Popular Saying and Moral Judgment: The Influence of Proverbs on Moral Intuition

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Abstract

The present research explores whether popular proverbs can shape moral intuitions and influence people's moral judgments. A two-response experimental paradigm was used to obtain participants' evaluations of immoral behaviors that were condemned or condoned using popular proverbs. When used to condemn immoral behaviors, proverbs increased the strength of participants' moral intuitions – making their judgments more polarized, confident, and resistant to response revision. When used to condone immoral behaviors proverbs did not change moral judgment (i.e., immoral behaviors were still considered unacceptable) but weakened participants moral intuitions – making their judgments relatively less polarized and confident. Our results further suggest that the cognitive ease of processing associated with proverbs contributes to explaining their impact on people's moral judgments.

Keywords: Proverb; Popular saying; Social influence, Moral judgment; Metacognition.

1. Introduction

Historically, theorists who seek to investigate morality disagree whether judgments are mainly products of reasoning and higher cognition (e.g., Kohlberg, 1969, 1986), or of intuitions and automatic processes (e.g., Haidt, 2001). More recently, research on dual-process theories has converged on the idea that intuitive processes often dominate moral judgments (Haidt & Kesebir, 2010) and that these intuitions are shaped by cultural and social factors (Haidt, 2001; 2007; Haidt & Bjorklund, 2008; Haidt & Kesebir, 2010). However, whereas a considerable amount of research has studied the intuitive and largely autonomous nature of moral judgments, less research has explored the social factors that shape people's moral intuitions and judgments. Among these factors are language-oriented communication devices such as proverbs, which are used to convey and perpetuate "well-known truths" across generations (D'Angelo, 1977), in a metaphorical and easy-to-memorize way (Mieder, 2004; see Bohrn et al., 2012; Chacoto, 1994; Lopes, 1992; Arewa & Dundes, 1964). In the present study, we are interested in understanding how these popular sayings influence one's moral judgments. Specifically, we aimed to further investigate the impact (in one's judgment) of listening to others using proverbs to condemn or condone immoral behaviors.

Proverbs are an essential part of every language's lexicon and of any culture's heritage (Mieder, 2015). They have an autonomous semantic value that allows them to be used as whole statements, proving they are more than just components of a sentence (Lopes, 1992). Like other folkloric expressions, they serve as impersonal conduits for interpersonal communication, never conveying the message of a single person but rather the collective wisdom of social groups (Maingueneau, 2008). They are part of belief systems and symbolic thinking (Mieder, 2015), carrying a high cloze predictability of upcoming words (Fernández et al., 2013), i.e., reading a few words of a proverb is enough to evocate fast memory

retrieval. For this reason, they are particularly helpful in political rhetoric, music lyrics, newspaper headlines, book titles, commercial slogans, and cartoon captions.

Furthermore, stimuli that generate cognitive ease are judged truer than their less fluent counterparts (Alter and Oppenheimer, 2009; Oppenheimer, 2008). Such fluency effects can serve as a basis for judgment in addition to, or at the expense of other information (Shwartz, 2004). As such, one might hypothesize that proverbs are so frequently used since childhood that become easily processed and hence may interfere with our moral intuitions. Thus, we propose that when used to communicate opinions condemning immoral acts proverbs (compared to non-proverbial semantically similar sentences) will a) increase the frequency of responses agreeing with the condemnation; b) increase confidence in one's initial moral judgment; c) lead to extremer condemnation of the immoral acts; and d) reduce further deliberation and the revision of the initial moral judgment. In contrast, when used to communicate opinions condoning immoral acts, proverbs will decrease the frequency of responses disagreeing with the condonation; decrease confidence in one's initial moral judgment; lead to relatively milder condemnation of the immoral behaviors; and eventually increase the likelihood of revision of the initial moral judgment.

Moreover, when comparing different proverbs that vary in cognitive ease of processing, those who produce greater cognitive ease of processing are predicted to have a greater impact in strengthening initial moral judgments when used to condemn immoral acts; and in weakening these judgments when used to condone the same acts.

1.1. Experiment overview

A set of pre-tested everyday immoral behaviors was used as materials. The immoral behaviors were followed by others' judgments that could condemn or condone them. For half of the trials, these judgments were conveyed through proverbs. In contrast, the other half was

conveyed by semantically similar sentences (SSS), which carry the same meaning but lack the proverbial structure of the popular sayings used in the present research.

