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

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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   1.1 INTRODUCTION

2   Moral licensing occurs when someone who initially behaved morally or cooperatively,

3   later behaves less morally or cooperatively, as if they had a "license" to act badly. This effect has

4   been reported in many domains, including cooperation (e.g., Conway & Peetz, 2012),

5   environmentalism (e.g., Geng et al., 2016), and discrimination (e.g., Monin & Miller, 2001).

6   Recent meta-analyses suggest that this is a small, but real effect (Blanken et al., 2015; Kuper &

7   Bott, 2018). On the flipside, the moral cleansing effect happens when people who have behaved

8   immorally, subsequently behave more cooperatively as if they need "cleanse themselves of" their

9   bad deeds (Conway & Peetz, 2012; Jordan et al., 2011). Moral cleansing has also been found

10   across different domains, including cooperation (Conway & Peetz, 2012), and cheating (Jordan

11   et al., 2011).

12   Despite the vast literature on moral licensing and moral cleansing, with over 400 articles

13   discussing these topics, few papers have investigated individual differences in these effects (see

14   supplement). Moreover, studies have not yet tested whether differences in cooperativeness

15   influence susceptibility to engage in moral licensing or compensation.

16   We posit that the moral licensing and cleansing effects will be influenced by participants'

17   cooperativeness, where cooperators will be less likely to engage in moral licensing but more

18   likely to engage in moral cleansing. Recent theoretic and empirical work on the *morality as*

19   *cooperation hypothesis* suggest that morality is a collection of cultural and biological solutions

20   that solve recurrent problems of human cooperation (Curry et al., 2019). This suggests that

21   morality and cooperation are strongly overlapping constructs, and can be similarly

22   operationalized. Thus, we can predict a moral licensing effect for cooperative manipulations and

23 dependent measures, in which moral licensing effects have been found (discussion in

24 supplement).

25   In this study, we characterize peoples' cooperativeness by their social value orientation

26 [SVO]), which is a points-based measure of how much a person values someone else, relative to

27 themselves. SVO has been associated with many real outcomes, including generosity in

28 economic games (Yamagishi et al., 2013), and sacrifice in real-life social relations (Van Lange et

29 al., 1997).

30   We hypothesize that people who prefer equal outcomes (i.e., prosocials) will cooperate

31 whether or not they have acquired a 'license'. On the flipside, we posit that individuals who aim

32 to maximize their earnings, would use good behaviours to justify being uncooperative, and

33 therefore 'license'. Similarly, for moral cleansing, we posit that cooperators will be more likely

34 to compensate (and cleanse) after recalling immoral behaviours, compared to individuals who

35 are more selfish. The purpose of this study is to investigate how individual differences in SVO

36 influence susceptibility to moral licensing and cleansing effects.

37 <div align="center">1.2 METHODS</div>

38   This experiment was pre-registered at osf.io/8bm5g; data and analysis scripts are

39 available at https://osf.io/f8byg/?view_only=759ce006568b49fab56292b944718ecc (reviewer-

40 only link). See supplement for pre-screening details.

41 **1.2.1 Participants**

42   A total of 562 Amazon Mechanical Turk Workers from the United States were paid to

43 complete a "Short survey about past behaviour and decisions". Based on our pre-registered

44 exclusion criteria, 44 participants were excluded (see supplement). The final sample had 519

45 participants (M_{age} = 37.32, SD_{age} = 12.29; 57.2% female, 41.4% male, 1.3% other), with 164

46 participants in the cooperative condition, 163 in the neutral condition, and 192 in the

47 uncooperative condition. For SVO, 319 participants were categorized as prosocial and 200 as

48 egoists.

49 **1.2.2 Survey**

50 Participants were randomly assigned to recall one of three types of recent behaviors,

51 which occurred in the last month: cooperative/moral (hereafter cooperative), neutral, or

52 uncooperative/immoral (hereafter uncooperative). Then, participants described that event. For

53 example, in the cooperative condition the prompt was: *"Please recall a time when you acted in*

54 *such a way that you felt virtuous or honorable. Perhaps you were loyal to a friend, were*

55 *generous when you could have been selfish, were kind to someone for no particular reason, or*

56 *caring toward someone who needed you."* This task has previously elicited moral licensing

57 (Conway & Peetz, 2012). Neutral and uncooperative prompts are provided in supplement.

