Cognition 150 (2016) 20–25

Contents lists available at ScienceDirect

Cognition

journal homepage: www.elsevier.com/locate/COGNIT

Blame, not ability, impacts moral "ought" judgments for impossible actions: Toward an empirical refutation of "ought" implies "can"

Vladimir Chituc [a,*], Paul Henne [b], Walter Sinnott-Armstrong [b,c,d,e], Felipe De Brigard [b,c,e]

[a] Duke University, Social Science Research Institute, Durham, NC, USA
[b] Duke University, Department of Philosophy, Durham, NC, USA
[c] Duke University, Center for Cognitive Neuroscience, USA
[d] Duke University, The Kenan Institute for Ethics, USA
[e] Duke Institute for Brain Sciences, USA

ARTICLE INFO

Article history:
Received 1 July 2015
Revised 12 January 2016
Accepted 18 January 2016

Keywords:
Ability
Blame
Excuse validation
Experimental philosophy
Obligation
Ought implies can

ABSTRACT

Recently, psychologists have explored moral concepts including obligation, blame, and ability. While little empirical work has studied the relationships among these concepts, philosophers have widely assumed such a relationship in the principle that "ought" implies "can," which states that if someone ought to do something, then they must be able to do it. The cognitive underpinnings of these concepts are tested in the three experiments reported here. In Experiment 1, most participants judge that an agent ought to keep a promise that he is unable to keep, but only when he is to blame for the inability. Experiment 2 shows that such "ought" judgments correlate with judgments of blame, rather than with judgments of the agent's ability. Experiment 3 replicates these findings for moral "ought" judgments and finds that they do not hold for nonmoral "ought" judgments, such as what someone ought to do to fulfill their desires. These results together show that folk moral judgments do not conform to a widely assumed philosophical principle that "ought" implies "can." Instead, judgments of blame play a modulatory role in some judgments of obligation.

1. Introduction

Moral psychologists have recently explored a host of moral concepts. Some have studied how people think about moral obligations (Cushman, Young, & Hauser, 2006; Greene, 2007; Greene et al., 2009), while others have studied how we ascribe abilities (Alicke, 2000; Phillips & Knobe, 2009), responsibility (Pizarro, Uhlmann, & Salovey, 2003, 2003; Shaver, 1985; Weiner, 1995), and blame (e.g. Malle, Guglielmo, & Monroe, 2014). While some work has explored the relationship between, for example, ability and blame (Alicke, 2000; Phillips & Knobe, 2009), no work has explored the relationship between obligation and these other concepts.

Philosophers, however, have claimed such a fundamental relationship between at least two of these concepts when they endorse the principle that "ought" implies "can," which claims that someone must be able to do whatever it is that they ought to do (Kant, 1787/1933:473; Moore, 1922:317; Parfit, 1984:15; Sidgwick, 1884:33). A promising way to begin exploring the relationship between these moral concepts is to test empirical predictions that may follow from discussions in moral philosophy.

Many philosophers have argued that the principle that "ought" implies "can" is true not only universally, but also necessarily, analytically, or conceptually (Vranas, 2007:171; Zimmerman, 1996:79). In other words, "ought" is supposed to imply "can" by virtue of the concepts expressed by the words "ought" and "can," just as "bachelor" implies "male" by virtue of the concepts expressed by the words "bachelor" and "male."

There is some reason, however, to be skeptical of such a relationship between "ought" and "can" in moral judgment, and some philosophers, who make empirical predictions of their own, reject this principle. For example, Sinnott-Armstrong (1984, 1985) argues that "ought" does not necessarily, analytically, or conceptually imply "can." Rather, it only suggests "can" in contexts where "ought" judgments are used to advise rather than to blame agents—if we were giving advice to a friend, then our advice would be useless if our friend could not do what we advise. In other contexts, such as when we are laying blame (e.g. "Where are you? You ought to be here by now!"), there is no implication from "ought" to "can."

