Intentionality Attributions About Perfect and Imperfect Duty Violations

JAMIE S. HUGHES
DAVID TRAFIMOW
New Mexico State University

ABSTRACT. Intentionality attributions were explored by drawing on the distinction between perfect and imperfect moral duties. Previous research has shown that perfect duty violations carry greater attributional weight than imperfect duty violations (Trafimow & Trafimow, 1999; Trafimow, Bromgard, Finlay, & Ketelaar, 2005). In Studies 1 and 2, the distinction between perfect and imperfect duties was replicated with intentionality judgments, and perfect duty violations received higher intentionality attributions than imperfect duty violations. In Study 3 this effect was reversed by manipulating information about an agent’s mental intentions or plans to perform a behavior. That is, participants attributed less intentionality to perfect duty violations compared to imperfect duty violations when a mental intention to perform the behavior was absent.

Keywords: attributions, moral judgment, social perception

RECENTLY, RESEARCHERS HAVE FOUND an asymmetry in judgments about intentionality such that morally bad behaviors are seen as more intentional than morally good or positive behaviors (Knobe, 2003; 2006; Nadelhoffer, 2006; Malle & Knobe, 1997). A similar negativity effect has been found in research concerning trait attributions—the performance of a negative behavior was judged to be more indicative of an underlying dispositional trait than was the performance of a positive behavior. This effect is also limited to the domain of morality (Reeder & Coover, 1986; Reeder, Pryor, & Wojciszke, 1992; Trafimow & Schneider, 1994; Trafimow & Trafimow, 1999). In the current paper, three studies are presented that explore the relationship between trait and intentionality attributions in the moral domain. We believe that by drawing on past research on negativity effects in trait attribution we may gain an understanding of the processes used to attribute intentionality. First, we describe research demonstrating a
distinction between certain types of immoral behaviors and trait judgments, and then we explain how this distinction can be used to make unique predictions regarding intentionality attributions.

The negativity effects found for trait attributions captured the interest of Reeder and Brewer (1979), who suggested that people have intuitive notions or implicational schemas regarding the relationship between particular traits and relevant behaviors. Within the moral domain, for example, an honest individual is a person who performs honest behaviors. However, a dishonest person is one who performs both honest and dishonest behaviors. Thus, a single dishonest behavior suggests a dishonest dispositional trait, whereas honest behaviors, performed by both honest and dishonest characters, are not necessarily indicative of a corresponding trait.

Reeder and Brewer’s (1979) research demonstrated that there are two different types of trait dimensions, labeled partially restrictive and hierarchically restrictive. Partially restrictive trait dimensions do not readily change a positive expectancy with the performance of an inconsistent behavior. For example, if you believe that someone is friendly, an occasional rude behavior will not change your friendly trait inference. In contrast, hierarchically restrictive traits can readily change a positive expectancy in response to the performance of an inconsistent behavior. Thus, if you believe that a person is honest, a single dishonest behavior may change your positive trait inference.

Trafimow and Trafimow (1999) expanded upon this research by drawing on Immanuel Kant’s ethical duty distinction. Trafimow and Trafimow (1999) found that some immoral behaviors carried more attributional weight than other types of immoral behaviors. Specifically, perfect duty violations carried more attributional weight than did imperfect duty violations. In other words, attributions about perfect and imperfect duty behaviors mirrored the findings regarding hierarchically restrictive and partially restrictive trait dimensions.

Immanuel Kant (1785/1998) believed that ethical agents must always perform perfect duties, regardless of other considerations but do not always have to perform imperfect duties. In other words, imperfect duty violations were seen as permissible, whereas perfect duty violations were not permissible. To illustrate, Trafimow and Trafimow (1999) suggested that honesty and loyalty are perfect moral duties (hierarchically restrictive traits) and that friendly and charitable behaviors are imperfect moral duties (partially restrictive traits). According to Kant, one must give top priority to being consistently honest and loyal, but one does not need to be consistently charitable or friendly to be ethical. Following this initial research Trafimow, et al. (2005) discovered that violations of perfect duties received greater attributional weight, not because people were using complicated mental models to arrive at Kant’s principles, but because perfect duty violations produced more negative affect than imperfect duty violations.

