# The Paradox of Group Mind: "People in a Group" Have More Mind Than "a Group of People"

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Three studies examine how subtle shifts in framing can alter the mind perception of groups. Study 1 finds that people generally perceive groups to have less mind than individuals. However, Study 2 demonstrates that changing the framing of a group from "a group of people" to "people in a group," substantially increases mind perception—leading to comparable levels of mind between groups and individuals. Study 3 reveals that this change in framing influences people's sympathy for groups, an effect mediated by mind perception. We conclude that minor linguistic shifts can have big effects on how groups are perceived—with implications for mind perception and sympathy for mass suffering.

Keywords: mind perception, framing effects, groups, morality

Supplemental materials: http://dx.doi.org/10.1037/xge0000293.supp

Social groups are defined as collections of people, and so—by definition—collections of people are groups. Logically, it should little matter whether we refer to a group as "a group" or as "a collection of people." However, psychological judgment can sometimes defy logic. Cognitive psychology has long revealed the power of framing effects in value (Tversky & Kahneman, 1981) and probability (Ellsberg, 1961), such that two equivalent propositions can lead to very different judgments. For example, imagine that you are in charge of responding to an outbreak of a new disease that is expected to kill hundreds of people. Research reveals that the way people respond to such a dilemma hinges on framing—focusing upon lives lost (e.g., 400/1,000 people will die) leads to greater risk-taking than focusing upon lives saved (e.g., 600/1,000 people will survive; Kahneman & Tversky, 1979). We investigate whether the perception of groups is sensitive to framing

in one key domain—mind perception. Such framing effects would reveal important knowledge about the psychological nature of both groups and mind perception, with consequences for moral decision-making.

Research reveals that people see groups as possessing minds (Jenkins, Dodell-Feder, Saxe, & Knobe, 2014; Knobe & Prinz, 2008; Morewedge, Chandler, Smith, Schwarz, & Schooler, 2013; Waytz, Gray, Epley, & Wegner, 2010; Waytz & Young, 2012; Waytz & Young, 2014; Wegner & Gray, 2016). For example, people have conversations about the plans and intentions of governments and debate whether corporations are "people" (Citizens United v. Federal Election Commission, 2010). But what exactly is the mind of the group? One possibility is that the group mind is merely the aggregate of individual members; however, inferences about group mind often seem to be distinct from member minds. Jenkins and colleagues (2014) found that people can attribute mental states (operationalized as beliefs and preferences) to a group even when they do not attribute those mental states to any of the group's individual members (and vice versa). Imagine a group is choosing music for a fundraising event and that half the group prefers classical music while the other half prefers heavy metal. As a compromise, the group chooses jazz for the event. Though the group as a whole prefers jazz, observers would not attribute this preference to any individual member of the group.

Groups are therefore perceived as more than just a raw collection of people, just as a melody is perceived as more than just a raw collection of notes. Gestalt psychology has long supported the idea

This article was published Online First April 3, 2017.

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that groups are more than the sum of their parts (Wertheimer, 1938). The perception of groups may therefore exist at two levels of understanding: at the lower level, there are the individual minds of people within the group, but at the higher level, there is a unified emergent group mind.

While most emergent phenomena possess more complexity than their underlying elements (e.g., a melody as compared to single notes), the emergent mind of a group may be a striking exception. Research reveals that individuals are seen to possess both agency (the ability to think and intentionally act) and experience (the ability to sense and feel), but people seem to be less likely to perceive mental capacities in groups, especially the mental capacity for experience (Knobe & Prinz, 2008; Rai & Diermeier, 2015; Waytz & Young, 2012). For example, participants rated sentences describing group experiences (e.g., "Acme Corp. is experiencing great joy") as sounding much more strange than those describing the same group as having agency (e.g., "Acme Corp. intends to release a new product this January;" Knobe & Prinz, 2008).

Possible explanations for this mind-perception asymmetry include a group's lack of body (Gray, Knickman, & Wegner, 2011) and the qualities of specific group members (Waytz & Young, 2012)—both of which view the reduced mind of groups as inevitable. We suspect, however, that groups *can* be seen to have substantial mind, if only they are framed differently. "A group of people" may have little mind, but "people in a group" may have more—perhaps even as much as an individual. In this sense, mind perception hinges on whether people focus on the group forest, or the individual trees.

