Supplementary materials -

Thinking, good <u>and</u> bad?

Deliberative thinking and the singularity effect in charitable giving

Content

Scenarios used

Below are the exact descriptions of the charity appeal presented to participants, for Israel and Sweden/US. Due to confidentiality aspects, the picture used in the Israeli sample cannot be shared here.

Israeli sample

Single victim

This is Guy, a 3-year old child who is admitted to a certain hospital in Israel due to a severe disease. His life is under serious threat.

Lately, a new treatment had been developed that can save his life, but the treatment is very expensive, and without donations, it will be impossible to save his life.

Group of victims

Guy, Yonatan, Avi, Ronit, Rachel, Orna, Yotam and Shiran are eight 3-year old children. They are admitted to a certain hospital in Israel due to a severe disease. Their life is under serious threat.

Lately, a new treatment had been developed that can save their lives, but the treatment is very expensive, and without donations, it will be impossible to save them.

Swedish sample
Single victim

This is Alex, a 3-year old child who has been diagnosed with a serious type of cancer. The association has described that Alex now is in need of an expensive treatment that could save his life.

(Alex, 3 year)

Group of victims

This is Lina, Julia, Adrian, Mary, Anthon, Sophie, Alex and Sarah, eight 3-year old children. These have been diagnosed with a serious type of cancer. The association has described that Lina, Julia, Adrian, Mary, Anthon, Sophie, Alex and Sarah now are in need of an expensive treatment that could save the children's lives.

(Lina, Julia, Adrian, Mary, Anthon, Sophie, Alex and Sarah, 3 year)

Description of other measures

REI

Before seeing the scenario of the child(ren), participants completed REI. Below is a picture of what they saw.

Secondary measures

On a 7-point Likert scale, participants rated how satisfied they were with their decision (1 = *A little*, 7 = *Very much*), how well they felt about their decision (1 = *A little*, 7 = *Very much*) and to what extent their decision had been motivated by intuition as opposed to rational considerations (1 = *A little intuition*, 7 = *Much intuition*).

After, all participants were asked to estimate how much they had considered the four attributes from the guided deliberation condition on a 7-point Likert scale (1 = *A little*, 7 = *Very much*): the degree of empathy ("*The degree of empathy that the case aroused in me*"), number ("*The number of children in need for donation*"), scope ("*The scope of the problem*"), and identification ("*The degree of identification with the case*").

In the Swedish and US sample (see below), participants also answered three questions about how they perceived the pictures used, as the pictures in these studies were other than from to the Israeli study (to use pictures of children that depicted ingroup victims) On a 7-point Likert scale, participants responded to how realistic they perceived the picture ("*How realistic did you feel the picture of the children was, based on the story you read about them?*") (1 = *A little realistic*, 7 = *Very realistic*), how strongly they perceived the child(ren) to be of

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Swedish/American (*"How Swedish [American] did you perceive the children to be?"*) (1 = *Not Swedish [American]*, 7 = *Swedish [American]*), and their feelings for the child(ren) on the picture ("*How strongly did you feel for the children?"*) (1 = *Felt little*, 7 = *Felt a lot*). Last, we asked participants if they perceived the donation decision to be a real decision (*"Did the decision feel like a real decision?"*) on a 7-point Likert-scale (1 = *Not a real decision at all*, 7 = *A very real decision*).

Extra results

Table 1 (Israeli sample) and 2 (Swedish sample) shows the distribution of the data, since most participants either donated the whole amount (100 NIS/250 SEK) or nothing.

Table 1

Percentages of participants donating specific amounts for all conditions in Israeli sample

Singularity	*Range amount*	**Control** % (N)	**Unguided deliberation** % (N)	**Guided deliberation** % (N)
	0	7,0% (3)	9,8% (4)	25,6% (10)
	1-20	16,3% (7)	29,3% (12)	12,8% (5)
	21-40	4,7% (2)	9,8% (4)	5,1% (2)
1 child	*41-60*	18,6% (8)	31,7% (13)	20,5% (8)
	61-80	7,0% (3)	2,4% (1)	2,6% (1)
	81-100	46,5% (20)	17,1% (7)	33,3% (13)
	Total	**100% (43)**	**100% (41)**	**100% (39)**
Mean NIS (donors)	*61.5*	*69.8*	*48.4*	*66.9*
Mean NIS (all)	*53.0*	*65.0*	*43.7*	*49.7*
	0	24,4% (10)	4,9% (2)	25,0% (10)
	1-20	24,4% (10)	29,3% (12)	5,0% (2)
	21-40	9,8% (4)	12,2% (5)	5,0% (2)
8 children	*41-60*	19,5% (8)	24,4% (10)	22,5% (9)
	61-80	2,4% (1)	0,0% (0)	7,5% (3)
	81-100	19,5% (8)	29,3% (12)	35,0% (14)
	Total	**100% (41)**	**100% (41)**	**100% (40)**
Mean NIS (donors)	*58.2*	*51.8*	*52.5*	*72.3*
Mean NIS (all)	*47.7*	*39.2*	*49.9*	*54.2*

Frequency table showing the amounts donated among participants in the Israeli sample, including non-donors to have donated 0 ILS. Mean amount (NIS) for participants who chose to donate and for all participants is included for each of the groups.

