Failure to replicate moral licensing and moral cleansing in an online experiment

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Notes:

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Abstract

Moral licensing occurs when someone who initially behaved morally or cooperatively, later behaves less morally, as if they had a “license” to act badly. On the flipside, moral cleansing occurs when someone first behaves immorally, which prompts them to later behaves more morally. To-date, few studies have investigated individual differences in the moral licensing and cleansing effects. This paper bridges this gap by investigating how cooperative preferences, as measured by social value orientation (SVO), influence engagement in these effects. We hypothesized that prosocial participants would be less likely to license, but more likely to cleanse. Contrary to predictions, we did not replicate the moral licensing or moral cleansing effects, and cooperative preferences did not influence engagement in the effect. However, checks suggest that our manipulations were successful. We postulate that licensing and cleansing effects are unlikely to be elicited online.

Keywords: Moral licensing, moral balancing, moral cleansing, moral compensation, social value orientation

1.1 INTRODUCTION

Moral licensing occurs when someone who initially behaved morally or cooperatively, later behaves less morally or cooperatively, as if they had a “license” to act badly. This effect has been reported in many domains, including cooperation (e.g., Conway & Peetz, 2012), environmentalism (e.g., Geng et al., 2016), and discrimination (e.g., Monin & Miller, 2001). Recent meta-analyses suggest that this is a small, but real effect (Blanken et al., 2015; Kuper & Bott, 2018). On the flipside, the moral cleansing effect happens when people who have behaved immorally, subsequently behave more cooperatively as if they need “cleansing themselves of” their bad deeds (Conway & Peetz, 2012; Jordan et al., 2011). Moral cleansing has also been found across different domains, including cooperation (Conway & Peetz, 2012), and cheating (Jordan et al., 2011).

Despite the vast literature on moral licensing and moral cleansing, with over 400 articles discussing these topics, few papers have investigated individual differences in these effects (see supplement). Moreover, studies have not yet tested whether differences in cooperativeness influence susceptibility to engage in moral licensing or compensation.

We posit that the moral licensing and cleansing effects will be influenced by participants’ cooperativeness, where cooperators will be less likely to engage in moral licensing but more likely to engage in moral cleansing. Recent theoretic and empirical work on the *morality as cooperation hypothesis* suggest that morality is a collection of cultural and biological solutions that solve recurrent problems of human cooperation (Curry et al., 2019). This suggests that morality and cooperation are strongly overlapping constructs, and can be similarly operationalized. Thus, we can predict a moral licensing effect for cooperative manipulations and

dependent measures, in which moral licensing effects have been found (discussion in supplement).

In this study, we characterize peoples' cooperativeness by their social value orientation [SVO]), which is a points-based measure of how much a person values someone else, relative to themselves. SVO has been associated with many real outcomes, including generosity in economic games (Yamagishi et al., 2013), and sacrifice in real-life social relations (Van Lange et al., 1997).

We hypothesize that people who prefer equal outcomes (i.e., prosocials) will cooperate whether or not they have acquired a 'license'. On the flipside, we posit that individuals who aim to maximize their earnings, would use good behaviours to justify being uncooperative, and therefore 'license'. Similarly, for moral cleansing, we posit that cooperators will be more likely to compensate (and cleanse) after recalling immoral behaviours, compared to individuals who are more selfish. The purpose of this study is to investigate how individual differences in SVO influence susceptibility to moral licensing and cleansing effects.

1.2 METHODS

This experiment was pre-registered at osf.io/8bm5g; data, analysis scripts, and supplementary material are available at <https://osf.io/f8byg/>. See supplement for pre-screening details.

1.2.1 Participants

A total of 562 Amazon Mechanical Turk Workers from the United States were paid to complete a "Short survey about past behaviour and decisions". Based on our pre-registered exclusion criteria, 44 participants were excluded (see supplement). The final sample had 519 participants ($M_{age} = 37.32$, $SD_{age} = 12.29$; 57.2% female, 41.4% male, 1.3% other), with 164

participants in the cooperative condition, 163 in the neutral condition, and 192 in the uncooperative condition. For SVO, 319 participants were categorized as prosocial and 200 as egoists.

