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Is Negligence a First Cousin to Intentionality? Lay Conceptions of Negligence and Its Relationship to Intentionality

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Summary: In three studies, we examined lay conceptions of negligence and how they are used when making judgments about actors' intentions, negligence, and blame. Study 1 examined the extent to which participants agreed about what constitutes negligence and accidents. After finding a high level of agreement between participants, Study 2 explored the features that defined participants' folk understanding of negligence. Additionally, we examined if definitions of negligence overlapped with key features of definitions of intentionality proposed in the literature. Study 2 suggested there were some key overlapping features and differences between negligence and intentionality. Finally, Study 3 examined how two key features of intentionality and negligence (knowledge and awareness) were related to attributions of negligence, accidental causation, blame, and desire to punish. The findings suggested that knowledge and awareness are positively related to judgments of negligence, blame, and desire to punish.

Beginning in 1997, Bertram Malle and colleagues conducted a series of studies exploring lay definitions of intentionality and intentional behavior (e.g., Malle & Holbrook, 2012; Malle & Knobe, 1997; Malle & Nelson, 2003). Of interest here are intentional behaviors with negative outcomes, and specifically, those behaviors that might result in civil or criminal charges.[1] Intentionality, as it relates to negative outcomes, is important to understand because relative to unintentional acts, people are often held to be more morally or criminally responsible for harmful acts that are committed intentionally. Moreover, jurors are often required to weigh intentionality when rendering verdicts. For example, differences between first-degree and second-degree murder hinge on whether defendants are seen as having formed the intent to kill prior to murdering and commit murder with this intent in mind. Jurors' decisions regarding intent can also lead to more severe sentencing, including the death penalty if jurors agree a murder was intentional. Thus, understanding how intentionality is conceptualized can have important legal as well as social consequences.

In terms of lay understanding, Malle and colleagues found that there is general agreement on the definition of intentionality (Malle & Knobe, 1997) and high agreement about what constitutes intentional versus unintentional acts (Malle & Knobe, 1997). Furthermore, their research has shown that people assign more blame for intentional than accidental behaviors (Guglielmo & Malle, 2010a; Malle, 2006; Malle & Nelson, 2003). Similarly, others have posited a close connection between judgments of intentionality and desire for retributive justice (Darley & Pittman, 2003). In the present studies, we seek to examine a related construct, negligence, exploring how it is both related to and distinct from intentionality. We also explore how key components of intentionality may also underlie judgments of negligence and how these components are related to blame and desire to punish.

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[1] Intentional acts that result in positive outcomes have also been studied, and some findings suggest that positive outcomes are viewed as less intentional than negative outcomes. However, our interest is primarily in intentionality as it might be applied in civil or criminal cases.

Lay conceptions of negligence

It is important to examine lay definitions because conceptualizations of negligence are central to our civil court system, and researchers have found that people assign moral attributions and blame for negligent acts that produce some type of harmful outcome. For example, Shultz and Wright (1985) presented participants with six different scenarios in which an actor acted intentionally (e.g., a roofer pushed shingles off a roof intending to damage a statue below and damaged the statue), negligently (e.g., a roofer pushed shingles off the roof without looking below, damaging a statue), or accidentally (e.g., while sneezing, a roofer pushed shingles off the roof, damaging a statue) and assessed perceptions of the actors' moral responsibility and deservingness of punishment. For intentional or negligent acts, actors were rated as more morally responsible and deserving of punishment than for accidental acts. Importantly, participants assigned equal moral responsibility and desire to punish in the intentional and negligent conditions. A subsequent study (Shultz, Wright, & Schleifer, 1986) found that children as young as 5 years incorporated intention into their moral judgments but that they also utilized information about negligence in forming punishment judgments. Among the children, negligence led to lower judgments of moral responsibility than did intentional acts, but judgments were still higher than accidents.

Similar findings were reported by Nobes, Panagiotaki, and Pawson (2009). They presented children aged 3–4, 5–6, and 7–8 year and adults with vignettes that varied the intent and negligence (i.e., the actor acted either carefully or carelessly) of an actor and the outcome of the scenarios (something bad happened or was avoided) and found that participants of all ages used intent information to judge the acceptability of the deeds and to determine punishments. As in the studies earlier, intentional behaviors were deemed as less acceptable and more deserving of punishment than negligent behaviors, but negligence itself was also rated as less acceptable and more deserving of punishment. Importantly, they also found that negligence information was most salient in the absence of intent. For example, if John does not like Sally and wants to throw a ball at her, it does not matter if John carefully tries to aim the ball or is not looking when

he throws the ball. Participants find John's behavior unacceptable and in need of punishment. However, if John likes Sally and means her no harm, then information about how he handles the ball becomes salient. If he carelessly handles the ball, then his behavior is viewed as unacceptable and more deserving of punishment. Thus, in the absence of a desire to hurt Sally, participants of all ages used other information (whether the actor was careful or not) to judge the behavior.

Although negligent individuals are viewed as morally responsible and deserving of punishment for their behavior, conceptualizations of negligence have received little direct attention in the literature (although we will later discuss how researchers may be assessing notions of negligence in their work, even if it is not labeled as such). The present paper attempts to redress this by examining folk conceptualizations of negligence, utilizing the literature that has examined lay definitions of intentionality as our model. Thus, we first present the key findings on folk definitions of intentionality, and discuss some research findings that have been viewed as anomalies by some researchers but may in fact represent judgments about negligence.

Lay conceptions of intentionality

In their first study, Malle and Knobe (1997) used lay definitions to identify key features of intentional actions: an agent's belief or knowledge that certain acts lead or can lead to specific outcomes (e.g., that firing a loaded gun at a person can kill them),[2] the desire to achieve a particular outcome (e.g., I want Sally dead), a decision or intention to perform the action (e.g., I decide to fire my loaded gun at Sally), and awareness of one's actions while performing the action (e.g., I fire my loaded gun at Sally while aware of doing it). Malle and Knobe also described a fifth 'skill' component regarding an agent needing the requisite skill to successfully complete the intentional action (e.g., Sally's killer would need at least the minimal skill required to point a gun at Sally and pull the trigger). However, as discussed by Guglielmo and Malle (2010a), some actions require very little skill to complete, and it can typically be assumed that when an action is seen as intentional, the skill component is assumed. We therefore do not discuss this component further.

