# HOW MUCH SHOULD THE PEOPLE KNOW? IMPLICATIONS OF METHODOLOGICAL CHOICES IN THE STUDY OF INTENTIONALITY AND BLAME ASCRIPTIONS

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Several studies have shown that people are more likely to attribute intentionality and blame to agents who perform actions that have harmful consequences. This kind of bias has problematic implications for jury decisions because it predicts that judgment in juries will malfunction if an action has a blameworthy effect. Most of these studies include in their design a vignette in which it is clear that agents have foreknowledge of the effects of their actions. This kind of design fails to replicate trial situations where, in most cases, it is impossible to know with certainty whether agents have foreknowledge of the effects of their actions. In the present study, we adopt an alternative design that includes vignettes in which there is no direct evidence of foreknowledge to investigate the relationship between intentionality and blame in actions that have harmful and helpful effects. We find that people are still more likely to attribute intentionality to actions that produce harmful effects than actions that produce good effects. However, we find that people tend to attribute more blame when they have direct evidence of foreknowledge than when presented with an alternative design that does not include foreknowledge. Results indicate the relevant role that evidence of foreknowledge plays in experimental designs that study blame attribution.

Keywords: foreknowledge, blame, intentionality, methods

Research on blame attribution has focused on the idea that mental factors such as intentionality and foreseeability play a fundamental role for blame attribution (Alicke, 2000, 2008; Lagnado & Channon, 2008; Shaver, 1985). Traditionally, intentionality has played a guiding role in the ascription of blame. For example, in *mens rea*, the difference between murder and manslaughter rests on whether the accused's behavior was intentional (Cushman, 2008). This emphasis on intentionality also is present in moral philosophy where it is argued that an action is morally permissible if an agent foresees but does not

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intend harmful consequences (Fitzpatrick, 2014). For example, Mikhail (2011) argues that harmful acts such as homicide may be permissible so long as the agent does not intend homicide as a goal of the action.

However, it has been shown that, in cases of homicide, if the agent intends a harmful action and foresees harmful consequences *without intending* those harmful consequences, people will attribute intentionality and blame for *both* the intentional action and the unintended foreseen harmful consequences. Studies (Guglielmo & Malle, 2010; Malle, 2006; Malle & Nelson, 2003; Nadelhoffer, 2006) have explored this relationship between mental states and attributions of blame in jury-like situations where participants ascribe intentionality to agents who commit a crime. These studies have shown that participants were more likely to judge a behavior as intentional and blame the agent for the behavior when there was a bad side-effect, even if the agent claimed that he did not perform the behavior with the purpose of bringing about that bad side-effect. This kind of bias has problematic consequences for jury decisions. Nadelhoffer (2004, 2006) argues that moral judgment in juries will malfunction if an action has a morally blameworthy side-effect. He argues that we ought to abandon the practice of asking juries whether they consider the defendant to have acted intentionally.

The background for these studies is a general bias found when determining the difference between intentional and unintentional effects in social psychology (Langer, 1975; Lerner, 1980; Mele, 2006; Mele & Cushman 2007; Rosset, 2008; Wegner, 2002) and determining intentional and unintentional effects in helpful and harmful conditions found in moral psychology (Knobe, 2003, 2006; Knobe & Burra, 2006; McCann, 2005; Sverdlik, 2004).

One element common to the methodology employed by these studies (Guglielmo & Malle, 2010; Malle & Nelson, 2003; Nadelhoffer, 2006) is the use of vignettes in which the main character has foreknowledge of the consequences of his/her actions, and this foreknowledge is explicit in the vignette. This design is the direct product of a long history of defining an intentional action as an action where the agent, at the time of choosing an action, is aware of the effects of the intended action (Mele, 1992).

However, in everyday life, when ascribing intentionality and blame we rarely know the mental state of a person. If we observe a person breaking a rule or law, it is unlikely that the person will reveal the intentions, beliefs, and/or desires that motivated the behavior. To ascribe blame, people observing the behavior must use other sources of information, such as the context wherein the behavior takes place or previous information about this person (Desforges, 2000). This is also true during a trial; it is not always clear that the accused had knowledge of the consequences of his/her actions. To decide whether the accused could foresee the side-effect of his/her action, the prosecution and defense provide jurors with a description of the facts and often conflicting interpretations of the accused's foreknowledge and motivation.