Trafimow and his colleagues (2005) asked individuals to rate the number of perfect and imperfect duty violations necessary to change a positive expectancy.
In one study, negative affect was induced. Because perfect duty violations are associated with negative affect, the manipulation did not change ratings pertaining to perfect duty violations but did decrease the number of imperfect duty violations needed to override a positive expectancy. In a second study, negative affect was “removed” by allowing participants to misattribute negative affect to a neutral stimulus. Ratings did not change with regard to imperfect duty violations, but the manipulation increased the number of perfect duty violations needed to change a positive expectancy. Numerous other studies have supported the distinction between behaviors pertaining to perfect versus imperfect duties (Brown, Trafimow, & Gregory, 2005; Duran, Renfro, Waller, & Trafimow, 2007; Trafimow, 2002; Trafimow, Reeder, Bilsing, 2001; Trafimow & Trafimow, 1999).

The distinction between perfect and imperfect duties may have important implications for attributions about intentionality. In philosophy, intentionality is sometimes defined as an outcome that is foreseen and desired (Forguson, 1989), or as an action with three mental state markers: the desire for an outcome, the belief that a behavior will lead to a foreseen outcome, and intentions or plans to perform the behavior (Bratman, 1987; Malle, 2006). Recent research suggests that intentionality attributions are different in the moral domain. As noted previously, several studies have shown that morally bad or blameworthy actions are seen as more intentional than morally good actions (Knobe, 2003; 2006; Nadelhoffer, 2006; Malle & Knobe, 1997). In many cases, a morally bad behavior is seen as intentional even when an agent has no desire for the particular outcome. This research points to the possibility that negative affect plays a role in attributions about intentionality. If negative affect guides these attributions, then we would expect perfect duty violations to be rated as more intentional than imperfect duty violations.

Based on the Trafimow et al. (2005) research, we predicted that perceivers would attribute less intentionality to actors who violate imperfect duties compared to perfect duties for at least two reasons. First, perfect duty violations are more sensitive to trait-behavior inconsistencies. Thus, they may also be seen as more intentional—perhaps these behaviors are more defining of one’s character, or are seen as requiring more effort or exertion to perform than are imperfect duty violations. Another possibility is drawn from Trafimow et al. (2005), who suggested that attention to perfect duty violations may serve an adaptive function. That is, violations of perfect duties (dishonesty and disloyalty) may elicit stronger affective reactions because these behaviors have greater consequences for survival and reproduction than do violations of imperfect duties (uncharitable and unfriendly behaviors). Thus, assigning intent to perfect duty violations may be more important for perceivers than the assignment of intent to imperfect duty violations, because they can affect one’s welfare and guide future interaction with an agent.

Before continuing, we should note a difference between our understanding of intentionality and other perspectives. Some believe that intentionality is strictly a dichotomous judgment—a behavior is either intentional or unintentional.
However, we view it as a continuous judgment. Just as traits can vary along a continuum whereby an individual may be extremely unfriendly, extremely friendly, or somewhere in the middle, we believe that a behavior may also be described as extremely intentional, extremely unintentional, or somewhere in the middle. This may depend on the number of situational constraints, the amount of effort or skill a person has to perform the behavior, the number or strength of the three mental state markers of desire, belief, and intention, or based on some other criteria.

**STUDY 1**

In Studies 1 and 2, we tested our hypothesis regarding intentionality by asking participants to provide trait ratings and rate the intentionality of immoral behaviors that pertain to perfect and imperfect duties. We predicted that intentionality judgments would be higher for violations of perfect duties than violations of imperfect duties.

**Methods**

**Participants**

Twenty-four participants from a mid-sized southwestern university participated in exchange for partial course credit. Participants were 11 males and 12 females (one participant failed to indicate his/her gender), with an average age of 21 years ($SD = 4.53$).