Table 2

Percentages of participants donating specific amounts for all conditions in Swedish sample

Singularity	Range amount	Control % (N)	Unguided deliberation % (N)	Guided deliberation % (N)
	0	21,8% (24)	32,4% (35)	33,0% (36)
	1-50	17,3% (19)	15,7% (17)	11,9% (13)
	51-100	12,7% (14)	14,8% (16)	12,8% (14)
1 child	101-150	10,9% (12)	3,7% (4)	8,3% (9)
	151-200	0,0% (0)	2,8% (3)	1,8% (2)
	201-250	37,3% (41)	30,6% (33)	32,1% (35)
	Total	**100% (110)**	**100% (108)**	**100% (109)**
Mean SEK (donors)	*166.0*	*166.9*	*161.2*	*169.8*
Mean SEK (all)	*117.8*	*130.5*	*109.0*	*113.7*
	0	35,2% (38)	28,8% (32)	30,3% (33)
	1-50	12,0% (13)	10,8% (12)	7,3% (8)
	51-100	7,4% (8)	9,9% (11)	8,3% (9)
8 children	101-150	3,7% (4)	5,4% (6)	11,9% (13)
	151-200	1,9% (2)	0,9% (1)	5,5% (6)
	201-250	39,8% (43)	44,1% (49)	36,7% (40)
	Total	**100% (108)**	**100% (111)**	**100% (109)**
Mean (donors)	*187.0*	*187.3*	*188.3*	*185.3*
Mean (all)	*128.8*	*121.4*	*134.0*	*130.9*

Frequency table showing the amounts donated among participants in the Swedish sample, including non-donors to have donated 0 SEK. Mean amount (SEK) for participants who chose to donate and for all participants is included for each of the groups.

Results for guided deliberation condition

Israeli sample

For participants in the guided deliberation conditions, Table 3 shows the mean ratings of the four attributes for a single child ($N = 39$) and a group of children ($N = 40$). Although participants seeing a group of children considered the scope of the problem as slightly more important than participants seeing a single child, this did not reach significance levels, $F(1, 77) = 3.48$, $p = .066$, $\eta_p^2 = .043$. The other attributes did not differ between participants seeing a single or a group of children.

Table 3

Mean ratings of the attributes asked in the guided deliberation condition in the Israeli sample

	Empathy M *(SD)*	Number of children M *(SD)*	Scope of the problem M *(SD)*	Identification with child M *(SD)*
Single child	**4.67** *(1.69)*	**4.69** *(1.79)*	**5.26** *(1.45)*	**4.21** *(1.61)*
Group of children	**5.10** *(1.51)*	**4.95** *(1.55)*	**5.83** *(1.26)*	**4.63** *(1.79)*

Swedish sample

Table 4 shows the mean ratings of the four attributes for a single child ($N = 109$) and a group of children ($N = 109$). The only significant difference between participants seeing a single child or eight children is how important they rated the attribute regarding number of children, $F(1, 216) = 11.4$, $p = .001$, $\eta_p^2 = .050$. Participants seeing a group of children considered number of children of less importance than participants seeing a single child.

Table 4

Mean ratings of the attributes asked in the guided deliberation condition in the Swedish sample

|	Empathy M *(SD)*	Number of children M *(SD)*	Scope of the problem M *(SD)*	Identification with child M *(SD)*
Single child	**4.07** *(2.02)*	**5.33** *(1.76)*	**5.82** *(1.37)*	**3.02** *(1.95)*
Group of children	**4.48** *(2.09)*	**4.44** *(2.12)*	**5.60** *(1.59)*	**3.34** *(2.04)*

Results for donated amount only among donors

Israeli sample

Figure 1 shows the mean donated amount among participants indicating willingness to donate in the six conditions. A factorial ANOVA with independent factors of singularity and decision mode showed no main effect of singularity, $F < 1$. The analysis did reveal a main effect for decision mode, $F(2, 197) = 6.42$, $p = .002$, $\eta_p^2 = .061$, such that participants in the unguided deliberation condition donated less money ($M = 50.49$, $SD = 32.16$) compared to those in the control ($M = 62.59$, $SD = 34.27$; $p = .025$) and the guided deliberation ($M = 70.53$, $SD = 31.11$; $p = .001$) conditions. The difference between the control and the guided deliberation conditions was not significant ($p = .171$). The interaction between the singularity and decision mode was not significant $F(2,197) = 2.76$, $p = .066$, $\eta_p^2 = .027$.

Figure 1.