Of interest, Malle and Knobe (1997) found that when presented with statements—such as 'Anne is sweating' or 'Anne interrupted her mother'—there was widespread agreement about which behaviors were intentional and which were not. The model of intentionality proposed by Malle and Knobe (1997) can be seen in Figure 1. Although this basic model appears quite sensitive to people's judgments across a variety of situations, some inconsistencies with the model have been noted in the literature. In particular, sometimes, people will rate a behavior as intentional even when a key element of intentionality is absent. For example, Knobe (2003a) gave participants the following scenario:

> The vice-president of a company went to the chairman of the board and said, 'We are thinking of starting a new program. It will help us increase profits, but it will also harm the environment.' The chairman of the board answers, 'I don't care at all about the environment. I just want to make as much profit as I can.'

[2] Malle and colleagues used the term 'belief' rather than knowledge, but we are using the term knowledge because we believe it best characterizes this dimension.

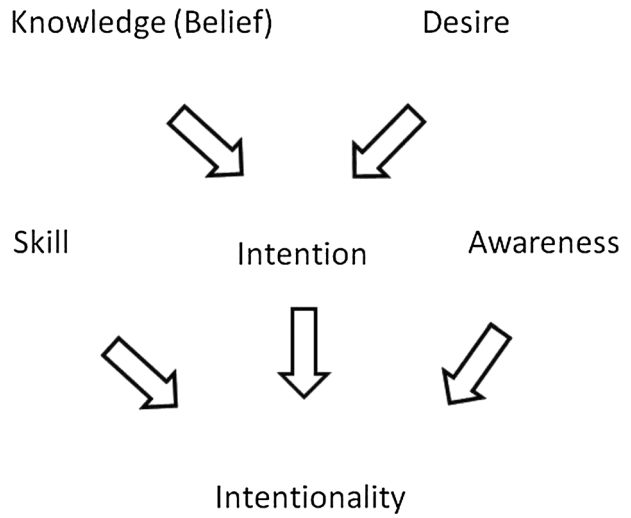

Figure 1. An adaptation of Malle and Knobe's (1997) model describing people's folk concept of intentionality

When presented with this scenario, a significantly higher number of participants rated the chairman's harming of the environment as intentional, relative to an identical scenario where the program would help rather than hurt the environment. Knobe suggested that he and Malle might have been too hasty in their original work in concluding that desire was necessary for intentionality. Guglielmo and Malle (2010b) yielded similar findings replicating Knobe's study. However, they found that when participants learned that the chairman claimed to not care about the environment, participants tended to perceive him as having a moderate desire for this outcome. Thus, they counter-argued that the greater number of participants who saw the chairman as having intentionally harmed the environment did so because he, in fact, moderately desired harm for the environment. In an earlier paper, Malle (2006) acknowledged some difficulty with his model because of consistent findings that people ascribe intentionality at higher rates than expected for some unintentional acts and pondered whether there were *two* uses among lay people for the concept of intentionality.

Whereas Knobe has consistently suggested that moral judgments may be influencing the way people perceive and assign mental states to actors, primarily on the basis of the finding that people ascribe intentionality to unintended negative side effects (Leslie, Knobe, & Cohen, 2006), we propose that blameworthy side effects such as these might be better described with other concepts. For example, Guglielmo and Malle (2010b) presented participants with the same scenario described earlier but allowed participants in one study to rate whether the chairman intentionally, willingly, knowingly, or purposefully harmed the environment. When given the option of rating the CEO's behavior as 'knowing', few participants called his actions intentional. This suggests that when a behavior appears blameworthy, people will sometimes rate it as intentional when this is the only option available, perhaps because of a reluctance to

let immoral actors off the hook. That is, calling a side effect outcome such as harming the environment unintentional might seem to participants an acquittal of the chairman's actions, and thus, participants may treat 'intentional' as a proxy for 'deserving of blame'. However, the question remains of why an unintentional behavior would be deserving of blame in the first place. One possibility regards an actor's *negligence*. That is, when an actor behaves in a way that is seen as negligent, but participants are not given the option to call the actor negligent, there may be a tendency to use whatever label is available that will convey blame, such as intentional. The idea that participants would choose 'knowingly' over 'intentionally' (Guglielmo & Malle, 2010b) to label the chairman's actions is consistent with this idea. As we discuss in more detail later, two essential components of negligence regard an actor's *knowledge* linking an action to an outcome, and their *awareness* of performing a particular action. Thus, when an actor knowingly acts in a way that brings harm to the environment, his or her actions might more properly be described as negligent, rather than as intentional.

In another work, Cushman and colleagues have conducted several studies that directly speak to perceptions of negligence and desire to punish negligent actors. For example, Cushman (2008) examined people's moral judgments and desire for punishment as a function of actors' beliefs[3] and desires, and the consequences of the actors' actions. In a series of four studies, participants assessed the wrongness or permissibility of actions in different moral scenarios and made judgments of blame and punishment. Cushman found that actors described as desiring harm, who acted in a way that induced harm, were judged most harshly (e.g., wrongness and blame were highest). This corresponds with the vast literature on intentionality, blame, and punishment. Importantly, however, Cushman found that harm occurring absent the desire to harm also resulted in greater ratings of wrongness and blame, but only when the actors had knowledge. Cushman labeled this type of harm as accidental harm, but we argue that some of these harms might be better described as negligent harms because the actors could have foreseen the potential for harm in their actions (i.e., the actors had knowledge).

For example, one scenario describes Jenny, who has been assigned to work with a partner in a sculpting class. Jenny welds a piece of metal that her partner is holding and, through her actions, her partner's hand gets burned. Jenny is described as either wanting or not wanting to burn her partner's hand (i.e., presence or absence of desire). She is also described as either knowing or not knowing that her actions could potentially result in the burning of her partner's hand (i.e., she either has or does not have knowledge). As expected, rating of wrongness and blame were highest when Jenny had a desire to harm her partner and when she knew that her partner's hand would be burned. However, ratings of wrongness and blame were also high when Jenny had no desire to hurt her partner but she knew her partner's hand could be burned. That is because even lacking desire to hurt her partner, the outcome should have been foreseen. Thus, participants who rated such scenarios as morally wrong and deserving of blame were probably reacting to the actors' negligence as well as their intentions.

Interestingly, in a neural imaging study, Young, Cushman, Hauser, and Saxe (2007) found that although the temporoparietal cortex was activated during all moral judgments, there were also differences for intentional versus accidental harms. In particular, accidental harms were more likely to activate the right inferior parietal cortex, parietal cortex, bilateral frontal gyrus, and the bilateral anterior cingulate sulcus. These are areas of the brain associated with cognitive conflict, and this finding suggests that judgments of accidental harm are more difficult to make than those involving intentional harm.

In sum, although we have claimed a dearth of research attention on negligence, studies may have examined important components of negligence, but not labeled it as such. Knobe and colleagues have detailed when unintended harms seem intentional (Leslie et al., 2006), and Cushman and colleagues (Cushman, 2008; Young et al., 2007) have used the term 'accidental harm' to explain why people might blame and desire to punish actors who commit unintended wrongs. In both cases, we believe they may be measuring the core concepts of negligence, which we argue is a blameworthy act.