Some preliminary evidence for these framing effects comes from the group-member mind trade-off (Waytz & Young, 2012), which reveals a tension between groups and their members. When groups were highly entitative (i.e., high in proximity, similarity, and common fate; Campbell, 1958), participants ascribed more agency to the group, but less agency to individuals within the group; when groups were less entitative (i.e., low in proximity, similarity and common fate), participants ascribed less agency to the group, and more agency to the individuals within the group. This trade-off is often understood as being tied to the intrinsic entitativity of particular groups, but, perhaps it is driven by people's relative focus on the group as a whole versus the individuals within it. If so, then the same group may be perceived quite differently based on shifts in the way the group is framed.

Consistent with prior work on the effects of linguistic framing (e.g., Asch, 1946), we expect that changes in linguistic frames can shift mind perception such that "people in a group" will have more mind than "a group of people." Furthermore, because of the link between mind perception and moral judgment (Gray, Gray, & Wegner, 2007), these linguistic shifts could have important downstream consequences for moral decision-making toward groups. As perceptions of experience are intimately tied to feelings of sympathy (Waytz, Gray, Epley, & Wegner, 2010), framing effects could also affect people's ability to sympathize with suffering groups. For example, people may be less willing to help "a camp full of refugees" than "refugees in a camp" or an "orphanage full of children" than "children in an orphanage."

# **Overview of Present Studies**

Three studies test whether the perceived mind of groups can change with shifts in framing. We predict that "groups of people" will seem to have less mind than "people in a group," which would reveal that the same group can be seen at two different levels of analyses: a collection of minded individuals, and an emergent group with less mind. Revealing this tension would not only demonstrate the power of framing upon mind perception, but would also help predict when people perceive group mind independent of its particular entitativity (Rai & Diermeier, 2015; Waytz & Young, 2012). Although a company (high entitativity group) may be perceived as having more mind than people waiting for a bus (low entitativity group), we predict that both would be affected by shifts in framing.

Study 1 compares mind perception of a variety groups—and individuals from those groups—to replicate and extend previous work showing less mind perception for groups. Study 2 manipulates the framing of a group—"a group of people" versus "people in a group"—and tests the effect of these frames upon mind perception. Study 3 tests whether framing-related shifts in group mind perception mediate sympathy felt toward suffering groups.

#### Study 1

In Study 1, we first establish that group mind is distinguishable from individual mind. For generalizability, we used many different types of targets, including those drawn from previous work on general mind perception (Gray et al., 2007) and mind perception of corporate groups in particular (Knobe & Prinz, 2008; Rai & Diermeier, 2015; Waytz & Young, 2012). Across this diverse collection of targets, we expect to replicate past work revealing reduced mind perception of groups compared to individuals especially regarding perceptions of experience (Knobe & Prinz, 2008; Rai & Diermeier, 2015; Waytz & Young, 2012).

We also test whether reduced mind perception for groups versus individuals is influenced by naming specific individuals or leaving them unnamed. One possibility is that groups are perceived as having less mind than individuals because groups are more abstract (Schelling, 1968). For example, some research indicates that people show more compassion toward a suffering identified individual (e.g., identified by name and photo) as compared to a suffering unidentified individual (Small & Lowenstein, 2003). If identification accentuates emotional responses, then the inherent lack of identification of groups may partially explain why groups are perceived as having less mind than an individual. If so, we would expect the largest difference between mind perception of groups and individuals to be between a group and an identified (rather than unidentified) individual.

# Method

# **Participants**

A power analysis (Faul, Erdfelder, Lang, & Buchner, 2007) indicated that we needed a sample of 148 to have adequate power  $(1-\beta \ge .80)$  to detect a medium effect (f = .30). We recruited 180 Amazon Mechanical Turk (Mturk) workers. Participants were randomly assigned to rate one type of target (i.e., group, named

individual, or unnamed individual) from each of 19 social categories. Our final sample (N = 177; 71 men, 106 women) was on average 33 years old (SD = 11.61) and a majority were White (81%; Black 7%; Asian 9%; Other 3%).<sup>1</sup>

