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Behave like you would or behave like you should:
The influence of morality and norms on doing the right thing

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Abstract

Morality is an important virtue and for most people it is important to perceive themselves as moral. Previous research suggests that people regulate their moral self when they are reminded of their (im)moral behaviour (Jordan *et al.,* 2011), and that any individual behaviour can be influenced by social norms being salient (Cialdini *et al.,* 2003). But whether people also regulate their moral self as a result of moral threat or affirmation in combination with a salient social norm is yet unknown. Hence, this study is conducted to look at the influence of (im)moral recollection and social norms on moral behaviour and how individuals differ in their response towards these social cues (self-monitoring). In an experiment participants recollected (im)moral memories, and afterwards were asked to divide money between a charity cause and to join a lottery. Predicted was that with a salient moral norm, people with a moral recollection would show consistent moral behaviour (H1), but people with an immoral recollection would show self-cleansing (H2). Zooming in on individual differences, predicted was that with a salient immoral norm and a moral recollection, high self-monitors would show self-licensing, whereas low self-monitors would show consistent behaviour (H3). Further, the last hypothesis predicted that with an immoral norm and an immoral recollection, high self-monitors would show consistent behaviour, whereas low self-monitors would show self-cleansing (H4). None of the hypotheses were confirmed, which led to the conclusion that previous research which argued that people regulate their moral self and that they act based on salient social norms, has not been replicated. Explanations and implications for future research are being discussed.

Introduction

In *Ethica Niomachea*, Aristotle wrote that morality is the most important virtue on which people evaluate themselves (*Ethica Niomachea*, 350 BC/2008, Aristotle). In our everyday lives, we are confronted with decisions, related to this morality virtue. For example, choosing a bike over a car because it is better for the environment, paying enough taxes to contribute to social services or not drinking while driving because it is dangerous and against the law. Schwartz & Bardi (2001) demonstrated that it is important for people to see themselves as moral and Jordan, Mullen, & Murninghan (2011) found that current behaviour is based on past (im)moral behaviour**.** Adding to that, Gollwitzer & Kirchhoff (1998) stress in their Self-completion theory on moral behaviour, in which they argue that people are motivated to act towards goals that provide them with symbols that are important for their ideal self-image. People feel complete when they acquire symbols related to their ideal self-image, which results in 'leaning back' towards identity-relevant goals. However, people feel incomplete when they do not manage to reach those goals, which leads to compensatory behaviour to require the symbols needed for a cherished self-image (Gollwitzer, Wicklund & Hilton, 1982; Jordan *et al.,* 2011).

As a result of the behaviour described in Self-completion theory, moral self-licensing can occur. Moral self-licensing arises when people got confidence to act immoral because they feel moral affirmation (Monin & Miller, 2001). For example, Jordan, Mullen and Murninghan (2011) conducted a study in which they asked participants to write about a time in their past when they acted (im)moral. Next after a filler up task, the experimenters asked the participants how likely it was that they would engage in prosocial activities like donating money to charity or donating blood. The results showed that people who had recalled moral behaviour from their past, had fewer intentions to engage in prosocial behaviour, which is an example of moral licensing. Hence, when you decided to take a bike over a car because it's better for the

environment, moral-licensing in a future decision can follow. On the contrary, when people decide to take a car over a bike it reflects an 'immoral' decision which can result in moral cleansing behaviour. Moral cleansing is when people engage in moral decisions because they feel moral threat as a result of past immoral behaviour (Sachdeva, Lliev, & Medin, 2009). There is research supporting the view that people regulate their moral self-worth when they think about their immoral past. In the same study mentioned above, Jordan *et al.* (2011) also found that after people recollected immoral behaviour, they engaged in more moral activities, reported stronger prosocial intentions and cheated less compared to people who recollected moral behaviour.

However, people do not always regulate their moral self through their behaviour. Social psychologist Leon Festinger published in the late 1950's his theory about cognitive dissonance, in which he argues that it is uncomfortable and threatening to people when they act inconsistent with their past behaviour (Festinger, 1957, cited Merrit, Effron & Monin, 2010). This would mean that people have a preference for acting consistent, which means that someone's behaviour is consistent with his or her previous behaviour. Conversely, according to Jordan *et al.* (2011), moral behaviour is not stable, but rather dynamic and fluctuant over time, and based on current self-perceptions of the moral self. At last, Fishbach and Dhar (2005) suggest that framing can influence whether someone applies self-regulation or when someone shows consistency. When behaviour is framed as *commitment* to reach a goal, people will show consistent behaviour, but when behaviour is framed as *progress* towards a goal, they show self-regulation (Fishbach & Dhar, 2005). Taken together, since previous research is contradicting, the question still remains when people decide to act consistent with their past behaviour, and when they choose to regulate.

However, morality, past (im)moral behaviour and framing are not the only factors that can influence our present behaviour. A lot of our present behaviour is also dependent on the

social norm represented. Social norms influence human behaviour in a way that they reflect what people think other people *should* do and what other people *actually* do. Norms that describe what most people do are referred to as descriptive norms, whereby norms that describe what people should do are referred to as prescriptive norms (Cialdini, Kallgren & Reno, 1991). Cialdini (2003) found that people conform their behaviour to the norm that is focal to people's attention. Cialdini performed a study in which he promoted environmental conscious behaviour by either stressing on the descriptive norm '*many past visitors have removed petrified wood from the park, changing the natural stage of the petrified forest'* or the prescriptive norm '*please don't remove the petrified wood from the park, in order to preserve the natural state of the petrified forest*'. As predicted, people took more wood from the forest with the presence of the descriptive norm, than when was stressed on the prescriptive norm.