The present paper examines whether people have a folk concept of negligence, similar to that of intentionality. Furthermore, we test how the essential features of negligence are related to or are distinct from features that comprise intentionality. Finally, we examine how two key features of intentionality (awareness and knowledge) are related to attributions of negligence, accidental causes, and blame. We propose that using adapted components from Malle and Knobe's (1997) original model of intentionality to understand negligence may account for some of the discrepancies noted in Malle (2006) and Guglielmo and Malle (2010a) and help explain some of the findings reported by Knobe (e.g., Knobe, 2003a, 2003b) and Cushman (2008). For example, Malle (2006) concluded that intentionality is not influenced by outcomes, whereas Knobe (2003a, 2003b) found that harmful outcomes are seen as more intentional than helpful outcomes. We believe that one reason for these discrepant findings may be that, as noted earlier, people will label negligent harms as intentional if they are not given any other response options. By examining negligence more systematically, we may obtain a better sense of how people view acts that are not intentional but that still engender a desire to blame and punish.

Study 1 attempted to determine if there is general agreement about what constitutes negligence versus accidents.[4] If wide agreement exists, this suggests a common underlying definition people use to determine if a harmful outcome is due to negligence or was accidental. Furthermore, although Cushman and colleagues (Cushman, 2008; Cushman & Greene, 2012; Young et al., 2007) used the term accidental

[3] Cushman (2008) defined beliefs as acts that are foreseen or are foreseeable, which maps with our concept of knowledge. That is, the actor knows that a particular action can result in a specific outcome.

[4] We should note that in the US tort system, accidents and negligent acts are not necessarily distinguished, except by the extent to which an actor whose actions cause harm is held liable. However, here, we are suggesting that people clearly distinguish between 'pure accidents' (unintentional actions/outcomes where no actor is to blame) and negligent acts.

harm to encompass unintended harms, we propose that accidents (at least as defined by lay persons) are closely related to but distinct from negligent acts and should be strongly negatively correlated with them. That is, in general, scenarios rated high in negligence should receive a low accident rating and vice versa.

STUDY 1

We provided participants with 24 short scenarios, asking them to rate the extent to which each scenario was an example of negligence. Malle and Knobe (1997) conducted a similar study of intentionality and found a high degree of agreement among lay raters. We predicted that there would be similar agreement regarding what constitutes negligence.

In addition to rating the negligence of different behaviors, participants were asked to rate the degree to which each scenario represented an accident, because prior research on negligence (e.g., Shultz & Wright, 1985) suggested that one component of intentionality—awareness—might help differentiate negligent and 'purely' accidental actions or outcomes. Specifically, when an agent should be aware of their actions or the potential consequences of their actions (i.e., when potential consequences are or could be foreseen), the action should be more likely to be viewed as negligent. However, when harm results not from a deficit of attention, but from an unintentional and random action, the outcome should be more likely viewed as accidental. Because accidents differ from negligent acts, we expected a negative correlation between accident and negligence ratings. However, the line between accident and negligence might be quite fine and often difficult to judge—a fact that is reflected in the US tort system—so we also expected some overlap between each construct.

Method

Participants

Participants were 204 individuals (97 women, 106 men, one gender unknown; $M_{Age} = 34.70$, $SD = 13.04$) recruited through Amazon's MTurk website for participation in a psychological study. The entire study was completed via computer.

Measures and procedures

After agreeing to participate and verifying they were at least 18 years of age, participants rated 24 very short scenarios (Table 1) on the extent to which each scenario represented an accident and then negligence, on a scale from 1 (*absolutely not*) to 7 (*absolutely*). Scenarios were randomly presented, and all participants rated all scenarios on both dimensions. Consistent with procedures used by Malle and Knobe (1997), the perspective of the scenarios was varied between participants (self/other), and half of the participants were provided definitions to guide their ratings, whereas the other half received none. The provided definitions were as follows: 'Negligence is when a person fails to exercise a reasonable degree of care that results in an unintended mishap or injury. An accident is an unexpected mishap or injury that a person could not have predicted'. In the self condition, participants rated scenarios worded to describe the event happening to themselves (e.g., You were scalded by hot water) and, in the other condition, to another person (e.g., Annie was scalded by hot water).

Table 1. Scenarios rated by participant

1. Annie turned around fast when someone called her name. When she turned, she hit someone standing behind her with her elbow, breaking their nose.
2. Annie fixed the brakes on her child's bicycle, and when her child was riding, the brakes failed and the child crashed into a tree.
3. Annie was sitting with her legs outstretched, and someone tripped over them, hitting their head on the marble floor.
4. Annie was texting while walking down the street and walked into an intersection where she was hit by a car.
5. Annie drove without a license and caused an accident which killed one person.
6. Annie's dog mauled a baby when Annie was not in the room
7. Annie fell because of poor lighting.
8. Annie spilled hot coffee on a patron at the restaurant in which she was working.
9. Annie was scalded by hot water.
10. Annie left her dog in the car with the windows up and the dog died.
11. Annie left her boss' computer at the coffee shop and it was stolen.
12. Annie was practicing her golf drive in her backyard and broke a neighbor's window.
13. Annie sprained her wrist by falling down stairs.
14. Annie was struck by lightning while playing golf.
15. Annie hit her head on an open cabinet door.
16. Annie left her gun safe unlocked and a child was killed.
17. Annie left her backyard gate open and a dog drowned in her pool.
18. Annie was on a ladder and fell when it tipped over.
19. Annie broke her arm when she fell while skiing.
20. Annie did not shovel her snowy walk and her neighbor fell and hurt her ankle.
21. During a particularly bad snowstorm, when motorists were warned to avoid travel, Annie drove to the store. Her car slid across the parking lot and she smashed into someone's car.
22. Annie was speeding in the car and hit a pedestrian.
23. Annie stubbed her toe.
24. Annie was washing dishes and broke a plate.

