Judgment and Decision Making (2024), **vol. 19**:e26 1–22
doi:10.1017/jdm.2024.31

EMPIRICAL ARTICLE

Revisiting the impact of singularity on the Identified Victim Effect: Replication and extension of Kogut and Ritov (2005a) Study 2

Rajarshi Majumder[1], Yik Long Tai[2], Ignazio Ziano[3], and Gilad Feldman[2]

[1]Department of Marketing, Grenoble Ecole de Management, Grenoble, France; [2]Department of Psychology, University of Hong Kong, Hong Kong, Hong Kong and [3]Geneva School of Economics and Management, University of Geneva, Geneva, Switzerland

Corresponding author: Gilad Feldman; Email: gfeldman@hku.hk

Received: 22 May 2024; **Revised:** 20 July 2024; **Accepted:** 3 September 2024

Keywords: identifiable victim effect; identified victim effect; empathic emotions; helping behavior; bias; judgment and decision-making

Abstract

The identified victim effect is the phenomenon in which people tend to contribute more to identified than to unidentified victims. Kogut and Ritov (*Journal of Behavioral Decision Making*, *18(3)*, 157–167, 2005) found that the identified victim effect was limited to a single victim and driven by empathic emotions. In a pre-registered experiment with an online U.S. American MTurk sample on CloudResearch (N = 2003), we conducted a close replication and extension of Experiment 2 from Kogut and Ritov (*Journal of Behavioral Decision Making*, *18(3)*, 157–167, 2005). The replication findings failed to provide empirical support for the identified single victim effect hypothesis since we found no evidence of differences in willingness to contribute when comparing a single identified victim to a single unidentified victim (η^2_p = .00, 90% CI [0.00, 0.00]), and no indication for the target article's interaction between singularity and identifiability (original: η^2_p = .062, 90% CI [0.01, 0.15]; replication: η^2_p = .00, 90% CI [0.00, 0.00]). Extending the replication to conduct a conceptual replication of Kogut and Ritov (*Organizational Behavior and Human Decision Processes*, *104(2)*, 150–157, 2007), we investigated a boundary condition of the effect—group belonging. We found support for an ingroup bias in helping behaviors and indications for empathic emotions and perceived responsibility contributing to this effect. We discuss differences between our study and the target article and implications for the literature on the identified victim effect.

1. Introduction

The identified victim effect[1] refers to a heightened willingness to contribute to victims whose identities are clearer, presented with details such as their first name or a picture. Kogut and Ritov (2005a) investigated the boundary conditions and the mechanisms underlying the identified victim effect by examining varying group sizes and identifiability. They found that the identified victim effect was stronger on both willingness-to-contribute and empathic emotions (e.g., distress) when the target of contribution was a single individual than when the target was a group of victims. The authors, therefore,

[1]This effect is also referred to as 'identifiable victim effect'. In this article, we refer to it as 'identified victim effect', as it is called in Kogut and Ritov (2005a).

demonstrated an interaction between two factors previously shown to have an impact on charitable giving and emphatic emotions—singularity and identifiability.

We sought to revisit this classic finding and re-examine the conditions which encourage or discourage helping intention. We report an independent close replication of the identified single victim effect demonstrated in Kogut and Ritov (2005a) Study 2 along with two extensions, testing the effect of group belonging as a conceptual replication of Kogut and Ritov (2007) and examining perceived responsibility (Erlandsson et al., 2015).

We begin with a brief literature review on the identified victim effect, with sub-factors of identifiability and singularity, as impacting charitable giving. We then discuss our motivations for the current replication and review Kogut and Ritov (2005a) as our chosen article. We then outline our chosen studies for replication from the target article, the target's experimental design, and our adaptations and extensions.

1.1. Factors impacting charitable giving and empathic concern

We considered the identified victim effect as an umbrella term that combines several phenomena, which scholars in this literature at times tend to confound. Some scholars emphasize 'identifiability'—whether the victims are identified or not, whereas some emphasize the number of people affected, which we refer to as 'singularity'—contrasting a single person to a group dichotomizing two related phenomena of 'compassion fade' and 'scope insensitivity' looking at the number of people as a continuous factor. Our chosen target article for replication, Kogut and Ritov (2005a), examined the interaction of these two factors.