But the question is how strong the influence of these norms is. Do norms influence a person's behaviour, even when someone knows it would not be the moral choice? And can this be explained by the salience of a specific norm and moral self-regulation? Although research has looked at the influence of norms on behaviour and the influence of moral self-regulation on behaviour, it is not been researched yet what the effect is on behaviour of those two moderators combined. Since it is the case in most real-life situations that the constructs of past (im)moral behaviour and social norms are present at the same time, it is relevant to look at their influence on moral behaviour in the present, in order to understand why people show (im)moral behaviour. In fact, different researches argue that there is a link between social norms and morality. For example, some argue that morality is *based* on social norms. Garret Hardin argued in his *Tragedy of the Commons* already in 1968 that morality is system-sensitive. What people perceive as moral varies over time and depends on the established norm. Where it was acceptable to hunt animals to use only their tongue for dinner two hundred years ago, nowadays when some species are endangered, this wouldn't be approved by many people (Hardin, 1968).

Whether individual behaviour is perceived as moral or not, seems to depend on the social norms that prevail during that time period. Therefore one could argue the same for pro-environmental behaviour in 2017 versus 1977. 40 years ago it was normal to use mostly fossil fuels for energy consumption. But since it is known that fossil fuels influence climate change negatively (Obama, 2017), attitudes towards fossil fuels are becoming negative and people are increasing their use of renewable energy. Hence, pro-environmental behaviour is starting to become the new established moral norm.

Although the suggestion is that people's behaviour is mainly influenced by moral self-regulation and the norm being salient, there is yet another relevant factor that could influence this process, and that is the influence of differences between individuals. Especially individual differences related to the effect of social norms and moral regulation can possibly have a meaningful impact, because norms don't influence everybody to the same extent. Personalities differ in the way they are influenced by norms. One theory that tries to explain why some people are more sensitive to norms than others, is known as Self-monitoring theory (Snyder, 1974; Gangestad & Snyder, 2000). According to this theory people differ in the way they behave and change their behaviour towards social cues and situations, whereby a distinction is made between high and low self-monitors. High self-monitors tend to adjust their behaviour depending on the situation, and therefore hold attitudes that fulfil a social function. On the other hand, low self-monitors seem to adjust their behaviour less depending on the situation and on social cues, and therefore hold attitudes that fulfil a more value expressive function (Snyder & DeBono, 1985; Maio & Haddock, 2010). So combined with moral self-regulation and the norm being salient, an individuals' level of self-monitoring can help explain why people show moral or immoral behaviour.

Therefore the central question in this paper is what the influence is of norms on moral behaviour when someone is just reminded of their own (im)moral past, and to what extent this

varies between individuals. Based on findings of Jordan, Mullen & Murninghan (2011) and Monin & Miller (2001) it was expected that when people are reminded of their own moral behaviour, they were more likely to show moral licensing, whereas when participants recollected own immoral behaviour they would show moral cleansing. However, based on conclusions from Effron, Merrit & Monin (2010) and in line with Festinger's Cognitive dissonance theory (1957), people do not always regulate their behaviour but also show consistency. Suggested is that whether people regulate or show consistency depends on the social norm being salient and is being influenced by whether people are low or high self-monitors. Hence, it was expected that when people were reminded of their moral past and were presented with a norm that is both moral and descriptive, people would show consistent behaviour. However, when people were reminded of their immoral past and were presented with a norm that is both moral and descriptive, people would show moral regulation by self-cleansing behaviour. Further was expected that high self-monitors were more sensitive to descriptive norms, since they rely more on cues from the social environment. On the other hand, for low self-monitors no difference was expected in sensitivity to a specific norm, because they hold on stronger to their own values instead of the available social norm. In line with this assumption, it can be hypothesised that whether someone regulates or shows consistent behaviour depends on the norm being salient and on the level of self-monitoring. When a salient norm was both descriptive and immoral after someone was reminded of their moral past, expected was that high self-monitors would show a preference for self-licensing, while low self-monitors would show consistent behaviour. However, when a salient norm was both descriptive and immoral after someone was reminded of their immoral past, predicted was that high self-monitors would show a preference for consistent behaviour, while low self-monitors would show self-cleansing behaviour.

In the current study, these ideas were tested via an online experiment. The study looked at present (im)moral behaviour when people were reminded of their (im)moral past and were presented with a salient norm. Past behaviour was manipulated by reminding people of their own moral or immoral behaviour, followed by a choice to show moral or immoral behaviour that was manipulated by the option for a charity donation and joining a lottery. Joining the lottery could result in winning the lottery for own gains, whereas donating to charity provided no individual gain. Since the choice to donate for the lottery reflected a proself option and the choice to donate for charity reflected a prosocial option, the proself option served as the immoral choice, while the prosocial option served as the moral option. Norms were manipulated in three different directions. Either a prescriptive or descriptive norm was salient (1), both prescriptive and descriptive norm were salient (2) or no norm was salient (3). The charity donation was always the prescriptive norm since there could be only one prescriptive norm. Together with the expectations described earlier, this led to the following four hypotheses:

Hypothesis 1: when people recollected moral behaviour and were presented with a descriptive (and prescriptive) norm of charity donation, people would show consistent moral behaviour by donating to charity (see figure 1).

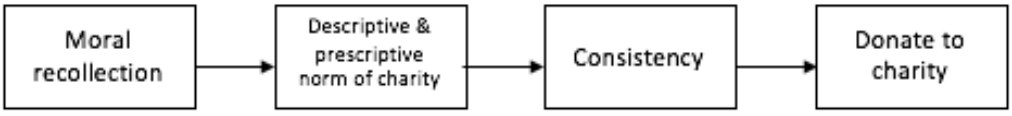

Figure 1. Hypothesis 1.

Hypothesis 2: when people recollected immoral past behaviour and were presented with a descriptive (and prescriptive) norm of charity donation, people would show self-cleansing by donating to the charity (see figure 2).