# Procedure

Participants read about 19 different social targets. Seven of these targets were taken from previous work on mind perception (Gray et al., 2007; i.e., dog, wild animal, baby, young girl, dead woman, robot, person in vegetative state), five were companies (i.e., accounting company, advertising agency, Google, Facebook, investment firm), one was a sports team, and six were racial/cultural groups (i.e., Afghans, Americans, Canadians, Russians, Black Americans, and White Americans). For each category, participants were randomly assigned to either rate a group, an individual identified by name, or an individual who was not identified by name on four items assessing perceived capacities for experience (i.e., perceived capacity for hunger, physical or emotional pain, physical or emotional pleasure, and fear) and four items assessing perceived capacities for agency (i.e., perceived capacity for planning, exercising self-control, remembering, and acting morally). For example, for the category "accounting company" participants were randomly assigned to rate one of the following targets: "Todd Billingsly who is an accountant" (identified individual), an accountant (unidentified individual), or an accounting company (group). Because the type of target was randomly assigned for each category, each participant rated some individuals and some groups. For example, participants may have been randomly assigned to rate "Todd Billingsly who is an accountant" for the accounting category (identified individual), "a group of Afghans" for the Afghan category (group), and "a man who works for Facebook" for the Facebook category (unidentified individual). All ratings were made on 0 (not at all) to 100 (extremely) scales. Participants concluded by reporting their attitudes toward the racial/cultural groups using feeling thermometers as well as demographic information.

# **Results and Discussion**

#### **Preliminary Analyses**

For all target-category combinations, we calculated the average response across the four items assessing agency ( $\alpha = .93$ ) and the four items assessing experience ( $\alpha = .92$ ).

#### Main Analyses

We hypothesized that groups would be perceived as having less mind than individuals across both dimensions of mind: agency and experience. To test this, we conducted a cross-classified mixed model using lme4 packages in R (Bates, Mächler, Bolker, & Walker, 2015) as used in (Judd, Westfall, & Kenny, 2012). We also used lmertest (Kuznetsova, Brockhoff, & Christensen, 2016) to perform significance tests on parameters of the model. Average mind ratings were modeled by mind dimension (agency vs. experience), target (group, identified individual, or unidentified individual), and the interaction of mind dimension with target. Random effects were estimated for participants and each of the 19 social categories (see supplementary material for model fit and R code). Next, we conducted significance tests using Satterthwaite p values (Luke, 2016). Results revealed two main effects and an interaction (see Table 1 and Figure 1).

Critically, as predicted, there was a main effect of target, F(2, 6632.4) = 231.258, p < .001. We probed the main effect of target by using a Tukey adjustment to control for multiple comparisons. As predicted, groups were attributed less mind (averaged across experience and agency) than either an identified individual, t (6638.96) = 18.69, p < .001, or an unidentified individual t (6620.01) = 18.53, p < .001. Differences in mind of identified and unidentified individuals did not vary from one another t (6638.37) = .204, p = .977. There was also a main effect of mind dimension, F(1, 6520.8) = 228.86, p < .001. This main effect indicated that participants perceived all targets as having more experience than agency: identified individuals, t (6521) = -11.31, p < .001, and groups t (6521) = -3.43, p = .0006.

Finally there was a target by mind dimension interaction, F (2, 6520.8) = 21.05, p < .001. To understand this interaction, we first examined the effect of target separately by mind dimension. When predicting perceptions of experience, people perceived the group as having significantly less experience than an identified individual t (6589.05) = 17.34, p < .001, or an unidentified individual t (6576.36) = 17.14, p < .001; ratings of individuals did not differ from one another: t (6588.66) = .194, p = .980. Likewise, when predicting perceptions of agency, people perceived the group as having significantly less agency than an identified individual t (6589.12) = 9.74, p < .001, or an unidentified individual t (6576.25) = 9.44, p < .001; ratings of individuals did not differ from one another t (6588.66) = .098, p = .995.

While the pattern of effects was the same for both experience and agency, as we predicted, the effect of target on mind perception was significantly more pronounced for experience. In particular, the difference in ratings of experience for a group as compared to an identified individual was significantly greater than the difference in ratings of agency for a group as compared to an identified individual, t (6521.02) = 5.67, p < .001. Likewise, the difference in ratings of experience for a group as compared to an unidentified individual was significantly greater than the difference in ratings of agency for a group as compared to an unidentified individual, t (6521.02) = 5.58, p < .001.