1.2.2 Survey

Participants were randomly assigned to recall one of three types of recent behaviors, which occurred in the last month: cooperative/moral (hereafter cooperative), neutral, or uncooperative/immoral (hereafter uncooperative). Then, participants described that event. For example, in the cooperative condition the prompt was: *“Please recall a time when you acted in such a way that you felt virtuous or honorable. Perhaps you were loyal to a friend, were generous when you could have been selfish, were kind to someone for no particular reason, or caring toward someone who needed you.”* This task has previously elicited moral licensing (Conway & Peetz, 2012). Neutral and uncooperative prompts are provided in supplement.

Subsequently, participants were given an additional \$0.25 USD; they could donate any amount to charity (i.e., UNICEF, American Red Cross, or the World Wildlife Fund)¹.

Participants then completed a manipulation check, demographics, and the SVO Slider Measure (Murphy, Ackermann, & Handgraaf, 2011).

The SVO slider is a continuous measure of cooperative preferences, which assesses the peoples’ magnitude of concern for others. Participants were presented with six items, where they chose their preferred distribution of points between themselves and a hypothetical other person among several options (e.g., “100 points for you, 50 points for other”; see Supplement for example item). Scores were calculated and converted to a number on a Cartesian plane, where higher values indicate greater valuation of others relative to the self, which we term prosociality

¹ Donations were made to these charities on participants’ behalves at the completion of this study.

(see Murphy et al., 2011). There are three SVO 'types': *prosocials* who prefer to maximize joint gain (i.e. choose to distribute points equally), *egoists* prefer to maximize their own outcome (i.e. typically choose the maximum amount and disregarding the amount for the other), and *competitors* who prefer to maximize the difference between themselves and the other (i.e. typically choose the option that has the greatest difference between themselves and the other). However, data were analyzed as a continuous variable.

The SVO slider was presented after our target measures to minimize and after demographics to minimize carry-over effects. To ensure that participants adequately completed the writing task, independent raters assessed the cooperativeness and relevance of the responses (see Supplement).

1.2.3 Analyses

We used ANOVAs in R version 3.6.0 (R Core Team, 2013) and interpreted them using the New Statistics (Cumming, 2012). We also provide null hypothesis significance tests, although these were not pre-registered (see Supplement; additional analyses and descriptives in supplement).

1.3 RESULTS

1.3.1 Manipulation Checks

Blinded raters scored the cooperativeness of participant responses. There was a large effect of condition, $F(2, 516) = 1207, p < .001$, Cohen's $f = 2.16$, where the cooperative responses were rated as more cooperative than neutral responses ($d = 3.95$) and uncooperative responses, $d = 4.69$. Neutral responses were rated more cooperatively than uncooperative responses, $d = 2.04$.

Participants also responded to the question “When recalling and describing a time where you felt [insert condition-specific statement], how cooperative did you feel?”. There was a large effect of condition ($F(2, 515) = 112.1, p < .001$, Cohen’s $f = 0.66$), with people feeling more cooperative in the cooperative condition than the neutral ($d = 1.27$) and uncooperative ($d = 1.51$) conditions. They felt less cooperative in the uncooperative condition compared to the neutral condition ($d = 0.54$). Results from both analyses suggest that the manipulation was successful (Figure 1; detailed analyses in supplement).

Figure 1. Manipulation check: violin plots of (a) raters’ cooperativeness ratings of participant responses in the manipulation by experimental condition, and (b) participants’ cooperative feelings following the manipulation by condition. Ratings were completed on 7-point Likert Scales. Means are indicated by the black line, and the white boxes are 95% confidence intervals. Dots represent data points (with jitter) and the colored areas represent the response distributions.

1.3.2 Main Analyses

There was a small and marginal effect of condition on donation, $F(2, 508) = 2.93, p = .054$, Cohen's $f = .11$. Contrary to predictions, participants in the cooperative condition ($M = 10.19, SD = 10.34, 95CI[8.62, 11.81]$) donated significantly more than those in the neutral condition ($M = 7.65, SD = 9.34, 95CI[6.12, 9.00]$; $t(321.77) = 2.43, p = .015$, Cohen's $d = 0.27, 95CI[0.05, 0.49]$, and marginally more than the uncooperative condition ($M = 8.36, SD = 9.55, 95CI[7.00, 9.72]$), $t(334.32) = 1.75, p = .082$, Cohen's $d = 0.19, 95CI[-0.02, 0.40]$. Both were small effects. Donations in the neutral and uncooperative conditions did not differ, $t(345.53) = 0.79, p = .428$, Cohen's $d = 0.08, 95CI[-0.12, 0.29]$. These results showed a (small) consistency effect in the cooperative condition (i.e., opposite direction of predicted effect), and we did not find either moral licensing cleansing effects.