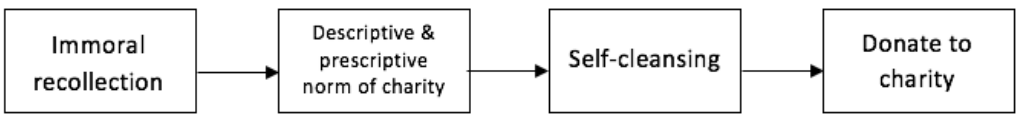

Figure 2. Hypothesis 2.

Hypothesis 3: when people recollected moral past behaviour and were presented with a descriptive norm of lottery donation, high self-monitors would show self-licensing by donating to the lottery, whereas low self-monitors would show consistent behaviour by donating to charity (see figure 3).

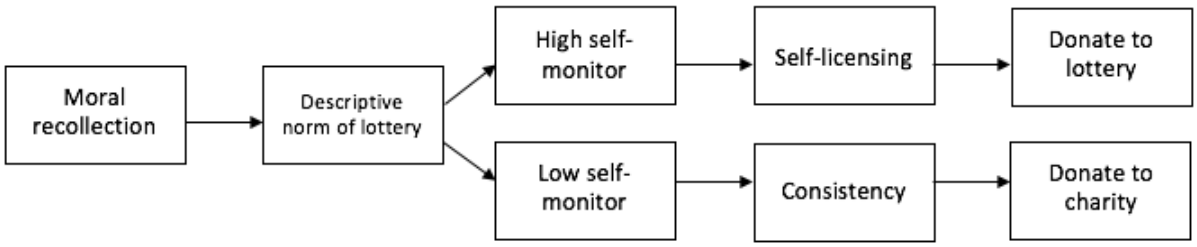

Figure 3. Hypothesis 3.

Hypothesis 4: when people recollected immoral past behaviour and were presented with a descriptive norm of lottery donation, a conflict would follow because people want to show self-cleansing, but this conflicts with the descriptive norm. High self-monitors would then show consistent behaviour with donating to the lottery, while low self-monitors would show moral self-cleansing by donating to charity (see figure 4).

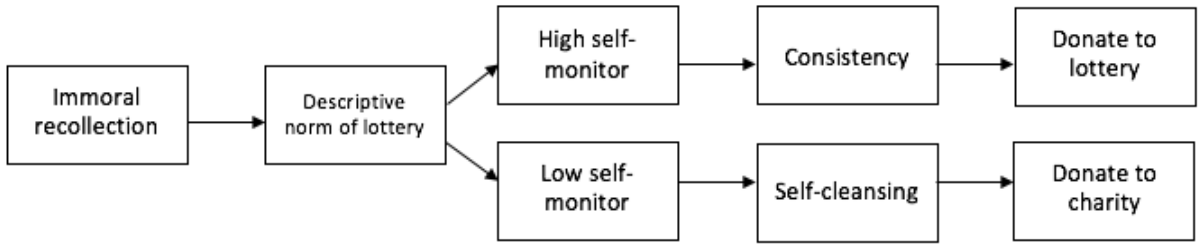

Figure 4. Hypothesis 4.

Method

3.1 *Participants and experimental design*

452 participants were recruited via the Mturk platform of Amazon. Anyone who was not aware of the purpose of the study could participate. To disguise the dependent variable of donating behaviour, participants were told that with participating in the study, they could win a lottery up to $225,- (the total amount when everybody would give all their money to the

lottery jar). An online experiment was conducted with a 3 (morality; moral, immoral, control) x3 (norm; prescriptive, descriptive, prescriptive and descriptive) two factor (morality and norms) between subject design. The independent variable of morality was operationalised by recollecting past behaviour and existed of a moral, an immoral and a control condition. The independent variable 'norm' included a prescriptive norm for charity, a descriptive norm for charity and a descriptive norm for lottery. The measure of self-monitoring was included as a continuous variable. Not all the variables in the overall study were used in every individual research. My colleagues looked at the variables of norm, morality and social anxiety, using a 3x3 two factor between subject design. In my research, I focused on the variables of norm, morality and self-monitoring, using a 3x3 two factor between subject design.

3.2 Materials

Morality: The first independent variable 'morality' consisted of three levels: moral, immoral and neutral behaviour (control condition). This variable was operationalised with use of an autobiographical recall task (Van Dillen, Enter, Peters, van Dijk & Rotteveel, 2017; Jordan *et al.,* 2011), where participants were asked to write down a detailed story of either an immoral or moral behaviour from their past. The control condition was asked to write down a detailed story of the last time they went to the grocery store (Van Dillen *et al.,* 2017). This was done through an online questionnaire, included in the rest of the experiment. To check whether the manipulation was successful and if participants felt moral threat or moral affirmation, participants were asked to indicate on 7-point scales (1=*not at all*, 7=*very much*) the extent to which they experienced seven negative emotions (sadness, guilt, disgust, shame, bad feelings about the self, anger, and fear) and five positive emotions (happiness, good feelings about the self, pleasure, satisfaction, and pride; cf Van Dillen *et al.,* 2017).

Norm salience: The second independent variable 'norm' also consisted of three levels: a prescriptive norm for charity, a descriptive norm for charity, and a descriptive norm for

lottery. To manipulate the norms, a task with two jars was designed based on the dictator game for measuring decision making (Kahneman, Knetsch & Thaler, 1986). The design contained one jar where participants could donate money for charity and one where people could put money to join a lottery. Each jar represented one of the norms whereby the jar with the most money always displayed the descriptive norm (no matter which jar it was), and the charity jar always displayed the prescriptive norm (no matter how much money was in the jar). This was because assumed was that donating to charity reflected what people *should* do and was therefore the moral choice, as compared to join a lottery for own gains, which reflected the immoral choice.

