Supplementary Material for Moral hypocrisy and the hedonic shift: a goal-framing approach.

General remark about shifting the salience (i.e. changing the activation) of goals in our two studies. Goal-framing theory predicts that cues in the instruction and the procedure can inadvertently influence the activation of the overarching goals, so that great care was taken with regard to instructions and procedure. Related to this point is the fact that we did not measure the goal shifts directly. In the first study, we relied on the indirect evidence based on the differences between the goal activation conditions (Spencer, Zanna, and Fong 2005). In the second study we used impatience as a manipulation check for a hedonic shift (see below).

Because females have been found to be more honest under many circumstances or more consistently committed to higher moral standards than men (Mühlheusser, Roider, and Wallmeier 2015), we also looked at gender effects in both studies. These gender differences may also muffle the strength of a hedonic shift for females and thus reduce the likelihood of hedonic hypocrisy.

Study 1

Design and Procedure

We took care that there was no hedonic distraction. The room was sober; the male experimenter looked plain and also very sober. Participants were randomly assigned to one of four conditions of a 2 (hedonic versus normative goal) x 2 (happy versus sad mood) between participants factorial design. The working spaces in the lab were separated by solid screens. The experiment began with an informed consent form, then a filler task that was meant to focus the participants before the goal manipulation on a

task that was unrelated to a specific overarching goal. The filler task consisted of a 150-word fictional story of neutral valence (about a hedgehog) in which the participants were asked to underscore all articles in the text. Then came the activation of goals, followed by the mood induction. After that, the moral stance was assessed, followed by a measure of biospheric values. Finally, mood was assessed, followed by demographic (age, gender) and funnel questions about understanding questions and possible suspicions ended the questionnaire. All had understood the questions well and none had guessed the goal of the experiment. At the very end of the experiment, participants in the sad mood condition were asked to shortly describe an intensely happy event from their memory, to make sure nobody is left with a depressed mood on account of the experiment. After the experiment, participants were debriefed.

Moral stance and gender

A univariate ANOVAs with the moral stance as dependent variable and mood condition and gender as fixed factors shows for the normative shift condition no gender differences ($p=0.715$). For the hedonic shift condition, however, we found a significant gender effect, with females showing a more stringent moral stance than males in both the happy and the sad hedonic conditions (for females: $M_{happy}=3.87$; $M_{sad}=4.75$; for males: $M_{happy}=3.00$; $M_{sad}=4.11$, $F(1)=5.841$, $N=40$; $p=0.021$; $eta_p^2=.140$). The explanation could be that the normative goal is more chronically activated in females than in men, so that men's moral stances are more easily influenced by wanting to feel good. This also implies that conditions that affect the salience of the normative goal (such as the exposure to lady justice) would have a stronger effect on males than on females.

Study 2

Design and procedure

As in the previous study, we took care that there was no hedonic distraction. The room was sober; the female experimenter looked plain and very sober and had no perfume or scent of any kind. Participants were randomly assigned to one of four conditions of a 3 (neutral, light hedonic shift, strong hedonic shift) x 2 (low sacrifice vs. high sacrifice) between participants factorial design. But because of the smell conditions that would linger, the different conditions were each conducted consecutively. For the "good" smell condition, we made use of a pleasant cake smell. A pilot study (N=10) had shown that the paste (available via www.smartnose.nl) whose smell is distributed by a small ventilator indeed smelled like cake and was pleasant. The ventilator was placed so that subjects could not see it and turned on half an hour before the subjects arrived (maximally two at a time), so that there was a constant ambient pleasant cake smell in the room. The "bad" smell condition was achieved with a 'fart spray' (available at a local party store). Research by Schnall et al (2008) had used this smell and had shown that it creates a feeling of disgust (a strong hedonic reaction). Before participants entered the room, six sprays were applied to the lining of a trashcan hidden approximately 1.5 meters from the subjects. This represents a considerable smell (between the mild and strong stink used by Schnall et al. 2008).