* Corresponding author.
E-mail address: vladimir.chituc@duke.edu (V. Chituc).

http://dx.doi.org/10.1016/j.cognition.2016.01.013
0010-0277/

This disagreement yields two competing hypotheses. If "ought" analytically or conceptually implies "can," as most philosophers assume, then participants should deny that the agent "ought" to do something if they learn that the agent can't do it, just as they would deny that Alex is a bachelor if they learn that Alex is a woman. Put more formally:

H1. Participants will deny that an agent ought to do something that the agent can't do, regardless of whether the agent is to blame for the inability.

In contrast, if the skeptics are right, then:

H2. Participants will judge that an agent ought to do something that the agent can't do when the agent is to blame for the inability.

Some recent empirical work speaks against H1 and in favor of H2. Buckwalter and Turri (2015) provide evidence that participants sometimes make judgments that do not accord with the principle that "ought" implies "can," but they do not explore the cognitive underpinnings of these judgments or the relationship between the relevant concepts. In some cases, for example, Buckwalter and Turri show that participants ascribe obligation without blame, as well as obligation without ability, but do not experimentally manipulate these factors to test the relationship between them.

Furthermore, existing work suggests that judgments of blame may impact "ought" judgments. *Blame validation* (Alicke, 1992, 2000, 2008; see also De Brigard, Mandelbaum, & Ripley, 2009), for example, is a process in which a motivation to blame can increase judgments of ability and responsibility—suggesting that when someone is blameworthy, participants may respond by exaggerating their obligations to hold them accountable. Subsequently, Turri and Blouw (2015) describe a related process called *excuse validation*, where a motivation to withhold blame leads participants to deny that a rule has been broken—suggesting that when someone is blameless for a transgression, participants may respond by downplaying their obligations to protect them from censure.

We present three experiments to adjudicate between hypotheses H1 and H2 and explore underlying cognitive processes. Experiment 1 investigates differences among *ought* judgments by experimentally manipulating blame. Experiment 2 explores the relationship among judgments of *ought*, *can*, and *blame* in a correlational design, while attempting to parse whether blame validation or excuse validation best explains the results from Experiment 1. Experiment 3 examines judgments of *ought*, *can*, and *blame* directly by experimentally manipulating all three variables. Together, these experiments allow us to adjudicate between H1 and H2, test empirical assumptions that underlie the philosophical principle that "ought" implies "can," and provide evidence to explore the relationships among obligation and other moral concepts.

2. Experiment 1

We manipulated blame across two vignettes where an agent is unable to keep a promise. Participants rated how much the agent in each vignette ought to keep the promise.

2.1. Method

2.1.1. Participants

82 participants were recruited via Amazon Mechanical Turk and paid $0.30 for completing the survey. Three participants were excluded after failing an attention check, leaving a total of 79 participants (38 female, M_{age} = 31, SD_{age} = 10.08).

2.1.2. Design, materials, and procedure

Participants read two vignettes adapted from Sinnott-Armstrong (1984) in a within-subjects design. The text of each vignette was as follows (the first paragraph is constant across the two conditions):

> Adams promises to meet his friend Brown for lunch at noon today. It takes Adams thirty minutes to drive from his house to the place where they plan to eat lunch together.
>
> *Low blame:* Adams leaves his house at eleven thirty. However, fifteen minutes after leaving, Adams car breaks down unexpectedly. Because his car is not working at that time, Adams cannot meet his friend Brown at noon, as he promised.
>
> *High blame:* Adams decides that he does not want to have lunch with Brown after all, so he stays at his house until eleven forty-five. Because of where he is at that time, Adams cannot meet his friend Brown at noon, as he promised.

Following each vignette, we asked participants "Do you agree or disagree with the following statement: At eleven forty-five, it is still true that Adams ought to meet Brown at noon." Participants answered on a scale from −50 (completely disagree) to 50 (completely agree), with 0 being "neither agree nor disagree." We also asked them to explain their answer. At the end of the study, we collected demographic information and administered an attention check.