Participants were randomly assigned to the moral, immoral or control condition. In the moral condition the descriptive and prescriptive norm both reflected the same norm: donate to charity. The charity jar was filled for ¾ with money, the lottery jar was filled for ¼ with money. In the immoral condition the descriptive and prescriptive norm both reflected a different norm: the prescriptive norm was donating to charity, and the descriptive norm was giving to the lottery. The charity jar was filled for ¼ with money, the lottery jar was filled for ¾ with money. At last, the control condition had no descriptive norm and therefore both jars were filled for ¼ with money. The prescriptive norm of donating to charity was however present, since this norm couldn't be eliminated. The jars were exposed on the screen after thanking the participants for participating in the experiment.

Donating behaviour: To see if people either regulated or showed consistent (im)moral behaviour, donating behaviour for charity and giving money for a lottery was used as dependent variable. This format was used because it has been proved in other studies like Jordan *et al.* (2011) that it can be used to measure (im)moral behaviour (lottery vs. charity donation). Moral and immoral behaviour was measured by how much participants donated in the charity jar and/or gave to the lottery jar. Participants could either choose to give all their money to the

lottery or to UNICEF, or could split their money between the two causes. By matching donating behaviour with recollection of a participants' (im)moral past, it was observed whether an individual showed consistent or regulating behaviour. As a charity cause for donating UNICEF was used, because this is a popular charity cause for United States citizens (www.statistia.com, www.topnonprofit.com). Participants all received 5 coins of 10 cents (in Dollars), whereby they were given the instruction to distribute the money between the jars. For this amount of money was chosen to prevent that participants would distribute the coins equally. Before the participants distributed their money, they saw the following text displayed on their screen: *'Thank you for your participation. As a thank you gift we would like to give you the opportunity to donate $0,50 to UNICEF where your money will be donated to help children or to a lottery where you have a chance on winning all the money placed in the lottery jar. You can also divide your money over both causes*[1].

Self-monitoring: Self-monitoring served as a moderator between moral recollection, norms and observed donating behaviour. Level of self-monitoring was measured with the original Self-Monitoring Scale (Snyder, 1974), whereby people can score high, average or low on self-monitoring. This questionnaire was included in the beginning of the experiment, before the moral integrity manipulation. The questionnaire consisted of 25 items that measured to what extend individuals are moderating their behaviour in the presence of other people. An example question was '*when I am uncertain how to act in a social situation, I look to the behaviour of the others for cues'.* Participants could either answer 'true' or 'false', whereby true meant that the statement is (mostly) in line with their behaviour, and false meant that the statement is (mostly) not in line with their behaviour. The total score was based on the number of matches of the answers (true or false) with the scoring scale (true or false), whereby 0 was the lowest

[1] A pilot study (n = 44) was conducted to find out which rending of pictures of jars was considered most veracious. Pictures of the jars can be found in the appendix.

and 25 the highest possible score. A score between the range of 0 and 8 was a low self-monitor, between 8 and 13 an average self-monitor and a score between 13 and 25 was a high self-monitor (Snyder, 1974).

Social Anxiety: Social anxiety served as a moderator between moral recollection, norms and observed donating behaviour. The level of social anxiety was measured with the social anxiety and distress scale with a modified response (Likert scale from 1 to 5 instead of yes or no) by High & Caplan (2009). This assessment was also included in the beginning of the experiment. However, I did not include this moderator in my analysis.

Social Economic Status: Participants rated their own social economic status using a social economic ladder. With help of this ladder they could rate their own economic status in relation to the status of other US citizens on a scale from 1 (lowest) to 10 (highest).

3.3 Procedure

Participants who agreed to join the experiment received an online link to participate. They were thanked for participation and asked to sign the informed consent. After they filled in their demographics, the social anxiety assessment and the self-monitoring questionnaire, participants were randomly assigned to one of the three conditions and were asked to write down a moral or an immoral memory, or were asked to write down their last supermarket visit. Next participants indicated on a 7-point scale their self-reported positive and negative emotions and were thanked for their participation. At last participants saw a message on their computer screen that they received an extra $0,50 which they could donate to UNICEF and/or give to a lottery where they had the chance to win an amount of money. After donating and/or giving money to the lottery participants were debriefed, thanked again and were informed that when the experiment was finished they received notice when they had won the lottery. Finally, participants received their compensation of $1,50.

Results

4.1 Participants and manipulation check

A total of 452 MTurk workers from the United States completed the survey in return for $1,50. After a manipulation check, 404 participants remained in the study, including 193 males (M_{age} = 39.37, *SD* = 11.70). 10 participants were excluded because the manipulation of (im)moral behaviour didn't influence their positive or negative emotions (scores on all emotions were a 1 or 2 on a scale from 1 to 7, whereby 1=*not at all* and 7=*very much*). 21 participants were excluded because they felt more positive than negative (>3 on a scale from 1 to 7) about an immoral memory, and 15 participants were excluded because they felt more negative than positive (>3 on a scale from 1 to 7) about a moral memory. One person was excluded because he confessed that he was addicted to gambling and one was excluded because he didn't want to cooperate with the survey. Since most participants were excluded from the immoral condition compared to the other conditions, apparently some immoral recollections were not immoral enough to create negative emotions, because they experienced more positive emotions. It was important to exclude participants for whom the manipulation did not have an effect or when they felt positive instead of negative and vice-versa because from them no effect was expected. Consequently, this resulted in 131 participants in the moral condition, 118 in the immoral and 155 in the control condition[2].

