

Nonconscious goal pursuit and the surmounting of physical and social obstacles

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Abstract

The ability to overcome obstacles is widely regarded as a sign of motivation. Building on recent research on nonconscious goal pursuit, two experiments are presented that test whether activating the goal of helping outside people's awareness by exposure to social stereotypes causes them to overcome physical and social obstacles. Experiment 1 established that although overall participants were less inclined to pick up a tissue that was accidentally dropped on the floor by the experimenter when this tissue was dirty instead of clean, they were able to overcome their aversion toward picking up the physical object when they were primed with the mental representation of a social group (e.g., nurse) containing the goal of helping. Results were replicated in Experiment 2, in which participants had to overcome a social obstacle by providing feedback to a student of a negatively evaluated ethnic minority group, and explanations in terms of demand characteristics and mood were excluded. Implications for the literature on nonconscious goal pursuit are briefly discussed. Copyright © 2008 John Wiley & Sons, Ltd.

One of the key characteristics of goal pursuit is that it involves engaging in concrete actions not because these are in themselves especially desired, but because they are instrumental in attaining the goal state (see e.g., Kruglanski, Shah, Fishbach, Friedman, Chun, & Sleeth-Keppler, 2002). Undeniably, to reach their goals people sometimes engage in activities that are downright unpleasant. They stand in line for hours to see their favorite band play, or spend nights in empty offices to get promoted. Sometimes, people even engage in actions that evoke strong aversive reactions, such as eating disgusting food to impress others, or reaching out a hand toward a member of a negatively evaluated ethnic minority group when they are at that moment driven by the goal to help other people. Engaging in such behaviors and overcoming one's aversive reactions is commonly regarded as a prominent sign of motivation. Hazing rituals, baptisms of fire, and the trials and tribulations described in the Bible: they all attest to the idea that true motivation reveals itself when people have to overcome obstacles in the pursuit of their goals.

While overcoming obstacles is often associated with conscious determination and will power (Ach, 1935; Baumeister, 1998), it has recently been suggested that goal pursuit can be instigated and unfold without conscious interventions (Aarts, Gollwitzer, & Hassin, 2004; Bargh, 1990; Bargh, Gollwitzer, Lee Chai, Barndollar, & Trötschel, 2001). Merely activating the mental representation of the goal suffices to trigger goal pursuit and give rise to motivational, goal-directed behavior. As a consequence, goals can be activated by associated cues in our social environment such as significant others

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(Fitzsimons & Bargh, 2003; Shah, 2003) or members of social groups (Aarts et al., 2005), and put goal pursuit into motion without a conscious fiat. According to this notion, the social environment can motivate people to reach their goals in an automatic fashion. In the present paper, we put this idea to the test. Specifically, we report two studies that test whether priming the representations of social groups that are believed to hold the goal of helping increases helping behavior, even when this requires performing actions that go against aversive responses that are triggered by physical or social features of the setting.

Nonconscious Goal Pursuit and Obstacles

Although obstacles are widely used in our society to test people's motivation, this prominent characteristic of goal striving (Gollwitzer & Moskowitz, 1996; Kruglanski et al., 2002; Martin & Tesser, 1996; Pervin, 1989) has rarely been used to systematically test the motivational qualities of behavioral effects in research on nonconscious goal pursuit (see for reviews Custers & Aarts, 2005a; Moskowitz, Li, & Kirk, 2004). In one of the few studies on the matter, Bargh and colleagues (2001, Experiment 4) rendered the goal to achieve accessible by exposing participants to performance-related words in a word-finding task. During a second word-finding task, participants were after 2 minutes asked to stop working over an intercom. It was found that primed participants more often continued working on the task than nonprimed participants. These results suggest that people can indeed overcome obstacles in the pursuit of their nonconsciously activated goal. Moreover, they suggest that nonconscious goal pursuit not merely results from habitual processes that—once activated—follow a well-practiced route to completion (Aarts & Dijksterhuis, 2000; Bargh, 1990) but is the result of the remarkable capacity of the mental system to flexibly adapt to the environment in the absence of conscious awareness (c.f. Hassin, 2005).