**Procedures and Materials**

Participants assessed four agents who violated perfect (dishonest and disloyal) and imperfect (uncharitable and unfriendly) duties. Behaviors included: “Tom backstabbed his friend” (disloyal), “Alan is rich but he did not give to the less fortunate” (uncharitable), “Sara yelled at the store clerk for no good reason” (unfriendly) and “Cindy pick pocketed a wallet” (dishonest). Participants judged two behaviors pertaining to perfect duties and two behaviors pertaining to imperfect duties. The target person’s gender was counterbalanced across duties; thus, a male and female violated a perfect duty, and each gender violated an imperfect duty. To ensure that each negative behavior was equal in intensity, behaviors were drawn from a pool of pre-tested behaviors listed in Chadwick, Bromgard, Bromgard, and Trafimow (2006). The four behaviors received a z-score of approximately 1 in extremity. Behaviors were completely balanced so that no participant judged them in the same order (i.e. behaviors were presented in 24 different orders). After reading each statement, participants responded to two items. The items asked about the extent to which the agent acted intentionally and possessed a particular trait. Agents were assessed on 7-point scales, with (1)
unintentional or does not possess a positive trait and (7) intentional or possesses a positive trait.

**Results**

To evaluate intentionality ratings by duty, dishonest and disloyal items ($\alpha = 0.68$) and uncharitable and unfriendly items were summed and averaged ($\alpha = 0.24$) to create perfect and imperfect duty scales. As predicted, a paired-samples t-test revealed that behaviors pertaining to perfect duties were rated as more intentional ($M = 6.17, SD = .92$) than behaviors pertaining to imperfect duties ($M = 5.26, SD = 1.28$), $t(22) = 3.83, p = .001, d = 0.80$. A composite of trait ratings about behaviors pertaining to perfect ($\alpha = 0.45$) and imperfect ($\alpha = 0.63$) duty violations was also created. As expected, participants rated an agent who violated a perfect duty lower on the given positive trait dimension ($M = 2.02, SD = 1.01$) than an agent who violated an imperfect duty ($M = 2.46, SD = .89$), $t(22) = -2.06, p = .05, d = 0.43$.

**Discussion**

Study 1 provides support for the prediction that, similar to trait attributions, perfect duty violations receive higher intentionality attributions than imperfect duty violations. We interpret this finding as indicating that the processes used to infer traits are associated to the processes used to infer intentionality. That is, since people do not make strong trait inferences based on single violations of imperfect duties, they also view them as less intentional. Further, the fact that the trait ratings replicated those previously found by Trafimow and his colleagues (e.g., Trafimow & Trafimow, 1999; Trafimow et al., 2005) indicates that there was nothing atypical about the stimuli that were used.

Although Study 1 provides support for the notion that perfect duty violations receive higher intentionality attributions than imperfect duty violations, it is possible that the idiosyncratic characteristics of the specific scenarios that were used somehow created cognitive or normative demands. If the Study 1 findings were due to this, then they should not replicate if abstract behaviors are used that do not have these idiosyncratic characteristics. Further, the internal consistency reliability coefficients for the perfect and imperfect duty violation scales were in some cases quite low. Study 2 was conducted to replicate Study 1 using abstract materials.

**STUDY 2**

In Study 2, we asked individuals to make intentionality and trait judgments about agents who performed abstract behaviors that pertained to perfect or imperfect duties. We predicted that perfect duty violations would receive higher intentionality ratings than imperfect duty violations.
Methods

Participants

Twenty-seven male and 35 female students from a mid-sized southwestern university participated in exchange for partial course credit. Participants were 24 years of age on average ($SD = 10.71$).