1.1.1. Identifiability

The identifiability effect is the tendency to provide greater aid to (a) specific identified victim(s) than to (an) unidentified victim(s) (Small and Loewenstein, 2003). This is now considered a classic effect in the social psychology and decision-making literature, with many follow-up studies reporting empirical evidence in support of the phenomenon (Slovic, 2010; Small et al., 2007; but see recent replication of their paper by Maier et al., 2023). The primary argument was that emotional reactions are the main underlying mechanism of the phenomenon, as emotions tend to dominate reasoning when the target's representation is specific and vivid (Hamilton and Sherman, 1996; Sherman et al., 1999).

1.1.2. Singularity and compassion fade

The singularity effect is the tendency to provide greater aid to a single victim than to a group of victims facing the same need. This seems related to a similar phenomenon of 'compassion fade' or 'scope insensitivity', which treats the number of people affected as a continuous measure and refers to people's decreasing ability to emphasize and willingness to help the more suffering, victims, or people in need are involved (Västfjäll et al., 2014). Some have shown that this not only happens regarding the number of people affected but also extends to the proportion of people helped (Fetherstonhaugh et al., 1997; but see recent replication of their paper by Ziano et al., 2021c). The general argument was that people experience psychic numbing—they become more psychologically numb and are therefore less likely to take action to step in and help the more people are involved (Slovic, 2007). If this phenomenon was indeed true, then this would mean that helping behavior does not maximize social benefits, as resources are more likely to be allocated to a single identified victim than to the greater population of people in need.

1.1.3. Interaction between singularity and identifiability

The literature about the identified victim effect covers a wide spectrum of findings at the intersection of identifiability and singularity. In a series of papers, Kogut and Ritov (2005a, 2005b, 2007) demonstrated an interaction between singularity (one vs. many victims) and identifiability (identified vs. unidentified). The authors argued that identifiability is limited to situations in which the target of contribution is a

single victim. Kogut and Ritov (2005b) suggested that the processing of information about individuals and groups is fundamentally different because a single victim is perceived as a more psychologically coherent unit than a group of victims (Hamilton and Sherman, 1996; Susskind et al., 1999). People pay attention to individuals, yet their attention begins to lose focus and intensity when targeting groups since they are psychologically more distant, resulting in the decline of helping behaviors toward groups of statistic victims (Hamilton and Sherman, 1996; Slovic, 2010; Susskind et al., 1999). To prevent themselves from suffering overwhelming levels of negative affect, people would then engage in emotional regulation by turning away their attention from the group of victims. Thus, the increased number of victims leads to motivated down-regulation of emotions and fewer donations. Some of the follow-up literature has shown some support for those findings (Dickert et al., 2011).

1.1.4. Mixed findings

In recent years, several replications of the effect have resulted in very mixed evidence, some by the very same authors who demonstrated identifiability and singularity. We summarized an incomplete list of some of the recent mixed findings in Table 1.

Two findings are especially noteworthy. Lee and Feeley (2016) conducted a meta-analysis of 41 effects from 22 experiments and concluded only a weak identified victim effect (r = .05), with the three highest-powered studies in the dataset showing effects that are almost zero (e.g., 1 study: 12,802 participants, r = 0.004). Further statistical analyses on the studies included in Lee and Feeley (2016) by Maier et al. (2023) uncovered 'moderate evidence of publication bias and strong evidence for the absence of an identified victim effect (BF_{01} = 14.93), with a model-averaged mean effect size estimate of r = 0.002 (95% CI [0; 0.004])'. In that same article, Maier et al. (2023) also reported a failed conceptual replication of the seminal study by Small et al. (2007).

1.2. Choice of the article for a direct replication: Kogut and Ritov (2005a)

We chose to replicate and extend the article by Kogut and Ritov (2005a) because of its impact and the theoretical and practical implications of its findings. We felt that the mixed findings in the literature exemplify the need for and value of direct, independent, and pre-registered replications of seminal impactful work.

1.2.1. Importance and impact

Willingness to help unrelated others, in situations where reciprocity is not a factor, is a common form of altruism. The identified victim effect is theoretically important because it suggests that such acts of altruism are more likely when people can identify the victim. Kogut and Ritov (2005a) have had a major scholarly impact on the social psychology and judgment and decision-making literature. At the time of writing (February 2024), there were 1019 Google Scholar citations of the article and many important follow-up theoretical and empirical articles.