Results and discussion

We first tested whether perspective (self vs. other) and definitions (having a definition for accident and negligence or not) impacted ratings of negligence and accident, using a 2 (perspective) × 2 (definitions) analysis of variance (ANOVA). Perspective did not significantly predict negligence ratings, $F(1, 200) = 1.74$, $p = .19$, $\eta_p^2 = .009$; $M_{Annie} = 4.15$, $M_{Self} = 4.28$, nor did definitions, $F(1, 200) = 0.70$, $p = .40$, $\eta_p^2 = .004$; $M_{absent} = 4.62$, $M_{present} = 4.38$, and the interaction was not significant. For accidents, perspective did not affect ratings, $F(1, 199) = 0.56$, $p = .45$, $\eta_p^2 = .003$; $M_{Annie} = 4.85$, $M_{Self} = 4.73$,[5] and the interaction failed to reach a conventional level of significance. A significant effect, however, was found for definitions, $F(1, 199) = 6.48$, $p = .01$, $\eta_p^2 = .03$; $M_{absent} = 4.99$, $M_{present} = 4.59$, which showed that participants' ratings of accidents were higher when a definition was not provided. Examination of the means for each of the scenarios revealed that although there was an overall effect of definition on

[5] Degrees of freedom are slightly different in this analysis because one participant failed to rate one of the scenarios on the accident question.

accident ratings, the means were only significantly different for three scenarios (#9: being scalded by hot water, $M_{absent} = 3.05$, $M_{present} = 2.02$; #15: hitting one's head on a cabinet door, $M_{absent} = 3.84$, $M_{present} = 2.93$; and #16: leaving a gun safe unlocked, $M_{absent} = 4.97$, $M_{present} = 4.10$). Including definition as a factor had no effect on subsequent findings, so reported analyses collapse across perspectives and definitions.

To determine the level of agreement across raters for negligence and accident, we treated raters as items and calculated agreement (Cronbach's α) across the 24 scenarios for accident ratings alone (α = .99), negligence ratings alone (α = .99), and for accident and negligence combined (α = .99). A high agreement was found in all analyses. However, because alpha increases as a function of the number of items included (in this case, 204 raters), we also computed alpha separately for four randomly drawn samples of size $n = 8$ for accident and negligence ratings, as well as for both ratings together. For accident ratings alone, across the four samples, the average α = .90 ($SD = 0.03$), and the average corrected rater–total correlation (i.e., the correlation of each rater's ratings, summed across all scenarios, with the sum of all other raters' ratings) was equal to .74 ($SD = 0.11$). For negligence ratings, average α = .93 ($SD = 0.01$; average rater–total $r = .78$, $SD = 0.10$). Across all ratings, the average α = .90 ($SD = 0.01$; average rater–total $r = .71$, $SD = 0.10$). Thus, even using a fairly conservative measure of rater consistency, the rater agreement was quite high.

We next examined correlations between accident and negligence ratings for each scenario, also testing mean differences for scenario in a series of repeated-measures ANOVAs. As can be seen in Table 2, ratings of accidents and negligence tended to be highly negatively correlated. However, for a few scenarios, either the correlation (Annie left her gun safe unlocked) or mean difference in ratings (Annie left her back yard gate open and Annie was practicing her golf swing in back yard) failed to reach conventional levels of significance. Thus, the tendency to find significant correlations among ratings and significant differences between ratings was not evident for all scenarios, suggesting that in some contexts, elements of an accident and negligence can co-occur. Consistent with our reasoning earlier, this suggests that the line between negligence and accident may occasionally be thin and, at times, difficult to perceive.

Study 1 clearly demonstrated that raters agree about what constitutes accidents and negligence, suggesting that people have a folk concept of negligence and accident and that their concepts are not idiosyncratic, but shared. It also demonstrated that although accident and negligence are not completely incompatible with one another, there is still a strong tendency to rate accidental causation low when negligence is high. Researchers should not, therefore, assume that accidents are a perfect antonym for negligence because in some scenarios, participants perceived features of both. Moreover, legal scholars should not assume that negligence is simply an accident where an actor is to blame for an outcome.

Having established people's high agreement on what constitutes negligence and accidents, we set out to determine the essential features of lay definitions of negligence, if they exist, and to examine how those features are the same and different from lay conceptions of intentionality.

STUDY 2

In their original study, in addition to finding substantial agreement in the ways participants rated intentionality, Malle and Knobe (1997) asked a group of participants to simply define intentionality. This led to their uncovering what they

Table 2. Correlations between accident and negligence ratings and mean accident and negligence ratings

	R	*F*(1, 203)	M_A (*SE*)	M_N (*SE*)
1. Annie turned around fast…	−.624*	282.39*	5.99 (0.10)	2.68 (0.12)
2. Annie fixed the brakes on her child's bicycle…	−.594*	57.79*	5.29 (0.12)	3.53 (0.14)
3. Annie was sitting with her legs outstretched…	−.636*	39.85*	5.13 (0.12)	3.68 (0.14)
4. Annie was texting while walking down the street…	−.340*	115.75*	3.75 (0.15)	6.03 (0.10)
5. Annie drove without a license…	−.278*	203.00*	3.88 (0.16)	6.15 (0.10)
6. Annie's dog mauled a baby…	−.328*	120.75*	3.74 (0.15)	5.99 (0.10)
7. Annie fell because of poor lighting.	−.582*	46.15*	5.25 (0.11)	3.74 (0.14)
8. Annie spilled hot coffee on a patron…	−.482*	136.70*	5.53 (0.10)	3.26 (0.12)
9. Annie was scalded by hot water.	−.548*	68.31*	5.26 (0.11)	3.47 (0.13)
10. Annie left her dog in the car with the windows up…	−.247*	560.39*	2.59 (0.14)	6.62 (0.07)
11. Annie left her boss' computer at the coffee shop…	−.379*	162.59*	3.39 (0.15)	6.04 (0.10)
12. Annie was practicing her golf drive in her backyard…	−.379*	4.29	4.48 (0.14)	4.97 (0.13)
13. Annie sprained her wrist by falling down stairs.	−.582*	555.15*	6.10 (0.09)	2.23 (0.10)
14. Annie was struck by lightning while playing golf.	−.652*	170.16*	5.80 (0.12)	2.77 (0.13)
15. Annie hit her head on an open cabinet door.	−.506*	210.30*	5.73 (0.10)	2.91 (0.12)
16. Annie left her gun safe unlocked…	−.189	279.77*	3.44 (0.16)	6.52 (0.07)
17. Annie left her backyard gate open …	−.479*	1.07	4.57 (0.15)	4.83 (0.14)
18. Annie was on a ladder and fell when it tipped over.	−.573*	259.87*	5.75 (0.10)	2.78 (0.11)
19. Annie broke her arm when she fell while skiing.	−.587*	550.64*	6.05 (0.09)	2.19 (0.10)
20. Annie did not shovel her snowy walk…	−.488*	9.68*	4.23 (0.14)	4.95 (0.13)
21. Annie drove to the store during snowstorm…	−.367*	33.99*	4.14 (0.14)	5.37 (0.11)
22. Annie was speeding in the car and hit a pedestrian.	−.221*	265.76*	3.33 (0.15)	6.34 (0.08)
23. Annie stubbed her toe.	−.561*	3989.36*	6.12 (0.08)	2.29 (0.10)
24. Annie was washing dishes and broke a plate.	−.598	337.77*	5.90 (0.10)	2.51 (0.11)

*Correlations or mean differences are significant at $p < .002$ (Bonferroni corrected to account for the 24 tests.)

described as essential features of intentionality: belief/knowledge, desire, intent, and awareness. Study 2 used a similar method to determine whether there are also essential features of negligence.