Procedures and Materials

As in Study 1, participants assessed a moral agent who violated perfect or imperfect duties. However, the behavior was described generally. For example, participants read: “Tom performed a dishonest (disloyal) behavior” or “Tom performed an uncharitable (unfriendly) behavior”. Behaviors were listed in all possible orders (24). Participants indicated the extent to which the behavior was intentional, and the extent to which the agent possessed a particular trait (e.g. To what extent is Tom honest?). Ratings were made on 7 point scales, with (1) very little or not at all, and (7) extremely.

Results

Intentionality ratings regarding behaviors pertaining to perfect ($\alpha = 0.60$) and imperfect ($\alpha = 0.61$) duty violations were summed and averaged. As predicted, a paired-samples t-test indicated that participants rated behaviors pertaining to perfect duties ($M = 4.80, SD = 1.35$) as more intentional than behaviors pertaining to imperfect duties ($M = 4.18, SD = 1.28$), $t(61) = 4.30, p = .001, d = 0.56$. Trait ratings regarding perfect ($\alpha = 0.80$) and imperfect ($\alpha = 0.65$) duty violations showed a similar pattern. Behaviors pertaining to perfect duty violations produced less positive trait ratings ($M = 2.92, SD = 1.31$) than behaviors pertaining to imperfect duty violations ($M = 3.19, SD = 1.49$), $t(61) = -2.25, p = .03, d = 0.29$.

Discussion

The Study 1 findings replicated in Study 2, thereby demonstrating that they were not due to idiosyncratic characteristics of the specific scenarios that were presented in Study 1. The internal consistency reliability coefficients also increased to acceptable levels in Study 2. In both studies, trait ratings replicated findings that had been obtained in previous research, thereby supporting that there was nothing irregular about the present paradigm. Thus, Studies 1 and 2 demonstrate that perfect duty violations receive more negative trait ratings and higher intentionality rating than imperfect duty violations.
STUDY 3

The data thus far indicate that perfect duty violations receive greater attributions about intentionality than imperfect duty violations. However, it is not clear why there should be such a distinction. Previous research suggests that positive behaviors pertaining to perfect and imperfect duties receive high intentionality attributions (Hughes & Trafimow, 2007; Knobe, 2003), and in general, positive behaviors receive high trait attributions because they are expected or normative (Ybarra, 2002). Negative behaviors, however, are not particularly normative and require an explanation (i.e. perceivers are likely to search for reasons to explain the behavior). To explain the distinction between intentionality attributions for perfect and imperfect duty violations, we hypothesized that the effects found in Studies 1 and 2 were produced because perceivers create different types of explanations for perfect versus imperfect duty violations.

We examined a number of specific behaviors that relate to perfect and imperfect duties (drawn from Chadwick, et al., 2006), and concluded that intentions or plans to perform a behavior are more strongly associated with perfect duty violations, and that situational causes are more associated with violations of imperfect duties. In other words, agents who violate perfect duties oftentimes have an implementation intention or plan prior to the performance of the behavior. When one cheats, lies, or steals, one must give some thought to implementing the behavior. However, agents who violate imperfect duties often do not give much thought to implementing the behavior. An individual does not plan to be unfriendly or uncharitable but does so on the spur of the moment because he or she lacks time, material resources, or is under stress. Although perfect duty violations may be associated with situational causes, these causes or reasons may be more distal than causes associated with imperfect duty violations. Thus, a perceiver may need much more information about an agent’s total situation or personal history in order to justify a violation of a perfect duty. Thus, we believe that intentionality attributions are greater for perfect duty violations than imperfect duty violations, because the former are more strongly associated with mental intentions or planning and the latter more commonly associated with situational causes.

The hypothesis that perfect duty violations are more strongly associated with mental intentions than imperfect duty violations is supported by previous research. Trafimow and Schneider (1994) manipulated trait, situational, and behavioral information, as well as the type of behavior performed (those pertaining to perfect and imperfect duties) by a target between participants. Participants were asked to judge the extent to which the target’s behavior was performed for internal (the type of person he or she is) or external (situational) reasons. The researchers found that situational information had a weaker effect on corresponding trait inferences regarding perfect duty violation, and a stronger effect on trait inferences regarding imperfect duty violations. This data suggests that when a target violates a perfect duty, there are fewer situational explanations that justify
the behavior. That is, one should not lie or steal regardless of situational factors, but one may be rude or curt on occasion due to the situation.