At the institutional and political level, decisions concerning the allocation of resources for offering aid to humanitarian crises are often determined by individuals' perceptions of victims' needs (Slovic and Västfjäll, 2010). Kogut and Ritov's (2005a) work has potentially important practical implications because it could be applied to the development of public policy and the advertisement campaigns of charities.

1.3. Choice of study for replication: Study 2

Kogut and Ritov's (2005a) empirical work consisted of 3 studies, and the current replication focused on Study 2 with modifications in the research design. In Study 2, the authors randomly assigned participants to one of four conditions of 2 (single vs. group of victims) × 2 (identified vs. unidentified victims). The authors found support for an interaction effect of singularity and identifiability of victims

Table 1. *Identifiability and singularity/compassion-fade: Mixed findings in the literature.*

Article	Factor	Main quote regarding
Byrd and Białek (2021)	Identifiability + Singularity	Concluded no strong support for the identified victim effect on compliance with public health recommendations
CORE Team and Feldman (2023)	Singularity / Compassion fade	No support for singularity; people donate larger proportions when there are more affected children
Erlandsson (2021)	Singularity	No support across all decision modes for a clear preference for saving a greater number of non-identified victims in joint evaluation and forced choice
Gordon-Hecker et al. (2024)	Singularity	Empathy depended on the pain experienced by each individual but not on the number of individuals in the group
Hagman et al. (2022)	Singularity	Compassion was higher for the eight than for the one child, both in the help request and no-help request conditions. The interaction term between help requests and the number of victims was not significant
Hart et al. (2018)	Singularity	In both Study 1 and Study 2, no significant differences were found between the individual and the group conditions
Lee and Feeley (2016)—meta-analysis	Identifiability	A meta-analysis of the literature until 2015 Summarized a statistically significant yet very small average effect size of $r = .05$
Maier et al. (2023)—meta-analysis re-analysis	Identifiability + Singularity	A reanalysis of the meta-analysis by Lee and Feeley (2016). Found moderate evidence of publication bias, adjusting for which, there was no evidence for the identified victim effect, with adjusted effect down to $r = .002$
Maier et al. (2023) replication of Small et al. (2007)	Identifiability + Singularity	A failed replication of Small et al. (2007). No support for identified victim effects
Moche and Västfjäll (2021)	Identifiability	In 3 studies (overall $N = 1508$) with different samples from different countries, there was no main effect of identifiability on any of the measures
Moche et al. (2022)	Singularity	Weak effects, with just below the alpha threshold for the Israeli sample, and in the Swedish sample, a signal for willingness to contribute was detected but not for actual donations
Moche et al. (2023)	Singularity	Three adults elicited more help than one adult
Moche et al. (2024)	Identifiability	Identified victim effect is contextual and much weaker than originally thought
Morvinski and Gordon-Hecker (2023)	Singularity	Adding a photo has a positive effect on donations, yet results are inconsistent with singularity effect and scope insensitivity
Vu et al. (2024)	Identifiability	No effect of identifiability on altruism

on willingness to contribute. However, the authors did not find support for the main effect of singularity and identifiability on willingness to donate.

We focused our replication on Study 2 as the most straightforward demonstration of the identified victim effect and interaction between singularity and identifiability. Kogut and Ritov's (2005a) Studies 2 and 3 reported similar findings in support of the proposed mechanisms (i.e., affect) and boundaries (i.e., singularity) of the identified victim effect, with Study 2 using hypothetical contributions and Study 3 using real monetary contributions.

In contrast to the target's findings, we did not find support for singularity, identifiability, or an interaction effect on willingness to contribute. We summarized the findings of the target article and the replication findings in Table 2.

We classified our attempt as a 'close replication' using the LeBel et al. (2018) replication classification (Supplementary Table S18). We tried to adhere as closely as possible to the target's methods and design yet note that compared to the original study—we ran this with a different target sample and in a different context and made some adjustments regarding procedural aspects aiming to maximize fit to the target sample and increase the chances for a successful replication.