58 Subsequently, participants were given an additional $0.25 USD; they could donate any

59 amount to charity (i.e., UNICEF, American Red Cross, or the World Wildlife Fund)[1].

60 Participants then completed a manipulation check, demographics, and the SVO Slider Measure

61 (Murphy, Ackermann, & Handgraaf, 2011).

62 The SVO slider is a continuous measure of cooperative preferences, which assesses the

63 peoples' magnitude of concern for others. Participants were presented with six items, where they

64 chose their preferred distribution of points between themselves and a hypothetical other person

65 among several options (e.g., "100 points for you, 50 points for other"; see Supplement for

66 example item). Scores were calculated and converted to a number on a Cartesian plane, where

67 higher values indicate greater valuation of others relative to the self, which we term prosociality

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

68   (see Murphy et al., 2011). There are three SVO 'types': *prosocials* who prefer to maximize joint

69   gain (i.e. choose to distribute points equally), *egoists* prefer to maximize their own outcome (i.e.

70   typically choose the maximum amount and disregarding the amount for the other), and

71   *competitors* who prefer to maximize the difference between themselves and the other (i.e.

72   typically choose the option that has the greatest difference between themselves and the other).

73   However, data were analyzed as a continuous variable.

74   The SVO slider was presented after our target measures to minimize and after

75   demographics to minimize carry-over effects. To ensure that participants adequately completed

76   the writing task, independent raters assessed the cooperativeness and relevance of the responses

77   (see Supplement).

78   **1.2.3 Analyses**

79   We used ANOVAs in R version 3.6.0 (R Core Team, 2013) and interpreted them using

80   the New Statistics (Cumming, 2012). We also provide null hypothesis significance tests,

81   although these were not pre-registered (see Supplement; additional analyses and descriptives in

82   supplement).

83   1.3 RESULTS

84   **1.3.1 Manipulation Checks**

85   Blinded raters scored the cooperativeness of participant responses. There was a large

86   effect of condition, $F(2, 516) = 1207$, $p < .001$, Cohen's $f = 2.16$, where the cooperative

87   responses were rated as more cooperative than neutral responses ($d = 3.95$) and uncooperative

88   responses, $d = 4.69$. Neutral responses were rated more cooperatively than uncooperative

89   responses, $d = 2.04$.

90   Participants also responded to the question "When recalling and describing a time where

91   you felt [insert condition-specific statement], how cooperative did you feel?". There was a large

92   effect of condition ($F(2, 515) = 112.1$, $p < .001$, Cohen's $f = 0.66$), with people feeling more

93   cooperative in the cooperative condition than the neutral ($d = 1.27$) and uncooperative ($d = 1.51$)

94   conditions. They felt less cooperative in the uncooperative condition compared to the neutral

95   condition ($d = 0.54$). Results from both analyses suggest that the manipulation was successful

96   (*Figure 1;* detailed analyses in supplement).

97   [Insert Figure 1 here]

98

99   **1.3.2 Main Analyses**

100   There was a small and marginal effect of condition on donation, $F(2, 508) = 2.93$, $p =$

101     $.054$, Cohen's $f = .11$. Contrary to predictions, participants in the cooperative condition ($M =$

102   10.19, $SD = 10.34$, 95CI[8.62, 11.81]) donated significantly more than those in the neutral

103   condition ($M = 7.65$, $SD = 9.34$, 95CI[6.12, 9.00]; $t(321.77) = 2.43$, $p = .015$, Cohen's $d = 0.27$,

104   95CI[0.05, 0.49], and marginally more than the uncooperative condition ($M = 8.36$, $SD = 9.55$,

105   95CI[7.00, 9.72]), $t(334.32) = 1.75$, $p = .082$, Cohen's $d = 0.19$, 95CI[-0.02, 0.40]. Both were

106   small effects. Donations in the neutral and uncooperative conditions did not differ, $t(345.53) =$

107   0.79, $p = .428$, Cohen's $d = 0.08$, 95CI[-0.12, 0.29]. These results showed a (small) consistency

108   effect in the cooperative condition (i.e., opposite direction of predicted effect), and we did not

109   find either moral licensing cleansing effects.