Our goal was to test the hypothesis that perfect duty violations receive higher intentionality attributions because they are associated with greater mental intentions when compared to imperfect duty violations. We asked individuals to rate the intentionality and make trait inferences about an agent who performed a perfect or imperfect duty violation with or without a mental intention. Situational information was not included in the scenario. We predicted that when perfect duties are violated without a mental intention, perceivers would be more likely to believe that the behavior was in fact, unintentional. Since unintentional behaviors are not associated with correspondent trait inferences (Malle, 2004; Reeder, 2009), we predicted that individuals would not attribute negative traits to targets in the perfect duty violation condition when mental intentions were absent. In contrast, when imperfect duty violations are performed without a mental intention, and no situational explanation is provided, we predicted that people would explain the behavior in terms of a target’s underlying disposition. That is, when mental intentions are absent, perceivers should attribute more intentionality and more negative dispositions in the imperfect compared to the perfect duty violation condition. In conditions in which perfect and imperfect duties are violated with a mental intention, we predicted that perfect duty violations would receive higher intentionality attributions than imperfect duty violations, thereby replicating Studies 1 and 2.

**Methods**

**Participants**

Thirty-six female and 31 male students from a midsize southwestern university participated in exchange for partial course credit. Participants were 20 years of age on average ($SD = 3.62$).

**Materials and Procedures**

To test our hypotheses, we asked participants to respond to violations of perfect or imperfect duty violations that were performed with or without a mental intention. We included only dishonest and uncharitable behaviors for simplicity. Participants read about a target person named Chris or Tom who performed a dishonest or uncharitable behavior. In the perfect duty violation conditions, participants read: “Chris was at the check out counter at the grocery store. The clerk miscalculated the amount of change that was due back. (Without thinking Chris/Chris noted the mistake and) pocketed the extra money.” Participants in the imperfect duty violation conditions read: “Tom reached into his pocket for change to buy a newspaper. He passed a beggar who asked him for extra change. (Without thinking Tom/Tom noted the request and) kept walking, ignoring the man.” Participants
rated the extent to which the behavior was intentional and the extent to which the target possessed the behavior related trait on a scale from 1) not at all to 7) extremely. Question order was counterbalanced across participants and no effects emerged based on order. In summary, participants were randomly assigned to one of four between participant conditions in the following design: 2(Duty: perfect duty violation (dishonest) vs. imperfect duty violation (uncharitable)) × 2(Mental Intention: present vs. absent).

Results

Intentionality Ratings

To explore intentionality ratings, a two-way ANOVA was performed with Duty and Mental Intention as factors. The main effect of Duty was significant, \( F(1, 63) = 4.61, p = .04, d = 0.42 \). Overall, perfect duty violations were rated as less intentional \((M = 4.03, SD = 2.54)\) than imperfect duty violations \((M = 4.97, SD = 1.93)\). Further, a main effect of Mental Intention was found, \( F(1, 63) = 28.77, p = .001, d = 1.21 \), indicating that intentionality ratings were higher in the mental intention present condition \((M = 5.61, SD = 1.77)\) compared to the mental intention absent condition \((M = 3.23, SD = 2.16)\). As predicted, the Duty × Mental Intention interaction was significant, \( F(1, 63) = 10.99, p < .002, \eta^2 = 0.10 \). Planned contrasts were used to examine differences between perfect and imperfect duty violations within mental intention conditions. Perfect duty violations \((M = 5.88, SD = 1.83)\) did not differ significantly from imperfect duty violations \((M = 5.36, SD = 1.73)\) within the mental intention present condition, \( t(63) = .86, p = .39, d = 0.29 \). As predicted, however, perfect duty violations were seen as less intentional \((M = 2.06, SD = 1.48)\) than imperfect duty violations \((M = 4.47, SD = 2.09)\) within the mental intention absent condition, \( t(63) = -3.73, p = .001, d = 1.33 \).