1.4. Extensions

1.4.1. Perceived responsibility

The sense of responsibility and obligation plays a crucial role in the moral decision-making process. Erlandsson et al. (2015) investigated possible mediators of different helping effects and found that perceived responsibility was responsible for the identified victim effect. In the current replication, we investigated the identified victim effect with both boundaries (i.e., singularity and group belonging) and aimed to examine whether the effect was limited to single ingroup victims (the identified *ingroup single* victim effect). We expected that the rating of perceived responsibility would be affected by an interaction between identification and singularity, such that people tend to express greater moral responsibility when considering a single identified ingroup victim than any of the other conditions.

1.4.2. Group belonging: Conceptual replication of Kogut and Ritov (2007)

People are more likely to provide aid to unrelated and unknown others when they categorize the victims as being in the same social category as themselves (Levine et al., 2002, 2005; Levine and Thompson, 2004). This categorization shortens the psychological distance between the perceiver and the victims, thus evoking feelings of greater emotional closeness (Brewer and Gardner, 1996). Kogut and Ritov (2007) found that the effect of singularity and group belonging might interact as determinants of helping behaviors toward identified victims. Other studies found that support for group belonging is a boundary condition for the identified victim effect (Dovidio et al., 1991, 1997; Goetz et al., 2010). Therefore, we aimed to extend Kogut and Ritov's (2005a) study by incorporating a manipulation as a conceptual replication of Kogut and Ritov (2007). In the present article, we added additional levels of group belonging in the independent variable of identifiability (i.e., unidentified, identified, *identified ingroup*, and *identified outgroup*) to explore the ingroup effect on the willingness to contribute toward identified single victims.

1.5. Pre-registration and open science

We first pre-registered the experiment on the Open Science Framework (OSF; https://osf.io/bjafe/), and data collection was launched later that week. Open-science details and disclosures, power analyses, and all materials used are detailed in the Supplementary Material. All pre-registration, materials, data, and code were made available on the OSF[2]: https://osf.io/9qcpj/.

[2]Pre-registrations were written in a Registered Report manuscript pre-registration format, simulating what the manuscript would look like after data collection using simulated data and code. The pre-registration package included a main manuscript, a supplementary, the simulated dataset, and the planned data analysis code.

Table 2. *Comparison of target article to replication findings: Effects of singularity and identifiability on willingness to contribute.*

Effects	Singularity and identifiability interaction	Singularity effect	Identifiability effect	Singularity effect × Identifiability effect (without the ingroup-outgroup extension)				Singularity effect × Identifiability effect (ingroup–outgroup extension)			
				Single identified *M* (*S.D.*) [*n*]	Single unidentified *M* (*S.D.*) [*n*]	Group identified *M* (*S.D.*) [*n*]	Group unidentified *M* (*S.D.*) [*n*]	Single Ingroup identified *M* (*S.D.*) [*n*]	Single outgroup identified *M* (*S.D.*) [*n*]	Group ingroup identified *M* (*S.D.*) [*n*]	Group outgroup identified *M* (*S.D.*) [*n*]
Kogut and Ritov (2005a) Study 2 (2 × 2 ANOVA)	$F(1,108) = 7.12$ $\eta^2_p = .062$ [0.01, 0.15], $p = .009$	$F(1,108) = 0.26$ $\eta^2_p = .002$ [0, 0.04] $p = .611$	$F(1,108) = 0.36$ $\eta^2_p = .003$ [0, 0.04] $p = .552$	52.96 (59.46) [~28]	36.06 (69.76) [~26]	29.95 (32.84) [~28]	45.37 (39.43) [~30]	N/A			
				Comparison: $d = 0.62$ [0.07, 1.16] $p = .025$		Comparison: $d = -0.39$ [−0.92, 0.13] $p = .139$					
Replication with the same conditions as in the target article (2 × 2 ANOVA)	$F(1, 926) = 0.19$ $\eta^2_p = 0.00$ [0.00, 0.00] $p = .666$	$F(1, 926) = 0.44$ $\eta^2_p = 0.00$ [0.00, 0.00] $p = .507$	Two conditions: $F(1, 926) = 0.19$ $\eta^2_p = 0.00$ [0.00, 0.00] $p = .754$	2.75 (1.94) [237]	2.85 (2.05) [227]	2.72 (2.04) [229]	2.70 (2.06) [237]	An extension: Not included in this replication analysis			
				Comparison: $d = -0.05$ [−0.23, 0.13] $p = .999$		Comparison: $d = 0.01$ [−0.17, 0.19] $p = 1.000$					
Replication and extension effect with additional ingroup outgroup conditions (2 × 4 ANOVA)	$F(3,1827) = 0.56$ $\eta^2_p = .001$ [0, 0.003] $p = .644$	$F(1,1827) = 3.35$ $\eta^2_p = .002$ [0, 0.01] $p = .067$	Four conditions: $F(3,1827) = 4.80$ $\eta^2_p = .008$ [0.002, 0.02] $p = .002$	2.75 (1.94) [237]	2.85 (2.05) [227]	2.72 (2.04) [229]	2.70 (2.06) [237]	2.94 (1.99) [230]	2.58 (1.93) [222]	2.80 (1.98) [228]	2.22 (1.93) [225]
				Comparison: $d = -0.05$ [−0.23, 0.13] $p = .999$		Comparison: $d = 0.01$ [−0.17, 0.19] $p = 1.000$		Comparison: $d = 0.18$ [−0.00, 0.37] $p = .526$		Comparison: $d = 0.29$ [0.11, 0.48] $p = .038$	

