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Tortured beliefs: How and when prior support for torture skews the perceived value of coerced information



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HIGHLIGHTS

- US adult judgments of terrorism scenarios were skewed by prior support for torture.
- Those previously supporting torture saw coerced information as more valuable.
- Torture opposers did not show a bias for or against coerced information.
- Results also revealed a "selective efficacy" boundary concerning informant identity.
- · Supporters privileged coerced information from outgroup but not ingroup informants.

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ABSTRACT

In the wake of recent revelations about US involvement in torture, and widespread and seemingly-growing support of torture in the US, we consider how people judge the value of information gained from informants under coercion. Drawing on past work on confirmation biases and moral judgments, we predicted, and found, that American torture supporters are more likely than opposers to see coerced information as relatively valuable and necessary in a scenario describing the foiling of an al-Qaeda terrorist attack. Judgments of coerced information value in the scenario also predicted endorsement of using the episode as a "success story" to justify torture in future cases. A second study shed light on an important boundary: Prior general support for torture predicted the perceived value of coerced information when the interrogated informant was an outgroup member (an al-Qaeda informant tortured by US operatives) but not when the informant was an ingroup member (an American soldier tortured by al-Qaeda). Overall, the results suggest that advocates for torture may readily interpret ambiguous evidence as implying the value and necessity of extreme interrogation techniques when used by the ingroup. Our findings also indicate that torture supporters often expect selective efficacy, whereby they see torture as more likely to yield valuable information when it is used by "us" compared to "them."

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1. Introduction

Is torture acceptable? Is it effective? These questions have received renewed interest in the wake of recent disclosures of American involvement in extreme interrogation (Mazzetti, 2014) and polls showing widespread and seemingly-growing acceptance of torture among the American public (Pew Research Center, 2014). A considerable share of people say that their answer to the first question—whether they support torture—follows from their answer to the second one—whether torture yields important information. To these people, distinctly valuable ends can justify the brutal means. But is it possible that, in a meaningful share of cases, this thinking could also flow in the other direction? Might the prior tendency to support torture predispose someone to

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see ambiguous information coming from a particular episode of extreme interrogation as being especially valuable? In such cases, pre-existing acceptance of the means—endorsing torture—could skew how positively the ends are judged. If such an effect were true and common, it could have troubling implications: Torture supporters may be inclined to read validation into equivocal results, reaffirming their attitudes and championing a course of action that is not systematically supported by evidence.

The present paper presents two studies examining this possibility. Building on past work, we show that Americans' prior general support for torture shapes their perceptions of the value of coerced information in a given case. We also identify an important boundary that sheds light on the underlying nature of the effect. On balance, American torture supporters seem to possess *selective efficacy* beliefs, expecting coercion to be more likely to yield valuable information when interrogated informants are members of a hostile outgroup (i.e., an al-Qaeda member tortured by US operatives) than when they are ingroup members (i.e., an

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American soldier tortured by al-Qaeda). The overall picture that emerges suggests that people strive for cognitive coherence (Liu & Ditto, 2013) in their perceptions of torture's efficacy and their judgments of torture's acceptability. Prior support for torture positively skews perceptions of coerced information value—but only when it is "us" torturing one of "them." These results hold implications for scholars interested in aggression and moral judgments and also for the broader public and policymakers as they weigh arguments for and against torture.

2. Background and plan of study

Prior scholarship on confirmation biases across many domains shows that people frequently interpret ambiguous evidence as conforming to their expectations and beliefs (Klayman, 1995; Lord, Ross, & Lepper, 1979; Nickerson, 1998). In scholarship on moral judgment, recent work argues that people readily use a "consequentialist crutch" to rationalize moral stances and achieve coherence in their perceptions: Those who see something as deontologically moral—as inherently right, consequences aside—also tend to see it as effective and beneficial (Ditto & Liu, 2011). Importantly, Liu and Ditto (2013) showed that those who deemed torture deontologically acceptable also believed it was generally effective. These results are consistent with the effect we posit, but leave open the possibility that broad expectations of torture's effectiveness cause general acceptance of torture. Our initial prediction focuses on the reverse causal sequence: We expect that Americans' prior general support for torture will predict the value they attach to information derived from coercive methods in a specific, novel case. It does not appear that past research has examined perceived coerced information value as a consequence of prior torture support.