110   We computed a factorial ANOVA to determine the influence of SVO and licensing

111   condition on amount donated to charity. SVO had a large effect on donation amount, $F(1, 512) =$

112   99.05, $p < .001$, Cohen's $f = 0.44$, where participants who were more prosocial (i.e., higher SVO

113   scores) donated more (r = .40, 95CI[.33, .47], p < .001). In this analysis, condition did not

114   influence amounts donated, $F(2, 512) = 1.34$, p = .263, Cohen's f = 0.07, and contrary to our

115   predictions SVO and condition did not interact, $F(2, 512) = 0.22$, p = .789, Cohen's f = 0.03. See

116   *Figure 2*. Qualitatively similar results were obtained when using the proportion of participants

117   who gave as a DV, and when we excluded all participants who did not give anything (see

118   supplement).

119   [Insert Figure 2 here]

120   1.4 DISCUSSION

121   We failed to replicate the moral licensing and moral cleansing effects: recalling a past

122   good behaviour had a small consistency effect (i.e., an increase in donations), and recalling a past

123   bad behaviour did not influence donation amounts. This finding is inconsistent with the moral

124   licensing/cleansing literature, but consistent with moral consistency literature (Balliet, Parks, &

125   Joireman, 2009). Our manipulation was highly successful: participants reported feeling more

126   cooperative after completing the cooperative/moral manipulation than the neutral manipulation,

127   and less cooperative after the uncooperative/immoral manipulation.

128   Similarly, recent exact and conceptual replications have failed to find moral licensing

129   and cleansing effects (Blanken, van de Ven, Zeelenberg, & Meijers, 2014; Urban, Bahník, &

130   Kohlová, 2019), suggesting that licensing and cleansing effects are not always be elicited.

131   Conway and Peetz' (2012) studies used similar methodology, however they found

132   licensing/cleansing effects. These differences may be due to: (i) spurious effects (our sample size

133   was three times larger), (ii) methodological differences (no control, different dependent

134   measures), or (iii) Mturk workers are habituated to licensing and cleansing primes. Future

135   research should replicate this effect online in naïve populations.

136   A new meta-analysis suggests that the moral licensing effect may be calibrated through

137   reputation, where people will only 'license' if they have established to others that they are a good

138   person. When no one is watching, participants do not establish a license (Rotella et al., 2019).

139   Moreover, the ambiguity of the DV will influence when people license and when they do not,

140   such that people are more likely to license with ambiguous dependent measures (Rotella et al.,

141   2019). These factors help explain why we did not find a moral licensing effect – there were no

142   reputation-based cues (e.g., observation) in this online study, and the dependent measure was

143   unambiguous. Given that moral cleansing is the flipside of moral licensing, it may also be

144   affected by reputational cues.

145   SVO influences responses to reputational cues. In the absence of reputational cues,

146   proselfs (i.e., egoists/competitors) are less cooperative than prosocials, but they are equally

147   cooperative when reputational cues are present (Simpson & Willer, 2008). Given that proselfs

148   are more strategic in their cooperation, we posit that individual differences in moral licensing and

149   cleansing effects will only be elicited when there are reputation-based reasons to license.

150   Nevertheless, this study adds to the literature in several important ways. Firstly, in the

151   absence of reputational cues (i.e., online, no observation), recalling a past good or bad behaviour

152   does not appear to influence subsequent cooperative behaviours. Thus, we failed to replicate

153   Conway and Peetz (2012). Secondly, we nevertheless validated the licensing manipulation

154   adapted from Conway and Peetz (2012): participants completed the task as requested, which

155   elicited more (less) cooperative feelings after reporting a good (bad) deed, but those feelings do

156   not cause moral licensing (cleansing). Thirdly, SVO does not influence moral licensing and

157   cleansing, at least not in this study; future studies should retest this using different methodology

158   (e.g., immoral dependent measure). Lastly, SVO prosocials donated more to charity, which

159   provides further validation that SVO predicts real-world behaviours.