Note: N/A, not available since the original article of Kogut and Ritov (2005a) did not have a comparison for ingroup outgroup victims; We used 95% confidence intervals for Cohen's *d* and 90% confidence intervals for η^2_p because η^2_p cannot assume negative values. For the target article, we reported the uncorrected *p*-values as was reported by the original authors. For the replication and extension analysis, all the *p*-values reported for the pairwise comparisons are Tukey corrected.

All measures, manipulations, and exclusions conducted for this investigation are reported. All studies were pre-registered with power analyses reported in the supplementary, and analyses were only conducted after all data had been collected.

2. Method

2.1. Power analysis

We determined the required sample size in our replication by conducting a power analysis (95% power with alpha = 5%). In the original study, 120 participants were asked about their willingness to contribute to the costly life-saving treatment of sick child/children, as well as their feelings of empathic concern and distress toward the victims. The required sample size was calculated from the smallest effect size in the original study by G*Power 3.1.9.4 (Faul et al., 2007), detailed in the 'Power analysis of Study 2 of Kogut and Ritov (2005a, 2005b) to assess the required sample for replication' subsection in the Supplementary Material. After pre-registration, based on the budget we had allocated for this project, we increased the sample size to around 2000, which, after pre-registered exclusions, resulted in 1835 participants. We provided details of the exclusion criteria in Supplementary Table S17. A sensitivity analysis indicates that this sample is sufficiently powered to detect weak effects (Cohen's $f < 0.1$ or $\eta^2_p < .01$; power = 95%, alpha = 5%; groups = 8), far weaker than the interaction effect reported in the target article ($\eta^2_p = .062$). We noted the deviation in 'Pre-registration plan versus final report' in Supplementary Table S18.

2.2. Participants

We recruited U.S. American participants online through Amazon Mechanical Turk (MTurk), using CloudResearch/TurkPrime (Litman et al., 2017). A total of 2003 participants completed the study. We retained 1835 participants ($M_{age} = 40.5$ years, $SD = 13.0$ years; 972 males, 851 females, 12 other/would rather not disclose) after applying the pre-registered exclusion criteria. Analyses before and after exclusions were very similar overall.

2.3. Design

Kogut and Ritov (2005a) Study 2 design employed a 2 (Singularity: single victim vs. a group of eight victims) × 2 (Identifiability: identified vs. unidentified) between-subject design. Our replication design included their design and further extended it by adding two identified conditions, employing a 2 (Singularity: single victim vs. a group of eight victims) × 4 (Identifiability: unidentified vs. identified vs. identified ingroup vs. identified outgroup) for a total of eight conditions between-subject design. Given the between-subject design, our extensions do not impact on the target article's design. We summarized the experimental design in Table 3.