To explore the impact of proverbs on how moral judgments unfold, we resorted to the two-response paradigm (Thompson et al., 2011). In each trial, participants were first presented with an immoral act that was condemned or condoned by a proverb or an SSS and requested to provide an initial fast (intuitive) moral judgment (i.e., was the act acceptable or not, and how acceptable/unacceptable it was perceived to be). Participants were then invited to reconsider the information presented and to give final (deliberated) moral judgment. Participants also expressed their degree of confidence in the initial intuitive judgment (i.e., feelings of rightness, FoR) and the final judgment (final confidence judgment, FCJ).

2. Method

2.1. Participants

Three hundred participants (198 females; M_{age}= 47; SD_{age}= 15.62) were recruited online through digital platforms and randomly assigned to one of the two experimental groups. A sensitivity analysis with this sample size, at α= 0.05, and power= 0.80, showed that the experimental design could reliably detect small or medium effect sizes (d= .287). Participants received no financial incentive, and the experiment was approved by the scientific research ethics committee of the Faculty of Psychology of the University of Lisbon.

2.2. Material and design

Two pre-tests were conducted online (with different samples of participants). One to choose the proverbs and the other to choose the immoral behaviors used in the Experiment here reported. In the first pre-test, sixty participants evaluated how frequently they had been

exposed to twelve proverbs (retrieved from Machado, 1998) using a rating scale from 1

("never heard") to 5 ("heard many times"). Next, for each proverb, participants were asked to

choose from three options, the sentence that best conveyed its meaning. Participants could

also write their sentences if they felt that none of the options provided accurately described

the proverb's meaning. Based on the results of this survey (see Supplemental materials), we

chose the five most common (most heard) proverbs and the best corresponding semantically

similar sentences that could be used to condemn or condone immoral behaviors.

To pre-test the immoral behaviors, sixty-six participants assessed 27 behaviors

developed by the researchers. Participants evaluated the behaviors on a rating scale from 1

("totally wrong") to 9 ("totally right"). Among the behaviors that were evaluated as more

morally wrong (between 1 and 3), we selected the behaviors that could be more easily

associated with the selected proverbs and their SSS counterparts (see Supplemental Material).

In the Experiment, participants were randomly divided into two groups. Each group

was exposed to the same ten immoral behaviors. Five of these behaviors were followed by

condoning opinions whereas the other 5 were followed by condemning opinions (see Table

A1, Appendix A). The only difference between the two groups is that when a behavior was

condemned (or condoned) using a proverb in group 1, the same behavior was condemned (or

condoned) using the corresponding SSS in group 2 (see Table A2, Appendix A), and vice-

versa (see Appendix A for an example illustrating the use of proverbs and SSS in different

conditions)

2.3. Procedure

After reading the instructions (see Appendix B) and agreeing to the consent terms,

participants were exposed to immoral behaviors, presented in a random order. Each behavior

was followed by a condoning or condemning judgment. In each trial, participants were first

asked to respond fast and to give the first answer that came to mind, whether they agreed with the judgment or not. After choosing "yes" or "no", participants rated the degree with which they agreed or disagreed on a 6-point rating scale; and they expressed how confident they were in their response - i.e., their feeling of rightness (FoR; Thompson et al., 2011) - also in a 6-point rating scale.

Next, participants were asked whether their initial response was the first that came to mind (as a control question). They were then allowed to reconsider their initial responses, this time without time pressure, and were encouraged to think carefully before responding. The same measures were repeated: participants were asked once more whether they agreed or not with the judgment, the degree with which they (dis)agreed, and how confident they were in their response – i.e., final confidence judgment (FCJ; Thompson et al., 2011). In each trial, the response times (RTs) of the initial and final dichotomous responses (agree/disagree) were measured, starting at the presentation of the trial "behavior + judgment" until participants responded whether they agreed or not with the judgment (See Appendix A for an illustration of the trials).

Finally, to obtain measures of ease of processing for the five proverbs used in the Experiment, participants were asked to rate each of them on familiarity, the feeling of truth, and reading fluency, on a rating scale from 1 ("very little") to 5 ("totally").