In this paper, we examine the methodological consequences of including foreknowledge in a study that examines ascriptions of intentionality and blame in a case of murder that is committed during a felony (i.e., robbing a store), which is death-penalty eligible. We depart from previous studies by employing a vignette that provides the reader with the same information that would be available in ordinary, everyday interactions or in the context of sitting on a jury. That is, we employed a vignette in which it is not clear whether the main character has foreknowledge of the side-effects of his/her action. This analysis is important for two reasons. First, as Mawson (2005) has reported intentions are taken for granted and seldom verified in jury trials. Second, evidence of foreknowledge can provide direct evidence of foreseeability, and it has been shown that foreseeability is connected to ascriptions of intentionality and blame (Alicke, 2000; Lagnado & Channon, 2008; Shaver, 1985).

To analyze the way participants ascribe blame we used Alicke's (2000) culpability control model (CCM). We chose this model because if, as others claim, the attribution of intentionality and blame in jury-like situations is biased, then we need a model that makes it possible to measure bias in blame validation processes. The CCM provides a description of how people may alter their perceptions in their blame validation process and that allows us to explain the reasons behind their bias.

In this model, Alicke (2000) identifies three aspects of personal control that encourage ascriptions of blame (i.e., mental elements such as desires or plans, behavioral elements such as actions or omissions, and consequential elements or behavioral outcomes). Using these aspects, we test whether ascriptions of blame are affected by the lack of direct evidence of foreknowledge and which aspects are used by participants to justify their ascriptions of blame. As argued by Lagnado and Channon (2008), it is important to consider both positive and negative outcomes to fully understand blame ascriptions. To determine the relationship between intentionality and praise, we also use the mental, behavioral, and consequential aspects of personal control to examine praise attributions.

Finally, addressing concerns as to whether studies that utilize undergraduate students exclusively provide accurate descriptions of human behavior (Henrich, Heine, & Norenzayan, 2010), we compare ascriptions of intentionality and blame in community and undergraduate student samples. Most studies use undergraduate students as their exclusive sample and extrapolate their results to jurors' assessments of behavior. To test whether students' responses are similar to those of people in the community, we conducted surveys of a random sample of participants in the city of Huntsville, Texas. Both the students and members of the community live or spend a significant portion of time in Huntsville, home of the Walls Unit, which houses "the busiest death chamber in America" (Fernandez, 2013, para. 4). The results of these surveys are relevant because they will inform us about the moral intuitions of people who are both familiar with death penalty cases and who could be selected as potential jurors in a death penalty trial.

We tested the following hypotheses. First, even in more naturalistic conditions with no direct evidence of outcome foreknowledge, participants still will exhibit bias in ascribing intentionality in an action that resulted in harm. Second, we believe that the bias observed in previous studies (Nadelhoffer, 2006) is in part the result of the methodological choice to

including foreknowledge in the design. Following the CCM (Alicke, 2000), we expected that eliminating direct evidence of foreknowledge and desire in our vignettes will decrease the actor's personal control. This in turn was expected to decrease blame ascriptions. If our hypotheses are correct, this will mitigate some concerns that authors (Nadelhoffer, 2006; Malle, 2006; Malle & Nelson, 2003) have posed regarding the attributions of intentionality in juries. Finally, we hypothesized that ascriptions of intentionality and blame of the community and students will be different. It seems plausible that the moral intuitions of people who have lived longer and been exposed for a longer period of time to death penalty cases will be different than the intuitions of undergraduate students (the community-participant's average age was 48 years, while the student-participants' average age was 21 years).

#### **METHOD**

# **Participants**

In the first part of our study, the first group of participants (N = 87) were people who attended two summer festivals held in Huntsville, Texas. The second group of participants (N = 167) were students attending Sam Houston State University during December of 2012.