Our first study tested for this effect of support on perceived coerced information value. In an online survey with American respondents, we found that torture supporters reading about a thwarted al-Qaeda terrorist attack had positively skewed judgments of coerced information value. In our second study, we examined whether this effect hinged upon the identities of the tortured informant and the torturers. In an online survey with American respondents, we found that torture supporters again judged coerced information to be especially important in the case of an al-Qaeda informant tortured by US operatives but not in the case of a US informant tortured by al-Qaeda operatives.

3. Study 1

Study 1 employed an online survey to gauge American respondents' support for torture and perceptions of a hypothetical episode of a thwarted terrorist attack.

3.1. Method

Three hundred and five US participants (157 males; age M = 35 years, SD = 11.54) completed an online survey through Amazon.com's Mechanical Turk platform (sample size was determined in advance of any analysis based on expected effect sizes). Twenty-four respondents failed at least one attention check question and were excluded from subsequent analyses (final sample n = 281; 142 males, age M = 36 years, SD = 11.67). We captured prior general support for torture with four measures, seeking to test our initial prediction in numerous ways. First, a general support measure identical to the National Opinion Research Center's (NORC, Himberger, Gaylin, Tompson, Agiesta, & Kelly, 2011) polling measure of support for torture ("Do you favor, oppose, or neither favor nor oppose this policy as a way of responding to terrorist threats: Using harsh interrogation techniques against suspected terrorists to seek information about terrorist activities?" with a five-point scale ranging from "Strongly oppose" to "Strongly favor"). Second, a justification measure identical to the Pew Research Center's (Pew Research Center, 2011) public polling measure ("Do you think the use of torture against suspected terrorists in order to gain important information can often be justified, sometimes be justified, rarely be justified, or never be justified?" with the responses coded as 1 through 4, respectively). We also employed Liu and Ditto's (2013) two measures of whether torture is *morally right* ("The use of forceful or harsh interrogation techniques on individuals suspected of terrorist activities is ...," on a seven-point scale ranging from "Morally acceptable in most or all cases" to "Morally wrong in most or all cases," reverse coded to indicate moral acceptance) and *deontologically right* ("The use of [...] is morally wrong even if it is effective in getting suspects to talk," rated on a seven-point scale ranging from "Strongly disagree" to "Strongly agree," reverse coded to indicate moral acceptance).

Participants reviewed a scenario describing a terrorist plot to detonate an explosive device in downtown Chicago (see Supplementary materials for details). The plot was stopped when a man referred to as Male A (described as having links to al-Qaeda) was apprehended. Participants read about two pieces of information that could have helped foil the plot: 1) Male A used a particular alias and 2) money was being transferred from outside the US to someone using that particular name in the Chicago area. We randomly assigned participants to one of two source conditions. Some read that the alias information was revealed under coercion (provided by a senior al-Qaeda member subjected to extreme interrogation techniques, including being forced to stand in positions that caused tremendous pain) and that the money transfer information was noncoerced (revealed by US operatives monitoring financial transactions). For other participants, these sources were reversed (i.e., the alias information was non-coerced, the money transfer information was coerced). Our critical factor of interest was this within-participant dimension of coerced versus non-coerced. The counterbalancing of information source helped to isolate the effects of source (i.e., coercion) from information content.

Two questions captured perceived information value. First, participants rated how important each piece of information was to "stopping the plot described above" on a five-point scale ranging from 1 ("Not very important at all") to 5 ("Extremely important"). Participants then indicated how likely the plot would have been stopped *without* that information, using a slider with responses ranging from 0 ("Very unlikely to stop the plot without this information") to 100 ("Very likely to stop the plot without this info"). We subtracted these values from 100 to create an index of the necessity of the information (i.e., 100 = 10

Participants next judged relative importance of the information in stopping the plot, using a five-point scale ranging from 1 ("The information that Male A was using that particular alias was vastly more important") to 5 ("The information that money had been transferred to that name in Chicago was vastly more important").

Participants then indicated support for continuing to subject the informant to further "harsh and extreme interrogation techniques" (five-point scale ranging from 1 (not supportive at all) to 5 (extremely supportive)) and used the same scale to indicate support for "using this episode as an example—as a kind of success story—to validate and defend the use of harsh and extreme interrogation techniques in future cases."

The survey concluded with demographic questions. Two attention check questions (e.g., asking participants to select the left-most response) were embedded in the survey.