3. Results

Participants gave the first answer that came to mind in most cases. The 6.58% of trials in which this did not occur were excluded.

3.1. *Preliminary analysis: Response fluency, FoR, rethinking time, and response revision*

Spearman Rank Correlations, carried out for both the condemning and condoning conditions, showed that response fluency (reflected by shorter initial RT) was a predictor of FoR ($r_{proverbs\ condemning} = -.139$, $p < .001$; $r_{SSS\ condemning} = -.250$, $p < .001$; $r_{proverbs\ condoning} = -.212$, $p < .001$; $r_{SSS\ condoning} = -.146$, $p < .001$). Furthermore, FoR was associated with shorter rethinking times ($r_{proverbs\ condemning} = -.139$, $p < .001$; $r_{SSS\ condemning} = -.204$, $p < .001$; $r_{proverbs\ condoning} = -.095$, $p = .013$; $r_{SSS\ condoning} = -.146$, $p < .001$) and increased response revision ($r_{proverbs\ condemning} = -.079$, $p = .035$; $r_{SSS\ condemning} = -.184$, $p < .001$; $r_{proverbs\ condoning} = -.207$, $p < .001$; $r_{SSS\ condoning} = -.159$, $p < .001$). In sum, as confidence increased, the initial intuitive response to others' opinions of immoral behaviors tended to progress into a final judgment with less rethinking and fewer revisions, replicating well-established results using the two-response paradigm (e.g., Thompson & Johnson, 2014; Thompson et al., 2011). For the full correlation tables (tables C1 and C2) see Appendix C.

3.2. *Effects of judgment (condemning or condoning) condition and judgment type on participants' responses*

3.2.1. Agreement

To explore the effects of judgment condition and judgment type, chi-square tests were used to compare the frequency of responses who agreed with condemning or condoning immoral acts (judgment condition) using proverbs or SSS (justification type).

As expected, the majority of participants' responses agreed with the condemnation of the immoral acts (initial agreement = 69.2%; final agreement = 71.5%) and disagreed with the condonation of these acts (initial agreement = 14.6%; final agreement = 14.2%).

In the condemning condition, there was no difference in the frequency of agreement between proverbs and SSS in the initial (proverb = 68.3%; SSS = 70.1%) and final responses (proverb = 70.1%; SSS = 72.8%). However, there were fewer revisions of the initial responses when participants were exposed to proverbs than to SSS, $\chi^2(1) = 4.696$, $p = .03$. This is congruent with the prediction that proverbs lead to less engagement in controlled processing and thus less response revision.

In the condoning condition, the frequency of agreement was even lower when proverbs (initial agreement = 12.2%; final agreement = 11.7%) rather than SSS (initial agreement = 16.9%; final agreement =16.6%) were used to condone immoral behaviors. Such difference is significant for initial, $\chi^2(1) = 6.39$, $p = .011$, and final responses, $\chi^2(1) = 6.95$, $p = .008$. It appears that the acceptance of others' opinions condoning an immoral act is even less frequent when these opinions involve the use of proverbs. Finally, in both proverb and SSS trials, participants did not significantly revise their initial intuitive responses when delivering their final judgments.

3.2.2. Response extremity

Two linear mixed models (LMMs) were performed to explore the effects of judgment (condemning or condoning) condition and justification type (proverbs or SSS) on initial and final response extremity including each item as a random effect, followed by multiple comparison test corrected by Bonferroni. As predicted, we found an interaction between judgment condition and justification type on the initial response extremity ($\beta = 0.47$; 95% CI [0.31, 0.64], $p < 0.001$). The same interaction emerged for the final response extremity ($\beta = 0.36$; 95% CI [0.21, 0.53], $p < 0.001$. As shown in **Figure 1 (left-hand side)**, proverbs led to extremer initial responses ($M = 4.97$, $SD = 1.17$) compared to SSS ($M = 4.62$, $SD = 1.26$) in the condemning condition ($p < 0.001$), and to more moderate (less extreme) responses ($M =$