#### Materials and Procedure

Participants in each group were asked to complete basic demographic questions (e.g., gender, age, ethnicity, religion, and general occupation) and read one of two scenarios depicting a thief shooting and killing the clerk he robbed (see Appendix). The scenarios are identical with the exception of the third-party consequences. In one scenario, the harm condition, the clerk's death has harmful consequences for the clerk's children (after their father's death, the clerk's children are forced to live in the streets). In the other scenario, the help condition, the clerk's death has beneficial consequences for the children (after their father's death, the clerk's children are adopted by a loving, non-abusive family) [1]. After reading the survey, the participants are asked whether the behavior was intentional; how much blame/praise the main character deserves (assessed using a Likert-type scale); why he is or isn't to be blamed/praised (an open-ended question); and whether they agree with the death penalty.

For the first open-ended question, we used Alicke's (2000) CCM to code the participant's answer in one of three categories: (1) Mental elements such as desires or plans, (2) behavioral elements such as actions or omissions, and (3) consequential elements or behavioral outcomes. If the answer to the open-ended question included more than one reason, then each reason was coded independently. Two coders coded the second open-ended question. The number of observed agreements among these coders was 53 (91.38% of the observations), Kappa = 0.863, SE of Kappa = 0.059 and Weighted Kappa = 0.885. The strength of agreement is considered to be "very good" (Fleiss, 1981). Finally, participants were asked whether they agree (or not agree) with the death penalty.

For the second part of our study, 145 Sam Houston State University students participated during January of 2013. Each participant was asked to complete the same basic

demographic questions (e.g., gender, age, ethnicity, religion, and general occupation) as in the first part of the study. They were asked also to read the same surveys used in the first part of the study (i.e., one of two scenarios, depicting a thief who shot and killed the clerk he robbed, that are differentiated by harmful and helpful side effects) except that the main character of these vignettes has foreknowledge of the consequences of his actions and demonstrates no care for these consequences (see Appendix). Just as in the first part of the study, after reading the survey, the participants are asked whether they think the behavior was intentional; how much blame (praise) using a Likert-type scale the main character deserves; why they think he is or isn't to be blamed/praised (an open-ended question); and whether they agree with the death penalty. For the analysis of this open-ended question, we used Alicke's (2000) CCM model as in the first part of the study.

## **RESULTS**

# The Huntsville Community—No Foreknowledge

Eighty-seven participants (34 males, 53 females) from a community sample completed the questionnaire[1]. The average age was 48[2]. A Chi-square analysis was conducted between attributions of intentionality in harm and help conditions, and it was found that the difference between harm and help conditions was significant  $X^2(1, N = 87) = 18.08$ , p < .001. In the harm condition, 52% of the participants said the harmful consequence of the agent's action (i.e., the children living on the streets) was not intentional, and 48% said it was intentional. In the help condition, 93% said the helpful consequence of the agent's action (i.e., the children living with a loving, non-abusive family) was not intentional, and 7% said it was intentional. In the harm condition, the blame attribution mean was 4.93 and in the help condition the praise attribution mean was 0.33. These results show that, even when lacking direct evidence of foreknowledge, participants exhibited a bias towards ascribing intentionality to an action that resulted in harmful consequences. The results also show that even though both conditions (i.e., harm and help) do not indicate direct evidence of foreknowledge, participants are likely to blame the actor for a behavior that results in harmful consequences and not to praise him for a behavior that results in helpful consequences.

# Students—No Foreknowledge

One hundred and sixty-seven participants (64 males, 103 females) completed the questionnaire. The average age was 21[3]. A Chi-square analysis was conducted between attributions of intentionality in harm and help conditions, and it was found that this difference between harm and help conditions was significant  $X^2(1, N = 167) = 29.40, p < .001$ . In the harm condition, 52% of the participants said the harmful consequence of the agent's action (i.e., the children living on the streets) was not intentional, and 48% said it was intentional. In the help condition, 90% said the helpful consequence of the agent's action (i.e., the children living with a loving, non-abusive family) was not intentional, and 10% said it was intentional. In the harm condition, the blame attribution mean was 4.55 and in the help condition the praise attribution mean was 0.83. These results show that, even when lacking direct evidence of foreknowledge, participants exhibited a bias towards ascribing intentionality to an action that resulted in harmful consequences. The results also show that

even though both conditions (i.e. harm and help) do not indicate direct evidence of fore-knowledge, participants are likely to blame the actor for a behavior that results in harmful consequences and not to praise him for a behavior that results in helpful consequences.