2.2. Results and discussion

Participants were more likely to say that an agent ought to keep a promise they can't keep in the *high blame* condition (M = 8.90, SD = 39.16) than in the *low blame* condition (M = −17.84, SD = 33.31), $t(79) = -4.62$, $p < 0.001$, $d = 0.74$. Importantly, the judgments in the *high blame* condition were significantly above the midpoint, $t(79) = 2.03$, $p = 0.045$, $d = 0.65$. On the whole, 31% of participants in the *low blame* condition and 60% of subjects in the *high blame* condition gave answers above the midpoint. To check for order effects, we compared the ratings of participants who read *low blame* first (n = 42) and *high blame* first. There were no significant order effects for whether participants read *low blame* first (M = −22.05, SD = 32.89) or second (M = −13.18, SD = 33.59; p = .24) or *high blame* first (M = 9.57, SD = 40.96) or second (M = 8.16, SD = 37.61; p = .87).

These results support H2 over H1. In fact, some of the participants outright rejected H1 in their explanations: e.g., "Brown is still going to be waiting for him at noon. Adams won't be ABLE to but he still OUGHT to" (capitals in participant response). As argued in the introduction, no one with the relevant concepts of "ought" and "can" should talk like this if "ought" analytically or conceptually implies "can."

Some critics of experimental work in philosophy reply that participants are making judgments in poor epistemic conditions (Williamson, 2010), and some researchers have found that improving epistemic conditions attenuates certain effects by, for instance, letting participants read contrasting vignettes (e.g. Pinillos, Smith, Nair, Marchetto, & Mun, 2011). However, the lack of order effects in our within-subjects design suggests that our findings are robust.

In free response explaining their judgments, some participants provided alternative actions that Adams should have done instead, such as calling his friend. Proponents of the principle that "ought" implies "can" may also argue that participants were not saying that Adams should meet his friend at noon, but claiming that Adams should still meet his friend, even if he's late. To rule out alternative explanations and to test H1 using a correlational method, we conducted Experiment 2 with a modified vignette.

3. Experiment 2

Judgments in many domains are distorted by a motivation to blame (e.g. Alicke, 1992, 2000, 2008; Alicke, Davis, Buckingham, & Zell, 2008). Thus, a defender of "ought" implies "can" might reply that the findings from Experiment 1 show only that "ought" judgments are distorted by a motivation to hold wrongdoers accountable in the *high blame* condition—that is, participants responses in Experiment 1 may be distorted by *blame validation*. The relationship between "ought" and "can" would hold—defenders of H1 might argue—only in the *low blame* condition, where participants on the whole might say that Adams ought to keep his promise since the motivation to blame is exerting less of a distorting force. This lends itself to an empirical prediction: if judgments of *ability* and *blame* are collected as well as *ought* judgments, then judgments of *ought* and *ability* would show a relationship in the *low blame* condition.[1] In contrast, if H2 is true, judgments of *ought* should correlate with judgments of *blame* rather than with judgments of *ability* in either condition. That is, rather than participants in Experiment 1 being biased by *blame validation*, this would suggest that defenders of H1 are themselves biased by *excuse validation*. Experiment 2 tests these predicted correlations.

3.1. Method

3.1.1. Participants

198 participants were recruited and paid as in Experiment 1. Three participants were excluded after failing an attention check, leaving a total of 195 participants (112 female, M_{age} = 34, SD_{age} = 11.07).

3.1.2. Design, materials, and procedure

Participants read a modified version of Study 1's *low blame* vignette that was carefully worded to exclude alternate ways Adams could keep his promise. It read as follows:

> Brown is a CEO of a large company in the economic boom in the middle of the 20th Century. At 2 o'clock, Brown has a meeting in the city to make a significant financial decision that will decide the future of his company. Since so much money is at stake, he asks his trusted personal advisor, Adams, to meet him on the 12 o'clock train. On the train, he plans to discuss his decision on the ride into the city, where Brown will go straight to his 2 o'clock meeting. Adams promises to meet Brown on the train at noon. It takes Adams thirty minutes to drive to the train station, park, purchase a ticket, and board the train. However, fifteen minutes after leaving at eleven-thirty, Adams car breaks down unexpectedly. Because his car is not working at the time, Adams cannot meet Brown at noon, as promised. Since cell phones have not been invented yet, Adams has no way to contact him.