Macrae and Johnston (1998), however, reported contrasting findings. They primed participants with helping-related words and investigated effects on helping behavior. In one experiment the experimenter—ostensibly by accident—dropped a number of pens, which were either leaking ink or not. While the leaking of the pens dramatically decreased the number of participants who picked up the pens to help the experimenter, priming only increased behavior when the pens were not leaking. This interaction effect suggests that primed participants were not able to overcome the obstacle in the leaking pen condition. Although helping-related primes are often regarded as goal primes in the literature (see e.g., Fitzsimons & Bargh, 2003), Macrae and Johnston interpreted these findings as a case of trait or behavior priming, which produces effects through a nonmotivational route (see for a more elaborate discussion Custers & Aarts, 2005a,b) that are easily overruled (Dijksterhuis & Bargh, 2001).

These seemingly conflicting findings challenge the field of behavior priming. Whereas Macrae and Johnston (1998) found that priming effects were absent when an obstacle was present, Bargh and colleagues (2001) found that goal priming *did* under similar circumstances lead to an increase in motivational behavior. However, in their experiment no control condition without an obstacle was present. As such, it remains the question whether their obstacle actually impeded behavior. In the present paper, we report two studies in which both goal accessibility and the presence of a physical (Experiment 1) and social (Experiment 2) obstacles are manipulated independently.

Stereotypes and Nonconscious Goal Pursuit

Recent research shows that instead of being primed directly, goals can also be activated by our social surrounding. Aarts and colleagues (2005) subliminally primed participants with social groups whose stereotypes include the goal of helping (e.g., nurses). Subsequently, participants were asked to provide feedback on an earlier performed computer-skill task, purportedly designed by a fellow student. Participants could either decide to leave the lab as quickly as possible or to stay a little longer and type in their feedback to engage in the desired behavior of helping. As expected, the results showed that participants who were primed with nurses helped more (i.e., provided more feedback) than those in the control group. Moreover, this priming effect was more pronounced for participants for whom helping was represented as more desirable, which provides further evidence for the claim that the effect on behavior was a result of enhanced goal striving. Thus, the mere activation of mental representations of stereotyped groups which contain the goals that are believed to be held by that group actually seems to cause individuals to put more effort in pursuing these goals.

Although these findings point to motivational consequences of social-group priming, demonstrating effects on people's ability to overcome physical and social obstacles in pursuit of the related goal, would provide stronger evidence for such a motivational account. The present studies were designed to provide such evidence. In Experiment 1, representations of social groups containing the goal of helping were activated in a scrambled-sentence task. Subsequently, participants could help the experimenter in picking up a tissue that was either fresh or used. We reasoned that if stereotype priming would in this case trigger motivational, goal-directed behavior, a used tissue would overall decrease helping behavior, but goal-primed participants should be able to overcome this physical obstacle.

In Experiment 2, we aimed to extend the work on stereotypes and goal priming to the realm of social obstacles related to ethnic attitudes. There is ample evidence that negative attitudes that people have toward ethnic minority groups can form a social obstacle to interact with, or act in a helpful manner toward members of these groups, and these effects seem to occur even on an implicit level (e.g., Bargh, Chen, & Burrows, 1996; Fazio, Jackson, Dunton, & Williams, 1995; Kunda, 1999; Macrae, Bodenhausen, Milne, & Jetten, 1994). Moreover, there is a lot of research aimed at investigating how people can control the automatic activation of negative stereotypes and prejudiced responses to prevent discrimination and other negative behaviors toward ethnic minorities (see for reviews Kunda & Spencer, 2003; Monteith & Mark, 2005). In the light of this research, it is of interest to see whether individuals can overcome their negative attitudes and aversive reactions toward ethnic minorities when they are primed with the goal of helping.