We hypothesized that lay definitions of negligence would share some features with intentionality but would also have some important differences. First, we hypothesized that knowledge would be an essential feature of negligence in much the same way as it is in intentionality. For example, one needs to know that a gun can kill someone in order to be negligent in its use (i.e., if one *reasonably* has no knowledge of guns or their uses, it would be hard to call it negligent if an actor discharges the gun and hurts someone).[6] Second, we hypothesized that lay definitions of negligence would often include some level of awareness (or need for awareness that was lacking) on the part of the negligent person. For example, if a person is not aware that a gun is loaded, when they discharge the weapon and shoot someone, it would likely be considered negligence if a perceiver thinks the agent *should have* checked for bullets; if a perceiver thinks that a reasonable person would not have checked, then it might be considered an accident. Put another way, if an agent, *while acting*, is reasonably unaware of performing the action (i.e., if a person thinks a gun is unloaded when he or she pulls the trigger, the person may be aware of pulling a trigger but not of *firing a gun*, which is also an action), their action should be seen as an accident. If perceivers feel the person should have checked for bullets (i.e., the person should have been aware they were firing a gun), then their action should be seen as negligent. Thus, we propose that like definitions of intentionality, lay definitions of negligence will include both knowledge and awareness.

Unlike Malle and Knobe's (1997) model of intentionality, where desire is an essential component, we hypothesized that desire would be absent in lay definitions of negligence. This is because desire for an outcome should tend to swing ratings toward the belief that an actor has formed an intention to act. For example, if Bill knows guns can kill people, wants to kill Sally, and is aware that he is pulling the trigger of a loaded gun, when the gun fires and kills Sally in the next room, people would likely view the shooting as intentional. However, when Bill knows about guns and killing and is aware of pulling the trigger of a loaded gun but does not want to kill Sally, when the bullet strikes her down in the next room, people will likely consider Bill negligent. Although he did not *desire* Sally's death, Sally is dead because Bill had knowledge and awareness and performed an action that could hurt someone.

To test our hypotheses, we simply asked a sample of American adults to define negligence. We then coded their responses and examined the extent to which a lay definition of negligence emerged and whether the essential components of negligence were similar to those in Malle and Knobe's (1997) work on intentionality.

[6] We acknowledge that in some cases, a reasonable expectation for knowledge will be present (i.e., people will think an agent *should have known*), and in these cases, even when knowledge is absent, the agent may be seen as negligent if his or her actions lead to harm. However, here, we are focusing only on knowledge that is *present*, rather than on cases where it *should have* been present, which is a different question.

Method

Participants

Participants were 161 people recruited through Amazon's MTurk website for a paid study. Although we did not collect any demographic information from participants, MTurk workers are typically diverse in age and are from across the USA; thus, this sample was likely similar to the samples in Studies 1 and 3.

Measures and procedures

After agreeing to participate in the study and verifying that they were at least 18 years of age, we asked people: 'When you say that someone was negligent, what does this mean? Please explain using the text boxes below'. There were four text boxes where participants could enter their definitions (132 participants used all four text boxes, 140 used three text boxes, 151 used two text boxes, and 161 used at least one text box to define negligence).

Coding of definitions

From the 161 participants, we obtained 128 codeable first responses. Of the responses that did not fit our coding scheme, only one pattern emerged. Three participants referred to being at fault or responsible in their definitions. Other statements were omitted because they were unclear (e.g., 'lost' or 'naughty'). The first responses were coded to determine the components of negligence that were consistently used in definitions of negligence.

We also wanted to investigate all unique definitions of negligence and did so by examining all statements ($n = 581$) for unique responses. Statements were sorted to identify redundant definitions, and redundancies were deleted. For example, 81 participants included the statement 'careless' in one of their responses. We deleted all but one of the statements for further coding. After removing redundant definitions (e.g., synonyms for careless), 235 statements remained. Next, we deleted statements that were too vague to code, such as 'wrong' and 'erred'. It should be noted that vague definitions were more likely to occur in the third or fourth text box. Some participants may have adequately defined negligence in the first two text boxes but felt compelled to add more given the opportunity. Finally, we eliminated definitions that were not exactly the same but meant essentially the same thing. For example, 'doing something without a care' was deemed to mean the same thing as 'doing something with no care'. 'Someone who was careless' was deemed to be redundant with 'careless'. This left 88 codeable statements.

Using Malle and Knobe's (1997) components as an initial framework, we started with the following categories: to qualify for a code of desire, a definition had to mention a desire for an outcome. Specifically, this was when a person mentions that an actor 'wants something to happen; either through an expressed wish or request'. Intention/intentionality was defined as 'the intention to perform an act; including statements that include words such intentionally, purposefully, choosing to act'. We also coded for any mention of neglect, defined as any of the following: 'to be remiss in the care or treatment of; to omit, through indifference or

Table 3. The explicit components of lay definitions of negligence

Component	Frequency (%)	Example
First responses		
Knowledge	41 (29.0)	Ignores a dangerous situation; fails to meet their responsibility
Should have been aware	26 (18.4)	Did not pay enough attention
Was aware	5 (3.5)	Aware of possible consequences
Had intention	4 (2.8)	Intentionally disregard a responsibility
Neglect	58 (41.1)	Careless; did not take reasonable care
Harm	7 (4.9)	Putting other lives at risk
Desire	0 (0)	Desire for an outcome or goal
Unique responses		
Knowledge	51 (22.9)	Ignores a dangerous situation; fails to meet their responsibility
Should have been aware	24 (10.8)	Did not pay enough attention
Was aware	44 (19.7)	Aware of possible consequences
Had intention	15 (6.7)	Intentionally disregard a responsibility
Neglect	72 (32.3)	Careless; did not take reasonable care
Harm	17 (7.6)	Putting other lives at risk
Desire	0 (0)	Desire for an outcome or goal

carelessness; to fail to carry out or perform (orders, duties, etc.); to fail to take or use precaution'.