Using a social economic ladder, participants rated their own social economic status (10-point scale, 1= *lowest*, 10=*highest*). The minimum score was 1 and the maximum score was 8 (M_{SES} = 4,71, *SD* = 1.62). This resulted in an average score that was almost at the middle point of the scale. A one-way between-groups analysis of variance was conducted to explore if conditions differed in level of social economic status. Preliminary checks were done to ensure

[2] To be certain a separate analysis was conducted including all participants, but no significant main effect for morality (F (2) = 0.006, p = .99, norm (F (2) = 1.685, p = .187 and self-monitoring (F (2) = 2.430, p = .120) was found.

that no assumptions were being violated[3]. Subjects were divided into three groups according to their recollected behaviour (condition 1: moral; condition 2: immoral; condition 3: control). The results showed that the conditions did not differed significantly in level of social economic status, F (2, 401) = 2.64, p = .073.

4.2. Manipulation check positive and negative emotions

A one-way repeated measures ANOVA was conducted to compare five self-reported positive emotions and seven negative emotions, with emotion as within-participants' factor and moral recollection (moral, immoral, control) as between-participants' factor. Preliminary checks were conducted to ensure that no violations of assumptions were made[4].

Table 1. *Self-reported positive and negative emotions (mean, standard deviation) as a function of moral recollection condition (moral, immoral, control) on a 7-point scale (1=not at all, 7=very much).*

	Moral recollection		
	Moral	Immoral	Control
Positive emotions			
Happiness	4,69 (2,03)	1,67 (1,275)	3,82 (2,04)
Good feelings about yourself	5,57 (1,741)	1,61 (1,125)	3,97 (2,07)
Pleasure	4,26 (2,193)	1,58 (1,243)	3,54 (2,18)
Satisfaction	5,39(1,92)	1,69 (1,4)	4,23 (2,29)
Pride	5,21 (1,888)	1,38 (0,905)	2,99 (1,93)
Negative emotions			
Sadness	1,84 (1,508)	3,95 (1,885)	1,52 (1,09)
Guilt	1,47 (1,198)	5,75 (1,396)	1,32 (0,83)

[3]Normality assumption was not violated due to a sufficient n per group. The homogeneity assumption was not violated because Levene's test was not significant (F (2, 401) = .056, p = .945). Independent errors assumption is a design matter. The errors of one participant were not related to the errors of another participant, so there was no violation of this assumption.

[4] Multivariate normality assumption was not violated because the test that were used are robust for this kind of violation. Independent errors assumption is a design matter. The errors of one participant were not related to the errors of another participant, so there was no violation of this assumption. For the assumption of sphericity was controlled with the use of Huyn-Feldt test, because the epsilon for Greenhouse-Geisser test was too high (ε_{GG} = .91).

Disgust	1,54 (1,432)	3,83 (1,98)	1,53 (1,18)
Shame	1,38 (1,126)	5,22 (1,72)	1,30 (1,0)
Bad feelings about yourself	1,31 (0,919)	5,19 (1,78)	1,57 (1,29)
Anger	1,62 (1,496)	2,38 (1,669)	1,68 (1,33)
Fear	1,39 (1,049)	2,6 (1,789)	1,47 (1,21)

Because $\varepsilon_{GG} > .75$ ($\varepsilon_{GG} = .91$), Huynh-Feldt epsilon was used ($\varepsilon_{HF} = .92$) for the corrected *F*. Results showed a significant effect for moral recollection, $F\ (2, 401) = 132.92$, $p < .001$ and a significant interaction between moral recollection and emotion, $F\ (7,351) = 25.40$, $p < .001$. To find out which groups differed significantly from each other, a multivariate analysis of variance was conducted. Compared to the immoral and control condition, participants in the moral condition reported more happiness ($F\ (2, 401) = 87,58$, $p < .001$, $\eta_p^2 = .30$), good feelings about themselves ($F\ (2, 401) = 163,82$, $p < .001$, $\eta_p^2 = .45$), pleasure ($F\ (2, 401) = 61,73$, $p < .001$, $\eta_p^2 = .24$), satisfaction ($F\ (2, 401) = 117,08$, $p < .001$, $\eta_p^2 = .37$) and pride ($F\ (2, 401) = 163,47$, $p < .001$, $\eta_p^2 = .45$), confirming that the manipulation of recollecting moral behaviour increased positive emotions in the moral condition, compared to the immoral and control condition. Means of positive emotions between the immoral and control did also differ significantly from each other ($F_s > 61.73$, $ps < .001$; for an overview of means and standard deviations see table 1).

A similar analysis was conducted for self-reported negative emotions, and again preliminary checks were conducted to ensure that no violations of assumptions were made[5]. Because $\varepsilon_{GG} > .75$ ($\varepsilon_{GG} = .76$), Huynh-Feldt epsilon ($\varepsilon_{HF} = .77$) was used for the corrected *F*. Results showed a significant effect for immoral recollection, $F = (2, 401) = 282.02$, $p < .001$, as well as a significant interaction between emotion and immoral recollection $F\ (9, 236) = 80.50$,

[5]Multivariate normality assumption was not violated because the test that was used is robust for this kind of violation. Independent errors assumption is a design matter. The errors of one participant were not related to the errors of another participant, so there was no violation of this assumption. For the assumption of sphericity was controlled with the use of Huyn-Feldt test, because the epsilon for Greenhouse-Geisser test was too high ($\varepsilon_{GG} = .76$).

p <.001. To find out which groups differed significantly, a multivariate analysis of variance was conducted. Participants in the immoral condition reported significantly stronger feelings of sadness (F (2, 401) = 99,10, p< .001, η_p^2 = .33), guilt (F (2, 401) = 614,63, p< .001, η_p^2 = .75), disgust (F (2,401) = 94,12, p< .001, η_p^2 = .32), shame (F (2, 401) = 381,07, p< .001, η_p^2 = .66), bad feelings about themselves (F (2, 401) = 319,41, p< .001, η_p^2 = .61), anger (F (2, 401) = 10,11, p< .001, η_p^2 = .05) and fear (F (2, 401) = 30,84, p< .001, η_p^2 = .13), compared to the moral and control condition. Means for negative emotions did not differ significantly between the moral and control condition (ps > .174; see table 1 for an overview of means and standard deviations). In line with the results described above, concluded was that the manipulation succeeded.