To address possible order effects, we counterbalanced the order of information presented to participants (i.e., half saw the alias information first) and the order of information-specific measures (i.e., half answered questions about the alias information first).

3.2. Results

Along with subjective ratings of relative information value, we computed two other indices of relative value (*importance difference* subtracted the importance rating for non-coerced information from that for coerced information; *necessity difference* subtracted the necessity value for non-coerced information from that for coerced information).

As shown in Table 1, all four measures of torture support were positively correlated with all three measures of relative information value in

Table 1Correlations between prior general support for torture, perceived information value, and readiness to continue torture and use the episode as a success story, Study 1.

Variable	М	Correlations								
		2	3	4	5	6	7	8	9	
1. Support torture	2.64 (1.41)	.83**	.88**	.81**	.20**	.23**	.23**	.69**	.79**	
2. Torture justified	2.28 (1.00)	_	.81**	.74**	.14*	.25**	.22**	.71**	.79**	
3. Morally right	3.09 (2.00)		_	.86**	.17**	.20**	.19**	.67**	.77**	
4. Deontologically right	3.26 (2.01)			_	.13*	.16**	.14*	.57**	.68**	
5. Importance difference	.11 (.98)				_	.56**	.55**	.11	.20**	
6. Necessity difference	1.63 (20.69)					_	.50**	.21**	.22**	
7. Relative importance	3.15 (1.07)						_	.18**	.28**	
8. Continued torture	2.01 (1.24)							_	.74**	
9. Success story	2.36 (1.40)								-	

Note. Standard deviations are given in parentheses.

the expected direction (rs.13–.25, all ps<.05, n = 281). This is consistent with our prediction that prior support for torture shaped people's perceptions of the value of coerced information. Additional analyses suggested that these effects emerged across counterbalancing manipulations and controlling for political conservatism (see Footnote 1).

A category-based analysis revealed a similar picture. We separated participants into groups using the NORC measure of support. Twice as many torture supporters (47.9%), compared to torture opposers (23.4%), saw the coerced information as more important (see Fig. 1).

We also analyzed ratings of importance and necessity as within-participant repeated measures, comparing judgments of coerced and non-coerced information. To test our prediction, we separately analyzed torture supporters and opposers (using the NORC measure). As predicted, torture supporters rated coerced information as significantly more important than non-coerced information (t(95) = 3.49, p = .001, see Fig. 2). Likewise, torture supporters rated coerced information as more necessary than non-coerced information (t(95) = 3.59, p = .001). Torture opposers did not show significant differences in judgments of importance (p = .282) or necessity (p = .123) for coerced versus non-coerced information (Fig. 2).

Lastly, we turned to our consequence measures, including support for ongoing torture of the informant and for using the episode as a success story to validate and defend the use of torture in future cases. As expected, both of these measures were generally positively correlated with our perceived information value measures (see Table 1).

We suspected that perceived information value might mediate the link between prior general support for torture and support for ongoing torture of the informant and use of this case as a success story. To gauge this, we systematically analyzed 40 mediation models (see Supplementary materials for details). In brief, two-thirds of the models showed partial mediation whereas one-third showed no mediation. Overall, we interpret these results as indicating that perceptions of information value likely play some role in consequences, such as the decision to continue torture and the readiness to use an episode as a "success story," but that these attitudes are typically also separately predicted by prior general support, regardless of perceived information value.

4. Selective efficacy

In sum, Study 1 confirmed our prediction that prior general support for torture was associated with perceived information value for a given case of coercion. How broadly does this effect extend—and does it emerge when the interrogated informant is a member of one's own group? It is possible that torture supporters believe in the general efficacy of such techniques for extracting valuable information. If so, American torture supporters would presumably see more value than non-supporters in coerced information regardless of whether the informant was a member of al-Qaeda being interrogated by American operatives or a member of the US military being interrogated by al-Qaeda operatives. In other words, just as torture works on "them" (a member of a hostile outgroup), it also works on "us" (a member of the ingroup).