In line with the Aarts et al. (2005) study, participants were subliminally primed with the social group of "nurses" or not. Subsequently, they were asked to provide feedback on a task that they had performed earlier to a foreign student with a neutrally or negatively valued ethnicity. We predicted that although this social obstacle would overall reduce helping behavior, participants primed with nurses would be more likely to overcome it in order to attain their goal of helping.

EXPERIMENT 1

Method

Participants and Design

Ninety-four Dutch undergraduates (31 males, 63 females; M -age = 21.39) participated in the experiment in exchange for 3 Euros. They were randomly assigned to one of the conditions of a 2 (goal: helping vs. control) \times 2 (type of tissue: unused vs. used) between-participants design.

Stimuli Material

A pre-test was conducted to obtain stereotyped groups that are perceived as exemplifying the goal of helping others. Twenty-nine students were requested to indicate to what extent they believed the goal of helping others to be held by various groups on a 10-point scale that ranged from not at all (1) to very strongly (10). For the help-goal condition we selected six groups, the members of which were strongly believed to hold the goal to help people (nurse, firefighter, volunteer, fundraiser, rescuer, therapist, $M = 8.66$, $SD = 0.65$). For the no-goal-control condition, we also selected six groups that were not associated with that goal (journalist, operator, customer, teenager, newspaper deliverer, sailor; $M = 3.79$, $SD = 1.38$).

Experimental Task and Procedure

Participants were told that they would take part in research conducted by different research teams and seated at a table in a large room. They were tested individually and conducted two consecutive tasks: the social group-priming task and the behavior assessment task.

Social group-priming task This first task consisted of a scrambled-sentence test that was presented as a language task. Participants were handed an envelope by the experimenter (blind to the experimental condition), which contained one of the two paper versions of the task and started working. This test consisted of ten items, comprising six words, five of which could be rearranged to make grammatically correct sentences (Srull & Wyer, 1979). In the *help-goal condition*, six sentences included the helping-related social groups (e.g., “enters, the, the, lamppost, nurse, room” becomes “the nurse enters the room”). In the *no-goal-control condition*, the same six sentences were presented with actors who belonged to the social groups unrelated to helping. Four additional sentences were presented in both conditions that featured members of other helping-unrelated social groups (e.g., gardener).

Behavior assessment task Upon completing the scrambled-sentence task participants were instructed to take a seat in front of the experimenter to answer some auxiliary questions. The experimenter was seated behind a table in the same room and the table was stocked with books and paperwork. A tissue was positioned clearly visible to participants at the right corner of the table (from the perspective of the participant) accompanied by the empty wrappings of the tissues package. Depending on the experimental condition, this tissue was either unused or used (i.e., rolled into a ball and appearing wet and dirty). Once the participant was seated, the experimenter (who was faking a cold) reached for a form and thereby—ostensibly accidentally—knocked the tissue off the table. The tissue landed just to the right of the participant and because of the arrangement of the table setting, the experimenter was unable to pick it up. Our dependent variable was whether or not participants would help the experimenter by picking up the tissue. Unfortunately, in one case the tissue landed in the participant’s lap. Data of this participant were excluded from the analyses.

Debriefing Finally, participants were debriefed by using a funneled debriefing procedure similar to that suggested by Bargh and Chartrand (2000). This debriefing indicated that none of the participants realized the true nature of the study. Importantly, participants were not aware of the nature of the goal-priming task and of the relationship between the different parts of the study.

Results and Discussion

As a measure of helping behavior, we assessed whether participants picked up the dirty tissue from the floor or not. This measure was subjected to a 2 (goal: helping vs. control) \times 2 (type of tissue: unused vs. used) between participants ANOVA (for ANOVA on binary data, see Kirk, 1982). This analysis showed that in general, people were more reluctant to pick up the used ($M = 44.7\%$), than the unused tissues, $M = 69.6\%$, $F(1, 89) = 5.20$, $p = .03$, $\eta^2 = .06$. Furthermore, participants in the help-goal condition picked up the tissue more often ($M = 66.0\%$) than in the no-goal-control condition, $M = 46.5\%$, $F(1, 89) = 7.61$, $p < .01$, $\eta^2 = .08$. The interaction effect was not reliable, $F < 1$. Crucially, however, priming increased helping behavior in the obstacle condition, $t(41) = -1.77$, $p = .04$ (see Figure 1).