160   1.5 CONCLUSION

161   We failed to replicate moral licensing and cleansing effects. Recalling past good/bad

162   behaviours did not influence donations to charity, and this did not differ by cooperative

163   preferences, possibly because of a lack of overall effect. Given that our manipulations were

164   successful and there is recent evidence that moral licensing is calibrated through reputation-

165   based mechanisms rather than self-image (Rotella et al., 2019), we posit that moral licensing and

166   cleansing effects are unlikely to be elicited online.
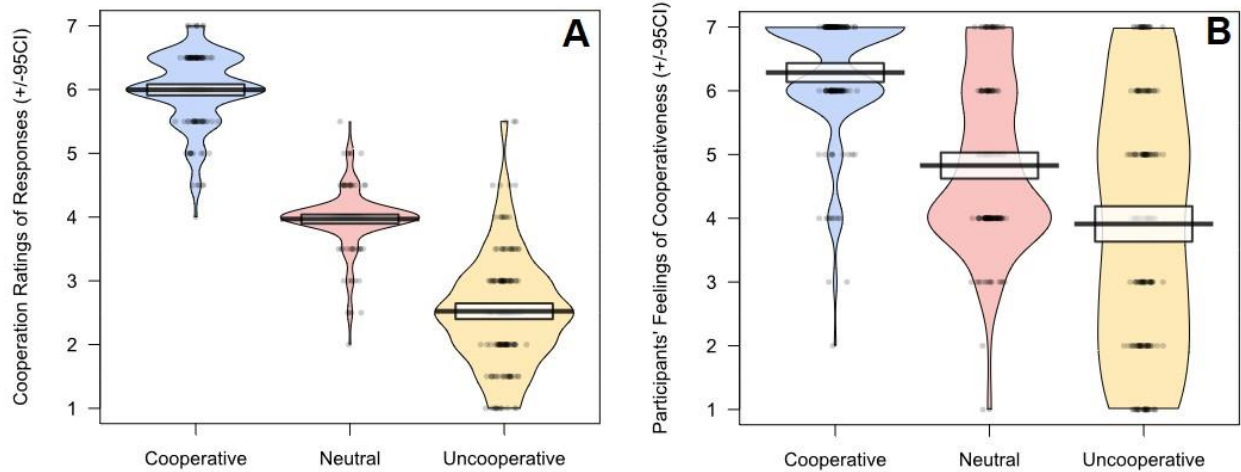
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Figure 1. Manipulation check: violin plots of (a) raters' cooperativeness ratings of participant responses in the manipulation by experimental condition, and (b) participants' cooperative feelings following the manipulation by condition. Ratings were 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.
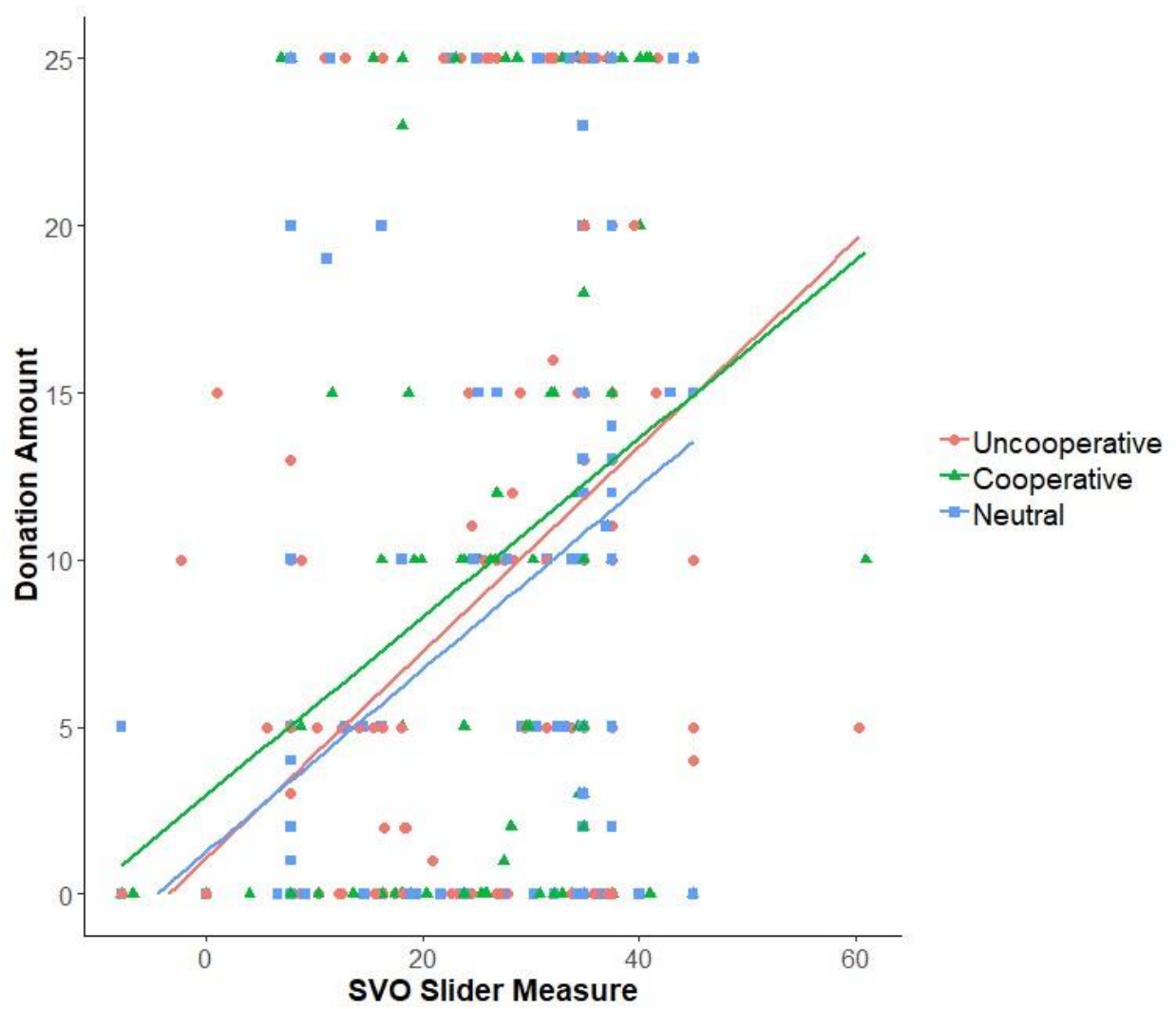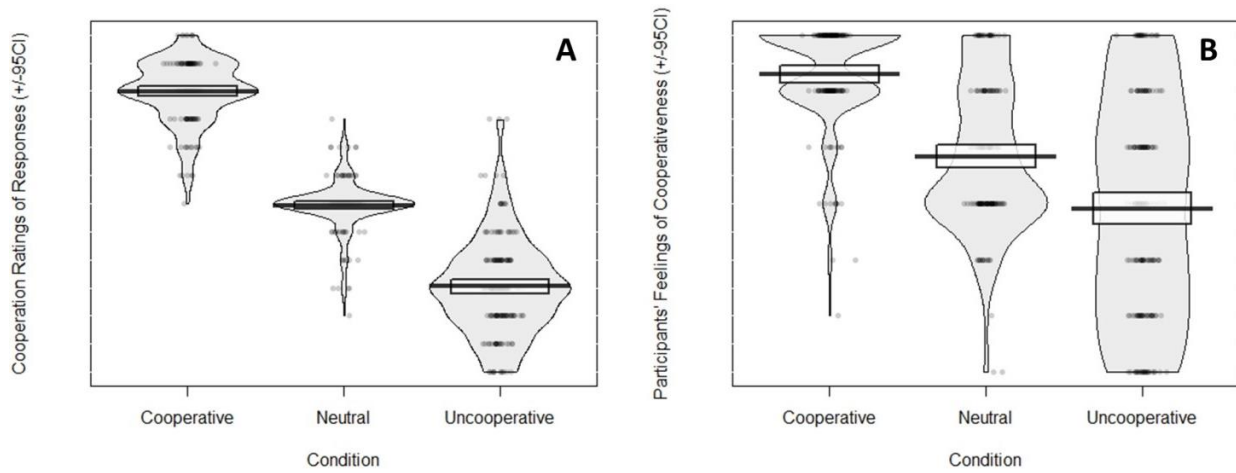
Figure 2. Amount donated to charity ($) according to SVO score and experimental condition.