There were six total identified victim conditions, where we provided pictures of the victim(s). We used a group portrait of eight white children (four boys and four girls) for the identification of the group and eight separate pictures of the same eight children for the identification of the single individual (using sections of the group portrait presented in the group conditions).[3] Common American names were used in both the identified and identified ingroup conditions, whereas common Russian names were used in the identified outgroup condition. The image stimulus was identical to the one used in Kogut and

[3]We note that we reached out to the original authors, who kindly shared their stimuli of the children's photos. The original authors also warned us that the photos were distorted and recommended against using these and instead suggested running a new set of stimuli. This presented us with a major dilemma. If we made no changes, a failed replication might be attributed to the needed changes to address the distortion. If we made changes, a failed replication might be attributed to the change made as deviating from the original. After long deliberation, we decided to run the stimuli provided as is and to follow what the authors ran and provided to remain as faithful as possible to the original's design. We thought that changing to new images would introduce too many unknown factors that may greatly affect the likelihood of the replication succeeding.

Table 3. *Replication and extension experimental design.*

Singularity (between-subject)	Single condition A single child	Group condition A group of 8 children
Identifiability (between-subject)		
Unidentified condition [Replication] No information about the victim (s) is provided	*Willingness to Contribute [Replication]* 'Imagine that you've just earned $5 U.S. dollars for completing this task. You're given an opportunity to donate any amount of the money to support the child. How much of that would you be willing to donate?' Scale: $0, $1, $2, $3, $4, $5	
Identified condition [Replication] The age, name, and picture of the victim (s) are provided	*Emotions [Replication]* *Distress* 'After reading the [child's/children's] story, I felt worried, upset, and sad'. Scale: 1 = *Not at all*, 2, 3, 4, 5, 6, 7 = *Very much*	
Identified Ingroup condition [Extension] The identified victim(s) is(are) introduced as American	*Empathic concern* 'I felt sympathy and compassion towards the sick [child/children]'. Scale: 1 = *Not at all*, 2, 3, 4, 5, 6, 7 = *Very much*	
Identified Outgroup condition [Extension] The identified victim(s) is(are) introduced as Russian	*Perceived responsibility [Extension]* 'I have the moral responsibility to help the sick [child/children] as much as I can'. Scale: 1 = *Not at all*, 2, 3, 4, 5, 6, 7 = *Very much*	

Ritov (2005a), with distortion to limit identification. See 'Deviation from the original study' in the Supplementary Material for more elaboration (summary of deviations in Supplementary Table S15).

2.4. Procedure

We conducted data collection using a Qualtrics survey. Participants were randomly assigned to one of eight conditions. All participants then read the same basic scenario describing a sick child or a group of eight sick children being treated in a medical center whose lives are in danger. In the identified condition, we provided the participants with information such as name, age, and picture of the sick child or children. Additional information on the nationality was presented in the identified ingroup (American) or outgroup (Russian) condition. Then, participants read the following:

> Recently, a new drug was developed that cures the disease. Unfortunately, this drug is extremely expensive, and unless a sum of US$500,000 is raised soon, it will no longer be possible to save the life (lives) of the sick child (children).

Then, participants read the following:

> Imagine that you've just earned $5 U.S. dollars for completing this task. You're given an opportunity to donate any amount of the money to support the child. How much of that would you be willing to donate?

Participants were then given a choice to contribute any round amount from nothing to $5 U.S. dollars (0 = *US$0*, 5 = *US$5*). Immediately following the measurement of the willingness-to-contribute (WTC), we presented participants with the following statement to measure their distress: 'After reading the child's story, I felt worried, upset and sad' (1 = *Not at all*; 7 = *Very much*). To measure empathic concern, we presented the participants with the statement: 'I felt sympathy and compassion towards the sick child' (1 = *Not at all*; 7 = *Very much*). To measure participants' perceived responsibility toward the victims (our extension), we used the scale item originally used in Erlandsson et al. (2015): 'I have the moral responsibility to help the sick [child/children] as much as I can' (1 = *Not at all*; 7 = *Very much*).

After the ratings, participants then answered a funneling section and provided demographic information, which contained items corresponding to the exclusion criteria of the study, before the end of the survey. For more information regarding the Qualtrics survey, please refer to the 'Instructions and experimental material' in the Supplementary Material and our shared Qualtrics on the OSF and in our pre-registration.