Using the same scale from Experiment 1, we asked participants to rate how much they agreed with statements saying that, (i) at 11:45 AM, Adams ought to keep his promise, (ii) Adams can keep his promise, and (iii) Adams is to blame for not keeping his promise. The questions were presented in random order.

3.2. Results and discussion

For judgments of *ought* (M = −2.94, SD = 37.22), *blame* (M = −15.48, SD = 31.30), and *can* (M = −33.01, SD = 25.32), we found that *ought* and *blame* judgments were modestly correlated $r(193) = .23$, $p < .001$, but *ought* and *can* judgments were not, $r(193) = .08$, $p = .25$. *Can* and *blame* judgments were also correlated, $r(193) = .24$, $p < .001$. Since there was an unexpected degree of variation in *can* judgments, we conducted a separate analysis excluding 29 subjects whose *can* ratings were above the midpoint, suggesting that, contrary to the vignette, these participants believed that Adams could keep his promise. The correlations were, nonetheless, nearly identical: *ought* significantly correlated with *blame*, $r(164) = .24$, $p = .002$, but not with *can*, $r(164) = .07$, $p = .37$, while *can* remained correlated with *blame* $r(164) = .24$, $p = .002$.

If *ought* judgments depend on *can* judgments, then we would expect to see *can* and *ought* judgments correlate. Instead, *ought* judgments correlated with *blame* judgments, providing further support for H2 over H1. Furthermore, these findings speak against a potential response by defenders of H1—judgments in Experiment 1 may be biased by a motivation to blame in a process of *blame validation*. That the relationship between "ought" and "blame" holds even in the "low blame" condition of Experiment 1 suggests that it's not the case that participants who would otherwise endorse the principle that "ought" implies "can" are distorting their judgments in order to assign blame.

4. Experiment 3

While Experiments 1 and 2 provide strong evidence for H2 over H1, there are still some remaining questions. First, do the patterns observed in Experiments 1 and 2 extend to non-moral uses of the word "ought," such as those expressing conventional or prudential norms? Second, is the observed relationship between judgments of *ought* and *blame* independent of ability or specific to impossible actions? Experiment 3 aims to shed light on these questions.

4.1. Method

4.1.1. Participants

321 participants were recruited via Amazon Mechanical Turk and paid $0.30 for completing the survey. Two participants were excluded after failing an attention check, leaving a total of 319 participants (147 female, M_{age} = 35, SD_{age} = 12.05).

4.1.2. Design, materials, and procedure

Participants were randomly assigned to one of eight conditions, where they were presented with a single vignette. These vignettes varied across three dimensions, with each dimension taking up two possible values as follows. First, the vignettes manipulated what the agent ought to do: Adams either promised to meet his friend at the movie (Moral Obligation) or decided to go alone to see a movie he wanted to see (Non-moral Obligation). Next, the vignettes varied the agent's blameworthiness: Adams either could not keep his obligation because his car broke down (Low Fault) or because he decided not to (High Fault). Finally, each of these vignettes included times when the agent's ability changed, so we asked participants whether the agent had the ability to take the relevant

[1] If all participants said with complete confidence that Adams could not keep his promise, then there should be no such relationship, since there can be no correlations when there is no variance in one of the measures. We suspected, however, and our results confirmed, that there would be some variance in judgments of ability. Participants may have been more or less confident, or responding to something like "degrees" of ability—no one in the world can jump 9 feet into the air (the world record as of writing is slightly more than 8 feet), but people may plausibly rate that the U.S. Olympic track team can't jump that high to a smaller degree than we, the authors, can't jump that high. Whatever the source of the variance, any supporter of the principle that "ought" implies "can" should predict that the more certain someone is of inability, the more certain they should be in denying that Adams ought to keep his promise. We thank an anonymous reviewer for raising this concern.