We computed a factorial ANOVA to determine the influence of SVO and licensing condition on amount donated to charity. SVO had a large effect on donation amount, $F(1, 512) = 99.05, p < .001$, Cohen's $f = 0.44$, where participants who were more prosocial (i.e., higher SVO scores) donated more ($r = .40, 95CI[.33, .47], p < .001$). In this analysis, condition did not influence amounts donated, $F(2, 512) = 1.34, p = .263$, Cohen's $f = 0.07$, and contrary to our predictions SVO and condition did not interact, $F(2, 512) = 0.22, p = .789$, Cohen's $f = 0.03$. See *Figure 2*. Qualitatively similar results were obtained when using the proportion of participants who gave as a DV, and when we excluded all participants who did not give anything (see supplement).

Figure 2. Amount donated to charity (\$) according to SVO score and experimental condition. Higher SVO scores indicate greater prosociality.

1.4 DISCUSSION

We failed to replicate the moral licensing and moral cleansing effects: recalling a past good behaviour had a small consistency effect (i.e., an increase in donations), and recalling a past bad behaviour did not influence donation amounts. This finding is inconsistent with the moral licensing/cleansing literature, but consistent with moral consistency literature (Balliet, Parks, & Joireman, 2009). Our manipulation was highly successful: participants reported feeling more

cooperative after completing the cooperative/moral manipulation than the neutral manipulation, and less cooperative after the uncooperative/immoral manipulation.

Similarly, recent exact and conceptual replications have failed to find moral licensing and cleansing effects (Blanken, van de Ven, Zeelenberg, & Meijers, 2014; Urban, Bahník, & Kohlová, 2019), suggesting that licensing and cleansing effects are not always be elicited.

Conway and Peetz' (2012) studies used similar methodology, however they found licensing/cleansing effects. These differences may be due to: (i) spurious effects (our sample size was three times larger), (ii) methodological differences (no control, different dependent measures), or (iii) Mturk workers are habituated to licensing and cleansing primes. Future research should replicate this effect online in naïve populations.

A new meta-analysis suggests that the moral licensing effect may be calibrated through reputation, where people will only 'license' if they have established to others that they are a good person. When no one is watching, participants do not establish a license (Rotella et al., 2019). Moreover, the ambiguity of the DV will influence when people license and when they do not, such that people are more likely to license with ambiguous dependent measures (Rotella et al., 2019). These factors help explain why we did not find a moral licensing effect – there were no reputation-based cues (e.g., observation) in this online study, and the dependent measure was unambiguous. Given that moral cleansing is the flipside of moral licensing, it may also be affected by reputational cues.

SVO influences responses to reputational cues. In the absence of reputational cues, proselves (i.e., egoists/competitors) are less cooperative than prosocials, but they are equally cooperative when reputational cues are present (Simpson & Willer, 2008). Given that proselves

are more strategic in their cooperation, we posit that individual differences in moral licensing and cleansing effects will only be elicited when there are reputation-based reasons to license.

Nevertheless, this study adds to the literature in several important ways. Firstly, in the absence of reputational cues (i.e., online, no observation), recalling a past good or bad behaviour does not appear to influence subsequent cooperative behaviours. Thus, we failed to replicate Conway and Peetz (2012). Secondly, we nevertheless validated the licensing manipulation adapted from Conway and Peetz (2012): participants completed the task as requested, which elicited more (less) cooperative feelings after reporting a good (bad) deed, but those feelings do not cause moral licensing (cleansing). Thirdly, SVO does not influence moral licensing and cleansing, at least not in this study; future studies should retest this using different methodology (e.g., immoral dependent measure). Lastly, SVO prosocials donated more to charity, which provides further validation that SVO predicts real-world behaviours.

1.5 CONCLUSION

We failed to replicate moral licensing and cleansing effects. Recalling past good/bad behaviours did not influence donations to charity, and this did not differ by cooperative preferences, possibly because of a lack of overall effect. Given that our manipulations were successful and there is recent evidence that moral licensing is calibrated through reputation-based mechanisms rather than self-image (Rotella et al., 2019), we posit that moral licensing and cleansing effects are unlikely to be elicited online.

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