Maximally two participants at a time entered a small room (about 20 m^2) to sit at a separate table and fill in a questionnaire. Upon arrival, participants received an informed consent form and a paper and pencil questionnaire. They then filled in questions concerning delay discounting and mood. Participants then answered questions concerning moral stance, after which they were asked whether or not they would like to volunteer to help a fellow student in urgent need of volunteers to fill in a questionnaire.

This was followed by questions concerning trait impression management, demographics (age, gender, religious belief), and finally funnel questions about whether participants understood the instructions and whether they guessed what the goal of the experiment was. All had understood the questions well and none had guessed the goal of the experiment. Participants who had volunteered to help a fellow student by filling in a questionnaire were then asked to do this in a separate room.

Impatience

Here we report some more detail about the manipulation check concerning impatience. The difference between the neutral and light hedonic shift conditions in discounting is not significant ($p=0.349$), the difference between the neutral and strong conditions is significant ($p=0.037$), while the difference between light and strong hedonic shift conditions is marginally significant ($p=0.086$). Thus, the hedonic shift did bring about greater impatience. We also see that even though there is no significant difference in impatience between the neutral and the light hedonic condition, we did see a modest difference in hypocrisy between these two conditions. It seems that the hypocrisy effect is likely to driven also by other aspects of the hedonic goal than impatience.

With regard to gender and impatience, we find that there is no significant difference in the effect of the goal manipulation on impatience for males and female in the neutral ($\chi^2=2.372(1)$, $N=44$, $p=0.124$) and the strong ($\chi^2=2.476(1)$, $N=41$, $p=0.116$) hedonic conditions, but there is a significant difference in the light hedonic condition ($\chi^2=8.256(1)$, $N=50$, $p=0.004$). Females in the latter condition are less impatient than males. It could be that females have a smaller hedonic reaction to pleasant smells, compared to males, but we have no way of testing this in the present study.

Moral stance

The seven norms we used were all concerned about behavior with negative externalities for others (which give them the "moral" character). All seven norms had comparable levels of abstraction and were selected on the basis of a pretest in which 81 students of the university volunteered to rate 37 social norms that were all concerned about externalities of behavior for others (and thus "moral" in this sense) on their perceived importance (1 = important norm, 3 = unimportant norm). Given the results of this study, we selected 7 norms rated by at least 30% and by at most 70% of the participants as *reasonably important*. Thus, they were all "middle range" norms, that were reasonably well established in the student population but presumably not strongly chronically activated, so that their activation would vary depending on situational factors: "not to bicycle through a red light", "to throw trash in the trashcan and not on the street", "to blow your nose and not snort", "to be silent in the library", "to sweep the sidewalk if it is covered with leaves", "to wash your hands after going to the toilet", "to keep to the ruling norms".

Gender

For the moral stance, the hypocrisy effects are stronger for males than for females (0%, 9%, 47% for males in the neutral, light, and strong hedonic shift condition, respectively, versus 3%, 10% and 25% for females)(χ^2=22.46(5), N=135, p<0.0001, Phi=0.408). This fits with the finding in the first study in which men's moral stances were more easily influenced by wanting to feel good than female moral stances.

Could it be that these gender differences were brought about by differences in the goal manipulation? Remember that, with regard to impatience, females reacted less strongly to the light hedonic shift, compared to males. While this may indicate that it takes stronger hedonic cues to make females impatient than men, it does not explain

why even for the strong hedonic cues (where there are no differences in impatience) we find differences in hypocrisy. It is more plausible to interpret the different gender effects concerning hypocrisy as a sign that the normative goal is more chronically activated in females than males, so that men's moral stances are more easily influenced by wanting to feel good. This also fits with the finding in the first study.

Moral judgments with vignettes of moral dilemmas. To test the moral character of hedonic hypocrisy in our second study in a different way than with a moral stance with every-day norms (with negative externalities), we also used four well-known moral transgression vignettes that were unrelated to helping someone in need but could be used to demonstrate one's worthy moral standards. Using moral dilemma vignettes makes it easy to see the double consistency theory (explained in the main article) in action: in case of a moral stance with moral dilemmas, it is obvious that there is no connection between moral stance and the moral behavior asked in the particular situation (helping). With a salient the normative goal, the moral stance should be consistent with "appropriateness", and the behavior should be consistent with the "appropriateness", but moral stance and behavior don't have to be related. Similarly, with a salient hedonic goal, the moral stance should be consistent with "feeling good", and the behavior should be consistent with "feeling good", and again moral stance and behavior don't have to be related.