Thus, while groups were perceived as having less mind than individuals for both experience and agency, the effect was stronger for perceptions of experience. This is consistent with previous research that indicates that people find it particularly strange to think of groups as having experiences (e.g., Knobe & Prinz, 2008). In Study 2, we tested whether subtly shifting the framing of the group so that emphasis is given to the people within the group rather than the group itself can lead group mind to be perceived as comparable to individual mind.

## Study 2

In Study 2, we expected that slight shifts in framing from a "group of people" to "people in a group" should lead people to perceive similar levels of mind (rather than less) in a group as

<sup>&</sup>lt;sup>1</sup> Three participants did not submit valid completion codes.

Descriptive Statistics for Ratings of Experience and Agency for Groups, Identified Individuals, and Unidentified Individuals, Study 1

Condition	Μ	95% CI	
Experience			
Group	58.91	[47.75, 70.08]	
Unidentified Individual	76.61	[65.44, 87.77]	
Identified Individual	76.81	[65.64, 87.97]	
Agency			
Group	55.41	[44.24, 66.58]	
Unidentified Individual	65.05	[53.88, 76.22]	
Identified Individual	65.15	[53.98, 76.32]	

compared to an individual. Thus, we selected a single group (an accounting company) and experimentally shifted the framing to examine effects on mind perception. We predict that people will perceive more mind in "people in a company" than in a "company of people."

In Study 2, we also aimed to rule out a potential alternative explanation. Recent research indicates that groups elicit greater prejudice than individuals (Cooley & Payne, 2016), suggesting that group-framing may focus attention more upon group-level stereotypes (i.e., corporations as "unfeeling"). We predicted that framing-related changes in mind perception toward groups will persist even controlling for the activation of these stereotypes—measured via assessments of warmth and competence, the two fundamental dimensions of stereotypes (i.e., stereotype content model; Fiske, Cuddy, & Glick, 2007).

#### Method

# **Participants**

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A power analysis (Faul et al., 2007) indicated that we needed a sample of 246 to have adequate power  $(1-\beta \ge .80)$  to detect a medium/small effect (f = .20). We recruited 250 participants from Amazon Mechanical Turk. Participants (115 men, 135 women) were on average, 31 years old (SD = 10.45) and a majority were White (83%; Black 6%; Asian 7%; Other 4%). One participant did not complete mind measures leaving us with a final sample of 249 people.

#### Procedure

After signing an electronic informed consent, participants completed a brief attention check and then were randomly assigned to read about a small accounting company in New York or an individual from that company. The company was described in one of two ways: the group-frame emphasized the company as a group (i.e., "an accounting company comprised of 15 people") and the group-composition-frame emphasized the individuals that composed the company (i.e., "15 people who compose the accounting company"). As can be seen, the only difference between these conditions was a small change in linguistic framing.

Participants then rated the target on the same four items assessing experience and agency as used in Study 1. Finally, to measure general stereotypes of the target we included four items assessing stereotypes of warmth (i.e., unfriendly, insensitive, sociable, caring) and four items assessing stereotypes of competence (i.e., skilled, capable, disorganized, lazy). Ratings of mind and stereotypes appeared in a randomly generated order and were answered on -10 (*not at all*) to 10 (*extremely*) scales. Finally, to explore consequences of mind perception for behaviors toward groups, we also measured whether people would endorse an action that would cause financial harm to the targets (see supplementary materials for exploratory analyses). Participants concluded by reporting how similar they thought employees of the accounting company were to one another, a measure of implicit emotions, and demographic information before being debriefed.

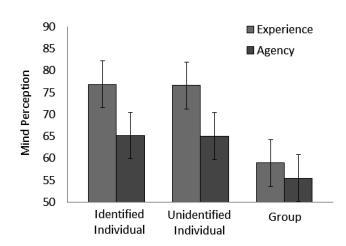
# **Results and Discussion**

#### **Preliminary Analyses**

First we calculated the average response across the four items assessing agency ( $\alpha = .87$ ) and the four items assessing experience ( $\alpha = .93$ ). Similarly, we calculated average stereotypes of warmth ( $\alpha = .73$ ) and competence ( $\alpha = .76$ ).