4.66, $SD = 1.52$) than SSS ($M = 4.86$, $SD = 1.40$) in the condoning condition ($p < 0.05$). A

similar pattern was observed in the final response (**Figure 1, right-hand side**), with proverbs

leading to extremer responses ($M = 5.02$, $SD = 1.16$) compared to SSS ($M = 4.75$, $SD = 1.24$)

in the condemning condition ($p < 0.01$), but to fewer extreme responses ($M = 4.67$, $SD = 1.56$)

than SSS ($M = 4.92$, $SD = 1.40$) in the condoning condition ($p < 0.01$).
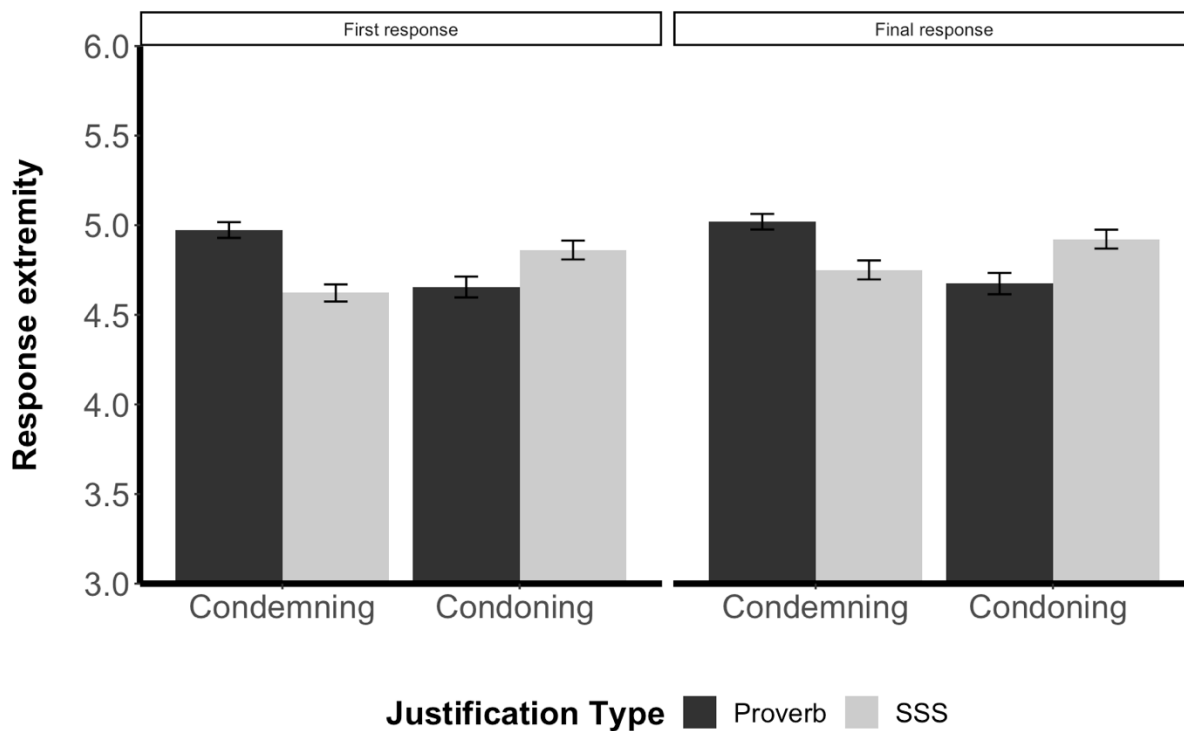

Figure 1. Response extremity at the first (fast) and final response (without time constrains). Error

bars depict standard errors.

Additionally, main effects for the judgment condition and justification type were

found in the initial response (judgment condition: $\beta = -0.35$; 95% CI [-0.49, -0.21], $p < 0.001$;

justification type: $\beta = -0.32$; 95% CI [-0.51, -0.13], $p = 0.001$) and final response (judgment

condition: $\beta = -0.29$; 95% CI [-0.45, -0.14], $p < 0.001$; justification type: $\beta = -0.35$; 95% CI [-

0.58, -0.12], $p < 0.001$), such that proverbs ($M = 4.82$, $SD = 1.36$) led to extremer responses

than SSS ($M = 4.74$, $SD = 1.34$) and the condemnation of immoral behaviors ($M = 4.80$, $SD =$

1.23) led to extremer responses than the condonation of these behaviors ($M = 4.76$, $SD = 1.47$)[1]. Finally, we calculated the difference (Delta) between the final and the initial response extremity and included it as the outcome in an LMM, with judgment condition and justification type as predictors. No significant effect was found.