The moral vignettes we used had among others also been used by Schnall et al. (2008) in their experiment on the effect of disgust on the severity of moral judgments. In the Dog vignette a man "Frank" is curious how a dog tastes and cooks his dog that had just been run over by a car. In the Wallet vignette your friend, in need of money, finds a wallet and keeps the money, returning the credit cards. In the Resume vignette, a

friend provides false information in his CV in order to get a job. In the Trolley vignette, you save five working man by deliberately killing one through hitting a switch of a trolley. The standard question at the end was "How wrong or okay is it for you (or Frank, your friend) to do X". Answers were on a 7 point Likert scale running from "1=Perfectly okay, 7=Completely wrong. In previous research (Schnall et al. 2008) even finding the "dog" and the "trolley" vignettes not OK proved to be stringent moral judgments. The sequence of the vignette and normative judgments was counter-balanced, but it had no effect.

The results are very similar to the moral stance based on norms. Again, the combination of median or more severity of moral judgments (5.00 on a seven point scale) and yet not helping was considered hypocritical. For the moral judgments and the combined 2-minute and 15-minute help conditions, a χ^2 test for three hedonic shift conditions by hypocrisy shows again a highly significant difference (χ^2=14.15(2), N=135, p=0.001; Phi=0.324). In the neutral hedonic shift condition, 2% of the participants are hypocritical. In the light hedonic shift condition, 10% are hypocritical, and in strong hedonic shift condition, 29% are hypocritical. Thus, here too, the intensity of the hedonic shift matters. We also see the expected effect of sacrifice (effort): For the participants in the hedonic condition with a high sacrifice (15 minutes help), hypocrisy is much larger than that for the low (2 minute) sacrifice condition (see Figure 1S for more detail). These results support our findings with norms.

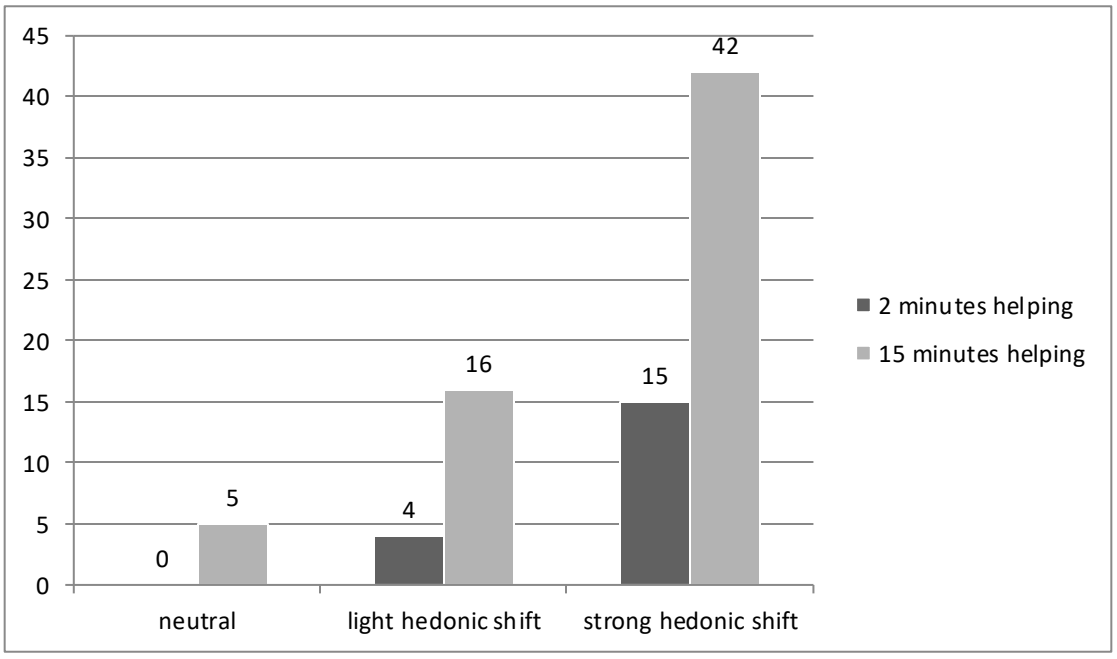

Figure 1S. Vignettes of moral dilemmas: Percentage of participants who are hypocritical, dependent on hedonic shift condition, for two effort levels for helping (2 minutes versus 15 minutes)