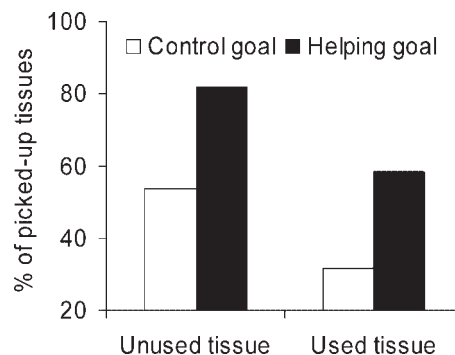


Figure 1. Behavior effects as a function of type of tissue and goal prime (Experiment 1)

The current results are in line with our predictions. First of all, the dirty tissue really posed a physical obstacle to the participants because it reduced behavior. Second, participants primed with helping-related social groups were overall more inclined to help the experimenter, a finding that replicates earlier work by Aarts and colleagues (2005). Importantly, the absence of an interaction effect shows that not only did goal-priming increase helping behavior in the absence of an obstacle; it also enabled participants who were facing an obstacle to overcome it. As Figure 1 shows, primed participants who encountered an obstacle were about as likely to help as control participants who did not face this obstacle.

EXPERIMENT 2

Experiment 2 aimed to conceptually replicate the findings of Experiment 1 for the surmounting of social obstacles. Accordingly, we examined whether helping goals activated by the social environment can increase people's helping behavior toward a member of a negatively evaluated ethnic minority group. For this purpose, we employed the Aarts et al. (2005) paradigm, in which participants could provide feedback to a foreign student who, in the present experiment, belonged to either a neutrally or a negatively evaluated ethnic group.

Furthermore, this experiment served two other important purposes. First, although this would be inconsistent with the results of the debriefing, it remains possible that some participants were aware of the relation between the words used in the priming task and the opportunity to help in Experiment 1. The results, then, could be the product of demand characteristics rather than the consequence of nonconsciously instigated motivational processes. To rule out this account we replaced the scrambled sentence task with a task in which words related to a social group (nurses) holding the goal of helping were subliminally primed. Second, we included a potential mediator variable to rule out alternative accounts for the observed goal-priming effects. Specifically, priming social groups that contain the goal of helping may increase participants' mood. Previous research has demonstrated that mood is positively related to helping (Carlson, Charlin, & Miller, 1988), and thus effects of goal priming on behavior may be attributable to variances in mood (cf. Fitzsimons & Bargh, 2003, Study 1). For this reason, we included a mood-check.

Method

Participants and Design

Seventy-one Dutch undergraduates (19 males, 52 females; M -age = 21.81) participated in the experiment in exchange for 3 Euros. They were randomly assigned to one of the conditions of a 2 (goal: helping vs. control) \times 2 (target: neutral vs. negative) between participants design.

Experimental Task and Procedure

Upon arrival at the laboratory, participants were told that they would take part in research conducted by different research teams, and had to perform several tasks on a computer in a private cubicle.

Computer-skill Task The first task was a computer-skill task. As a cover story, participants were told that we were interested in people's ability to handle a computer mouse. The task consisted of two specific mouse-click tasks. Both tasks were designed to be rather easy and boring, so that participants would not be too enthusiastic about providing feedback later in the experiment.