## **Main Analyses**

We hypothesized that framing that placed emphasis on the group itself (i.e., group-frame) would lead people to perceive less mind in the group than an individual as in previous research and our Study 1; however, we expected that framing that slightly shifted focus to the people within the group (i.e., groupcomposition-frame) would lead people to perceive the group as having much more mind—perhaps even comparable to an individual. Because we focused on a single category and thus did not have random category effects, we conducted a MANOVA predicting ratings of both experience and agency from framing condition.



Groups Are Perceived as Having Less Mind Than Individuals

*Figure 1.* Ratings of experience and agency for groups, unidentified individuals, and identified individuals, Study 1. Error bars represent  $\pm 1$  standard error. See supplementary materials for R code and estimates of model parameters.

This analysis revealed an omnibus effect of condition on perceptions of experience and agency, F(4, 490) = 14.65, Wilks'  $\lambda =$ .798, p < .001,  $\eta_p^2 = .11$ .

This significant MANOVA, reflected a significant effect of condition on both experience, F (2, 246) = 30.34, p < .001,  $\eta_p^2 =$ .20, and agency, F(2, 246) = 6.36, p = .002,  $\eta_p^2 = .05$  (see Table 2 and Figure 2). Replicating Study 1, Tukey post hoc tests indicated that the group in the group-frame condition was perceived as having less experience (p < .001, 95% CI [-5.42, -2.35]), and less agency (p < .003, 95% CI [-2.64, -.43]), than an individual. Critically, the group-composition-frame led people to perceive greater experience (p < .001, 95% CI [3.29, 6.42]), and agency (p = .013, 95% CI [.24, 2.48]), than the group-frame—an amount similar to an individual's experience (p = .303, 95% CI [-.58, 2.52]), and agency (p = .927, 95% CI [-1.29, .94]).

Next, we examined the possibility that decreased attributions of experience and agency to the group in the group-frame condition may be driven by greater application of stereotypes to groups in this condition. We again conducted a MANOVA predicting ratings of experience and agency from framing condition, but this time, included warmth and competence as standardized covariates. The MANOVA remained significant even when controlling for stereotypes, F (4, 486) = 16.22, Wilks'  $\lambda$  = .778, p < .001,  $\eta_p^2$  = .12. This significant MANOVA reflected a significant effect of condition on both perceptions of experience F (2, 244) = 34.47, p <.001,  $\eta_p^2 = .22$ , and agency, F(2, 244) = 5.48, p = .005,  $\eta_p^2 = .04$ . Critically, the pattern of effects also remained identical to the model without stereotypes added as covariates (see supplementary materials). These findings indicate that variations in mind perception based on the framing of the group are not driven by differential activation of stereotypes of the target.

As in Study 1, when a group was framed in a way that emphasized the group itself, the group was attributed less mind than an individual. As predicted, shifts in framing that gave emphasis to the individuals within the group led participants to see comparable mind in a group as compared to an individual. Critically, results did not change when we controlled for stereotypes of warmth and competence, ruling out the alternative explanation that stereotypes of companies in particular drive these effects. Next, we attempted to replicate and extend this framing effect on group mind perception to a moral emotion: sympathy.

# Study 3

In Study 3, we adapted materials from previous research that found that a group is perceived as having less mind and elicits less

Table 2

Descriptive Statistics for Ratings of Experience and Agency Based on Framing, Study 2

Condition	М	SD	95% CI	п
Experience				
Group-Frame	2.67	5.57	[1.75, 3.58]	83
Group-Composition-Frame	7.53	3.11	[6.60, 8.46]	80
Individual	6.56	3.61	[5.66, 7.46]	86
Agency				
Group-Frame	5.05	3.32	[4.40, 5.71]	83
Group-Composition-Frame	6.41	2.86	[5.74, 7.08]	80
Individual	6.59	2.91	[5.94, 7.23]	86

4 3 2

# Frame

Figure 2. Ratings of experience and agency depend on framing, Study 2. Error bars represent  $\pm 1$  standard error.

sympathy than an individual (Rai & Diermeier, 2015). We expected to replicate this finding when we framed the group as a single entity. However, we predicted that shifting framing to the people within the group would lead to more perceived mind and sympathy-perhaps even in similar amounts to an individual.