action at a time when he could still do it (Able) or at a time when he no longer could (Unable). Following the vignettes, all participants answered the same three questions about *ought*, *can*, and *blame* as in Experiment 2.[2] Here, for instance, is one of the vignettes where there is an obligation, an inability, and either a high or a low degree of fault (all other vignettes are available in the Supplementary Materials):

Moral Obligation, Inability, High Fault (Low Fault):

Brown is excited about a new movie that is playing at the cinema across town. He hasn't had a chance to see it, but the latest showing is at 6 o'clock that evening. Brown's friend, Adams, asks Brown to see the movie with him, and Brown promises to meet Adams there. It takes Brown fifteen minutes to drive to the cinema, park, purchase a ticket, and enter the movie. It would take 30 min if Brown decided to ride his bike. The cinema has a strict policy of not admitting anyone after the movie starts, and the movie always starts right on time.

[As Brown gets ready to leave at 5:45, he decides he really doesn't want to see the movie after all. He passes the time for five minutes, so that he will be unable to make it to the cinema on time. Because Brown decides to wait, Brown can't make it to the movie by 6. (High Blameworthiness)]

[At 5:30, Brown thinks about riding his bike, but decides it is too cold. Instead, he leaves at 5:45, but his car breaks down five minutes later. He can't fix it himself in time to make it to the cinema, and it is too late to make it by bike. Because his car is not working at the time, Brown can't meet his friend Adams at the movie by 6. (Low Blameworthiness)]

Questions

Can: At 5:30 [*Can't*: 5:50], Brown can make it to the theater by 6

Blame: Brown is to blame for not making it to the theater by 6

Ought: Brown ought to make it to the theater by 6

4.2. Results and discussion

Data was initially modeled as an 8 (Condition) × 3 (Question) MANOVA. Using Pillai's Trace, this analysis revealed a significant effect of Condition, $V = 1.01$, $F = 25.56$ (21, 933), $p < .001$, $\eta^2 = .36$, with between-subject effects of Condition for Ought, $F(7,311) = 11.51$, $p = .001$, $\eta^2 = .21$, Blame, $F(7,311) = 36.24$ $p < .001$, $\eta^2 = .45$, and Can, $F(7,311) = 63.80$, $p < .001$, $\eta^2 = .59$ (see Table 1).

Because of our *a priori* interest in replicating Experiment 1 and testing whether or not there is an interaction between blame and obligation for vignettes in which the agent is unable—rather than able—to perform the action, we follow-up the initial analysis with two separate 2 (Obligation: Moral, Nonmoral) × 2 (Fault: High, Low) ANOVA's for *ought* judgments at the two levels of ability (Able, Unable). For the Unable condition, mirroring the circumstances of Experiments 1 and 2, there was a main effect for Fault, $F(1,161) = 11.48$. $p = .001$, $\eta^2 = .07$, though no effect for Obligation ($p = .20$). Critically, the Fault by Obligation interaction was significant, $F(1,161) = 12.78$. $p < .001$, $\eta^2 = .07$. For the Able condition, on the other hand, there was a main effect for Fault $F(1,150) = 9.43$. $p = .003$, $\eta^2 = .06$ and Obligation $F(1,150) = 4.97$. $p = .027$, $\eta^2 = .03$, but the interaction was not significant, ($p = .17$). Moreover, there were no significant interactions for *can* or *blame* for either Able or Unable conditions (the complete analysis of the results for *can* and *blame* are included in Supplementary Materials).

To extend the correlational findings in Experiment 2, we limited our analysis to the Unable and Moral Obligation conditions. There was a moderate significant correlation between *ought* and *blame* judgments, $r(80) = .413$, $p < .0001$. There was no significant correlation between *ought* and *can* judgments, $r(80) = .18$, $p = .09$ or between *blame* and *can* judgments, $r(80) = -.07$, $p = .51$ (see Fig. 1).