*Mean amount donated (NIS) for the six conditions in the Israeli sample.*
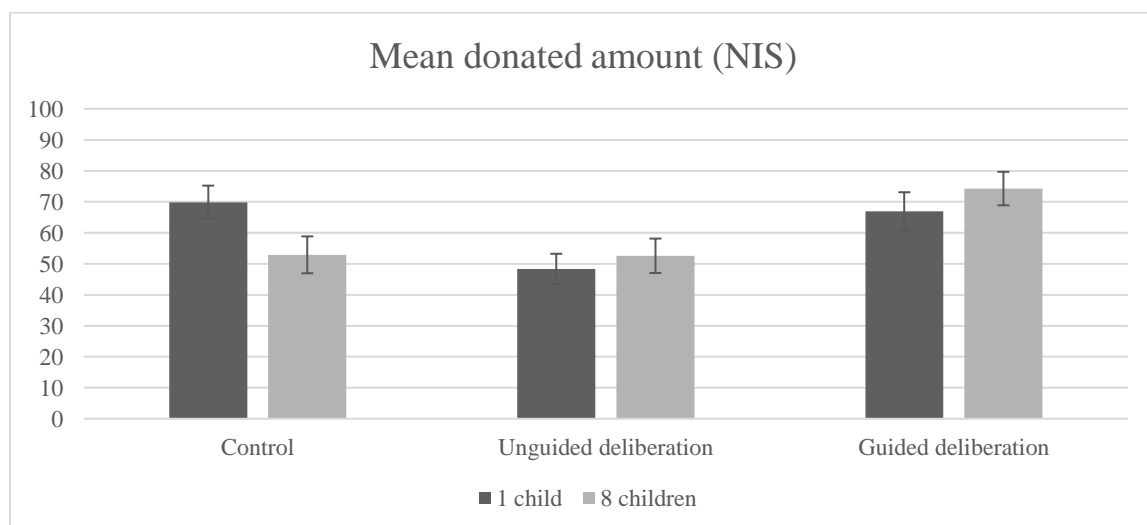
Swedish sample

Figure 2 shows the mean donated amount among participants indicating willingness to donate in the six conditions. A factorial ANOVA with independent factors of singularity and decision mode showed a main effect of singularity, $F(1, 452) = 7.19$, $p = .01$, $\eta_p^2 = .01$, meaning participants seeing a group of children donated a higher mean amount ($M = 187.0$, $SD = 81.2$) than participants seeing a single child ($M = 166.0$, $SD = 85.1$). No significant difference in mean donated amount was found for decision mode, $F(2, 452) = 0.05$, $p = .95$, and no interaction effect, $F(2, 452) = 0.18$, $p = .83$.

Figure 2

Mean amount donated (SEK) for the six conditions in the Swedish sample.
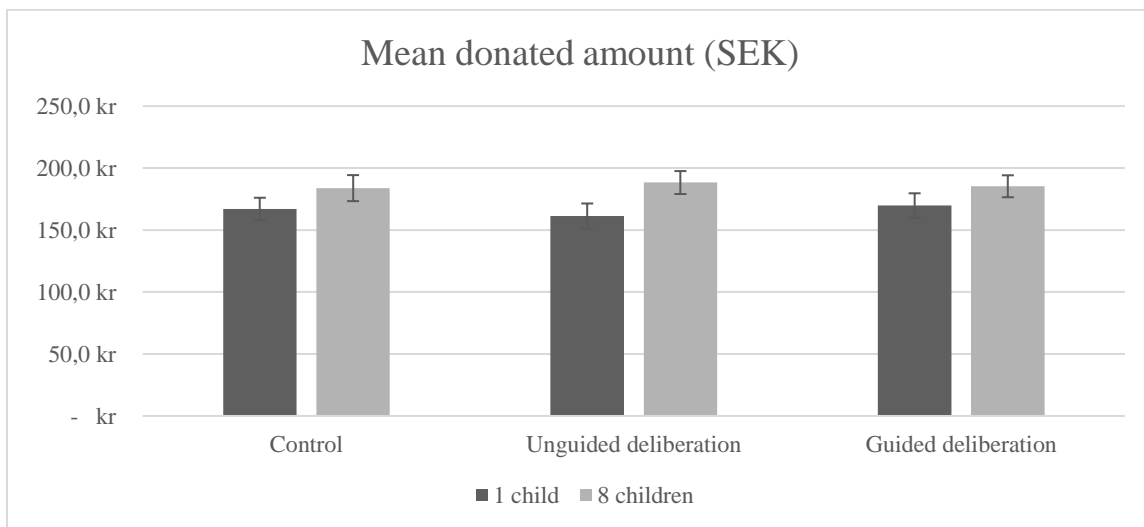
Secondary measures

Israeli sample

Unless anything else is stated, the analyses below were done with an ANOVA with singularity and decision mode as independent factors.

Post-measures

There was no significant difference in the extent to which participants were satisfied with their decision between groups (F's < 1). However, including the donation decision as an additional independent factor resulted in a main effect for decision, $F(1, 233) = 11.43$, $p = .001$, such that donors were significantly more satisfied with their decision ($M = 5.99$, $SD = 1.18$) than non-donors ($M = 4.95$, $SD = 1.53$).