#### Method

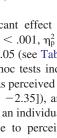
## **Participants**

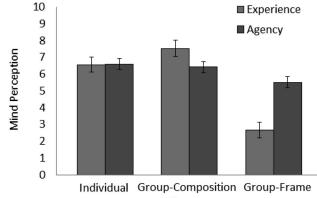
A power analysis (Faul et al., 2007) indicated that we needed a sample of 246 to have adequate power  $(1-\beta \ge .80)$  to detect a medium/small effect (f = .20). Thus, we recruited 250 participants from Amazon Mechanical Turk. Participants (134 men, 116 women) were on average, 33 years old (SD = 10.71) and a majority were White (79%; Black 8%; Asian 10%; Other 3%). Eight participants failed to complete at least one of our main dependent variables. For consistency, we do not include these eight participants in the following analyses. Thus, our final sample is 242 participants who completed all dependent variables. However, results do not change if we use the maximum number of participants that completed each measure in our analyses.

#### Procedure

Participants were assigned to read vignettes adapted from previous research (Rai & Diermeier, 2015). Some participants read about a group in a group-frame (i.e., a small company), others read about the same group in a group-composition-frame (i.e., 20 employees who compose a small company; this condition was added to Rai and Diermeier's [2015] design to test our main hypothesis), and others read about an individual. Exact wording by condition appears below.

Take a moment to imagine a man who was quite successful. Now imagine that, recently, the man's electronic security firewalls were breached and his private accounts were hacked, and as a result he went bankrupt. [Individual]





#### Group Mind Depends on Framing

Take a moment to imagine a small company that was quite successful. Now imagine that, recently, the company's electronic security firewalls were breached and its private accounts were hacked, and as a result the company went bankrupt. [Group-frame]

Take a moment and imagine 20 employees who compose a small company and who were quite successful. Now imagine that, recently, the 20 employees' electronic security firewalls were breached and their private accounts were hacked, and as a result the company went bankrupt. [Group-composition-frame]

Participants then rated the target on its capacity for "experiencing pain and suffering" (experience) and "having intentions and goals" (agency) on scales from 0 (*not at all capable*) to 100 (*extremely capable*). Participants also rated sympathy for the target on a 0 (*not at all sympathetic*) to 100 (*extremely sympathetic*) scale.

#### **Results and Discussion**

#### Main Analyses

First we tested the effect of framing on mind perception (experience and agency) and sympathy in an overall MANOVA. This analysis revealed that framing had a significant overall effect on our main dependent variables, F(6, 474) = 5.79, Wilks'  $\lambda = .868$ , p < .001,  $\eta_p^2 = .07$ .

**Mind perception.** As predicted, and replicating Study 2, the significant MANOVA reflected a significant effect of framing on experience, F(2, 239) = 14.38, p < .001,  $\eta_p^2 = .12$ , and agency, F(2, 239) = 7.18, p = .001,  $\eta_p^2 = .06$ . The group in the group-frame was perceived as lower in a capacity for experience (p < .001, 95% CI [-23.18, -8.23]), and agency than an individual (p = .001, 95% CI [-15.80, -3.31]) (see Table 3 and Figure 3). Conversely, the group in the group-composition-frame was perceived as just as capable of experience (p = .787, 95% CI [-9.51, 5.35]), and agency (p = .714, 95% CI [-8.26, 4.15]), as an individual; and as more capable of experience (p < .001, 95% CI [6.12, 21.12]), and agency (p = .014, 95% CI [1.24, 13.76]), than the group-frame.

**Sympathy.** The framing condition predicted sympathy for the target in the same pattern as perceptions of mind, F(2, 242) = 12.78, p < .001,  $\eta_p^2 = .10$  (see Table 4). Replicating previous research, a group in the group-frame condition elicited less sympathy than an individual (p < .001, 95% CI [-22.83, -7.65]). Critically, a group in the group-composition-frame elicited comparable levels of sympathy as an individual (p = .700, 95% CI

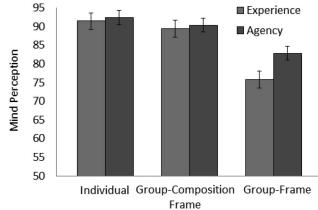
Table 3

Descriptive Statistics for Ratings of Experience and Agency Based on Framing, Study 3

Condition	М	SD	95% CI	Ν
Experience				
Group-Frame	75.75	28.73	[71.29, 80.20]	79
Group-Composition-Frame	89.37	15.42	[84.97, 93.77]	81
Individual	91.45	12.79	[87.08, 95.83]	82
Agency				
Group-Frame	82.80	22.31	[79.08, 86.52]	79
Group-Composition-Frame	90.30	14.93	[86.62, 93.97]	81
Individual	92.35	11.51	[88.70, 96.01]	82

5 Experience

Group Mind Depends on Framing



*Figure 3.* Ratings of experience and agency depend on framing, Study 3. Error bars represent  $\pm 1$  standard error.