4.3 Self-monitoring

To check for the reliability of the Self-Monitoring scale, first the negative items were recoded. Next, all the individual scores per question where recoded in which they were matched with the answering model and where given a new score of 0 (no match with answering model) or a 1 (match with answering model according to Snyder (1974)), which led to a total score through which a distinction could be made between high, average and low self-monitors. The reliability analysis resulted in a Cronbach's Alpha = .80 for 25 items. Concluded was that the Self-Monitoring scale had a good reliability.

4.4.1 Social norms and the influence of (im)moral recollections

A factorial between-groups ANOVA was conducted to explore the impact of (im)moral memories and social norms on donating behaviour. Hypothesis 1 formulated that when people recollected moral behaviour and were presented with a descriptive (and prescriptive) norm of charity donation, people would show consistent moral behaviour by donating to charity.

Preliminary checks were conducted to ensure that there were no violations of the assumptions[6]. There was a non-significant main effect for morality, F (2, 395) = .20, p = .82, η_p^2 = .001 and a non-significant main effect for norm, F (2, 395) = .93, p = .39, η_p^2 = 004. The means showed that when the social norm of charity donation was salient, the participants in the moral condition donated more to the charity jar (M = 1.53, SD = 1.60) than the immoral condition (M = 1.40, SD = 1.70) but not more than the control condition (M = 1.57, SD = 1.60), as expected. However, the differences between the means were nonsignificant and therefore hypothesis 1 was not confirmed. Hypothesis 2 predicted that when people recollected immoral past behaviour and were presented with a descriptive (and prescriptive) norm of charity donation, people would show self-cleansing behaviour by donating to the charity jar. However, no significant main effect was found for morality F (2, 395) = .20, p = .82, η_p^2 = .001 and norm F (2, 395) = .93, p = .39, η_p^2 = 004. The interaction between morality and norms did also not reach statistical significance (F (4, 395) = .38, p = .82, η_p^2 = 003). When the social norm of charity donation was salient, the means showed that participants who recollected immoral behaviour did not show self-licensing behaviour as expected, and donated more to the lottery jar (M = 3.60, SD = 1.70) than the moral condition (M = 3.47, SD = 1.59) and the control condition (M = 3.43, SD = 1.54). However, since the differences between the means were nonsignificant, hypothesis 2 was not confirmed.

In sum, the differences between the means were in line with hypothesis 1 but not in line with hypothesis 2. When a social norm of charity donation was made salient, both participants in the moral and immoral condition showed consistent behaviour compared to their recollected

[6] Normality assumption was not violated due to a sufficient n per group. Independent errors assumption is a design matter. The errors of one participant were not related to the errors of another participant, so there was no violation of this assumption. The homogeneity assumption was not violated because Levene's test was not significant (F (8, 395) = .53, p = .837). Using a scatterplot with residuals vs predicted scores, no outliers (>3 or <-3) were found for the dependent variable. Cook's distance was much smaller than 1 (max. = .02). Largest leverage was .008 and since .008> 3(3+1)/404, there were no outliers on the independent variable.

behaviour. However, hypotheses 1 and 2 were not significant and therefore not confirmed, so no conclusions could be drawn.

4.4.2 Social norms, the influence of (im)moral recollection and self-monitoring

A factorial between-groups ANCOVA was conducted to explore the impact of (im)moral memories and social norms on donating behaviour with self-monitoring as covariate. Preliminary checks were conducted to ensure that there were no violations of the ANCOVA assumptions[7]. Hypothesis 3 formulated that when people recollected moral past behaviour and were presented with a descriptive norm of lottery donation, high self-monitors would show self-licensing by donating to the lottery, whereas people who are low self-monitors would show consistent behaviour by donating to charity. No significant main effect was found for morality (F (2,385) = .21 p = .81, η_p^2 = 001), norm (F (2,385) = .78, p = .46, η_p^2 = 003), and self-monitoring, F (1, 385) = 2.23, p = .14, η_p^2 = 005. When reminded of moral past behaviour and when the lottery norm was salient, high monitors showed self-licensing behaviour by giving more to the lottery jar (M = 3.89, SD = .37) compared to the immoral condition (M = 3.42, SD = .38) and the control condition (M = 3.80, SD = .27), which was in line with hypothesis 3. However, after low self-monitors were reminded of their moral past behaviour combined with a salient lottery norm, they gave more to the lottery jar (M = 3.76, SD =.32) compared to the control condition (M = 3.70, SD = .33), but not compared to the immoral condition (M = 4.01, SD = .41), which was not in line with hypothesis 3. However none of the means differed significantly, and therefore hypothesis 3 was not confirmed. Hypothesis 4 predicted that when people recollected immoral past behaviour and were presented with a descriptive norm of

[7] Normality assumption was not violated since F is robust. Homogeneity assumption was not violated because Levene's Test is not significant (F (8,394) = .31, p = .964). Reliable covariate assumption was not violated (Cronbach's Alpha =.80). Independent errors assumption is a design matter. The errors of one participant were not related to the errors of another participant, so there is no violation of this assumption. Linearity assumption was not violated because there were no signs of nonlinearity in the predicted vs residuals plot. Using a scatterplot with residuals vs predicted scores, no outliers (>3 or <-3) were found for the dependent variable. Cook's distance was much smaller than 1 (max. = .04). Largest leverage was .008 and since .008> 3(3+1)/404, there were no outliers on the independent variable.