There was no significant main effects nor interaction for how well participants felt about their decision, F's < 2.40, $p > .093$. However, including the donation decision as an additional independent factor resulted in a main effect for decision, $F(1, 233) = 20.50$, $p < .001$, such that donors felt significantly more well with their decision ($M = 5.92$, $SD = 1.27$) than non-donors ($M = 4.45$, $SD = 1.66$).

There was no significant main effects nor interaction for the extent to which participants reported that their decision was based on intuition, F's < 2.56, p's > .080. However, including the donation decision as an additional independent factor resulted in a main effect for decision, $F(1, 233) = 16.58$, $p < .001$, such that donors rated that their decision was significantly more intuitively made ($M = 3.68$, $SD = 1.62$) than non-donors ($M = 2.19$, $SD = 1.61$).

Attributes

All participants rated how much they had considered each of the four attributes mentioned in the guided deliberation intervention in their decision. Unless anything else is stated, the analyses below were done as an ANOVA with singularity and decision mode as independent factors.

The results for the first attribute, empathy for the case, revealed no main effects for singularity and decision mode nor interaction term, F's < 1.42, p's > .244. However, including the donation decision as an additional independent factor resulted in a main effect for decision, $F(1, 233) = 17.17$, $p < .001$, such that donors reported giving more consideration to the empathy the case arises ($M = 5.13$, $SD = 1.52$) compared to non-donors ($M = 3.62$, $SD = 1.78$).

The results for the second attribute, number of children in need, revealed a main effect for decision mode, $F(1, 233) = 3.71$, $p = .026$, such that participants in the guided deliberation condition reported giving more consideration to the number of children in need ($M = 4.20$, $SD = 1.87$) compared to participants in the control ($M = 3.57$, $SD = 2.10$; $p = .051$) and the unguided deliberation ($M = 3.35$, $SD = 2.14$; $p = .009$) conditions. The analysis revealed no main effect for singularity nor an interaction term, F's < 1. Including the donation decision as an additional independent factor did not reveal a main effect for donation decision, $F < 1$.

The results for the third attribute, the scope of the problem, revealed a main effect for decision mode, $F(1, 233) = 4.80$, $p = .009$, such that participants in the unguided deliberation condition reported giving less consideration to the scope of the problem ($M = 4.22$, $SD = 1.92$) compared to participants in the control ($M = 4.79$, $SD = 1.74$; $p = .039$) and the guided deliberation ($M = 5.06$, $SD = 1.60$; $p = .003$) conditions. The analysis revealed no main effect for singularity nor an interaction term, F's < 1.17, p's > .312. Including the donation decision as an additional independent factor resulted in a main effect for decision, $F(1, 233) = 11.48$, $p = .001$, such that donors reported giving more consideration to the scope of the problem ($M = 4.80$, $SD = 1.74$) compared to non-donors ($M = 4.12$, $SD = 1.93$).

The results for the fourth attribute, identification with child(ren), revealed no main effects for singularity and decision mode nor interaction term, F's < 1.15, p's > .319. Including the donation decision as an additional independent factor did not reveal a main effect for donation decision, $F < 1$.

Correlations between attributes and dependent variable

For participants in the guided deliberation condition, we explored how participants' ratings for the four attributes, before making their decision, correlated with their donation decision. We

therefore correlated the ratings of the four attributes before the decision with the second dependent variable, donated amount that included non-donors (these were coded as having donated 0). The table below shows the results of these correlations for the Israeli study, divided for participants seeing a single child and participants seeing a group of children.

Attributes	Correlation with donated amount	
	1 child (N = 39)	8 children (N = 40)
Empathy for case	r = .163, p = .321	r = .330, p = .038
Number of children	r = -.140, p = .396	r = .112, p = .490
Scope of problem	r = .063, p = .703	r = .239, p = .138
Identification with case	r = .122, p = .460	r = .221, p = .170

Swedish sample

Unless anything else is stated, the analyses below were done with an ANOVA with singularity and decision mode as independent factors.

Post-measures

There were no significant results in differences of how satisfied participants were with their decision between groups, neither for main effects nor interaction effects, all F's < 1. However, when including the donation decision as an additional independent factor, there was an effect of decision, $F(1, 641) = 43.1$, $p < .001$, meaning that donors were significantly more satisfied with their decision ($M = 5.49$, $SD = 1.59$) than non-donors ($M = 4.55$, $SD = 1.79$).

There was no significant difference in how well participants felt about their decision results between groups, neither for main effects nor interaction effects, all F's < 1.2. However, including the donation decision shows that donors felt significantly more well about their decision ($M = 5.13$, $SD = 1.71$) than non-donors ($M = 4.01$, $SD = 1.82$), $F(1, 637) = 54.8$, $p < .001$.

There was no significant difference in how much the decision was based on intuition between groups, neither for main effects nor interaction effect, all F's < 1. However, including the donation decision shows that donors rated that their decision was significantly more intuitively made ($M = 4.50$, $SD = 1.85$) than non-donors ($M = 3.18$, $SD = 1.85$), $F(1, 641) = 66.3$, $p < .001$.