In contrast to this possibility that torture supporters see torture as generally effective, we expected to find a boundary. Specifically, we anticipated that American torture supporters, compared to opposers, would show greater perceived coerced information value in the case of an al-Qaeda informant interrogated by the US than in the case of an American informant interrogated by al-Qaeda. Why might this be so? If perceptions of coerced information value reflect the operation of moral coherence processes (Ditto & Liu, 2011), then we would expect that effect to be concentrated in cases where the relevant moral stance applies. A good deal of theory and research has explored the ways in which moral judgments of outgroups differ from those of ingroups (e.g., Opotow, 1990). Recent research (e.g., Leidner, Castano, Zaiser, & Giner-Sorolla, 2010; Tarrant, Branscombe, Warner, & Weston, 2012) has shown that peoples' moral evaluations of torture and atrocities vary depending on whether they were described as having been enacted by individuals from one's own country (e.g., the US) or by individuals from an outgroup ally (e.g., the UK or Australia). Other recent work has identified cases where behaviors may be more likely to be considered torture when enacted by a hostile outgroup (e.g., an Iraqi guard slapping an American prisoner) than when enacted by an ingroup member (e.g., an American guard slapping an Iraqi prisoner; Norris. Larsen, & Stastny, 2010). However, prior research appears not to have examined perceptions of torture efficacy or information value, contrasting interrogations performed by one's own group with those performed by a hostile outgroup (e.g., the US versus al-Qaeda torturing a captured informant). Such perceptions of torture efficacy and information value deserve explicit study, we suggest, because of their roles in public debate and private decisions about torture's acceptability and necessity.

We believe that the identities of a tortured informant and those conducting an interrogation will affect judgments of coerced information value. In particular, we predict that American torture supporters will display judgments reflecting *selective efficacy* beliefs, such that support for torture will more positively predict perceived coerced information value when the informant is an al-Qaeda operative interrogated by the US than a member of the US military interrogated by al-Qaeda.

5. Study 2

To test for the selective efficacy boundary, Study 2 gathered responses from online survey participants, gauging their judgments of a

^{*} p < .05.

^{**} p < .01.

¹ Our main focus was on the link between prior support for torture and the perceived value of coerced information. As such, we collapsed across counterbalancing manipulations (as detailed in the Supplementary materials, our expected effects emerged across counterbalanced conditions, including which information was coerced and which information and which questions were presented first). We also considered whether self-reported conservatism served as an alternative explanation or boundary condition for the effects reported here. Our analyses suggested it did not (see Supplementary materials for more details).

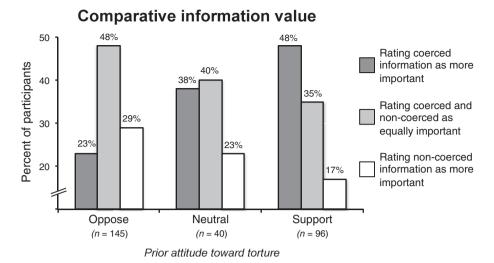


Fig. 1. Share of participants within each prior attitude group (those opposed to torture, those neutral toward torture, and those supportive of torture) who judged coerced or non-coerced information as more important or who found the information equally important, Study 1.

scenario involving a thwarted attack, conducted by either al-Qaeda or US military forces, in Afghanistan.

5.1. Method

Three hundred and sixty-seven US participants (186 males; age M = 33.7 years, SD = 11.13) completed an online survey through Amazon.com's Mechanical Turk platform (sample size was determined

in advance of any analysis based on expected effect sizes). Ninety-five respondents failed at least one of three attention checks and were excluded from subsequent analyses (final sample n=272; 137 males, age M=33.4 years, SD=11.32).

We employed the same four torture support measures used in Study 1. Participants were randomly assigned to review one of two scenarios (see Supplementary materials for details). One described an attack by al-Qaeda on a civilian hotel in Afghanistan being thwarted when US

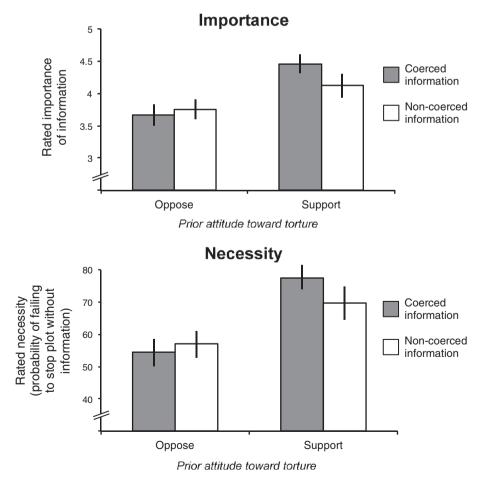


Fig. 2. Ratings of importance and necessity for coerced and non-coerced information by those opposed to and supportive of torture, Study 1. Error bars represent 95% confidence intervals.