[-10.11, 4.97]), and more than the group-frame (p < .001, 95% CI [5.06, 20.28]).

# Mediation of Framing on Sympathy by Mind Perception

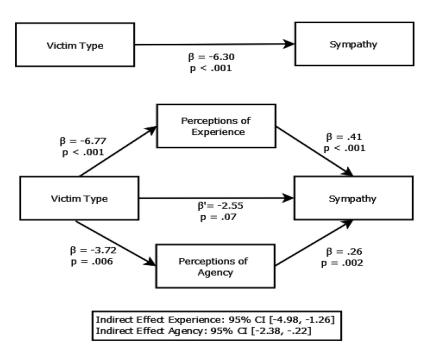
Next, we next tested whether the relationship between target (*X*; 1: Group-composition-frame; 2: Individual; 3: Group-frame) and sympathy (*Y*) was mediated by differences in mind perception in terms of experience (*M1*) and agency (*M2*). To test this dual mediation model (See Figure 4) we used the Process macro in SPSS (Hayes, 2013) and 10,000 bootstrap resamples. Results were consistent with mediation. As can be seen in Figure 4, there was a significant indirect effect of target type on sympathy through changes in perceptions of experience, b = -2.79, 95% CI [-4.98, -1.26], and changes in perceptions of agency, b = -.96, 95% CI [-2.38, -.22].

In sum, when we framed groups in the same way as previous research (Rai & Diermeier, 2015), we replicated the finding that groups have less mind than an individual and elicit less sympathy. However, we also demonstrate that linguistic shifts dictate differences in mind perception for groups. Framing that gave emphasis to the individuals within the group led participants to perceive the group as having similar mind and elicit similar sympathy as an individual. Mind perception of groups may therefore hinge more

Table 4

Descriptive Statistics for Ratings of Sympathy Based on Framing, Study 3

Condition	М	SD	95% CI	Ν
Sympathy				
Group-Frame	72.44	25.57	[67.92, 76.97]	79
Group-Composition Frame	85.11	18.86	[80.65, 89.58]	81
Individual	87.68	15.73	[83.25, 92.12]	82



*Figure 4.* The relationship between victim type (X) and sympathy (Y) was mediated by differences in mind perception in terms of experience (M1) and agency (M2) using the PROCESS macro in SPSS (Hayes, 2013) and 10,000 bootstrap resamples, Study 3.

upon perspective than upon inherent differences between groups and individuals (Jenkins et al., 2014; Knobe & Prinz, 2008).

## **General Discussion**

Across three studies, we demonstrate that subtle linguistic shifts —from "a group of people" to "people in a group"—can affect mind perception. A group of 15 people is perceived as having less mind than an individual, while 15 people in a group are perceived as comparable in mind to an individual. As perceptions of mind are tied to feelings of sympathy (Rai & Diermeier, 2015), we also demonstrated that these frames change the amount of sympathy felt toward victimized groups. These studies replicate past research showing reduced mind perception and sympathy toward groups (Cameron & Payne, 2011; Rai & Diermeier, 2015; Slovic, 2007), but suggest that this reduction is not inevitable. Instead, people's callousness toward groups hinges upon how they are framed, which provides the opportunity to increase moral behavior toward groups of suffering people, such as the ever-expanding number of refugees.