3.2.3. Response confidence (FoR and FCJ)

Also, two LMMs were also performed to explore the effects of the judgment (condemning or condoning) condition, and justification type separately for the initial (FoR) and final measures (FJC) of response confidence including the item as a random effect, followed by multiple comparison tests corrected by Bonferroni. As predicted and shown in **Figure 2 (left-hand side)**, we found an interaction between the judgment conditions and justification type on FoR ($\beta = 0.48$; 95% CI [0.31, 0.64], $p < 0.001$) and FCJ ($\beta = 0.37$; 95% CI [0.21, 0.53], $p < 0.001$). Proverbs led to higher FoR ($M_{proverbs} = 5.16$, $SD = 1.01$) compared to SSS ($M_{SSS} = 4.78$, $SD = 1.19$) in the condemning condition ($p < 0.001$) whereas the reverse occurred for the condoning condition ($M_{proverbs} = 5.08$, $SD = 1.10$; $M_{SSS} = 5.17$, $SD = 1.07$), although not significantly different. A similar pattern occurred for the FCJ (**Figure 2, right-hand side**), with proverbs leading to higher FCJ ($M_{proverbs} = 5.19$, $SD = 1.01$) compared to SSS ($M_{SSS} = 4.91$, $SD = 1.16$) in the condemning condition ($p < .0001$), but to lower FCJ compared to SSS in the condoning condition ($M_{proverbs} = 5.13$, $SD = 1.10$; $M_{SSS} = 5.21$, $SD = 1.08$; not significantly different). Furthermore, both the FoR and the FCJ showed main effects for justification type (FoR: $\beta = -0.39$; 95% CI [-0.51, -0.26], $p < 0.001$; CFJ: $\beta = -0.28$; 95%

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[1] A 2x2x2 LMM was also performed to investigate the effects of judgment condition (condoning vs. Condemning), justification type (Proverbs vs. SSS), and Response (initial vs. final response) in the participant's response extremity. No significant effect was found for Response, suggesting that there is no significant difference in the response extremity between the initial (fast) response and the final (slower) response. Confirming the analyses reported in the main text, the 2x2x2 LMM showed an interaction between judgment condition and justification type on initial response extremity ($\beta = 0.54$; 95% CI [0.34, 0.75], $p < 0.001$), as well as the main effects for Judgment Condition$_{Condoning}$ ($\beta = -0.35$; 95% CI [-0.57, -0.12], $p = 0.002$) and Justification Type$_{SSS}$ ($\beta = -0.30$; 95% CI [-0.45, -0.14], $p < 0.001$).

CI [-0.39, -0.17], *p* < 0.001) such that proverbs led to higher initial and final judgments of
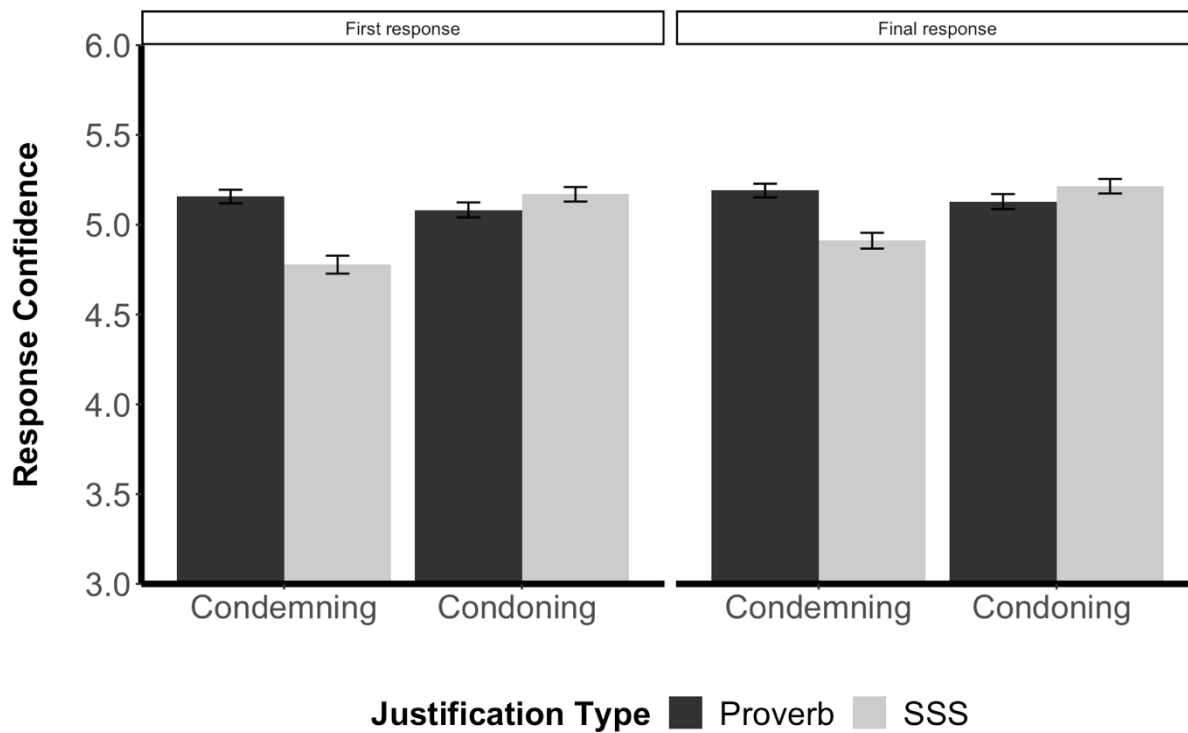
confidence than SSS.