Social group-priming task Next, participants performed a letter-detection task in which they had to indicate as quickly as possible, by pressing a key, whether a string of similar letters contained a capital or not. Half of the letter strings

contained a capital. Before each letter string a prime-word was presented. In the *help-goal condition* the primes consisted of four different words describing a social group that is strongly associated with the goal of helping people. The words consisted of two female and two male labels for the group nurses (in Dutch these words are *verpleegster*, *zuster*, and *verpleger*, *broeder*, respectively). According to the earlier described pre-test, this group was strongly associated with the goal to help people ($M = 8.47$; $SD = 0.87$). Because Experiment 1 already demonstrated that priming of social groups in itself cannot explain the difference in helping behavior between the experimental and the control group, four different nonwords were used as primes in the *no-goal-control condition* in line with the procedure of Aarts et al. (2005). Each trial began with a fixation-point on the computer-screen that had a duration of 500 milliseconds. The prime (in capitals) was then presented for 23 milliseconds, followed by a mask of random letters for 200 milliseconds. Finally, the string of similar letters was presented and remained on the screen until a response was made. The inter-trial interval was 1.5 seconds. Each prime-word was presented 10 times.

Behavior Assessment Task Next, participants learned that the study was completed. They were further told that the study was part of an international student exchange project, and that one of the students would like to get feedback about the mouse-click task they had performed earlier. In the *neutral target* condition participants were told that this task was designed by a male undergraduate student called Jozef Lewicka (a typical Polish name). In the *negative target* condition the name Mohammed el Idrissi (a typical Moroccan name) was used. These targets were selected on the basis of another pilot study, in which 41 students were requested to evaluate various Dutch minority groups on a 9-point scale, ranging from negative (-4) to positive ($+4$). This study showed that a Moroccan person was negatively evaluated, while a Polish person was judged as neutral, $M_s = -1.51$ versus 0.49 , $t(40) = 5.62$, $p < .01$. These findings concur with consistent reports in the literature that Moroccans are one of the ethnic groups that are in general evaluated most negatively by native Dutch people (see e.g., Hagendoorn, 1995; SCP, WODC, & CBS, 2005; Verkuyten & Thijs, 2002).

Participants could give their feedback by typing it into the computer. As a dependent measure, we used a combined measure that reflected both the effort participants exerted in helping the student as well as the helpfulness of the actual feedback.

Measurement of Mood Immediately after the session, the mood items from the modified version of Salovey and Birnbaum's (1989) Affect-Arousal Scale were administered. The items aim to differentiate feelings of mood on 10-point scales. The mood items were *bad-good*, *sad-happy*, and *displeased-pleased*. Participants responded to each item in terms of how they felt at that moment.

Debriefing As in the first study, participants were debriefed. The debriefing indicated that neither participants realized the true nature of the study nor were they aware of the relationship between the priming task and the feedback task. Furthermore, in line with previous research (Aarts et al., 2005) participants were unaware of the primes.

Results

Effects on Helping Behavior

In line with earlier research, the number of words that participants typed for their feedback was used as an indicator for the effort participants expended to help the foreign student (see Aarts et al., 2004, 2005, for a similar procedure to measure goal-directed helping behavior). Moreover, the helpfulness of the content of the feedback was judged on a 4-point scale by two raters blind to the experimental conditions. Because correspondence was high ($r = .86$), their judgments were averaged to create a measure for helpfulness of the feedback. This measure correlated with the number of words participants used ($r = .88$): the more effort participants expended, the more helpful the feedback was. Because of this high correlation, we combined the measures for effort and helpfulness in one index of helping behavior by z -scoring and averaging the two measures.

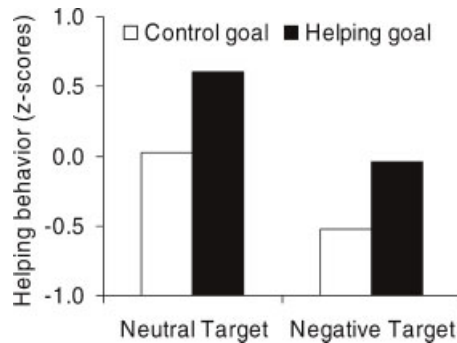


Figure 2. Behavior effects as a function of target and goal prime (Experiment 2)

The index was subjected to a 2 (goal: helping vs. control) \times 2 (target: neutral vs. negative) between-participants ANOVA. It was found that participants provided less feedback to the negative than to the positive target, $F(1, 67) = 7.65$, $p < .01$, $\eta^2 = .10$. Furthermore, helping goal-primed participants provided more feedback than no-primed participants, $F(1, 67) = 6.04$, $p = .02$, $\eta^2 = .08$. The interaction effect was not reliable, $F < 1$. In line with our specific hypothesis, it was found that priming increased helping behavior in the obstacle condition, $t(34) = -1.84$, $p = .04$ (see Figure 2).