2.5. Evaluation criteria for replication findings

We aimed to compare the replication effects with the original interaction effect between singularity and identifiability on willingness to contribute. Using the criteria by LeBel et al. (2018), we classified our replication as 'close replication', with details summarized in the Supplementary Material (refer to Supplementary Table S16).

3. Results

We report our analyses after applying the pre-registered exclusion criteria. We summarized descriptive statistics in Table 4.

3.1. Full design (pre-registered extension): With ingroup–outgroup conditions

We first conducted 2 (singularity: single vs. group of eight victims) × 2 (identifiability: unidentified vs. identified victims) ANOVAs of all dependent variables in order to isolate the effects of victim identifiability, without considering the ingroup-outgroup extension, and directly compared the results with the respective findings from the target article. For the extensions, we also ran our analysis on the complete 2 (singularity: single vs. group of eight victims) × 4 (identifiability: unidentified vs. identified vs. identified ingroup vs. identified outgroup victims) ANOVAs of all dependent variables combining both the replication and the extension to the outgroup victims.

We found no support for an effect of singularity, identifiability, or interaction effect of singularity and identifiability on any of the dependent variables. In Table 2, we focused on presenting the comparison of the findings of the effect of singularity and identifiability on willingness to contribute for both the target article and the current replication and extension.

In our extension, we failed to find support for the findings by Kogut and Ritov (2007) that there is a higher likelihood of helping single victims over a group if they belong to the ingroup (vs. the outgroup). In addition, in our extension, we also failed to find an interaction effect of singularity and identifiability on perceived responsibility (for detailed analysis, Supplementary Figure S7). In Table 5, we compared the findings of the effect of singularity and identifiability for all the dependent variables for both the target article and the current replication and extension.

3.1.1. Willingness to contribute

We conducted a 2 (single victim vs. a group of eight victims) × 4 (unidentified vs. identified vs. identified ingroup vs. identified outgroup) between-subjects ANOVA and did not find support for an effect

Table 4. *Replication: Descriptive statistics per condition across identifiability and singularity.*

Dependent variable	Identifiability	Singularity	*n*	*M*	*SD*
Willingness to contribute	Identified	Single	237	2.75	1.94
		Group	229	2.72	2.04
	Unidentified	Single	227	2.85	2.05
		Group	237	2.70	2.06
	Identified ingroup	Single	230	2.94	1.99
		Group	228	2.80	1.98
	Identified outgroup	Single	222	2.58	1.93
		Group	225	2.22	1.93
Distress	Identified	Single	237	5.03	1.76
		Group	229	4.94	1.88
	Unidentified	Single	227	5.04	1.74
		Group	237	4.98	1.84
	Identified ingroup	Single	230	5.01	1.81
		Group	228	4.93	1.78
	Identified outgroup	Single	222	4.70	1.85
		Group	225	4.56	1.90
Empathic concern	Identified	Single	237	5.73	1.56
		Group	229	5.79	1.60
	Unidentified	Single	227	5.86	1.47
		Group	237	5.73	1.68
	Identified ingroup	Single	230	5.84	1.55
		Group	228	5.81	1.49
	Identified outgroup	Single	222	5.56	1.60
		Group	225	5.37	1.69

of the interaction between singularity and identifiability on willingness to contribute, $F(3,1827) = 0.56$, $p = .644$, $\eta^2_p = .001$, 90% CI [0, 0.003], and found no support for an effect of singularity on willingness to contribute, $F(1,1827) = 3.35$, $p = .067$, $\eta^2_p = .002$, 90% CI [0, 0.007]. We found support for a main effect of identifiability on willingness to contribute, $F(3, 1827) = 4.80$, $p = .002$, $\eta^2_p = .008$, 90% CI [0.002, 0.015].