Although we initially intended to define awareness as did Malle and Knobe (1997; i.e., 'awareness of the act while the person is performing it', p. 107), we found awareness was referenced in two different ways, and we therefore opted to break it into two components. The first was 'had awareness', defined as an agent's awareness of performing an act. The second was 'should have been aware', defined as when an agent 'should have been aware of the act while performing it'. Knowledge (called *belief* by Malle & Knobe, 1997) was defined as 'information or knowledge that a person should have'. This included 'what typical people should know, common sense, and common knowledge'. After the authors read all codeable statements, an additional category —harm—was added, because many people mentioned it. Coders were instructed to code harm when a definition included 'to do or cause harm to [someone]; injure; damage; hurt'.

Two coders blind to the study goals coded the 161 first responses and the 88 unique statements for presence or absence of the categories described earlier. Prior to coding all the statements, coders were given a brief training and rated 41 statements. Agreement ranged from 75% to 100%, with kappas ranging from 0.43 to 0.83. Coders were instructed to discuss discrepancies and agree on final codes. They then coded and discussed the remaining statements.

Results and discussion

First statements

As can been seen in Table 3, the most common first response fits the definition of neglect (e.g., a person was careless or did not take reasonable care). The other common responses were that the person knew or had knowledge and should have been aware of a situation or condition. As predicted, desire was not referenced in any first responses.

Unique statements

Seventy-eight percent of the statements directly mentioned awareness as part of the definition of negligence. Statements regarding awareness suggest that someone is negligent when they were aware of or should have been aware of a situation or condition. Neglect was also commonly mentioned. As predicted, desire was never mentioned in definitions, although some statements included intent in their definitions (Table 3).

Study 2 suggests that when asked to define negligence, the most consistent first response is to define negligence with synonyms such as carelessness. First statements also frequently referred to knowledge and awareness that should have been present. Among unique responses, the strongest components of negligence were knowledge (a person knew or should have known), awareness (a person was aware or should have been aware), and neglect (e.g., the person failed to follow through, failed to carry out, or failed to perform). Some participants mentioned intention (a person acted willfully or knowingly acted) and harm (the failure to act caused harm) although these components were not mentioned as often as the other components of negligence. No one mentioned desire as a component of negligence. As predicted, and related to but distinct from the folk model of intentionality, lay definitions of negligence appear to involve having knowledge and awareness, without desire for a particular outcome.

From our findings, we propose that components adapted from Malle and Knobe's (1997) model of intentionality can be used to define negligence and that using these components can help us understand lay conceptions of negligence. We propose that some of the same components from Malle and Knobe's (1997) model of intentionality also underlie a similar model of negligence and, in effect, can also be used to determine not only the intentionality of an action but also whether an action is seen as negligent. In this way, intentionality and negligence are related constructs, because data indicate that they both require knowledge and awareness.[7] In order to test this, we conducted one final study to test how knowledge and awareness predict ratings of negligence, culpability, and desire for punishment.

[7] As to the other components of the intentionality model (i.e., intention and skill), future research should investigate whether these aspects are also relevant for judgments of negligence.

STUDY 3

In this study, we presented participants with a scenario in which an actor, Annie, prepares dinner for a guest using cooking oil containing a small amount of peanut oil. The guest subsequently has a severe allergic reaction because of an allergy to peanuts. We manipulated the actor's Knowledge (she either knew or did not know that her guest had a peanut allergy) and Awareness[8] (she was either aware or unaware that the oil she was using contained a small amount of peanut oil) and examined the influence of these manipulations on perceptions of negligence, accident, culpability, and desire for punishment.

Our primary hypothesis was that the presence versus absence of Knowledge would have a substantial effect on perceptions of negligence, accident, culpability, and punishment. However, we also had three further predictions. The first was that there should be no differences in negligence (e.g., accident) as a function of manipulated Awareness, as long as Knowledge was manipulated to be *absent*. This is because when Knowledge is *reasonably* and *believably* absent, the presence versus absence of Awareness should not impact judgments. Without knowledge, a person could not be reasonably expected to be aware of the risks of her actions. However, when Knowledge is present, but Awareness is absent, perceptions of negligence should increase relative to when Knowledge is absent, because with knowledge, the actor *should have been* aware of the potential for risk in her actions. Finally, we expected that relative to all other cells, when Knowledge and Awareness were both present, the actor would be blamed to the greatest extent, because not only did she know about the allergy, but she then proceeded to prepare a meal using oil containing peanut oil in full awareness of doing so.

Method

Participants

Participants were 120 individuals (54 women, 66 men; $M_{Age} = 33.54$, $SD = 12.72$) recruited through Amazon's MTurk website for participation in a psychological study. The sample was 79.2% Caucasian, 3.3% African-American, 10.8% Asian American, 3.3% Latino/Latina, 0.8% Native American, and 2.5% mixed/other. Most participants reported some college (34.2%), a 2- or 4-year college degree (39.1%), or postgraduate education (10.0%). Two people reported not having graduated high school (1.7%), and the remaining participants (15.0%) reported a high school degree or equivalency.

Procedure

After consenting to participate, participants were presented with one of four versions of a scenario that manipulated Knowledge and Awareness. In this scenario, a woman (Annie) prepares fried chicken for a dinner guest using cooking oil that contains some peanut oil. The guest, allergic to peanuts, has a severe allergic reaction. The manipulation of Knowledge was achieved by describing that the guest had not told Annie about her peanut allergy (No Knowledge) or by describing that the guest had told Annie about the allergy, with Annie described as 'fully' knowing about the allergy (Knowledge). Thus, in the No Knowledge conditions, Annie's lack of knowledge concerning her guest's peanut allergy should be seen as reasonable. To manipulate Awareness, Annie is first described in all conditions as in a hurry and running behind schedule. In the No Awareness conditions, Annie simply did not notice that the cooking oil she was using contained a small amount of peanut oil. In the Awareness conditions, Annie noticed that the oil contained a small amount of peanut oil.

Measures

With the exception of the two manipulation check items regarding Annie's knowledge and awareness, all responses were on 10-point scales, where higher numbers indicate greater agreement with the constructs (e.g., that Annie was negligent). Alphas are given for scales with multiple items.

Manipulation checks. Before responding to the primary dependent variables, participants were asked whether Annie knew about her guest's peanut allergy and whether she was aware that the oil she used contained peanut oil. Possible responses were 0 = no, 1 = maybe, and 2 = yes. If participants answered either no or maybe, they responded to follow-up questions about whether she *should have* known or been aware.

Negligence ($\alpha = .99$). Three items measured beliefs about Annie's negligence. 'Annie was negligent in cooking the chicken in oil that contained peanut oil', 'By cooking the chicken in oil that contained peanut oil, Annie was negligent', and 'The allergic reaction of her dinner guest was a result of Annie's negligence'.