Potential Mediation by Mood

To rule out mood as a potential mediator for the effects of goal priming, we first conducted an ANOVA using goal and type of target as independent variable and the average of the three mood items ($\alpha = 0.75$) as the dependent variable. No significant main or interaction effects were found, $F_s < 1.37$, which indicates that mood was not affected by the treatments. Next, we performed between-participants ANCOVAs with the mood measure as covariate. This analyses yielded the same pattern of results after controlling for mood, $F(1, 66) = 6.91$, $p = .01$, and $F(1, 66) = 5.88$, $p = .02$; for the main effects of type of target and goal priming, respectively. Taken together, then, these analyses indicate that the observed pattern of results is not attributable to changes in mood.

GENERAL DISCUSSION

The results of two studies demonstrate that goal representations that are activated as part of social stereotypes motivate people to pursue these goals, even when this involves performing actions that require overcoming one's aversive responses toward physical objects or social situations. In Experiment 1, it was found that participants who were primed with social groups whose stereotypes contained a helping goal, were more inclined to pick up a tissue that was "accidentally" dropped by the experimenter, even when this tissue was dirty and posed a physical obstacle for goal pursuit. In fact, primed participants facing an obstacle helped about as much as control participants in the absence of an obstacle. In Experiment 2, these effects were replicated and extended with a social instead of a physical obstacle. Participants proved to be more inclined to help a student when they were subliminally primed with words related to the social group "nurses", even when the student belonged to a negatively evaluated ethnic minority group. In addition, Experiment 2 demonstrated that these priming effects were not mediated by changes in mood. Furthermore, the awareness checks in Experiment 1 and the subliminal priming manipulation in Experiment 2 made clear that people were not aware of the source of their motivation. These data are important, as they show that people cannot only surmount their aversion toward physical objects, but also—at least partly—conquer their prejudiced responses toward social targets when they are nonconsciously motivated to help others.

Our current findings therefore extend the work on stereotypes and nonconscious goal-pursuit in general (e.g., Moskowitz, Gollwitzer, Wasel, & Schaal, 1999; Moskowitz, Salomon, & Taylor, 2000), and the work of Aarts and

colleagues (2005) in specific. Their studies revealed that people primed with social groups whose stereotypes contained a specific goal (e.g., helping) became more motivated to help others. Our current results suggest that this motivation can be utilized to overcome obstacles that are encountered during goal pursuit.

These findings seem to be at odds, however, with those by Macrae and Johnston (1998), who found that priming people with the concept of helping did not increase helping behavior when this behavior involved picking up leaking pens. This difference may lie in the fact that in contrast to our current studies, helping behavior was in the no-prime condition almost completely wiped out by the leaking pens, thus leaving no room for any priming effects. There are several possible explanations for this difference in the magnitude of the effect of the obstacle. For one, it may be the case that the dirty pens proved to be a much stronger obstacle in that they triggered aversive reactions that were too strong to be overruled by the helping primes. Moreover, the difference could be due to differences in the perceived need for help. In our two experiments, the setting was constructed so that it was clear that not helping would have detrimental consequences for the experimenter. In Experiment 1, the experimenter was unable to pick up the tissue, but obviously needed it, as he was suffering from a cold. In Experiment 2, the experimenter explicitly asked for help. This need for help may have been less clear in the study by Macrae and Johnston (1998). Perhaps it seemed to participants that the experimenter was able to pick up the pens by him or herself or would not have been bothered by their loss. Hence, when helping the experimenter was easy, participants may have executed the helping behavior despite this unclarity. But when helping required overcoming an obstacle, participants may have abandoned the helping goal as it was unclear whether help was really needed.

