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## FlashReport

## Expanding the moral circle: Inclusion and exclusion mindsets and the circle of moral regard

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## ABSTRACT

The human tendency to draw boundaries is pervasive. The ‘moral circle’ is the boundary drawn around those entities in the world deemed worthy of moral consideration. Three studies demonstrate that the size of the moral circle is influenced by a decision framing effect: the inclusion–exclusion discrepancy. Participants who decided which entities to exclude from the circle (exclusion mindset) generated larger moral circles than those who decided which to include (inclusion mindset). Further, people in an exclusion mindset showed “spill-over” effects into subsequent moral judgments, rating various outgroups as more worthy of moral treatment. The size of the moral circle mediated the effects of mindset on subsequent moral judgment. These studies offer an important first demonstration that decision framing effects have substantial consequences for the moral circle and related moral judgments.

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In the middle of the 19th century, the eminent Irish historian, W.E.H. Lecky characterized moral progress throughout history as an expanding circle of moral regard (Lecky, 1869). Just over one hundred years later, the philosopher, Peter Singer echoed Lecky’s sentiment, acknowledging that over the course of human history more and more beings in the world have come to be deemed worthy of serious moral consideration, and have thus been included in ‘the moral circle’ (Singer, 1981). Not only has the moral circle expanded over the course of history, it also expands from birth through to adulthood. Bloom (2004) argues that children begin with an egocentric conception of the moral, but proceed to draw boundaries around larger and larger sets of entities over the course of development.

Although a prominent concept in moral philosophy, at least since its popularization by Singer, the moral circle has received little attention in psychology. A notable exception is work by Reed and Aquino (2003), who suggest that a salient moral identity is associated with a more expansive moral circle. These authors found that people who define themselves in terms of moral traits possess a more expansive circle of moral regard toward outgroups. Other psychologists have speculated about the roles of reason, empathy and emotion in shaping the moral circle (Pizarro, Detweiler-Bedell, & Bloom, 2006), but empirical evidence bearing directly on the effects of these variables is scant. The current research addresses this lack by examining an aspect of decision framing that

may influence the size of the moral circle: the inclusion–exclusion discrepancy (Yaniv & Schul, 1997, 2000).

A large body of work shows that people can arrive at markedly different outcomes depending on how a decision is framed (e.g., Kuhberger, 1998; Tversky & Kahneman, 1986). Consider the task of reducing a long list of job applicants to a shorter list of viable candidates. One might focus either on selecting the best on the list for inclusion (inclusion mindset) or on excluding the worst (exclusion mindset). Although each mindset should logically result in the same final set, research shows that this is not the case. Typically, people in an exclusion mindset generate larger final sets than people in an inclusion mindset (e.g., Hugenberg, Bodenhausen, & McLain, 2006; Levin, Jasper, & Forbes, 1998; Maoz, Yaniv, & Ivri, 2007; Yaniv & Schul, 1997, 2000; Yaniv, Schul, Raphelli-Hirsch, & Maoz, 2002). This is called the inclusion–exclusion discrepancy (IED). A recent study by Maoz et al. (2007), for example, demonstrated the IED in participants’ judgments about the concession of Jewish settlements in Gaza and the West Bank. Each respondent was given a list of Jewish settlements and asked either to mark those settlements over which they *would* be willing to concede Israeli sovereignty (inclusion mindset) or those settlements over which they *would not* be willing to concede Israeli sovereignty (exclusion mindset). Consistent with previous work, participants in an exclusion mindset were willing to concede more settlements (i.e., had larger final sets) than those in an inclusion mindset.

Drawing the moral circle can be approached in either an inclusion or exclusion mindset. One may focus on those entities that one thinks *should* be included in the circle (inclusion

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mindset) or on those entities that one thinks *should not* be included in the circle (exclusion mindset). In the current studies, participants demarcated their moral circles while in either inclusion or exclusion mindsets. It was hypothesized that exclusion mindsets would result in larger moral circles than inclusion mindsets.

### Studies 1a and 1b

Studies 1a and 1b considered the IED in the demarcation of two important moral boundaries. Philosophers and bioethicists have long pondered whether entities such as fetuses and people in permanent vegetative states deserve the same moral treatment as fully functioning human beings (McMahan, 2002). Such entities, said to reside at the ‘margins of life,’ are granted full moral regard by some but not by others and the consequences of such disagreements can have serious implications for social policy and legislation (e.g., abortion and voluntary euthanasia). Study 1a thus considered the effects of inclusion and exclusion mindsets on drawing a boundary at the ‘margins of life.’

Another important focus of philosophical work on the moral circle concerns the expansion of the moral circle to include non-human animals. According to Singer (1990), much of history is characterized by ‘speciesism’ (Ryder, 1975), an attitude consistent with the exclusion of most non-human animals from the moral circle. The question of which animals to include in the circle is not only of philosophical interest but has real implications for the humane treatment of animals in farming as well as other industries (Lund, Mejdell, Röcklinsberg, Anthony, & Håstein, 2007). Study 1b examined this important instance of the moral circle by considering the boundary between those animals considered worthy of moral treatment and those not.