military forces confronted and drove off an al-Qaeda cell as it was preparing for the attack. In this scenario, "Person M," an al-Qaeda operative, was captured a few days earlier by US military forces in Afghanistan. Person M was described as "subjected to extreme interrogating techniques, including being forced to stand in positions that caused tremendous pain and being subjected to extremely cold temperatures" and, during one of these sessions, revealing that an attack targeting the hotel was planned. The scenario also noted that US intelligence operatives monitoring al-Qaeda radio transmissions intercepted messages the day before the attack indicating that an operation was being planned for the next day.

The second scenario paralleled the first, featuring an attack by US forces on an al-Qaeda training camp in Afghanistan being thwarted when al-Qaeda forces confronted and drove off a US military team. This scenario described Person M as a US military operative who provided information about targeting the training camp under the same coercive conditions as in the first scenario. This scenario noted that al-Qaeda intelligence operatives intercepted US military transmissions indicating the timing of an operation. Thus, in both scenarios, target information was coerced and timing information was non-coerced.

Participants next rated how important the target information from Person M was to US forces (or al-Qaeda) for preventing casualties, using a slider with responses ranging from 0 ("not valuable at all") to 100 ("extremely valuable"). Next, they used the same scale to rate the importance of the timing information. Participants then judged relative importance of the information in stopping the plot using a slider with responses ranging from 0 ("The information from radio transmissions about the timing of an operation was more important") to 100 ("The information from Person M about the target of the attack was more important"). In all cases, sliders had a starting default value of 50.

Participants also answered four questions about information provision under torture that were not specific to the context of the scenario. Two questions captured revealing valid information: "How likely do you think it is that US military personnel (al-Qaeda members) would reveal any important information they have if they were coerced and tortured?" Judgments were given using a slider with responses ranging from 0 ("Would not reveal any important information") to 100 ("Would very likely reveal any important information"). Two questions captured providing bogus information: "How likely do you think it is that US military personnel (al-Qaeda members) would provide bogus or untrue information if they were coerced and tortured?" Judgments were given using a slider with responses ranging from 0 ("Would not provide bogus or untrue information") to 100 ("Would very likely provide bogus or untrue information"). In all cases, sliders had a starting default value of 50. The sequence of this block of four questions was randomly counterbalanced such that some participants answered these general questions before reading the scenario and other participants answered them after reading the scenario and responding to the scenario-specific questions. Regardless of placement of the block, the order of the four questions within the block was also randomized.

The survey concluded with demographic questions. Three attention check questions were embedded in the survey, including two instructing participants to make a specific response (e.g., select the leftmost option) and one asking participants to identify the source of information in the scenario (multiple choice with the correct answer being "Person M provided information about the target of the attack").

5.2. Results

We first considered whether Study 2 replicated the information value effects of Study 1. Focusing only on the al-Qaeda informant condition (akin to the scenario in Study 1), the correlations between the torture support measures and the relative information value measures were similar to what we observed in Study 1. As shown in the upper portion of Table 2, all four measures of torture support correlated positively with both measures of the relative value of coerced information. Consistent

with our predictions, these correlations suggest that Americans' prior support for torture led them to see information obtained through extreme interrogation of an al-Qaeda operative as relatively more valuable for thwarting a terrorist attack. A categorical analysis of supporters and opposers echoed our findings from Study 1 as well. When judging the scenario featuring an al-Qaeda informant, over two-thirds of supporters (67.8%) saw the coerced information as more important than the noncoerced information whereas fewer than half of opposers (45.0%) did so.

Turning to our boundary prediction, we computed the same correlations as noted above for participants in the American informant condition. As shown in the lower portion of Table 2, and consistent with our expectations, these correlations were noticeably lower than those in the al-Qaeda informant condition, with seven of the eight correlations failing to reach conventional levels of significance. We also conducted regression analyses predicting relative value of coerced information with three independent measures: prior support for torture, a dummy code for informant identity (0 = American, 1 = al-Qaeda), and an interaction of support and identity. Across multiple analyses, this interaction term emerged as a positive and significant predictor, indicating that the relationship between prior support for torture and the perceived relative value of coerced information was stronger when the target was an al-Qaeda informant compared to an American informant. For instance, using the rating measure of relative value of coerced information as the dependent variable, prior support showed a weak link with information value ($\beta = .13$, t(271) = 1.43, p = .16), informant identity showed a negative main effect on information value ($\beta = -.33$, t(271) = 2.33, p = .02), and the interaction term showed the predicted positive effect (β = .39, t(271) = 2.38, p = .02). In short, our analyses confirmed our prediction about selective efficacy: prior support for torture predicted the perceived value of coerced information when the tortured informant was a hostile outgroup member but not when the informant was an ingroup member.