Figure 2. Response Confidence in the initial and final Judgments. Error bars depict standard errors.

3.2.4. Response time

The LMMs were also performed to investigate the effects of judgment (condemning or

condoning) condition, justification type, and response condition (i.e., initial vs. final

response) in the participant's response time. However, because each scenario differs from

the other in terms of sentence length, the response time was corrected by dividing it by the

number of characters (of each proverb and SSS). The outcome measure, therefore, depicts

an adjusted response time[2]. As expected, our analyses revealed a main effect of response

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[2] We acknowledge that this solution may not be enough to control for bias since while reading familiar proverbs
people can easily anticipate via memory retrieval the upcoming words in a much faster and more efficient way
than when reading other text (Fernández et al., 2013).

condition in the adjusted reaction time, indicating that participants were faster when giving their initial responses than when giving their final responses ($\beta = 0.003$; 95% CI [0.0001, 0.001], $p = 0.038$). Also, a main effect of the judgment condition was observed, showing that participants usually took longer to condone an immoral behavior than to condemn it ($\beta = -0.01$; 95% CI [-0.02, -0.001], $p = 0.002$). No other effects reached statistical significance.

3.3. Proverbs and the cognitive ease of processing

Additional Spearman Rank Correlations were performed to assess whether there is an association between proverbs' cognitive ease of processing (familiarity, the feeling of truth, and reading fluency) and participants' moral judgment concerning the condemnation or condonation of immoral acts[3]. Feelings of truth emerged as the best indicator. Proverbs' feelings of truth not only led to more initial agreement with opinions condemning immoral behaviors ($r = .354$, $p < .001$) but also increased participants' initial confidence (FoR) in their judgments ($r = .232$, $p = .004$). In contrast, feelings of truth reduced participants' initial disagreement with opinions that condoned immoral behaviors ($r = .226$, $p = .005$) and decreased the confidence with which participants held these judgments ($r = -.160$, $p = .05$). However, feelings of truth failed to affect response revision in both the condemning and condoning condition. The full correlation tables (tables C3 and C4) and a more detailed analysis of these results are reported in Appendix C.

Discussion

Proverbs are communication devices used to convey "well-known truths" in a cognitively fluent and easy-to-memorize way (D'Angelo, 1977; Mieder, 2004). Such features

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[3] An aggregated measure of familiarity, perceived fluency and feeling of truth did not show a satisfactory level of reliability (Cronbach alfa = 0.540), we thus opted to test the three indicators of cognitive ease separately.

of proverbs may affect how we make judgments about others' behaviors. The reported study explored how proverbs used to condemn or condone immoral behaviors influence one's judgments about these behaviors. We proposed that proverbs used to condemn immoral behaviors would a) increase the frequency of responses agreeing with the condemnation; b) increase confidence in one's initial moral judgments; c) lead to extremer condemnation of the immoral acts; and d) reduce revision of the initial judgments.