Alternatively, or perhaps additionally, it could have been the case that the leaking pens posed an obstacle because the behavior of picking them up was in competition with another (conscious) goal. As Macrae and Johnston note, it could be the case that "...participants would be unwilling to engage in this action because of possible costs involved—that is, getting covered in ink" (1998, p. 407). Thus, participants may have anticipated that picking up the pens would create a discrepancy with their goal to look well groomed (c.f. Custers & Aarts, 2007). Such an explanation in terms of conflicting goals that try to steer behavior in two opposite directions would fit with recent insights in goal-shielding, according to which such conflicts are resolved in an all or none fashion in which one goal inhibits the other (Shah, Friedman, & Kruglanski, 2002). In fact, Macrae and Johnston (1998) found in their second study that participants also refrained from picking up clean pens when it was more or less explicitly communicated to them that they had to hurry. Thus, conscious goals that are in conflict with a goal that is primed seem to override these priming effects in an all or none fashion.

In our case, however, the social and physical obstacles did overall reduce the behavior, but did not completely overrule it, which suggests that the dirty tissue did not reduce behavior because a competing goal (e.g., being healthy) was activated. Perhaps the dirty tissue did reduce behavior on a different level, by triggering aversive responses that worked against the goal-directed behavior (see e.g., Chen & Bargh, 1999). Participants may have actually had to force their hand toward the tissue, in much the same way that one has to overcome one's aversive bodily responses if one tries to swallow a juicy cockroach or eat Japanese fermented beans to impress friends. This effect may have occurred independently of the goal-priming effect because it is produced by a different system. That is, the reduction in behavior may have been caused by bodily withdrawal responses toward the gross, wet tissue, whereas the action of picking up the tissue was guided by the higher cognitive goal to help. As such, aversive responses may have been the real obstacles that participants had to overcome. Although one might expect goal-directed actions to always triumph in such a situation, avoidance responses may have on some occasion prevailed because they were triggered on the spot by the object itself, whereas the goal-directed actions was guided by a goal that had to be maintained since the priming manipulation (for a discussion on the difference between approach/avoidance responses and nonconscious goal-directed behavior, see Custers & Aarts, 2005a).

In a similar manner, people may have been less helpful towards the Moroccan experimenter because the goal to help could not always overcome their aversive reactions that pushed them away from the interaction with the negative minority group member. The fact that the influence of this aversion toward people of a negatively evaluated group on people's behavior can be surmounted is particularly interesting for the literature on controlling prejudiced behavior (Kunda & Spencer, 2003; Monteith & Mark, 2005). Whereas earlier research by Moskowitz and colleagues (Moskowitz et al., 1999, 2000) suggests that egalitarian goals that are activated for chronic egalitarians upon perception of members of social groups (or other sources) can eliminate prejudiced responses by suppressing the activation of the stereotype, the findings of Experiment 2 show that these prejudiced responses could also be reduced by activating the goal to help other people. Although overall participants expended less effort on their helping behavior when the target was a Moroccan, instead of a Polish person, activating the helping goal increased helpful behavior regardless of the target. The presence of these two

main effects shows that priming did not so much suppress activation of the negative stereotype (in which case helping behavior after priming should have been equally high for the both targets, which would result in an interaction effect), but rather that people were able to overcome their negative attitudes in the pursuit of their helping goal.

To conclude, the current findings provide evidence for the idea that members of social groups can activate behavioral goals outside our awareness which instigate behavior that persists, even in the face of obstacles, and allows us to flexibly adapt to changes in the environment, thereby promoting achievement (c.f. Hassin, 2005). This ability to pursue goals that we believe to be held by members of that group may foster social bonding and serve our basic need to belong (Fiske, 2003). Thus, although our social environment may trick us into performing activities that we personally evaluate as negative—such as picking up filthy tissues—outside our awareness, this ability may eventually serve us well as social human beings.

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