We next examined whether the general expectancy measures (not specific to the hypothetical scenario) revealed selective efficacy beliefs among torture supporters. In general, we found that the torture support measures were positively correlated with assumed likelihood of an al-Qaeda informant revealing important information under torture but not correlated with the likelihood of an American informant revealing important information (see Supplementary materials for more details). The torture support measures were generally negatively correlated with assumed likelihood of an al-Qaeda informant providing bogus information and only weakly negatively correlated the likelihood of an American informant providing bogus information.

Fig. 3 illustrates these effects, showing means for the Oppose, Neutral, and Support categories based on the NORC support torture measure.

Table 2Correlations between prior general support for torture and perceived information value for al-Qaeda and American informants, Study 2.

Variable	M	2	3	4	5	6					
al-Qaeda informant interrogated by American operatives											
1. Support torture	3.05 (1.31)	.76**	.78**	.76**	.31**	.41**					
2. Torture justified	2.38 (0.89)	-	.68**	.65**	.25**	.37**					
3. Morally right	3.48 (1.81)		-	.84**	.30**	.37**					
4. Deontologically right	3.56 (1.94)			-	.32**	.42**					
5. Importance difference	-5.38(20.46)				-	.59**					
6. Relative importance	58.10 (27.14)					-					
American informant interrogated by al-Qaeda operatives											
1. Support torture	2.65 (1.24)	.82**	.73**	.65**	.14*	.12					
2. Torture justified	2.24 (0.91)	-	.73**	.66**	.23**	.11					
3. Morally right	2.77 (1.76)		-	.83**	.12	.03					
4. Deontologically right	3.24 (1.88)			-	.14	.07					
5. Importance difference	-4.60(15.90)				-	.53**					
6. Relative importance	56.96 (26.83)					-					

Note. Standard deviations are given in parentheses.

^{*} p < .05.

^{**} *p* < .01.

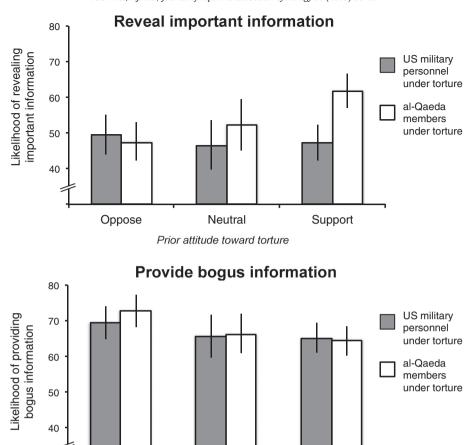


Fig. 3. Ratings of likelihood of US and al-Qaeda informants revealing important information and bogus information under torture, Study 2. Error bars represent 95% confidence intervals.

Neutral

Prior attitude toward torture

Consistent with our expectations, torture supporters, compared to opposers, expected that al-Qaeda informants would be more likely to reveal important information under torture (t(225) = 3.91, p < .01). Supporters, compared to opposers, expected that al-Qaeda informants would be less likely to provide bogus information under torture (t(225) = 2.66, p < .01). Supporters and opposers did not differ significantly in their expectations about US informants. Comparing within supporters across informant identity, supporters thought al-Qaeda informants would be more likely than US informants to reveal important information (t(108) = 4.85, p < .01).

Oppose

In exploratory analyses, we considered whether these general expectancies played any mediating role in the link between prior support for torture and judgments of coerced information value in the thwarted-attack scenarios. We found some evidence consistent with this, showing, for instance, that in the case of al-Qaeda informants, the link between prior general support for torture and perceptions of the value of coerced information in the specific scenario was partly mediated by judgments of the general likelihood of al-Qaeda informants revealing important information (see Supplementary materials for more details).