Attributes

All participants rated how much they had considered each of the four attributes mentioned in the guided deliberation intervention in their decision. Unless anything else is stated, the analyses below were done as an ANOVA with singularity and decision mode as independent factors.

The results for the first attribute, empathy for the case, and the last attribute, identification with child(ren), yielded no significant results for singularity (empathy for case: $p = .19$, identification with child: $p = .32$), decision mode (empathy for case: $p = .67$, identification with child: $p = .77$), or the interaction (empathy for case: $p = .18$, identification with child: $p = .19$). However, in both cases, there was a significant result for the decision when including the first decision in the analysis. Donors stated that they had considered empathy for child(ren) more ($M = 4.61$, $SD = 1.90$) than non-donors ($M = 3.18$, $SD = 1.80$), $F(1, 637) = 80.0$, $p < .001$, $\eta_p^2 = .112$, and they had considered identification with case more in their decision ($M = 3.02$, $SD = 1.91$) than non-donors ($M = 2.61$, $SD = 1.85$), $F(1, 637) = 5.81$, $p = .016$, $\eta_p^2 = .009$.

For the second attribute, number of children, participants seeing one child considered number of children in their decision more ($M = 3.64$, $SD = 2.11$) than people seeing eight children ($M = 2.93$, $SD = 2.15$), $F(1, 643) = 18.7$, $p < .001$, $\eta_p^2 = .028$. There was also a significant effect of decision mode, $F(2, 643) = 8.49$, $p < .001$, $\eta_p^2 = .026$. A Bonferroni post-hoc test revealed that participants in the guided deliberation condition considered number of children more ($M = 3.76$, $SD = 2.13$) than participants in control condition ($M = 3.00$, $SD = 2.18$) and unguided deliberation condition ($M = 3.09$, $SD = 2.09$). When including the first decision in the analysis, donors considered number of children in their decision slightly more ($M = 3.40$, $SD = 2.14$) than non-donors ($M = 3.03$, $SD = 2.17$), but not significantly more, $F(1, 637) = 3.64$, $p = .057$.

For the third attribute, scope of problem, participants seeing eight child stated that they considered the scope of the problem more ($M = 4.60$, $SD = 1.97$) than people seeing a single child ($M = 4.28$, $SD = 2.01$), $F(1, 643) = 4.21$, $p = .04$, $\eta_p^2 = .006$. No significant results emerged for decision mode, $F(2, 643) = 2.09$, $p = .13$, or the interaction effect, $F(2, 643) = 1.12$, $p = .33$. When including the first decision as an additional factor, donors stated that they had considered scope of the problem ($M = 4.66$, $SD = 1.91$) more than non-donors ($M = 3.91$, $SD = 2.09$), $F(1, 637) = 20.5$, $p < .001$, $\eta_p^2 = .031$.

Pictures

Participants seeing the picture of a single child rated it as more realistic in relation to the story ($M = 3.10$, $SD = 1.76$) than participants seeing the picture of a group of children ($M = 2.38$, $SD = 1.70$), $F(1, 638) = 28.8$, $p < .001$, $\eta_p^2 = .043$. There was also an interaction effect, that people in the control groups between one and a group of children differed more than for the unguided or guided deliberation group, $F(2, 638) = 3.77$, $p = .024$, $\eta_p^2 = .012$.

Participants seeing a single child ($M = 6.04$, $SD = 1.34$) rated it as looking more Swedish than participants seeing a group of children ($M = 4.90$, $SD = 1.55$), $F(1, 636) = 99.3$, $p < .001$, $\eta_p^2 = .135$. No significant difference was found for decision mode or an interaction effect, $F\text{'s} < 2$.

Participants seeing a single child felt more for the child ($M = 3.58$, $SD = 1.83$) than participants seeing the group of children ($M = 3.21$, $SD = 1.78$), $F(1, 637) = 7.07$, $p = .008$, $\eta_p^2 = .011$. There was also a significant interaction effect, that this singularity effect did not exist in the unguided deliberation group, $F(2, 637) = 3.51$, $p = .031$, $\eta_p^2 = .011$. No significant difference was found for decision mode, $F(2, 637) = 1.41$, $p = .25$.

Correlations between attributes and dependent variable

For participants in the guided deliberation condition, we explored how participants' ratings for the four attributes, before making their decision, correlated with their donation decision. We therefore correlated the ratings of the four attributes before the decision with the second dependent variable, donated amount that included non-donors (these were coded as having donated 0). The table below shows the results of these correlations for the Swedish study, divided for participants seeing a single child and participants seeing a group of children.