# Implications for Understanding the Nature of Group Mind

Previous research has examined mind perception toward groups varying in entitativity (Waytz & Young, 2012) and finds evidence for a trade-off: more entitative groups have more group mind and less individual mind than less entitative groups. We believe that our findings provide a new understanding of this and other research, such that differences in mind perception are driven by differences in perspective. While previous research presents participants with *different* groups that are con-

sidered to be high or low in entitativity as determined by participants (Study 1, Waytz & Young, 2012) or as determined by experimenters (Study 3, Waytz & Young, 2012), we hold the type of group constant in our Study 2 and Study 3 and merely shift linguistic emphasis from "the group of people" to "the people in the group." This shift in emphasis (holding all else constant) produces a reliable shift in mind perception and sympathy. Such a finding reveals that framing may be more powerful than intrinsic differences in entitativity for mind perception. Even when the type of group is held constant, we observe large differences in mind perception depending on whether we emphasize the emergent collective (i.e., the group) or the members of that collective (i.e., the people). Importantly, this framing is extremely subtle. In Studies 2 and 3, we provided the exact same information about the group, but merely shifted the linguistic emphasis involved in the description.

Such framing may be a key facet predicting support for policy decisions involving groups of people. For example, in the context of intergroup conflict, people may perceive the morality of launching a drone to be quite different if the potential victims are framed as the people of Afghanistan versus Afghan people. Likewise, if a group wants to elicit sympathy for their victimization, this research provides a simple way for doing so.

The big effect of subtle linguistic shifts also raises the possibility that people could toggle between different perceptions of groups in a motivated way. Research on the collapse of compassion finds that people down-regulate their experience of compassion when viewing many suffering victims as compared to a salient individual who is suffering (Cameron & Payne, 2011). People may achieve this down-regulation by considering the group rather than the people within it. Although we focus on emotions felt toward groups (i.e., sympathy), research on group emotions (Fischer & Manstead, 2008; Kuppens, Yzerbyt, Dandache, Fischer, & van der Schalk, 2013; Smith, Seger, & Mackie, 2007) indicates that people also perceive groups themselves as experiencing emotions that can be distinguished from the emotions of individual group members. Similarly, we find that—through framing—"group mind" can be distinguished from the minds of its individual members, which may affect the perception of other group emotions. Future research should test this possibility.

## Limitations

Study 1 demonstrated that people perceive diverse groups as having less mind than individuals. However, Studies 2 and 3—which examined framing—focused on corporate groups, and so more research is needed the test the generalizability of these group framing effects. We chose to focus on corporate groups for a couple of reasons. First, research demonstrating that groups are perceived as having less mind than individuals frequently uses corporate groups (Knobe & Prinz, 2008; Rai & Diermeier, 2015; Waytz & Young, 2012), providing the most stringent test of our hypothesis. Second, corporate groups represent a ubiquitous and powerful type of group—providing our research with real-world applicability.

Our research is also limited by the exclusive use of samples from Amazon Mechanical Turk (Mturk). While participants on Mturk tend to be more diverse than undergraduate university samples, they are not representative of Americans more generally (Buhrmester, Kwang, & Gosling, 2011). Thus, our findings should be replicated with more representative samples of Americans, and with cross-cultural samples. Many cultures are more collectivistic than America (e.g., China; Oyserman, Coon, & Kemmelmeier, 2002) and may see groups (i.e., collectives) rather differently which may moderate the effect of framing (Kashima et al., 2005). Future research should also investigate whether group membership (i.e., actually belonging to a group) alters how it is perceived. If someone can directly appreciate the individual minds within a group, perhaps they would be resistant to changes in framing.

#### Conclusion

The ability to perceive a mind in another entity is integral to human social interaction and morality (Gray, Young, & Waytz, 2012; Waytz et al., 2010; Wegner & Gray, 2016). If we perceive others as capable of having experiences of pleasure and pain, we are more likely to feel sympathy and compassion for them (Galinsky & Moskowitz, 2000; Gray, Young, & Waytz, 2012); if we perceive others as capable of agency, we are likely to hold them as morally blameworthy if they cause harm. More broadly, perceiving a mind in someone turns them from a "thing" into a person (Cameron, Harris, & Payne, 2016; Castano & Giner-Sorolla, 2006; Haslam, 2006; Leyens et al., 2001).

This research provides a deeper understanding of mind perception by revealing the importance of framing—and the paradox of groups. Groups are simultaneously a collection of individual members and an emergent entity that transcends its members. Exactly which frame we apply to groups is both easily manipulated and holds important consequences for downstream behavior. As John Donne famously said, "No man is an island entire of itself; every man is a piece of the continent, a part of the main." In other words, all of us are part of some group—but whether that groups strips away our perceived mind is a matter of perspective.

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Received August 14, 2016

Revision received January 25, 2017

Accepted February 1, 2017 ■