# Students with Foreknowledge

As mentioned, since no significant differences were found in the ascription of intentionality in harm/help conditions between the community and student groups in the first part of the study, we recruited only student participants for this next level of analysis. One hundred and forty-five participants (63 males, 82 females) completed the questionnaire. The average age was 25[4]. A Chi-square analysis was conducted between attributions of intentionality in harm and help conditions, and it was found that this difference between harm and help conditions was significant  $X^2(1, N = 144) = 46.19, p < .001$ . In the harm condition, 32% of the participants said the harmful consequence of the agent's action (i.e., the children living on the streets) was not intentional, and 68% said it was intentional. In the help condition, 88% said the helpful consequence of the agent's action (i.e., the children living with a loving, non-abusive family) was not intentional, and 12% said it was intentional. In the harm condition, the blame attribution mean was 5.16 and in the help condition the praise attribution mean was 0.84. These results show that when presented with direct evidence of foreknowledge, participants exhibited an even more pronounced bias towards ascribing intentionality to an action that resulted in harmful consequences. The results also show that when presented with evidence of foreknowledge participants are even more likely to blame the actor for a behavior that results in harmful consequences and continue to not praise him for a behavior that results in helpful consequences.

# Comparison of Self-Reports of Ascription of Blame Between Students with No Foreknowledge and Students with Foreknowledge

A Chi-square analysis was conducted between the foreknowledge and no foreknowledge student groups to compare the relationship between the kinds of mental states being used to attribute blame and praise in the harm and help conditions. There was no significant difference between the foreknowledge and no foreknowledge group. However, there was a difference between participants who exhibited a bias towards ascribing intentionality in an action that resulted in harmful consequences (i.e., participants who exhibit a gap between harm and help conditions; they consistently ascribe intentionality in the harm condition and do not ascribe praise in the help condition) and participants who did not exhibit the bias  $X^2(3, N = 308) = 24.28, p < .001$ . Participants who did not exhibit the bias (both foreknowledge and no foreknowledge groups) consistently use more behavioral elements to justify *not* ascribe blame; foreknowledge 64% use behavioral elements to *not* ascribe blame). At the same time, they use more behavioral elements to justify ascribing praise (no foreknowledge 66% use behavioral elements to ascribe praise).

Finally, a one-way between subjects Analysis of Variance (ANOVA) was conducted between foreknowledge and no foreknowledge student groups to compare blame attributions. We were interested in the following question: Did the presence of foreknowledge

result in a significant difference in blame attributions? Indeed, there was a significant difference between the attribution of blame between these two groups F(3,306) = 228.38 p < .0001. Participants in the harm condition with foreknowledge ascribed higher levels of blame to the agent (M = 5.16, SD = 1.26) than did participants without foreknowledge (M = 4.55, SD = 1.53; Tukey HSD; p < .05).

#### **DISCUSSION**

As predicted in the first part of the study, we found that, even if an agent does not have foreknowledge, participants are still more likely to attribute intentionality to the action that brought about those harmful effects (although at a lower rate than previous findings) than they are to attribute intentionality to an action that brought about helpful effects. When presented with a vignette that includes foreknowledge, participants exhibit a more pronounced biased effect of attributing intentionality to a behavior that resulted in a harmful effect. Thus, based on the results of this study, we can conclude that foreknowledge seems to contribute to a more pronounced bias in attributing intentionality, but participants still show this bias even when lacking direct evidence of foreknowledge.

Given the connection of this kind of bias to the development of Theory of Mind (i.e., the ability to attribute beliefs and desires to others), it is surprising to see that this bias is not necessarily tied to direct evidence of foreknowledge. Leslie, Knobe, and Cohen (2006) describe the circumstances in which children demonstrate a bias in attributing intentionality to actions that have harmful (or helpful) side effects. The authors found that pre-school children (4 and 5-year-olds) claim that a foreseen effect is brought about "on purpose" if it has morally bad consequences, but it was not considered brought about "on purpose" if the effects were morally good. Thus, they argue that the two prerequisites for the appearance of this kind of bias in children are that the *actor knows* that the side effect will occur and that the actor does not care about the side effect. In our, study participants *did not know* whether the actor knows the side effect of his action or whether the actor cares about causing the effect. Contrary to Leslie, Knobe, and Cohen's (2006) findings, our results suggest that this kind of bias can appear without direct evidence of foreknowledge and desire.