Trait Ratings

Trait ratings were explored using a two-way ANOVA with Duty and Mental Intention entered as factors. The main effect of Duty was significant, \( F(1, 63) = 7.23, p = .002, d = 0.55 \), indicating that imperfect duty violations received less positive trait ratings \((M = 2.06, SD = 1.20)\) than perfect duty violations \((M = 2.97, SD = 2.00)\). In further support of our prediction, the significant interaction of Duty and Mental Intention, \( F(1, 63) = 13.68, p = .001, \eta^2 = 0.16 \), revealed a similar pattern as that found for intentionality ratings. Planned contrasts were used to examine differences between perfect and imperfect duty violations within mental intention conditions. Trait attributions about perfect duty violations \((M = 2.00, SD = 1.22)\) did not differ significantly from imperfect duty violations \((M = 2.37, SD = 1.30)\) within the mental intention present condition, \( t(63) = .74, p = .46, d = 0.29 \). As predicted, however, trait attributions were more positive for perfect duty violations
(M = 4.00, SD = 2.19) than imperfect duty violations (M = 1.66, SD = .98) within the mental intention absent condition, t(63) = 4.36, p = .001, d = 1.38.

**Discussion**

In Study 3, we found support for the prediction that perfect duty violations receive greater intentionality attributions because these behaviors require greater planning or mental intentions than imperfect duty violations. Within the mental intention absent conditions, participants provided more positive trait ratings and rated perfect duty violations as less intentional than imperfect duty violations. In other words, when a perfect duty violation was performed without a mental intention, participants were less likely to think the person possessed a negative trait and were more likely to believe that the behavior was in fact unintentional. However, participants rated imperfect duty violations performed without mental intentions as intentional and indicative of a negative dispositional trait. We believe this finding is related to how people explain and interpret different behaviors. Perfect duty violations provoke high trait and intentionality ratings because they are usually performed with prior mental intentions. Imperfect duty violations do not yield strong correspondent trait inferences or intentionality attributions because they are facilitated by situational factors and lack prior mental intentions. Thus, when situational factors and mental intentions prior to the behavior are absent, intentionality and trait ratings for imperfect duty violations are reversed and the behavior is explained in terms of the target’s dispositions.

Across intentionality and trait ratings in the mental intention present condition, we found no significant differences between ratings of perfect versus imperfect duty violations; however, the means were in the expected direction—with perfect duties receiving slightly higher intentionality ratings and slightly more negative trait ratings than imperfect duty violations.

**GENERAL DISCUSSION**

In trait attribution research, perfect duty violations carry more attributional weight, and agents who violate these duties are believed to possess negative trait characteristics to a greater extent than agents who violate imperfect duties. In Studies 1 and 2, we also found that perceivers discounted the amount of intentionality associated with imperfect duty violations compared to perfect duty violations—both when they judged specific behaviors and abstract behaviors.

In Study 3, we predicted that perfect duty violations are more commonly associated with prior mental intentions, whereas imperfect duty violations are not. Our data demonstrated that when a perfect duty violation is performed without a mental intention, participants discounted the intentionality associated with the behavior and believed the target possessed a positive trait. However, since imperfect duty violations are often performed due to situational constraints and
are not often associated with prior planning, participants rated imperfect duty violations performed without mental intentions or situational facilitators as highly intentional and indicative of a negative trait.