### Method

Thirty (Study 1a; 19 females, 11 males; mean age = 20.60 years, SD = 2.51 years) and 65 (Study 1b; 58 females, 7 males; mean age = 18.48 years, SD = 1.09 years) undergraduate university students were randomly assigned to the inclusion or exclusion mindset conditions. Participants in both conditions received a list of entities (Study 1a) or animals (Study 1b). The 20 entities used in Study 1a were selected from philosophical and psychological work on the margins of life (e.g., Gray, Gray, & Wegner, 2007; McMahan, 2002) and included such entities as *young girl, fetus, brain-dead person, adult man and baby*. Twenty-seven animals, of varying genetic relatedness to humans, were used in Study 1b. These included *monkeys, fish, dolphins, snails, dogs, elephants, birds, and gorillas*. All participants were presented with a list of entities (animals) and the following prefatory instructions: “When we think about entities (animals) in the world, we might feel a moral obligation to show concern for the welfare and interests of some of those entities (animals). Below is a list of entities (animals).” Next, respondents in the inclusion mindset condition were asked to “circle those that you feel morally obligated to show concern for.” Respondents in the exclusion mindset condition were asked to “cross out those that you do not feel morally obligated to show concern for.” Instructions such as these are typically used to manipulate inclusion/exclusion mindsets (e.g., Yaniv et al., 2002).

### Results

#### Study 1a

As expected, an independent samples *t*-test showed that participants in the exclusion condition generated significantly larger

moral circles ( $M = 16.40$ ,  $SD = 1.45$ ) than did those in the inclusion condition ( $M = 13.00$ ;  $SD = 4.02$ ),  $t(28) = 3.08$ ,  $p < 0.01$ ,  $d = 1.13$ . Percentages of items retained in the moral circle as a function of mindset are displayed in Table 1.

#### Study 1b

An independent samples *t*-test revealed that participants in an exclusion mindset generated significantly larger sets ( $M = 21.85$ ,  $SD = 5.74$ ) than did those in an inclusion mindset ( $M = 14.78$ ,  $SD = 7.37$ ),  $t(63) = 4.33$ ,  $p < 0.01$ ,  $d = 1.07$ . Percentages are displayed in Table 1.

### Study 2

Although Studies 1a and 1b demonstrate that the IED does occur for judgments about the circle of moral regard, an interesting question remains as to whether inclusion and exclusion mindsets have significant effects on other, related moral judgments. An important consequence of an expansive moral circle is that it promotes treating a wider range of others with moral consideration. Thus the focus of Study 2 was not only whether exclusion mindsets would lead to more expansive moral circles, but whether subsequent judgments about various outgroups would exhibit similarly expansive conceptions of moral regard. Specifically, would people who had previously adopted an exclusion mindset subsequently rate various outgroups as more worthy of moral treatment?

### Method

Forty-nine undergraduate university students (34 females, 15 males; mean age = 22 years;  $SD = 3.8$  years) were randomly assigned to the mindset conditions. They began by completing the ‘margins of life’ task used in Study 1a. Next, participants were asked to rate the extent to which they “feel a moral or ethical obligation to show concern for the welfare and interests” of numerous groups. These groups were “people who practice a different religion than you,” “people of different ethnicities than you,” and “people with different beliefs than you” (Reed & Aquino, 2003). Ratings were made on 5-point scales (1 = *absolutely no obligation*; 5 = *very strong obligation*). Importantly, none of the groups rated in the second stage of the experiment were listed in the first, moral circle task.

### Results

Replicating Study 1a, participants in an exclusion mindset generated significantly larger moral circles ( $M = 16.37$ ,  $SD = 2.00$ ) than those in an inclusion mindset ( $M = 13.50$ ,  $SD = 3.57$ ),  $t(47) = 3.56$ ,  $p < 0.01$ ,  $d = 1.02$ . Percentages are displayed in Table 1.

To examine the effects of mindset on the moral treatment of outgroups, the ratings of each of the three groups were averaged to form a composite, a high score on which indicated stronger feelings of moral obligation ( $\alpha = 0.91$ ). An independent samples *t*-test on these ratings demonstrated the expected effect: participants in an exclusion mindset reported significantly stronger obligations to show concern for outgroups ( $M = 3.78$ ,  $SD = 0.68$ ) than did those

**Table 1**

Percentage of targets (and standard deviations) in the moral circle as a function of mindset (%)

	Mindset		
	Inclusion	Exclusion	Discrepancy
Study 1a	65 (20)	82 (8)	17
Study 1b	55 (27)	81 (21)	26
Study 2	68 (18)	82 (10)	24

in an inclusion mindset ( $M = 3.14$ ,  $SD = 0.81$ ),  $t(47) = 3.01$ ,  $p < 0.01$ ,  $d = 0.86$ .<sup>1</sup>

To examine the possibility that set size (moral circle) mediated the effect of mindset of moral concern for outgroups, the above effects were reconsidered in a series of regression analyses. As noted above, mindset (coded 0 = inclusion, 1 = exclusion) significantly predicted moral concern for outgroups,  $B = 0.64$  ( $\beta = 0.40$ ),  $p < 0.01$ . In addition, mindset predicted set size,  $B = 2.87$  ( $\beta = 0.46$ ),  $p < 0.01$ . Finally, when both mindset and set size were included as predictors of moral concern for outgroups, set size significantly predicted moral concern,  $B = 0.08$  ( $\beta = 0.32$ ),  $p = 0.03$ , but mindset became a marginal predictor,  $B = 0.40$  ( $\beta = 0.25$ ),  $p = 0.09$ , suggesting partial mediation. Indicative of significant mediation, a bootstrapped, 95% confidence interval constructed around the unstandardized indirect effect did not include zero (0.01, 0.56) (Preacher & Hayes, 2004).