Accidental causation ($\alpha = .95$). Three items measured the extent to which the outcome (i.e., the guest's allergic reaction) was accidental. 'The allergic reaction of Annie's dinner guest was accidental', 'The allergic reaction Annie's dinner guest had happened accidentally', and 'It was the result of an accident that Annie's dinner guest had an allergic reaction'.

Culpability ($\alpha = .97$). Four items measured how culpable Annie was for her guest's allergic reaction. 'Annie should be held accountable for her guest's allergic reaction', 'Annie is at fault for her guest's allergic reaction', 'Annie is to blame for her guest's allergic reaction', and 'Annie is responsible for her guest's allergic reaction'.

Desire for punishment ($\alpha = .99$). Three items measured the extent to which participants thought Annie should be punished for her actions. 'Annie should be punished for what she did', 'For the allergic reaction her guest suffered, Annie should be punished', and 'Annie deserves punishment for her actions'.

Results and discussion

We first present results of our manipulation checks. Following this, we report correlations among all dependent variables.

[8] In the text concerning Study 3, we capitalize the words knowledge and awareness when they refer to our experimental manipulations, to distinguish them from manipulation checks measuring perceptions of these same variables.

Next, we report 2 [Knowledge: absent (NK) vs. present (K)] × 2 (Awareness: absent (NA) vs. present (A)) ANOVAs on each dependent variable. We expected to find substantial effects of Knowledge, weaker effects of Awareness, and interactions between the two, showing that the effects of our manipulations on each dependent variable were strongest when both Knowledge and Awareness were present, but also somewhat strong when Knowledge was present and Awareness absent. To test our specific predictions concerning these effects, we examined three *a priori* contrasts. The first tested the NK/NA cell against the NK/A cell, and we expected this contrast to not be significant. The second contrast tested the NK/NA cell against the K/NA cell, and the expectation was that negligence and blame would be increased when the agent had Knowledge, even when Awareness was absent. The final contrast (K/A cell against all other cells) tested the prediction that when both Knowledge and Awareness were present, the agent would be seen as most negligent (e.g., responsible). Last, we examined all pairwise cell differences using *post hoc* Tukey tests.

Manipulation checks

In the NK conditions, only three people responded that Annie maybe knew or knew that her guest was allergic to peanuts (5%; only one person answered 'yes'). In the Knowledge conditions, all participants agreed that she knew about the allergy.

When questioned about Annie's *awareness* of using oil that contained peanut oil, several people said 'maybe' (14.5%) or 'yes' (9.6%) when Awareness was manipulated to be absent. The fact that almost one fourth of the participants thought she might be aware or was aware is telling. In addition, most of these maybe and yes responses were in the No Knowledge condition (13/31 or 42% of this cell) rather than in the Knowledge condition (3/31 or 10%). Thus, following a harmful outcome, even when an actor *believably* and *reasonably* claims that he or she had no knowledge and no awareness, some proportion of people will claim that indeed, the actor was aware of her or his actions. Consistent with our expectations, however, when Knowledge and Awareness were both absent, the mean response regarding whether Annie *should have* been aware was relatively low ($M = 3.38$, $SD = 2.25$). When Annie had Knowledge, but no Awareness, this increased by a large margin ($M = 8.33$, $SD = 1.61$), suggesting that people thought she should have taken more care when she knew about the allergy.

Primary dependent variables

For all reported tests from ANOVA models reported later, degrees of freedom are 1 and 116. All condition means and *SD* are reported in Table 4 and are presented graphically in Figure 2.

Correlations. As expected, correlations among all dependent variables were strong and significant (all $ps < .001$). Negligence correlated with accident ($r = -.60$), culpability ($r = .96$), and punishment ($r = .78$). Accident correlated with culpability ($r = -.60$) and punishment ($r = -.62$). Culpability and punishment were also correlated ($r = .80$).

Examining these correlations suggests several conclusions. First, negligence correlated more strongly with culpability and punishment than did accident, showing that it is more important to judgments of blame than is perception of accident. In fact, negligence correlated so strongly with culpability that one might—probably erroneously—conclude that negligence *equals* culpability. Also, although there was a strong negative correlation between negligence and accident, it is clear that these two concepts do not simply serve as a proxy for one another. Instead, they likely measure two distinct concepts that are both correlated with culpability (i.e., when an act is negligent, an actor is culpable; when an outcome is accidental, no actor is culpable). To examine this possibility, we explored the partial correlation between negligence and accident, while controlling for culpability, and found that it was no longer

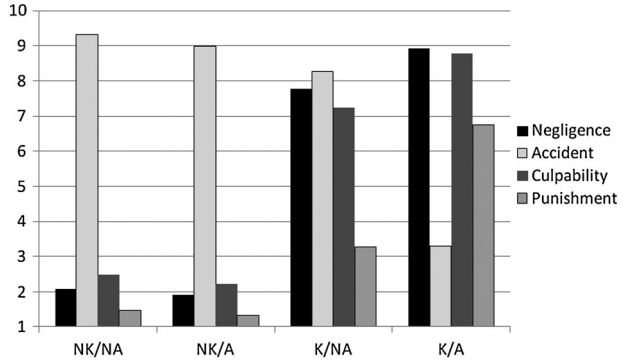

Figure 2. Ratings of negligence, accident, culpability, and punishment as a function of manipulated knowledge (absent = NK, present = K) and manipulated awareness (absent = NA, present = A). Note: All measures were on 10-point scales, where higher numbers indicate greater agreement

Table 4. Ratings of negligence, accidental causation, and blame as a function of manipulated actor knowledge (absent/present) and awareness (absent/present)

	Knowledge/awareness combinations (condition)							
	NK/NA		NK/A		K/NA		K/A	
Study 3	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Negligence	2.07a	1.95	1.91a	1.58	7.78b	2.18	8.93b	1.64
Accident	9.33a	1.20	8.99a	1.51	8.27a	2.00	3.30b	2.62
Culpability	2.49a	2.05	2.23a	1.76	7.24b	1.86	8.79c	1.69
Punishment	1.47a	1.66	1.33a	1.01	3.26b	1.79	6.76c	2.13

Note: NK = No Knowledge, NA = No Awareness, K = Knowledge (present), A = Awareness (present). Possible responses ranged from 0 = *completely disagree* to 10 = *completely agree*. Within rows, means not sharing a common letter differ significantly ($p < .05$) using a Tukey *post hoc* test.

significant ($r = -.08$). Controlling for accident, we found that the correlation between negligence and culpability remained strong ($r = .94$). Thus, although we believe that more research is necessary, particularly considering that in law, accidents are not fully distinguished from negligence, we tentatively conclude that people have distinct concepts regarding negligence and accident and that at least one common factor linking the two is culpability or responsibility for harm.