Attributes	Correlation with donated amount	
	1 child (N = 109)	*8 children (N = 109)*
Empathy for case	$r = .259, p = .007$	$r = .185, p = .054$
Number of children	$r = .090, p = .353$	$r = .049, p = .612$
Scope of problem	$r = .137, p = .155$	$r = .214, p = .025$
Identification with case	$r = .094, p = .330$	$r = .243, p = .011$

The US study

We also conducted a third study through Mturk, with same stimuli as used in the Swedish sample. This was not included in the manuscript for one main reason: 1) the unknown validity and quality of the data, since Mturk samples recently have been found to include a significant portion of low quality data by respondents that engage in suspicious behavior, "trolling", or satisficing (Ahler et al., 2019; Kennedy et al., 2020). This is especially critical since this study did not include any attention check, thereby reducing the risk of having dubious data. Also, compared to the other two studies, this was not a student sample, which could possibly make it harder to compare the results. However, to remain transparent, we include all the results of this this study here below.

Subjects
1199 American participants were recruited through Mechanical Turk (51.9% women, $M_{age} = 39.5$, $SD = 11.9$).

Results

Willingness to donate

Figure 2 shows the result of participants' willingness to donate (%) in the six conditions. There was no significant singularity effect in control condition, $\chi^2(1) = 0.19$, $p = .67$, nor in the unguided deliberation condition, $\chi^2(1) = 0.01$, $p = .94$, or guided deliberation condition, $\chi^2(1) = 0.35$, $p = .55$.

Figure 2

Willingness to donate (%) for the six conditions in the experiment, in the MTurk sample.

Percentage choosing to donate
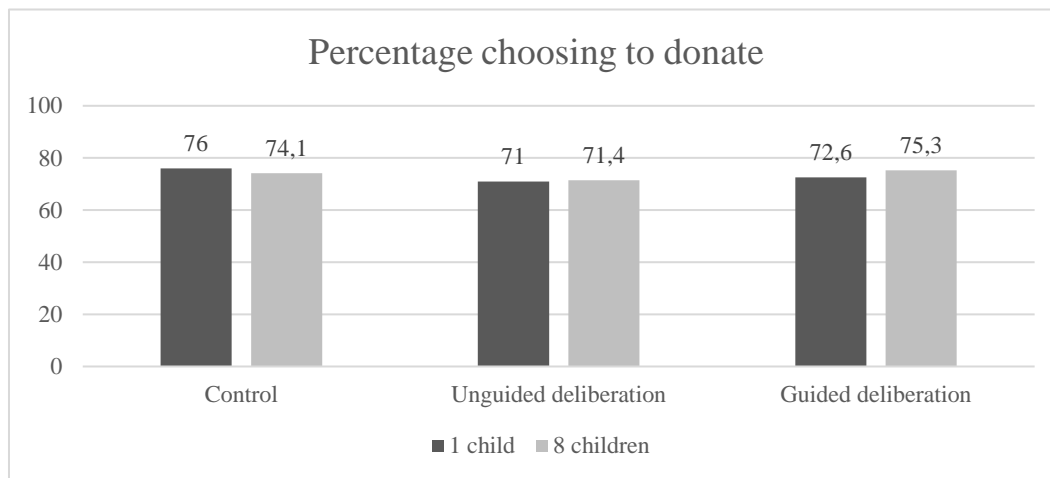
Donated amount

Figure 3 shows the mean donated amount among participants indicating willingness to donate in the six conditions. No significant difference was found for singularity, $F(1, 873) = 0.00$, $p = .99$, or decision mode, $F(2, 873) = 1.48$, $p = .23$, or an interaction effect, $F(2, 873) = 0.36$, $p = .70$.

Figure 3

Mean amount donated (USD) for the six conditions in the MTurk sample. Error bars represent standard error of mean

Mean donated amount (USD)
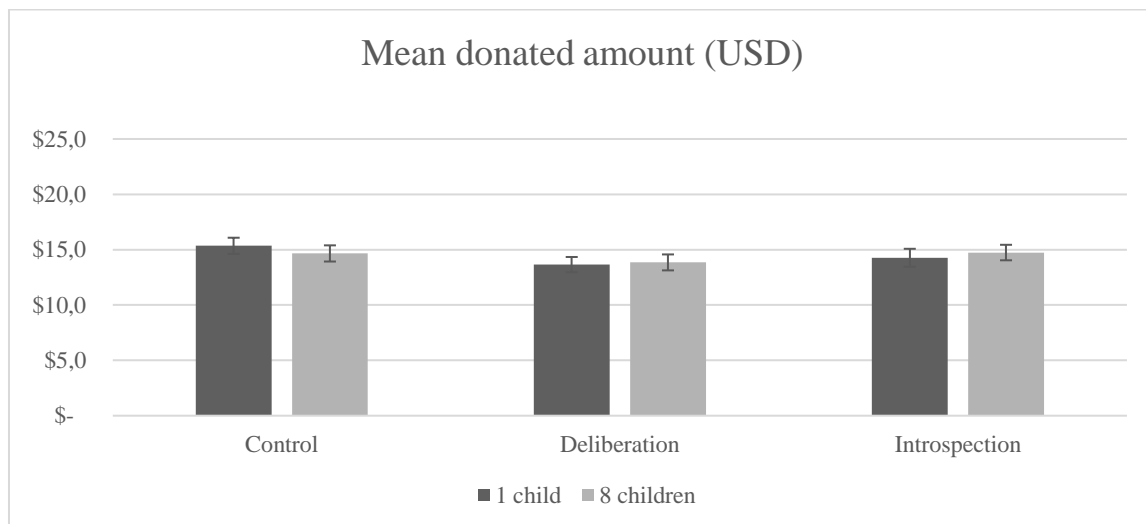
Donated amount with all participants