## Discussion

Across three studies, exclusion mindsets resulted in consistently and substantially larger moral circles than did inclusion mindsets. Studies 1a, 1b and 2 demonstrated that in drawing boundaries at the 'margins of life' (1a and 2) and between animals (1b), exclusion mindsets led to more expansive moral circles than inclusion mindsets. Moreover, Study 2 demonstrated that participants in an exclusion mindset felt a stronger obligation to treat various outgroups with moral regard than did those in an inclusion mindset. This effect of mindset on moral regard towards outgroups was partially mediated by the size of the moral circle. Participants in an exclusion mindset afforded outgroups greater moral regard, in part because they possessed more expansive moral circles.

Why do exclusion mindsets result in larger moral circles than inclusion mindsets? One possibility is that an inclusion mindset requires people to justify why they decide to *include* an item, whereas an exclusion mindset requires people to justify why they decide to *exclude* an item (Yaniv et al., 2002). Thus, in an inclusion mindset, the absence of definitive support for an item's inclusion may be sufficient to exclude it, whereas in an exclusion mindset, the absence of definitive support for an item's inclusion may not be sufficient to exclude it. On this view, borderline cases (i.e., cases which cannot definitively be excluded) are more likely to be retained under exclusion than inclusion mindsets. Clearly, if one wants to foster expansiveness of moral regard, one should focus not on why an entity *should* be afforded moral treatment, but why an entity *should not* be.

Another important point to be taken from the current research is that inclusion and exclusion mindsets have effects not only on moral circle demarcation, but also on subsequent moral judgments. Study 2 demonstrated that participants in an exclusion mindset generated larger moral circles and, thus, felt a stronger obligation to treat people of other religions, ethnicities and political beliefs with moral concern. This finding is important for at least two reasons. First, it demonstrates that having a larger moral circle influences judgments of moral treatment. Most philosophical explorations of the moral circle treat the circle as a rather abstract entity. The current results show quite concretely that those who have a larger moral circle feel stronger obligations to treat various others with moral consideration.

Second, the results of Study 2 provide a first demonstration of the 'spill-over' effects of inclusion and exclusion strategies into a subsequent task. Mindset priming effects are typically characterized by a spill-over of a cognitive orientation from one task to

another (Freitas, Gollwitzer, & Trope, 2004; Gollwitzer, 1990). Such spill-over may account for the effects obtained in Study 2. In focusing one's attention on why a target *should not* be afforded moral concern, an exclusion strategy effectively 'lowers the bar' for the award of moral treatment, relative to an inclusion strategy. In set size tasks, such as those used in the current studies, such a mindset results in larger sets. However, when rating the extent of moral consideration due a *particular target* (as in the outgroup rating task in Study 2), the lowered criterion induced by the exclusion mindset results in the award of greater moral consideration to that target. Although such a spill-over of criterion differences provides a reasonable account of the results of Study 2, this explanation was not directly tested here and requires explicit consideration in future work.

As one of the first empirical explorations of the moral circle, the current research leaves a number of questions unanswered. What other factors influence the moral circle? Bloom, Pizarro and colleagues (Bloom, 2004; Pizarro et al., 2006) posit empathy and emotion as possibilities. Future work should take an empirical approach to further exploring these relationships.

Another important question is: What other consequences follow from an expansive moral circle? The current research showed that larger moral circles promote stronger perceived obligations to treat others with concern, but just how far do these effects extend? Do larger moral circles entail more humane treatment of animals or more willingness to help others? More generally, are the effects of an expansive moral circle restricted to relatively cost-free moral judgments or do they extend to real behavior? These are important questions for future research.

We have come quite a way since Lecky noted the historical expansion of the moral circle. On the whole, we now include not only all humans but also many animals within the circle of moral regard. It is clear, however, that there is variability in how individuals draw moral boundaries. If our goal is to expand the moral circle, then it seems that a simple way of approaching this goal is to ask not "Why *should* I treat this being with moral concern?" but rather "Why *shouldn't* I?" Shifting the burden of proof in this way, from sufficiency for inclusion to sufficiency for exclusion, may result in borderline cases receiving the benefit of the doubt and thus gaining a place in the circle of moral regard.

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<sup>1</sup> Independent samples *t*-tests conducted separately on moral concern for each outgroup also yielded significant results  $t_s > 2.6$ ,  $p_s < 0.01$ ,  $d_s > 0.74$ .

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