Negligence. As expected, Knowledge strongly affected perceptions of negligence, $F = 351.34$, $p < .001$, $\eta_p^2 = .75$. There was also a marginally significant interaction between Knowledge and Awareness, $F = 3.74$, $p = .056$, $\eta_p^2 = .03$. No main effect of Awareness was found. As expected, the first contrast testing the NK/NA cell against the NK/A cell was not significant ($p = .73$), but the second contrast testing the NK/NA cell against the K/NA cell was significant, $p < .001$. Finally, the contrast testing the K/A cell against all other cells was also significant, as hypothesized, $p < .001$. *Post hoc* tests showed that the K/A cell significantly differed from every cell except the K/NA cell ($p = .085$). Other than a comparison between the NK/NA and NK/A cells ($p = .99$), all other pairwise comparisons were significant ($ps < .001$).

Accident. For accidental causation, there were main effects of Knowledge and Awareness, and an interaction between the two, with the strongest effect found for Knowledge (Fs from 44.30 to 94.48, $ps < .001$, η_p^2 from .28 to .45). Again, the NK/NA cell did not significantly differ from the NK/A cell ($p = .48$) but did differ from the K/NA cell, $p = .03$. The K/A cell also significantly differed from the other cells, combined ($p < .001$), and *post hoc* tests showed that this cell significantly differed from each other cell ($ps < .001$). No other pairwise comparison was significant ($ps > .12$).

Culpability. For culpability, there was again a main effect for Knowledge ($F = 280.03$, $p < .001$, $\eta_p^2 = .71$) and a significant interaction of Knowledge and Awareness ($F = 7.17$, $p = .008$, $\eta_p^2 = .06$). The main effect of Awareness was marginally significant, $F = 3.65$, $p = .058$, $\eta_p^2 = .03$. The NK/NA cell did not significantly differ from the NK/A cell, as hypothesized, $p = .59$. Relative to the NK/NA cell, the K/NA cell saw the actor as more culpable, $p < .001$. The K/A cell significantly differed from the remaining cells (combined; $p < .001$) and from each cell individually ($ps \leq .008$). As with negligence, with the exception of a comparison between the NK/NA cell and the NK/A cell ($p = .95$), all other pairwise comparisons were significant ($ps < .001$).

Punishment. Similar to the findings for accident, there were main effects of Knowledge (the largest effect) and Awareness on punishment, and the predicted interaction (Fs from 34.45 to 135.14, $ps < .001$, η_p^2 from .23 to .54). Once again, the NK/NA cell did not significantly differ from the NK/A cell ($p = .75$), whereas it did differ from the K/NA cell, $p < .001$. The K/A cell differed from all other cells combined ($p < .001$), and from each cell ($ps < .001$). Again, with the exception of a comparison between the NK/NA cell and the NK/A cell ($p = .99$), all other cell comparisons were significant ($ps < .001$).

As expected, we found that our manipulation of Knowledge played a large role in participants' judgments. That is, when Annie had no knowledge of her guest's allergy to peanuts, people did not find her responsible for her guest's later allergic reaction. The two No Knowledge conditions did not differ (i.e., our NK/NA vs. NK/A contrasts), probably because awareness was irrelevant when knowledge was absent. Of course, this makes sense—if she was not told of the allergy, it would be close to impossible for her to know to avoid using a cooking oil containing peanut oil, regardless of her awareness of using it. Blame increased greatly when she had Knowledge (i.e., the guest told her of her allergy), and even when she had no Awareness of using the oil, she was still held accountable, because she probably should have exercised more caution. And when she had both Knowledge and Awareness, she was clearly seen as most deserving of blame, because she was aware of the potential for a harmful outcome but acted anyway, in light of this risk.

GENERAL DISCUSSION

In three studies, we demonstrated that there was a strong general agreement among laypersons as to what constitutes negligence and that people differentiate between accidents and negligence. We also showed that the defining features of negligence were knowledge, awareness, and neglect without desire, which distinguishes it from intentionality. In the last study, we showed that knowledge and awareness impacted people's ratings of negligence, culpability, and punitiveness. In general, negligence and culpability ratings were highest, and accident ratings lowest, when knowledge and awareness were present. Thus, the key features of negligence identified in Study 2 were supported when people were given a short scenario and asked to rate negligence and blame.

As predicted, we found that accident and negligence were negatively correlated, although not in all contexts. In some scenarios (e.g., practicing a golf swing in the backyard and breaking a neighbor's window), participants found elements of both accident and negligence. Context may thus be important, and future research should consider both accidental and negligent causations (rather than assuming that anything rated as accidental is automatically not negligent and vice versa). Furthermore, whereas in Study 1, correlations between accident and negligence were typically high, results from Study 3 suggest that high correlations between the constructs may be due to shared variance with an actor's responsibility for an outcome. That is, in Study 3, we found that a strong negative correlation between negligence and accident was greatly diminished and reduced to non-significance after controlling for perceived culpability.

In sum, we suggest that folk definitions of negligence are well conceived, as they are for intentionality, and that using adapted components from Malle and Knobe's (1997) intentionality model to understand negligence can potentially help us account for some of the aberrant findings linking blame with intentionality (e.g., Cushman, 2008; Knobe, 2003a). For example, when the chairman of the board starts a

program to increase profits, knowing it will harm the environment, his actions are likely perceived to be negligent, and if asked, participants would probably agree that he acted negligently (because he has knowledge of the link between his actions and the likely outcome; cf. Guglielmo & Malle, 2010b) rather than intentionally harmed the environment. We propose that ascriptions of negligence arise for blameworthy acts that are related to but distinct from intentional acts. That is, we believe that negligent actors have knowledge and awareness (or *should have had* knowledge and *should have been* aware) but lack desire or the intention to bring about negative outcomes.

Future research should examine this possibility further and should also explore how intentionality and negligence predict both blame and desire for punishment, and whether negligence and intentionality lead to different punitive goals. For example, in civil trials, juries are often asked to decide compensatory and punitive damages. Although negligent and intentional acts may both be deserving of blame, they may also differentially predict how people focus on compensation versus punitive judgments.

In closing, we believe that studying intentionality and the components underlying intentionality judgments can help provide insight into other blameworthy acts that are not intentionally performed. That is, intentional acts may be seen as highly blameworthy not simply because they are *intentional*, but, in part, because each of the individual *components* of intentionality are present, particularly beliefs/knowledge, desire, awareness, and intention. If this is the case, then blame should still be present when one or more components are absent—depending on the context and the components—but not because the action was intentional. Instead, other concepts are needed. We believe that one of these concepts is negligence and that the present research provides a compelling first step in answering this question.

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