These findings replicate the findings of Experiments 1 and 2, where *blame* affects *ought* judgments, but *can* does not—both in an experimental (Experiment 1) and correlational (Experiment 2) design. Furthermore, Experiment 3 demonstrates that this relationship between ought and blame does not hold for "ought" judgments based on non-moral desires or judgments about instances when the agent can do what he ought to do.

5. Discussion

In three experiments, we explore the relationship between judgments of what one ought to do, what one can do, and what one is blameworthy for doing. As such, we tested a widely assumed philosophical principle—that "ought" implies "can"—and a competing empirical hypothesis. We show that judgments of *ought*, contrary to broad philosophical assumption, do not imply judgments of *can*. Instead, judgments of *ought* are affected by judgments of *blame*. Experiment 1 shows that participants are significantly more likely to say that agents ought to keep a promise they can't keep when it is their fault that they can't keep it. Experiment 2 shows that judgments of *ought* correlate with judgments of *blame* but not with judgments of *can*. Experiment 3 replicates these findings and shows that this pattern of responses does not hold for some non-moral "ought" judgments.

Even more than exploring the relationship between concepts in moral psychology, these findings have important normative significance, as they pose a serious challenge for the many philosophers who hold that "ought" implies "can." Because this principle is usually taken as an analytic (e.g. Zimmerman, 1996) or a conceptual (e.g. Vranas, 2007) entailment, it is supposed to follow necessarily from the concepts expressed by the words "ought" and "can." Our results show that it does not.

Supporters of "ought" implies "can" may defend the principle by suggesting that the subjects in our experiments had distorted judgments—perhaps the relationship between judgments of *blame* and *ought* is merely explained by a process like *blame validation* (Alicke, 1992, 2000, 2008), where participants respond in order to justify blame. Our results, however, do not support this interpretation—the relationship between *ought* judgments and *blame* judgments held even in "low blame" conditions, where the motivation to blame is the weakest and responses are least likely to be distorted.

Why, then, are so many philosophers attracted to the principle that "ought" implies "can"? One explanation is that rather than the participants in our experiment being distorted by a motivation to ascribe blame, philosophers may be distorting *their* judgments by a motivation to withhold blame. In a process called *excuse validation* (Turri & Blouw, 2015), participants who read about someone who broke a rule (for example by speeding) in a way that wasn't their fault (because their speedometer was malfunctioning) readily reported that no rule was actually broken. The arguments that some philosophers give for "ought" implies "can" support such an explanation: for instance, "Does ought imply can? Surely it

[2] Since both the independent and dependent variables capture the same three constructs—judgments of blame, ought, and can—we refer to the independent variables by "fault," "obligation," and "ability," respectively, and italicize the dependent variables in order to minimize confusion.

Table 1
Results for Experiment 3.

		Able			Unable		
		Ought rating	*Can* rating	*Blame* rating	*Ought* rating	*Can* rating	*Blame* rating
Moral Obligation	High Fault	27.78 (27.86)	40.85 (17.64)	40.39 (19.25)	6.17 (35.36)	−35.04 (23.14)	38.19 (26.54)
	Low Fault	8.21 (31.74)	23.34 (32.51)	3.59 (36.69)	−30.06 (25.60)	−34.74 (26.94)	−15.32 (30.06)
Non-moral Obligation	High Fault	3.63 (36.49)	36.89 (24.01)	45.11 (9.98)	−19.18 (28.54)	−36.24 (24.20)	31.62 (30.27)
	Low Fault	−1.03 (35.43)	12.87 (35.09)	−7.84 (35.70)	−18.21 (37.32)	−32.12 (31.71)	−18.71 (31.69)