The finding in our study of the presence of this bias when there is a lack of direct evidence of foreknowledge suggests an even greater flexibility in the way people attribute (or not) intentionality. Paharia, Kassam, Greene, and Bazerman (2009) have shown the presence of this same kind of flexibility in the use of foreknowledge in the case of indirect agency (i.e., how observers perceive the harmful action of a person whose intentions are carried through the actions of other agents). This same kind of flexibility of intentionality attribution seems to be supported by developmental studies. Pellizzoni, Siegal, and Surian (2009) found that 4- and 5-year-olds showed this bias in attributing intentionality to behaviors that have harmful effects when the agent had knowledge *or* desire/care for the outcome. What our study adds to this discussion is the presence of an even more extreme form of flexibility. Our results lead us to believe that people will exhibit this kind of bias not only in the absence of direct evidence of foreknowledge *or* desire, but also in

the absence of direct evidence of *both* foreknowledge *and* desire. This suggests that the attribution of intentionality is a flexible process that can be used in contexts in which the agent's mental states such as foreknowledge is explicit as well as in contexts in which mental states are unknown.

The results of this study also confirm our second prediction: The lack of direct evidence of foreknowledge has an effect on the attributions of blame. Our results show that participants in the harm condition with foreknowledge ascribed higher levels of blame to the agent in the vignette than did participants without foreknowledge. As described earlier, previous studies (Guglielmo & Malle, 2010; Malle, 2006; Malle & Nelson, 2003; Nadelhoffer, 2006) have consistently demonstrated that if the behavior of an agent has harmful consequences, participants will ascribe intentionality and blame, even when the agent provides direct evidence that s/he did not intend those harmful consequences. Our findings are consistent with these earlier studies.

What is different and intriguing about our results is that participants attributed *more* blame to the agent when they had direct evidence that the agent could *foresee but did not intend* the harmful consequences (e.g. foreknowledge condition) and attribute *less* blame when they have *no* direct evidence of the agent's intentions and desires. This was the case even when the agent's behaviors brought forth the same kinds of harmful consequences.

These findings have important implications for the legal applications of the concept of intentionality in *mens rea* (Cushman, 2008), where it is necessary for a jury to distinguish between an action being intentional and the degree of blameworthiness of that action. Some authors (Malle, 2006; Malle & Nelson, 2003; Nadelhoffer, 2006) have claimed that the bias found in attributions of intentionality and blame poses a serious problem for the legal system. Judgments may be more biased against the defendants because of the negative behaviors that are attributed to them. The results in our study suggest that if prosecutors are able to demonstrate clearly the beliefs and desires of the accused, jurors will attribute blame based on the degree to which these effects are harmful. However, if there is doubt about what the accused believes and desires, then it seems that jurors will not be as biased towards harmful effects. This, in turn, allows us to have more faith in the way people on a jury will ascribe blame to defendants. Moreover, we found that people who agree with the death penalty attribute blame in the same way as those who do not agree with the death penalty. This suggests that the people's ability to determine the degree of blameworthiness will not be biased in trials where the death penalty is a possibility.

At this point, we are interested in answering this question: Why does the absence of direct evidence of foreknowledge have as an effect a decrease in blame attribution for a harmful consequence? Shaver (1985) argues that there are two kinds of foreseeability: Subjective foreseeability (what the person actually knows) and reasonable foreseeability (what the person should know). Shaver argues that blame attributions should only be affected by reasonable foreseeability and not by subjective foreseeability. Following Shaver, the differences between the foreknowledge and no foreknowledge conditions should only have an effect on subjective foreseeability and, since only reasonable foreseeability should

have an effect on attributions of blame, the presence or absence of foreknowledge should not have an effect on ascriptions of blame. However, our results indicate that subjective foreseeability (what the actor actually knows) drives blame ascriptions.

