive exchanges with others.

Because being noncooperative may have less severe consequences than acting in harmful ways on a social or even legal level, the present research is relevant for practices in achievement contexts. Indeed, interpersonally harmful behavior may have detrimental consequences for sound organizational collaboration (Poortvliet et al., 2009b). This tendency has been shown to become smaller with increasing ranks. The current research makes clear that such systems should be applied cautiously given the possible deconstructive social consequences.

Acknowledgments

I like to thank Onne Janssen, Joris Lammers, Nico Van Yperen, and Evert Van de Vliert for their suggestions during the development of the study presented here; and Fabrizio Butera, Anne Marike Lokhorst, Eveline Oostdijk, and Reint Jan Renes for their comments on previous versions of this article.

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Received May 30, 2011
Final revision received September 18, 2012
Accepted September 29, 2012
Published online December 11, 2012

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