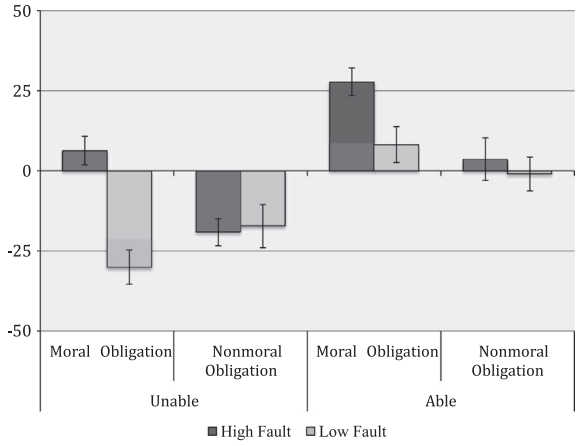

Fig. 1. Ought judgments in the Able and Unable conditions of Experiment 3.

does. For we do not hold a person to blame for not doing something he was unable to do" (Brown, 1977:206). This would suggest that philosophers supporting the principle that "ought" implies "can" look at cases where an agent is blameless for the inability and ignore any rule or obligation that is broken. In other words, the judgment that someone does not deserve blame—which should be irrelevant in an analytic or conceptual relationship between "ought" and "can"—might explain why some hold that no one ought to do what they can't.

Philosophers still committed to "ought" implies "can" may respond that our experiments don't capture the relevant concept of "ought," perhaps because "ought" is polysemous—that is, it has multiple meanings. While this may be true, it is entirely *ad hoc* to insist that the participants in our experiments are utilizing a different meaning of "ought." There is no reason to posit different meanings of "ought" other than to preserve the truth of "ought" implies "can" in light of contrary evidence. Until defenders of the principle supply an independent argument for the claim that "ought" has a different meaning in our examples—we find such attempts to be lacking in a companion paper (Henne, Chituc, De Brigard, & Sinnott-Armstrong, in preparation)—this response merely begs the question.

Furthermore, much of the appeal of the principle that "ought" implies "can" is supposed to be that it reflects commonsense moral judgments. If philosophers do not stick to common moral concepts, then they risk becoming esoteric and irrelevant. In response to our results, then, philosophers who defend "ought" implies "can" need to show not only that they use a different concept than our subjects do, but also that the philosophical concept is common and important. We doubt that they can carry that heavy burden.

These findings also suggest that judgments of "ought" or obligation may be more complex than they initially may seem. Like judgments of intentionality (e.g. Knobe, 2003), causation (e.g. Cushman, Knobe, & Sinnott-Armstrong, 2008), or happiness (Phillips, Misenheimer, & Knobe, 2011), judgments about whether someone has an obligation seems as if it should rely strictly on certain relevant facts about the world and that person's psychology—did they make a promise, were they of sound mind, and so on. Our results, however, suggest that "ought" judgments are similarly underwritten by something more sophisticated, being susceptible to moral factors that we may not necessarily consider *a priori* relevant. Whether these findings may similarly be explained by an appeal to alternate possibilities (Phillips, Luguri, & Knobe, 2015) is a question ripe for future exploration.

Acknowledgments

For funding the research in this article, the authors express their appreciation to the Kenan Institute for Ethics at Duke University. For their patient feedback and support, the authors are in debt to the members of MADLAB, especially Michael Campbell and Aaron Ancell, and the IMC Lab at Duke University. For their sharp and challenging discussions, the authors are grateful to Peter van Inwagen and Julia Driver. For his generous comments at the Society for Philosophy and Psychology Conference, the authors express their thanks and admiration to Wesley Buckwalter.

Appendix A. Supplementary material

Supplementary data associated with this article can be found, in the online version, at http://dx.doi.org/10.1016/j.cognition.2016.01.013.