Meanwhile, for Alicke (2000), foreseeability modulates the degree of control that a person has, and for that reason it has a direct effect on blame attributions. For Alicke, both subjective and reasonable foreseeability will have an effect on attributions of blame. Our results seem to be in accordance with Alicke's analysis of blame; the evidence presented in the vignette on subjective foreseeability (i.e., foreknowledge or no foreknowledge) has an effect on ascriptions of blame.

However, we could not use the elements found in the CMM to explain this effect. If Alicke (2000) is right, we should have found differences in the reasons that participants chose to justify ascriptions of blame: Mental states, behaviors, and consequences among the foreknowledge and no foreknowledge groups, since foreknowledge and desire have an impact in personal control and blame attributions. We found that there are no significant differences, however, between the reasons participants provided to justify ascriptions of blame between the foreknowledge and no foreknowledge groups.

Alicke (2000) also claims that, besides using the three reasons described above when attributing blame, people also may use spontaneous evaluations, that is, affective reactions to the people performing that action and the harmful consequences that this behavior brought about. In a previous paper, Alicke and colleagues (Alicke, Davis, & Pezzo, 1994) argue that this kind of negative reaction to the consequence of the behavior can influence and distort ascriptions of intentionality and blame. Thus, following Alicke (2000), participants may have provided a spontaneous evaluation, that is, an affective reaction to the features of the harmful effect that altered the evidence (i.e., lack of direct evidence of foreknowledge and desire) in order to justify their ascriptions of blame.

Our final and unexpected discovery involved the bias towards ascribing intentionality for an action that resulted in harmful consequences. We found two significant differences between the reasons offered by participants who displayed this bias to justify their answers, and the reasons offered by those who did not. First, participants who did not exhibit this bias consistently attribute praise in helpful conditions. This is an unexpected and surprising finding because, as Alicke argues, "Whereas blaming reckless people has obvious instrumental value, there is little to be gained in praising inadvertent do-gooders" (2008, p. 181). In other words, this group of participants is surprising, because compared to the majority of participants, not only did they not follow this bias, but they praised the agent for helpful consequences. Second, the participants who did not exhibit this bias consistently used more behavioral elements to justify their ascriptions of blame/praise. We think that this small group was able to escape this bias by focusing on the behavioral elements of the vignette. Meanwhile, participants who exhibit the bias do not have a consistent strategy. They use a variety of interpretations to justify ignoring direct evidence (the agent's claim that he did not intend the harmful consequences). This finding suggests that people who "escape" the bias have a more consistent and coherent strategy when

evaluating a moral action. Meanwhile, people who fall under the influence of the bias do not seem to follow a consistent strategy when providing a justification for a moral judgment. Instead, they exhibit a form of flexibility to justify what may be considered a bias against harmful consequences.

A question that remains for future research is whether empathy also plays a role in this spontaneous affective attribution of blame. Hanson, Terrance, and Plumm (2015) found that empathy plays a fundamental role in social punishment. In their study, empathy was negatively correlated with blame and responsibility. In the context of our study, it may be fruitful to investigate whether or not spontaneous affective attributions of blame in the absence of direct evidence of foreknowledge are driven by empathy towards agents who perform actions that result in a helpful outcomes and agents whose actions that result in harmful outcomes.

Finally, our results did not confirm our last prediction. The results in this study showed that there are no significant differences between the general attributions of intentionality and blame by the students and the Huntsville community. To our surprise, age and familiarity with the topic do not seem to have a significant effect on the subjects' responses. These results suggest that concerns about potential differences between community members and students in ascriptions of intentionality appear to be unwarranted.