6. General discussion

Attitudes about torture matter. Public opinions shape the context for policy making. Policy makers' own views inform their choices. And military and intelligence professionals' beliefs guide their operational decisions. A good deal of research suggests that torture does not reliably yield valuable information, a conclusion echoed in the US government's own analyses (Costanzo & Gerrity, 2009; Rejali, 2009; Senate Select

Committee on Intelligence, 2014). Nonetheless, many Americans support torture—and some invoke the information payoff from torture as a reason (Janoff-Bulman, 2007; Pew Research Center, 2014). Although a considerable amount of research has examined support for torture and moral evaluations of torture (e.g., Tarrant et al., 2012; Viki, Osgood, & Phillips, 2013), relatively few studies have examined perceptions of information payoff and torture efficacy (though see, e.g., Crandall, Eidelman, Skitka, & Morgan, 2009).

Support

Building on prior work, we argued that the value torture supporters assign to information gained from coercive interrogation may reflect skewed interpretations, biased in a confirmatory direction to cohere with their moral stance. Our first study supported this notion, finding that torture supporters were twice as likely as torture opposers to see information derived through coercion as having greater value than non-coerced information (see Footnote 2 regarding whether supporters and opposers are symmetrically biased).²

We also expected that information value judgments would predict support for ongoing torture of an informant as well as support for

² We have framed our argument in terms of torture supporters displaying a kind of confirmation bias. Would it also be fair to characterize opposers as showing a mirror image of bias? There are no objectively correct answers about information value in our scenarios so there are limits to our ability to declare some answers accurate or biased. However, we believe that Study 1's counterbalancing of information (location and identity) and source (coerced or not) provides one meaningful test. Normatively, source should not matter to information value. Our analyses revealed that torture opposers showed no effect of source whereas supporters did. We cannot conclude that torture opposers are wholly bias-free but our clearest test of judgment validity locates the information value distortion within torture supporters.

using the episode as a success story to validate and defend the use of torture in future cases. Our results confirmed these links. In addition, we found that measures of general support for torture had substantial independent links to these measures, not wholly mediated by perceived information value. This is consistent with past work suggesting that torture attitudes reflect not just consequentialist reasoning (e.g., assumed information payoffs) but also other motives as well, such as retribution, ingroup glorification, and dehumanization (Carlsmith & Sood, 2009; Harris & Fiske, 2011; Leidner et al., 2010; Liberman, 2013; Waytz & Epley, 2012).

It is possible that some torture supporters believe in the general value of coercion for extracting useful information. In other words: torture works, regardless of who is doing it to whom. However, we predicted that a boundary would emerge in perceived efficacy, arguing that support for torture would most strongly predict judgments of the value of coerced information when the tortured informant was a member of a hostile outgroup rather than a member of the ingroup. Study 2 revealed clear evidence for this effect, with torture support among Americans predicting perceptions of coerced information value when the informant was an al-Qaeda member interrogated by US operatives but not when the informant was an American soldier interrogated by al-Qaeda. In general, torture supporters (but not torture opposers) thought al-Qaeda members would be substantially more likely than American soldiers to provide valuable information in the wake of coercion.

We believe that our findings concerning this boundary shed light on the mechanisms underlying perceived coerced information value. These perceptions do not appear to be driven by a simple global belief that "coercion works." Rather, the bounded appearance of this effect suggests the operation of moral coherence processes as well as the selective moral acceptance of torture. Perceptions of efficacy seem to retrace the contours of moral evaluation. A troubling implication of selective efficacy beliefs is that some torture supporters might see a world filled with torture as yielding disproportionate benefits for their own group—an attitude that, if not only misguided but also adopted widely by different groups, could lead to a meaningful and pointless increase in human suffering.

The present results suggest a larger story about aggression: Not only do assertive and coercive behaviors flow in part from positive expectations about future outcomes (Ames, 2008), but it also seems that, after the fact, those predisposed to aggression read ambiguous outcomes as implying the necessity of their heavy-handed approach. Importantly, these perceptions of efficacy and necessity emerge more strongly when it is "us" aggressing against "them" rather than the reverse. In the case of torture, it appears that initial general support for the means often shapes interpretation of the specific ends. When it comes to coercive interrogation of a hostile outgroup member, torture supporters may think the world is telling them "You're right," "It's paying off," and "Keep going," when in fact what they are hearing is the uncorrected echo of their starting assumptions.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at http://dx. doi.org/10.1016/j.jesp.2015.05.002.