References

Alicke, M. D. (1992). Culpable causation. *Journal of Personality and Social Psychology, 63*(3), 368–378.
Alicke, M. D. (2000). Culpable control and the psychology of blame. *Psychological Bulletin, 126*(4), 556–574.
Alicke, M. D. (2008). Blaming badly. *Journal of Cognition and Culture, 8*(1), 179–186.
Alicke, M. D., Davis, T. L., Buckingham, J. T., & Zell, E. (2008). Culpable control and counterfactual reasoning in the psychology of blame. *Personality and Social Psychology Bulletin, 34*, 1371–1381.
Brown, J. (1977). Moral theory and the ought–can principle. *Mind, 86*, 206–223.
Buckwalter, W., & Turri, J. (2015). Inability and obligation in moral judgment. *PLoS One, 10*(8), e0136589.
Cushman, F., Knobe, J., & Sinnott-Armstrong, W. (2008). Moral appraisals affect doing/allowing judgments. *Cognition, 108*(1), 281–289.
Cushman, F. A., Young, L., & Hauser, M. D. (2006). The role of conscious reasoning and intuition in moral judgments: Testing three principles of harm. *Psychological Science, 17*(12), 1082–1089.
De Brigard, F., Mandelbaum, E., & Ripley, D. (2009). Responsibility and the brain sciences. *Ethical Theory and Moral Practice, 12*(5), 511–524.
Greene, J. D. (2007). In W. Sinnott-Armstrong (Ed.), *Moral psychology. The neuroscience of morality: Emotion, disease, and development* (Vol. 3). Cambridge, MA: MIT Press.
Greene, J. D., Cushman, F. A., Stewart, L. E., Lowenberg, K., Nystrom, L. E., & Cohen, J. D. (2009). Pushing Moral Buttons: The interaction between personal force and intention in moral judgment. *Cognition, 111*(2), 364–371.
Henne, P., Chituc, V., De Brigard, F., & Sinnott-Armstrong, W. (2016). An empirical refutation of "ought" implies "can" (in preparation).
Kant, I. (1933). *Critique of pure reason* (N. K. Smith, Trans.). London: Macmillan and Co (Original work published 1787).
Knobe, J. (2003). Intentional action and side effects in ordinary language. *Analysis, 63*(279), 190–194.
Malle, B. F., Guglielmo, S., & Monroe, A. E. (2014). A theory of blame. *Psychological Inquiry, 25*(2), 147–186.
Moore, G. E. (1922). *Philosophical studies*. New York: Harcourt, Brace, and Co.
Parfit, D. (1984). *Reasons and persons*. New York: OUP.
Phillips, J., & Knobe, J. (2009). Moral judgments and intuitions about freedom. *Psychological Inquiry, 20*, 30–36.

Phillips, J., Luguri, J. B., & Knobe, J. (2015). Unifying morality's influence on non-moral judgments: The relevance of alternative possibilities. *Cognition, 145*, 30–42.
Phillips, J., Misenheimer, L., & Knobe, J. (2011). The ordinary concept of happiness (and others like it). *Emotion Review, 3*(3), 320–322.
Pinillos, A., Smith, N., Nair, S., Marchetto, P., & Mun, C. (2011). Philosophy's new challenge: Experiments and intentional action. *Mind and Language, 26*, 115–139.
Pizarro, D., Uhlmann, E., & Salovey, P. (2003). Asymmetry in judgments of moral blame and praise: The role of perceived metadesires. *Psychological Science, 14*(3), 267–272.
Shaver, K. (1985). *The attribution of blame: Causality, responsibility, and blameworthiness*. Springer Science & Business Media.
Sidgwick, H. (1884). *The methods of ethics*. London: Macmillan and Co.
Sinnott-Armstrong, W. (1984). Ought' conversationally implies 'can'. *The Philosophical Review, 93*, 249–261.
Sinnott-Armstrong, W. (1985). 'Ought to have' and 'could have'. *Analysis, 45*, 44–48.
Turri, J., & Blouw, P. (2015). Excuse validation: A study in rule-breaking. *Philosophical Studies, 172*(3), 615–634.
Vranas, P. (2007). I ought, therefore I can. *Philosophical Studies, 136*, 167–216.
Weiner, B. (1995). *Judgments of responsibility: A foundation for a theory of social conduct*. Guilford Press.
Williamson, T. (2010). *The philosophy of philosophy*. New York: Blackwell.
Zimmerman, M. (1996). *The concept of moral obligation*. New York: Cambridge University Press.