lottery donation, high self-monitors would show consistent behaviour with donating to the lottery, while low self-monitors would show self-cleansing behaviour by donating to charity. Neither one of the main effects were statistically significant (morality, F (2,385) = .21 p = .81, η_p^2 = 001; norm, F (2,385) = .78, p = .46, η_p^2 = 003). The covariate self-monitoring was also not significant, F (1, 385) = 2.23, p = .14, η_p^2 = 005. Also no significant interaction effect was found between morality and self-monitoring (F (2, 385) = .34, p = .71, η_p^2 = 001), social norms and self-monitoring (F (2, 385) = 1.26, p = .29, η_p^2 = 006) and social norms and morality (F (2, 385) = .63, p = .64, η_p^2 = 006). When reminded of immoral past behaviour and when the lottery norm was salient, high self-monitors did not show consistent behaviour by giving less to the lottery jar (M = 3.42, SD = .38) compared to the moral condition (M = 3.89, SD = .33) and the control condition (M = 3.80, SD = .27), which is not in line with hypothesis 4. When low self-monitors were reminded of immoral past behaviour combined with a salient lottery norm, participants did not showed self-cleansing behaviour and instead gave more money to the lottery jar ((M = 4.01, SD = *.41*) compared to the moral condition (M = 3.76, SD =.32) and the control condition (M = 3.70, SD = .33), which was also not in line with hypothesis 4. Again, these results indicate that there was no difference in high and low self-monitors for donating behaviour, but none of the results reached statistical significance and therefore hypothesis 4 was not confirmed.

In sum, the means showed a confirmation for hypothesis 3 but not for hypothesis 4 towards high self-monitors. For both hypotheses 3 and 4 the means did not show a confirmation towards low self-monitors[8]. However, since none of the results were statistically significant, hypotheses 3 and 4 were not confirmed.

[8] Ordinal regression was conducted to see if significant main effects or interactions could be found. However, there was not a good data fit with this method and the assumptions were violated. Consequently, this method was eliminated. An explorative analysis was also conducted, but no significant results were found.

Overall, based on all means suggested was that when participants were reminded of their moral behaviour they showed moral licensing, except when the social norm of charity was made salient. In that case participants showed consistent behaviour, and donated more to charity compared to the immoral (but not the control) condition (see table 2). In general, participants gave more money to the lottery (*M*=3,64; *SD*=1,59) than that they donated to charity (*M*=1,36; *SD*=1,59), no matter in which condition they were, see table 2.

Table 2. *Means and standard deviations (between brackets) of average amount of coins per jar (0 = minimum, 5 = maximum) as a function of moral condition and norm condition.*

		Jar	
	Salient norm	Charity	Lottery
Moral	Lottery norm	1,18 (1,603)	3,82 (1,603)
	Charity norm	1,53 (1,594)	3,47 (1,594)
	No norm	1,18 (1,402)	3,82 (1,402)
Immoral	Lottery norm	1,3 (1,667)	3,7 (1,667)
	Charity norm	1,4 (1,698)	3,6 (1,698)
	No norm	1,6 (1,676)	3,4 (1,676)

Discussion

In our everyday lives, we are confronted with decisions that can result in moral or immoral behaviour. Morality is a factor that has been studied thoroughly, and this study was meant to contribute to this literature by exploring the idea of moral self-regulation and showing the influence of social norms on (im)moral behaviour. Expected was that social norms and (im)moral recollection of memories can influence moral behaviour, and that individuals differ in to what extend this happens. However, in this study no support was found for the idea that social norms and memories of (im)moral behaviour influence donating behaviour, and self-monitoring as a trait for individual differences did not further moderated any effects. Although sometimes the results were in the predicted direction, none of the hypotheses were confirmed..

More specifically, hypothesis 1 predicted that when people recollected moral behaviour and were presented with a descriptive (and prescriptive) norm of charity donation, people would show consistent moral behaviour by donating to charity, but this was not confirmed. When people recollected immoral past behaviour and were presented with charity donation norm, hypothesis 2 predicted that people would show self-cleansing behaviour by donating to charity, but this was also not confirmed. Moreover, expected was that when people recollected moral past behaviour and were presented with a descriptive norm of lottery donation, high self-monitors would show self-licensing by donating to the lottery, whereas people who are low self-monitors would show consistent behaviour by donating to charity (hypothesis 3). However, no difference was found between high and low self-monitors in donating behaviour and hypothesis 3 was not confirmed. At last, hypothesis 4 predicted that when people recollected immoral past behaviour and were presented with a descriptive norm of lottery donation, high self-monitors would show consistent behaviour with donating to the lottery, while low self-monitors would show moral self-cleansing by donating to charity, but this was also not confirmed. Hence, based on these results it seems there is no influence of social norms on moral behaviour when someone is just reminded of their own (im)moral behaviour, and that level of self-monitoring does not seem to matter. This means that this study doesn't offer an explanation why people show (im)moral behaviour and why people sometimes show consistent behaviour and sometimes regulate. Moreover, the study wasn't able to demonstrate that self-monitoring can serve as a reason for individual differences in showing (im)moral behaviour.

It is especially remarkable to see that hypotheses 1 and 2 were not confirmed. Previous studies have proven multiple times the effects of moral self-regulation when confronted with past (im)moral behaviour (a.o. Jordan, Mullen, & Murninghan, 2011; Monin & Miller, 2001). Moreover, among others, Cialdini and colleagues (1991) found convincing evidence that social norms influence people's behaviour. Cialdini (2003) found that people conform their behaviour