Previous research has shown that the distinction between trait attributions about perfect and imperfect duties is caused by negative affect, and the current findings suggest that mental state inferences may also be involved. That is, because perfect duty violations cause negative affect and are potentially more disruptive to relationships, people may be highly sensitive to information about an agent’s mental state prior to the performance of the behavior. When given explicit information about a lack of prior planning for a perfect duty violation, individuals may also believe that the agent did not desire the outcome or understand the consequences of the behavior, and therefore readily discount the agent’s intentionality. Imperfect duty violations, however, are not often planned ahead of time (people do not often intend or plan an unfriendly act or uncharitable behavior). Therefore, when given explicit information about an imperfect duty violation performed without a mental intention or situational constraint, individuals attribute the behavior to the target’s traits, believing perhaps that the behavior comes naturally and is a part of the target’s behavioral repertoire.

The current findings have important implications for researchers interested in intentionality attributions. For example, Knobe (2003) has found that individuals attribute intentionality to bad or blameworthy behaviors even when an agent has no desire for an outcome. In particular, Knobe (2003) created a scenario in which a CEO of a company finds that a new program will harm the environment. The CEO declares that he does not care at all about helping or harming the environment and only cares about making a profit. Participants in this study were then asked to judge the intentionality associated with the behavior. Results indicated that a large proportion of participants judged the negative behavior to be intentional. In Kantian terms, one’s failure to help the environment would be an imperfect duty. However, as duties and mental state components were not varied between participants, we cannot be certain what exactly participants were responding to—the CEO’s negative motives, lack of situational constraints, or some other factor.

Another line of research relates to the current findings. Specifically, Pizarro, Uhlmann, and Salovey (2003) asked participants to judge positive and negative behaviors performed impulsively or deliberately and to assign praise and blame. First, an asymmetry was revealed whereby praise was similar across conditions for positive behaviors, but participants discounted the amount of blame assigned to agents who performed impulsive acts compared to deliberate acts. A follow-up study revealed that the asymmetry was caused in part because participants assumed that impulsive agents had positive meta-desires. We can relate this study to the current findings if we think of an impulsive behavior as an act performed with less intentionality than one performed deliberately. Pizarro’s findings, then, are similar to the findings obtained here. That is, under certain conditions, people are more likely to attribute positive motives or meta-desires to individuals who
lack some component of intentionality. In Study 3, a person who performed a dishonest behavior without a mental intention was seen as a relatively honest person. However, a person who performed an uncharitable act without a mental intention was seen as relatively uncharitable. This may indicate that individuals are more likely to attribute positive meta-desires when a perfect duty violation is performed impulsively compared to an imperfect duty violation. Certainly, further research is needed to understand how perceivers make inferences about other people’s mental states and how this helps one to explain particular types of behaviors. Furthermore, we believe that intentionality attributions, in particular, are an important, yet understudied construct that can help researchers better understand moral judgments and judgments concerning justice, such as blame, guilt, or punishment. Questions regarding mental state attribution are clearly very important and fortunately capable of being addressed with further empirical investigation. The next few years may prove very exciting as researchers explore pathways to answer fascinating questions regarding intentionality attribution.

There are a few limitations in the current studies. First, we used only four perfect and imperfect duty behaviors in Studies 1 and 2, and only two behaviors in Study 3. Although many behaviors may be categorized as perfect or imperfect duties, we chose to use only those behaviors included in previous research (e.g., Trafimow, et al., 2005). Second, in Study 3, intentionality was manipulated by varying an agent’s mental intention. In one condition, the agent noted a mistake or request and in the other condition the agent performed a behavior “without thinking.” We believe that we failed to find a significant difference in the mental intention present conditions because noting a request or mistake may not be a very strong indication of a mental intention. Thus, in these conditions, perceivers may have withheld strong attributions regarding the agent’s intentionality and dispositions. However, the means were in the appropriate direction, and thus we believe that these conditions simply lacked sufficient power to replicate Studies 1 and 2 due to the stimulus used.

**AUTHOR NOTES**

Jamie S. Hughes is a PhD candidate in the social psychology program at New Mexico State University. She received her MA in social psychology at Illinois State University in 2006. David Trafimow is a professor of psychology at New Mexico State University. He received his PhD in psychology at the University of Illinois, Champaign, in 1993.

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