Figure 4 shows the results for donated amount when all participants are included. Here, non-donors were coded as having donated 0 $. There was no significant difference for singularity,

$F(1, 1193) = 0.01$, $p = .91$, or for decision mode, $F(2, 1193) = 2.40$, $p = .09$, and no significant interaction, $F(2, 1193) = 0.63$, $p = .53$.

Figure 3

Mean amount donated (USD) for the six conditions in the MTurk sample.
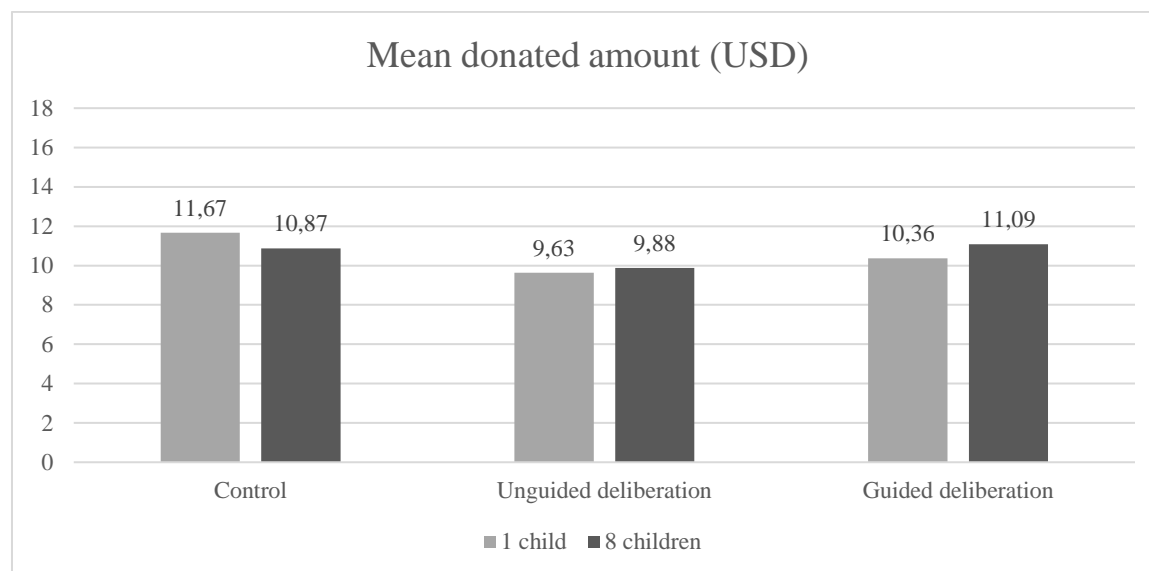
Guided deliberation

Table 5 shows the mean ratings of the four attributes for a single child ($N = 109$) and a group of children ($N = 109$). The only significant result was for scope of the problem, where participants who saw eight children stated that that scope of problem should influence their decision significantly more than people seeing one child, $F(1, 397) = 7.73$, $p = .006$.

Table 5

Mean ratings for the attributes asked in the guided deliberation condition in the MTurk sample

	Empathy M *(SD)*	Number of children M *(SD)*	Scope of the problem M *(SD)*	Identification with child M *(SD)*
A single child	**4.91** *(1.78)*	**4.78** *(1.71)*	**5.52** *(1.48)*	**4.51** *(1.89)*
Group of children	**5.03** *(1.64)*	**4.91** *(1.73)*	**5.91** *(1.29)*	**4.49** *(1.79)*

Secondary measures

Unless anything else is stated, the analyses below were done with an ANOVA with singularity and decision mode as independent factors.

Post-measures

There was no significant difference in how satisfied participants were with their decision for the main effects or the interaction effect, all *F's* < 2. However, when including the donation decision as a factor, the results showed that donors were significantly more satisfied with their

decision ($M = 5.78$, $SD = 1.42$) than non-donors ($M = 5.29$, $SD = 1.81$), $F(1, 1187) = 24.1$, $p < .001$, $\eta_p^2 = .020$.

There was no significant difference in how well participants felt with their decision for the main effects or the interaction effect, all F's < 2. However, when including the donation decision as a factor, donors felt significantly more well about their decision ($M = 5.81$, $SD = 1.40$) than non-donors ($M = 5.02$, $SD = 1.94$), $F(1, 1187) = 58.6$, $p < .001$, $\eta_p^2 = .047$.