Higher SVO scores indicate greater prosociality.

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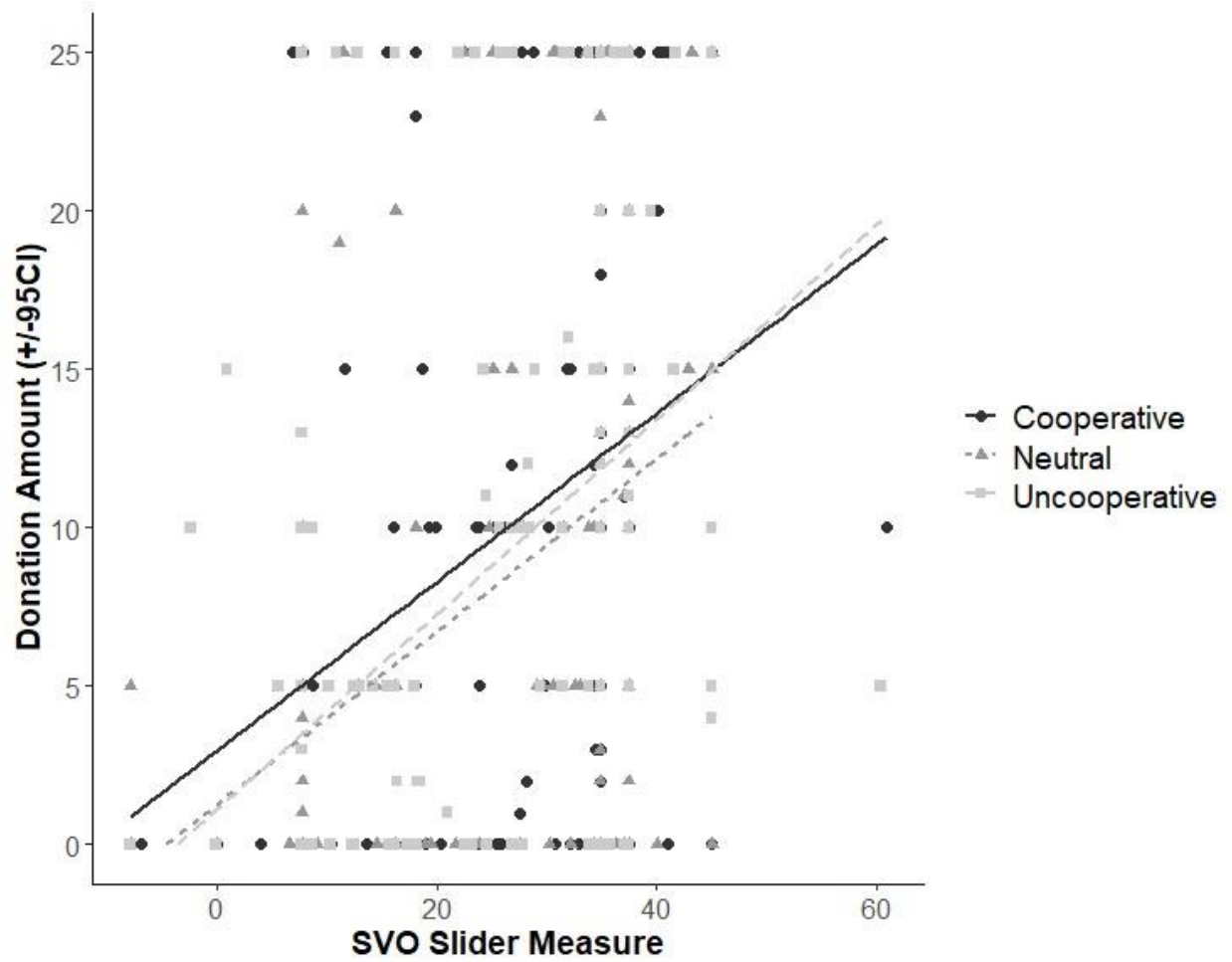
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