References

- Ames, D.R. (2008). Assertiveness expectancies: how hard people push depends on the consequences they predict. *Journal of Personality and Social Psychology*, 95, 1541–1557.
- Carlsmith, K.M., & Sood, A.M. (2009). The fine line between interrogation and retribution. Journal of Experimental Social Psychology, 45(1), 191–196.
- Costanzo, M.A., & Gerrity, E. (2009). The effects and effectiveness of using torture as an interrogation device: using research to inform the policy debate. *Social Issues and Policy Review*, 3(1), 179–210.
- Crandall, C.S., Eidelman, S., Skitka, L.J., & Morgan, G.S. (2009). Status quo framing increases support for torture. Social Influence, 4, 1–10.
- Ditto, P.H., & Liu, B. (2011). Deontological dissonance and the consequentialist crutch. In M. Mikulincer, & P. Shaver (Eds.), The social psychology of morality: Exploring the causes of good and evil (pp. 51–70). Washington, DC: American Psychological Association.
- Harris, L.T., & Fiske, S.T. (2011). Dehumanized perception: a psychological means to facilitate atrocities, torture, and genocide? Zeitschrift für Psychologie/Journal of Psychology, 219(3), 175.
- Himberger, D., Gaylin, D., Tompson, T., Agiesta, J., & Kelly, J. (2011). Civil Liberties and Security: 10 Years After 9/11. Chicago, IL: Associated Press-NORC Center for Public Affairs Research
- Janoff-Bulman, R. (2007). Erroneous assumptions: popular belief in the effectiveness of torture interrogation. *Peace and Conflict: Journal of Peace Psychology*, 13(4), 429–435.
- Klayman, J. (1995). Varieties of confirmation bias. Psychology of Learning and Motivation, 32, 385–418.
- Leidner, B., Castano, E., Zaiser, E., & Giner-Sorolla, R. (2010). Ingroup glorification, moral disengagement, and justice in the context of collective violence. *Personality and Social Psychology Bulletin*, 36, 1115–1129.
- Liberman, P. (2013). Retributive support for international punishment and torture. *Journal of Conflict Resolution*, 57(2), 285–306.
- Liu, B.S., & Ditto, P.H. (2013). What dilemma? Moral evaluation shapes factual belief. Social Psychological and Personality Science, 4(3), 316–323.
- Lord, C.G., Ross, L., & Lepper, M.R. (1979). Biased assimilation and attitude polarization: the effects of prior theories on subsequently considered evidence. *Journal of Personality and Social Psychology*, 37(11), 2098–2109.
- Mazzetti, Mark (2014, 09 Dec.c). Panel faults C.I.A. over brutality and deceit in terrorism interrogations. The New York Times. The New York Times (Web. 06 Jan. 2015).
- Nickerson, R.S. (1998). Confirmation bias: a ubiquitous phenomenon in many guises. Review of General Psychology, 2(2), 175–220.
- Norris, J.I., Larsen, J.T., & Stastny, B.J. (2010). Social perceptions of torture: genuine disagreement, subtle malleability, and in-group bias. *Peace and Conflict*, 16(3), 275–294.Opotow, S. (1990). Moral exclusion and injustice: an introduction. *Journal of Social Issues*,
- 46(1), 1–20.

 Pew Research Center (2011). *Ten Years after 9/11: United in Remembrance, Divided over Policies.* Washington. DC: Author.
- Pew Research Center (2014). About Half See CIA Interrogation Methods as Justified. Washington, DC: Author.
- Rejali, D. (2009). *Torture and Democracy*. Princeton University Press.
- Senate Select Committee on Intelligence (2014). The Senate Intelligence Committee Report on Torture: Committee Study of the Central Intelligence Agency's Detention and Interrogation Program. Brooklyn, NY: Melville House.
- Tarrant, M., Branscombe, N.R., Warner, R.H., & Weston, D. (2012). Social identity and perceptions of torture: it's moral when we do it. *Journal of Experimental Social Psychology*, 48(2), 513–518.
- Viki, G.T., Osgood, D., & Phillips, S. (2013). Dehumanization and self-reported proclivity to torture prisoners of war. *Journal of Experimental Social Psychology*, 49(3), 325–328.
- Waytz, A., & Epley, N. (2012). Social connection enables dehumanization. Journal of Experimental Social Psychology, 48(1), 70–76.