The results for the third post-measure, how much the decision was based on intuition as opposed to rational considerations, showed a significant difference for decision mode, $F(2, 1193) = 5.16$, $p = .006$, $\eta_p^2 = .009$. Post-hoc showed that participants in control condition considered their decision to be based on intuition ($M = 4.25$, $SD = 2.01$) significantly more than participants in unguided deliberation condition ($M = 3.81$, $SD = 2.00$). No significant results for the singularity or interaction came forth. When including the donation decision as a factor, donors stated that their decision was significantly more intuitively made ($M = 4.28$, $SD = 1.88$) than non-donors ($M = 3.46$, $SD = 2.13$), $F(1, 1187) = 41.3$, $p < .001$, $\eta_p^2 = .034$.

Attributes

The results for the first attribute, empathy for the case, showed a significant effect for decision mode, $F(2, 1193) = 3.24$, $p = .039$, $\eta_p^2 = .005$, showing that people in control condition considered empathy for case ($M = 5.04$, $SD = 1.91$) significantly more than people in unguided deliberation condition ($M = 4.70$, $SD = 2.02$). There was no significant difference for singularity or an interaction effect, both F's < 1.5. When including the first decision as a factor in the analysis, donors stated that they had considered empathy for the case ($M = 5.47$, $SD = 1.56$) more than non-donors ($M = 3.32$, $SD = 1.95$), $F(1, 1187) = 384.9$, $p < .001$, $\eta_p^2 = .245$.

The result for the second attribute, number of children, shows that participants seeing one child considered the number of children in their decision less ($M = 3.98$, $SD = 2.14$) than people seeing eight children ($M = 4.52$, $SD = 2.14$), $F(1, 1193) = 19.1$, $p < .001$, $\eta_p^2 = .016$. There was also a significant effect of decision mode, $F(2, 1193) = 7.32$, $p = .001$, $\eta_p^2 = .012$, where Bonferroni post-hoc test revealed that participants in the unguided deliberation condition considered number of children ($M = 3.94$, $SD = 2.24$) significantly less ($p = .001$) than participants in guided deliberation condition ($M = 4.51$, $SD = 2.05$). When including the first decision in the analysis, the results showed that donors considered number of children in their decision ($M = 4.63$, $SD = 2.08$) more than non-donors ($M = 3.20$, $SD = 2.02$), $F(1, 1187) = 114.9$, $p < .001$, $\eta_p^2 = .088$.

The results for the third attribute, scope of problem, shows that participants seeing eight child stated that they considered the scope of the problem ($M = 5.20$, $SD = 1.81$) more than people seeing a single child ($M = 4.96$, $SD = 1.87$), $F(1, 1193) = 5.24$, $p = .022$, $\eta_p^2 = .004$. Also, a significant results emerged for decision mode, $F(2, 1193) = 8.17$, $p < .001$, $\eta_p^2 = .014$, where Bonferroni post-hoc test revealed that participants in the unguided deliberation condition considered scope of problem ($M = 4.78$, $SD = 1.93$) less than participants in control ($M = 5.19$, $SD = 1.83$, $p = .006$) and guided deliberation condition ($M = 5.28$, $SD = 1.75$, $p < .001$). No significant interaction effect emerged, $F(2, 1193) = 1.45$, $p = .23$. When the first decision was

included, donors stated that they had considered scope of the problem ($M = 5.55$, $SD = 1.55$) more than non-donors ($M = 3.78$, $SD = 1.98$), $F(1, 1187) = 265.5$, $p < .001$, $\eta_p^2 = .183$.

The results for the last attribute, identification with case, showed no significant difference for singularity or the interaction, both $F's < 1$. There was a significant result for decision mode, $F(2, 1193) = 5.84$, $p = .003$, $\eta_p^2 = .010$, where Bonferroni post-hoc test showed that people in unguided deliberation condition considered identification with case ($M = 3.86$, $SD = 2.06$) less than people in guided deliberation condition ($M = 4.35$, $SD = 1.97$), $p = .002$. When the first decision was included, donors stated that they had considered identification with case ($M = 4.37$, $SD = 1.98$) more than non-donors ($M = 3.39$, $SD = 1.99$), $F(1, 1187) = 56.7$, $p < .001$, $\eta_p^2 = .046$.

Pictures

Participants seeing the picture of a single child rated it as more realistic in relation to the story ($M = 4.52$, $SD = 2.00$) than participants seeing the picture of a group of children ($M = 3.96$, $SD = 2.13$), $F(1, 1193) = 22.2$, $p < .001$, $\eta_p^2 = .018$. There was also a significant difference for decision mode, $F(2, 1193) = 3.81$, $p = .022$, $\eta_p^2 = .006$. Bonferroni post-hoc test reveal that control condition ($M = 4.46$, $SD = 2.07$) rated the picture as significantly more realistic than unguided deliberation condition ($M = 4.07$, $SD = 2.12$).

There was no significant difference in how participants perceived the child(ren) to be of American descent for the main effects or the interaction effect, all $F's < 1$.

There was no significant difference in how much participants felt for the child(ren) on the picture for the main effects or the interaction effect, all $F's < 2.4$.