Although we found no difference in the number of responses agreeing with the condemnations of immoral acts that used proverbs versus semantically similar sentences, we did find evidence supporting the remaining predictions. Compared to SSS, proverbs did generate more confidence in initial judgments, extremer responses, and less response revision — leading to extremer and more confident final judgments. In contrast, when used to communicate opinions condoning immoral acts, the reverse pattern of results was expected. Proverbs were predicted to decrease the frequency of responses disagreeing with the condonation; decrease confidence in one's initial moral judgments; lead to relatively milder condemnation of the immoral behaviors; and eventually increase the likelihood of revision of the initial judgments.

While our first prediction was not supported, the frequency of responses disagreeing with other's opinions condoning an immoral act was slightly smaller (and not larger) when these opinions were conveyed by proverbs (compared to SSS); our predictions concerning response confidence and response extremity were confirmed: in the condoning condition, proverbs did generate less confidence on initial judgments and less extreme initial responses than SSS — leading to less extreme and less confident final judgments. However, proverbs did not lead to more revision of the initial intuitive responses than SSS.

In sum, proverbs did not directly change one's explicit moral judgment (Yes/No agreement responses) in the predicted direction. The impact of proverbs appears to have

occurred indirectly on how extremely participants agreed/disagreed with the immoral behaviors and how confident they were in their judgment.

As aforementioned, proverbs (compared to SSS) reduced response confidence (FoR) when used to oppose people's initial judgments (condoning condition), but they did not seem to lead to more response revision. This might be due to the kind of behaviors here used which were selected (and perceived) to be highly immoral. Future research could use behaviors that vary in the extent to which they are judged as immoral to test such possibility. Lower FoR triggered by proverbs condoning immoral behaviors should lead to (more) response revision as the perceived immorality of the behaviors becomes less extreme.

Furthermore, the greater the feeling of truth generated by a proverb, the more participants agree with the condemnation of the immoral behavior and the less they disagreed with its condonation. Also, the truer the proverb is perceived to be the greater the FoR it generates when it is used to condemn immoral behaviors; and the lower the FoR it generates when it is used to condone the immoral behaviors. The impact of a proverb's truth feeling thus seems to be context-dependent. It is likely to reinforce initial moral intuitions concerning the immoral nature of the behavior in the condemning condition but to weaken the same moral intuitions when it is used to condone the immoral behavior.

One limitation of the present study is that the behaviors presented in the condemning condition were different from those in the condoning condition. This occurred due to the difficulties we faced when trying to have immoral behaviors that could be condoned and condemned by the same proverbs (and SSS). However, all behaviors selected via pre-test were considered to be equally quite immoral, and participants in the main study confirmed this by evaluating all behaviors used as highly (and equally) immoral. Future studies should seek to use the same set of behaviors across conditions (or at least several sets of behaviors)

to further reduce possible sources of bias arising from other differences between behavior besides their perceived (im)morality.

Another limitation is that response time measures included the reading time of the proverbs and SSS. Since proverbs are on average shorter than the corresponding SSS, this introduced a systematic bias in response time. We dealt with this limitation by dividing RT by the number of characters (of each proverb and SSS). However, Future research should experimentally separate reading time from response time.

In conclusion, to the best of our knowledge, this study is the first to show the effects of proverbs on everyday moral intuitions and judgments. Additionally, by using the two-response paradigm, we were able to shed some light on the psychological processes underlying these effects. Our results suggest that, when proverbs are used to express opinions already aligned with people's moral intuitions, these intuitions tend to progress into final judgments without much deliberation ending up being more polarized judgments held with added confidence. In contrast, when used against people's moral intuitions, proverbs decreased confidence in such first intuitions and lead to milder condemnation of immoral behaviors. These findings highlight the importance of proverbs as subtle forms of social influence. People won't radically change their minds because of proverbs, but the degree of confidence, polarization, and flexibility of moral judgments are likely to be swayed when proverbs are used as communication devices.

Data availability statement

Data supporting the findings of this study are available in the article and its supplementary materials. Any additional information about the data is available from the corresponding author, AS, upon reasonable request.

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