#### REFERENCES

- Alicke, M. (2000). Culpable control and the psychology of blame. *Psychological Bulletin*, 26(4), 556-674. Alicke, M. (2008). Blaming badly. *Journal of Cognition and Culture*, 8, 179-186.
- Alicke, M. D., Davis, T. L., & Pezzo, M. V. (1994). A posteriori adjustment of a priori decision criteria. *Social Cognition*, 12, 281-308.
- Cushman, F. (2008). Crime and punishment: Distinguishing the roles of causal and intentional analysis in moral judgment. *Cognition*, *108*, 353-380.
- Desforges, D. M. (2000). Guilty or innocent: Evaluation bias as a function of information format. *Journal of Offender Rehabilitation*, 31, 69-76.
- Fernandez, M. (2013, June 29). From America's busiest death chamber, a catalog of last rants, pleas and apologies. *The New York Times*. Retrieved from http://www.nytimes.com/2013/06/30/us/from-americas-busiest-death-chamber-a-catalog-of-last-rants-pleas-and-apologies. html?pagewanted=all&\_r=0.
- Fitzpatrick, S. (2014). Distinguishing between three versions of the doctrine of double effect hypothesis in moral psychology. *Review of Philosophy and Psychology*, *5*, 505-525.
- Fleiss, J. (1981). Statistical methods for rates and proportions (2nd ed.). New York, NY: John Wiley.
- Guglielmo, S., & Malle, B. (2010). Can unintended side effects be intentional? Resolving a controversy over intentionality and morality. *Personality & Social Psychology Bulletin*, *36*, 1635-1647.
- Hanson, B. L., Terrance, C. A., & Plumm, K. M. (2015). Parent as both perpetrator and victim: Blame and punishment in a case of child neglect. *Applied Psychology in Criminal Justice*, 11, 162-184.
- Henrich, J., Heine, S., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, 33, 61-83.
- Knobe, J. (2003). Intentional action in folk psychology: An experimental investigation. *Philosophical Psychology*, 16, 309-324.
- Knobe, J. (2006). The concept of intentional action: A case study in the uses of folk psychology. *Philosophical Studies*, 130, 203-231.

- Knobe, J. & Burra, A. (2006). The folk concepts of intention and intentional action: A cross-cultural study. *Journal of Cognition and Culture, 6,* 113-132.
- Lagnado, D. A., & Channon, S. (2008). Judgments of cause and blame: The effects of intentionality and foreseeability. *Cognition*, 108, 754-770.
- Langer, E. J. (1975). The illusion of control. *Journal of Personality and Social Psychology*, 32, 311-328.
- Lerner, M. J. (1980). The belief in a just world: A fundamental delusion. New York, NY: Plenum.
- Leslie, A., Knobe, J., & Cohen, A. (2006). Acting intentionally and the side-effect effect: 'Theory of Mind' and moral judgment. *Psychological Science*, *17*, 421-427.
- Malle, B. F. (2006). The relation between judgments of intentionality and morality. *Journal of Cognition and Culture*, *6*, 61-86.
- Malle, B., & Nelson, S. (2003). Judging *mens rea*: The tension between folk concepts and legal concepts of intentionality. *Behavioral Sciences and the Law*, 21, 563-580.
- Mawson, A. (2005). Intentional injury and the behavioral syndrome. *Aggression and Violent Behavior*, 10, 375-405.
- McCann, H. (2005). Intentional action and intending: Recent empirical studies. *Philosophical Psychology*, 18, 737-748.
- Mele, A. (1992). Recent work on intentional action. American Philosophical Quarterly, 29, 199-217.
- Mele, A. (2006). The folk concept of intentional action: A commentary. *Journal of Cognition and Culture*, 6, 277-290.
- Mele, A., & Cushman, F. (2007). Intentional actions, folk judgments and stories: Sorting things out. *Midwest Studies in Philosophy*, *31*, 184-201.
- Mikhail, J. (2011). *Elements of moral cognition: Rawls' linguistic analogy and the cognitive science of moral and legal judgment.* Cambridge, UK: Cambridge University Press.
- Nadelhoffer, T. (2004). Blame, badness, and intentional action: A reply to Knobe and Mendlow. *Journal of Theoretical and Philosophical Psychology*, 24, 259-269.
- Nadelhoffer, T. (2006). Bad acts, blameworthy agents, and intentional actions: Some problems for juror impartiality. *Philosophical Explorations: An International Journal for the Philosophy of Mind and Action*, *9*, 203-219.
- Paharia, N., Kassam, K., Greene, J., & Bazerman, M. (2009). Dirty work, clean hands: The moral psychology of indirect agency. *Organizational Behavior and Human Decision Processes*, 109, 134-141.
- Pellizzoni, S., Siegal, M., & Surian, L. (2009). Foreknowledge, caring and the side-effect in young children. *Developmental Psychology*, *45*, 289-295.
- Rosset, E. (2008). It's no accident: Our bias for intentional explanations. Cognition, 108, 771-780.
- Shaver, K. G. (1985). *The attribution of blame: Causality, responsibility, and blameworthiness*. New York, NY: Springer-Verlag.
- Sverdlik, S. (2004). Intentionality and moral judgments in commonsense thought about action. *Journal of Theoretical and Philosophical Psychology*, 24, 224-236.
- Wegner, D. M. (2002). The illusion of conscious will. Cambridge, MA: MIT Press.