to the norm that is focal to people's attention. Based on these results one would expect that not only separated, but that both (im)moral memories and social norms combined can predict (im)moral behaviour. The question is what kind of explanation there is for the unexpected results of this study. A possible clarification for these results can be found when looking at theory about gambling behaviour in relation to risk aversive and risk seeking behaviour. Prospect theory (Kahneman & Tversky, 1986) argues that people base their decisions on their reference point, and are dependent of this reference point, risk seeking or risk aversive. When there is a choice between a sure *gain* of $50,- or a higher uncertain gain (50% to get $100,-) but also the possibility of getting nothing, people show risk aversive behaviour and choose the first option, because this option has more *subjective* value for them. But when there is an option between a sure *loss* of $50,- and the same option with a high uncertain gain (50% to get $100,-) or the possibility of getting nothing, people show risk seeking behaviour and choose for the second option, because now this option has more *subjective* value (Kahneman & Tversky, 1986). This study is a bit similar to option two where people show risk seeking behaviour, because there is a certain option of getting nothing (donating to charity) versus an uncertain option with a possibility of gaining something (the lottery of $225,-). Because participants in this study are in the risk domain, there is a bigger chance that they will show more risk seeking behaviour and therefore choose the lottery more often. This would explain why all participants contributed more money to the lottery jar compared to the charity jar. Another alternative explanation could be related to the methodology of this research, specifically the manipulation of the present social norms. At the end of the survey participants were asked what they thought the purpose of the study was. Positive was that nobody found out what the purpose was, but on the other side it was also conspicuous that nobody of the 452 participants referred to the manipulation of the social norms reflected on the jars. This could mean that in some way the manipulation of making the social norm salient using the amount of money in the jars was not

successful and didn't influence participants. This could explain why no results were found regarding the influence of a social norm. Another explanation could be related to the amount of money participants could distribute. $0,50 is not a lot of money, and therefore the weighting of donating $0,50 to UNICEF which will help relatively very little, versus joining a lottery for $0,50 with the chance of winning $225,- seems much more profitable. Especially with a group of participants were the mean level of their self-perceived social economic status is 4,63 on a scale from 1 to 10, the incentive of the lottery could have possible overruled the influence of the salient social norm. Although no significant results were found here, it is still relevant to look at the combined influence of norms and past (im)moral behaviour in future research, since these factors are most common to occur simultaneously. To increase chances of finding meaningful results in the future, the methodologic limitations of this research can be improved by giving participants more money to divide, and improving the manipulation of social norms.

Furthermore, yet another explanation for the lack of significant results found can be linked to the fact that MTurk workers were used as participants in this study. Because they participated in this study to earn money, it makes sense when they chose a lottery more often, versus choosing to donate to a charity cause. Hence, in future research it would be a good alternative to use a different, more diverse sample. A last possible explanation for the results found could be that the manipulation of (im)moral memories was not strong enough to create self-regulating behaviour. However, after the autobiographical memory task participants had to rate their experience of positive and negative emotions, and the manipulation check showed that participants who had collected a moral memory reported higher positive emotions, whereas participants who had collected an immoral memory reported higher negative emotions. Consequently, concluded was that the manipulation succeeded. This method has also proven its validity in previous research such as by van Dillen *et al.* (2017), so this does not seem to explain the unexpected results.

No evidence was found for the theory of moral self-regulation (Monin & Miller, 2001; Fishbach & Dhar, 2005). This is unexpected since this theory has been replicated multiple times, and therefore the non-confirmation is a surprising result by itself. The question rises whether outcomes of this study can be perceived as an exception, or that the theory of moral self-regulation is maybe not as strong as is claimed in other studies. For example, it is interesting to see that people who perceive themselves on or below average of the social economic ladder, are apparently influenced differently by their (im)moral past behaviours, then people in samples that are normally used in moral self-regulating studies, such as graduate students. Since no conclusions are possible based on this study and there is no comparable sample available with a high mean of perceived social economic status, it would be interesting to see in future research whether this factor of sample heterogeneity can influence if and when people show (im)moral behaviour after they are reminded of their own (im)moral behaviour. Furthermore, it is still plausible that the effect of moral self-regulation combined with the anticipation on present social norms can be influenced by individual differences on constructs such as self-monitoring. Although this study didn't confirm the influence of individual differences via self-monitoring, it is an interesting first step to find out more about the impact on moral behaviour. A good first step would be to look at the influence of self-monitoring on (im)moral behaviour separated from present social norms, and if individuals deal differently with salient social norms, aside from (im)moral behaviour. This could give more insights in the mechanism of self-monitoring and could possible explain why no effect was found in this research.

In some way, the outcomes that are found are in line with argument of Jordan *et al.* (2011) that the moral self is not static, but rather dynamic. Apparently moral behaviour needs specific circumstances to occur. When the need for money is reasonable, the moral choice is put aside and preference for a (small) chance to win a lottery increases. In their Self-completion theory on moral self-regulation, Gollwitzer & Kirchhoff (1998) claim that people are motivated

to behave towards goals that provide them with their ideal self-image. While in Jordan *et al.* (2011) this is related to a moral context, it could be argued that an ideal self-image can also be obtained for example through the possession of money, when money is perceived as a display of power. This could possibly explain why people in this study don't display compensatory behaviour, because that will not help them reach their ideal self-image.

Already back in 350 BC Aristotle wrote that morality is the most important virtue on which people evaluate themselves. If being moral is such an important factor in our lives, in a perfect world only moral people would exist. But since this perfect world is fiction, it is useful to know what does and does not trigger (im)moral behaviour. According to this study, it does not matter if you recall moral or immoral behaviour because it does not influence your future (im)moral behaviour with the presence of a salient social norm. Consequently, it is important to find out what does trigger (im)moral behaviour in this context in order to stimulate preferred behaviour and discourage (unwanted) immoral behaviour in our society.

People do not seem to do the right thing when the incentive (or need) to earn money is high, independent from whether people are reminded of their own (im)moral behaviour combined with a salient social norm. So far, it thus looks like people behave like they would, and not as they should.

Appendix

Appendix 1. *Jars for control condition (no (descriptive) norm salient).*

Appendix 2. *Jars for lottery condition (lottery norm salient).*

Appendix 3. *Jars for charity condition (charity norm salient).*

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