Trait impression management

Goffman (1959) believed that we are all "merchants of morals" in the sense that we try to impress others by appearing moral. In our first study, we showed that the expression of an "insincere" stringent moral stance depends on the degree to which cues in the situation create a hedonic shift. There is yet a third possibility: people differ as a matter of predisposition in the degree to which they are prone to use impression management (Kashy and DePaulo 1996). Thus, if one is predisposed to try to impress others, one might be more likely to be hypocritical. We therefore included a measure of this trait in Study 2 to see how the influence of this trait would compare to the influence of the hedonic shift. We used four items of the public self-consciousness scale (Fenigstein, Scheier and Buss 1975) (translated into Dutch): "I usually worry about making a good impression"; "I'm concerned about what other people think of me"; "I'm usually aware

of my appearance"; "I'm self-conscious about the way I look" (Cronbach's α =.61, which is not high but passable).

As we would expect from a trait, there was no difference in means for this trait between the hedonic shift conditions ($F=0.181(2)$; $p=0.835$). Trait impression management does also not correlate significantly with moral behavior ($r(133)=0.101$, $p=0.244$), but it does correlate with moral stance ($r(133)=.277$, $p<0.001$)). Thus, there does seem to be an element of trait impression management in expressing a moral stance. Does this indeed relate to hedonic moral hypocrisy? The answer seems to be a qualified Yes. Controlling for the hedonic shift conditions in a regression, we see that trait impression management is positively associated with hedonic hypocrisy ($t(134)= 2.140$; $p=0.034$). Looking at the hedonic shift conditions separately, we see that there is, as one may expect, no significant correlation between trait impression management and hedonic hypocrisy ($r(42)=0.068$, $p=0.663$). By contrast, for the combined light and strong hedonic conditions, there is a marginally significant correlation between trait impression management ($r(89)=0.191$, $p=0.060$) and hedonic hypocrisy. Dichotomizing trait impression management, we see that there is a significant difference in the light hedonic condition (0% hypocritical for low versus 18% for high trait impression management in the light hedonic shift conditions ($\chi^2=4.365$ (1), $N=50$, $p=0.037$), and a sizable but not quite significant difference within the strong hedonic condition: 24% for low versus 45% for high trait impression management ($\chi^2=2.046$ (1), $N=41$, $p=0.153$). This is an interesting result. The trait related to impression management seemingly needs a hedonic shift to be activated; i.e. there is an interaction between the hedonic shift conditions and the effect of trait impression management on hypocrisy. Without a hedonic shift, a predisposition to try to impress others seemingly has little effect on boosting hedonic hypocrisy.

References

Fenigstein, A., Scheier, M.F. and Buss, A. H. (1975) Public and private self-consciousness: Assessment and theory. *Journal of Consulting and Clinical Psychology* 43, 522–527

Kashy, D. .A. and. DePaulo, B.M. (1996) Who lies? *Journal of Personality and Social Psychology* 70, 1037-1051

Mühlheusser, G., Roider, A. and Niklas Wallmeier, N. (2015) Gender differences in honesty: Groups versus individuals, *Economics Letters*, 128, 25-29.

Schnall, S., Haidt, J., Clore, G.L. and Jordan, A. (2008) Disgust as embodied moral judgment. *Personality and Social Psychology Bulletin* 34, 1096–1109

Spencer, S., Zanna, M. and Fong, G. (2005) Establishing a causal chain: why experiments are often more effective than mediational analyses in examining psychological processes. *Journal of Personality and Social Psychology* 89, 845–851.