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## **APPENDIX**

#### NO FOREKNOWLEDGE VIGNETTES

#### Harm Condition

John is robbing a store.

John recognizes the clerk as an old neighbor and knows that the clerk is a single parent who takes care of his children.

Responding to John's demand, the clerk opens the cash register. John thinks the clerk has a gun and is going to shoot him. John shoots the clerk and kills him.

After their father's death, the clerk's children are forced to live in the streets.

# Help Condition

John is robbing a store.

John recognizes the clerk as an old neighbor and knows that the clerk physically abuses his children.

Responding to John's demand, the clerk opens the cash register. John thinks the clerk has a gun and is going to shoot him. John shoots the clerk and kills him.

After their father's death, the clerk's children are adopted by a loving, non-abusive family.

#### FOREKNOWLEDGE VIGNETTES

#### Harm Condition

John is robbing a store.

John recognizes the clerk as an old neighbor and knows that the clerk is a single parent who takes care of his children. John knows that without their father, the children will be forced to live in the streets, but that isn't what matters to him. He just wants money.

Responding to John's demand, the clerk opens the cash register. John thinks the clerk has a gun and is going to shoot him. John shoots the clerk and kills him.

After their father's death the clerk's children are forced to live in the streets.

# Help Condition

John is robbing a store.

John recognizes the clerk as an old neighbor and knows that the clerk physically abuses his children. John knows that without their father, the children will be adopted by their uncle and his wife, a loving and non-abusive couple, but that isn't what matters to him. He just wants money.

Responding to John's demand, the clerk opens the cash register. John thinks the clerk has a gun and is going to shoot him. John shoots the clerk and kills him.

After their father's death, the clerk's children are adopted by their uncle and his wife, a loving and non-abusive couple.

#### **ENDNOTES**

- 1. Out of the first group of participants (i.e., Huntsville community members), 44 participants answered the survey after reading the harm condition, and 43 participants answered the survey after reading the help condition. Out of the second group of participants (students), 87participants answered the survey after reading the harm condition, and 83 participants answered the survey after reading the help condition.
- 2. All of the participants completed high school, with slightly over half of them completing college degrees (58%). A total of 44 were in the harm condition; 43 were in the help condition. Race/ethnicity of the sample was as follows: 6% Asian-American; 5% Black/African-American; 9% Hispanic/Latino; 1% Native American/ Alaskan Native; 80.5% White; and 3% Other. Religious affiliations were: 6% agnostic; 10% atheist; 1% Buddhist; 9% Catholic; 59% Christian; 2% Jewish; and 13% Other. Because of the sample size, no significant differences were found among these different demographic categories.
- 3. Race/ethnicity of the sample was as follows: 1.8% Asian-American; 19.2% Black/African-American; 17.4% Hispanic/Latino; 0.6% Native Hawaiian/Pacific Islander; 0.6% Native American/Alaskan Native; 59.9% White; and 3.6% Other. Religious affiliations were: 7.8% agnostic; 2.4% atheist; 0.6% Buddhist; 16.8% Catholic; 60.5% Christian; and 12% Other or not reported. Because of the sample size, no significant differences were found among these different demographic categories.
- 4. Race/ethnicity of the sample was as follows: 1.4% Asian-American; 25.5% Black/African-American; 16.6% Hispanic/Latino; 0.7% Native American/Alaskan Native; 51.7% White; and 4.1% Other. Religious affiliations were: 11% agnostic; 3.4% atheist; 16.6% Catholic; 61.4% Christian; and 7.6% Other or not reported. Because of the sample size, no significant differences were found among these different demographic categories.