Since we only found support for an effect of identifiability,[4] we then conducted Tukey-corrected posthoc pairwise comparisons to test whether there were any differences between subgroups depending on their identifiability, which showed that participants were willing to contribute less money in the identified outgroup condition compared to the identified ingroup condition ($p_{Tukey} = .002$, $d = -0.24$), and the unidentified condition ($p_{Tukey} = .024$, $d = -0.19$), and similar to the identified condition ($p_{Tukey} = .057$, $d = -0.17$). All the other pairwise comparisons showed very small effect sizes (all Cohen's *d*s < 0.06) and very high p-values (all > .80) because the identified, unidentified, and identified ingroup conditions had very similar average willingness to contribute values. Kogut and Ritov (2005a) found support for an interaction effect of singularity and identifiability on willingness to contribute ($p = .009$; for detailed analysis, refer to Table 2), and our findings are not consistent with their results in several ways. We did not find support for the interaction effect. Further, in the supported main effect, the differences between conditions were about our ingroup-outgroup extension and not about the identifiability effect. The results are depicted in Figure 1.

[4]The willingness to contribute toward a single victim ($M = 2.78$, SD = 1.98) was similar to that toward a group of victims ($M = 2.61$, $SD = 2.01$), $t(1827) = 1.83$, $p_{tukey} = .067$, $d = 0.09$, 95% CI [−0.006, 0.18].

Table 5. *Summary and comparison of the findings in the original study and the replication based on the LeBel et al. (2019) criteria.*

Hypothesis	Target article effect (d / η^2_p / Pearson's r) [C.I.s]	Replication effect (d / η^2_p / Pearson's r) [C.I.s]	Replication NHST summary	Replication Summary
H1: The single-identified victim will elicit higher **WTC** as compared to a single-unidentified victim	$d = 0.62$ [0.07, 1.16], $p = .025$	$d = -0.05$ [−0.23, 0.13] $p = .594$	Not supported	No signal-inconsistent, smaller
H2: The group-identified victim will (not) elicit higher **WTC** as compared to a group-unidentified victim	$d = -0.39$ [−0.92, 0.13] $p = .139$	$d = 0.01$ [−0.17, 0.19] $p = .934$	Not supported	No signal-inconsistent, smaller
H3 (interaction): Identified victims will elicit higher **WTC** than unidentified victims, but the effect will be weaker for a group of victims compared to single victims	$\eta_p^2 = 0.06$ [0.01, 0.15] $p = .009$	$\eta_p^2 = 0.00$ [0.00, 0.00] $p = .666$	Not supported	No signal-inconsistent, smaller
H4: The single-identified victim will elicit higher **distress** as compared to a single-unidentified victim	$d = 0.99$ [0.43, 1.54] $p < .001$	$d = 0.00$ [−0.18, 0.18] $p = .993$	Not supported	No signal-inconsistent, smaller
H5: The group-identified victim will elicit higher **distress** as compared to a group-unidentified victim	$d = -0.01$ [−0.53, 0.52] $p = .984$	$d = -0.02$ [−0.20, 0.16] $p = .817$	Not supported	No signal-consistent
H6 (interaction): Identified victims will elicit higher **distress** than unidentified victims, but the effect will be weaker for a group of victims compared to single victims	$\eta_p^2 = 0.06$ [0.01, 0.15] $p = .01$	$\eta_p^2 = 0.00$ [0.00, 0.00] $p = .871$	Not supported	No signal-inconsistent, smaller
H7: The single-identified victim will elicit higher **concern** as compared to a single-unidentified victim	$d = 0.34$ [−0.20, 0.89] $p = .208$	$d = -0.09$ [−0.27, 0.09] $p = .342$	Not supported	No signal-consistent

(Continued)

Table 5. *(Continued).*

Hypothesis	Target article effect (d / η^2_p / Pearson's r) [C.I.s]	Replication effect (d / η^2_p / Pearson's r) [C.I.s]	Replication NHST summary	Replication Summary
H8: The group-identified victim will elicit higher **concern** as compared to a group-unidentified victim	d = 0.13 [−0.39, 0.65] p = .617	d = 0.03 [−0.15, 0.22] p = .711	Not supported	No signal-consistent
H9 (interaction): Identified victims will elicit higher **concern** than unidentified victims, but the effect will be weaker for a group of victims compared to single victims	η_p^2 = 0.00 [0.00, 0.04] p = .575	η_p^2 = 0.00 [0.00, 0.00] p = .360	Not supported	No signal-consistent
H10: The greater the rating of distress, the higher will be the willingness to contribute	r = 0.29 [0.11, 0.45], p = .002	r = 0.59 [0.54, 0.62] p < .001	Supported	Signal-inconsistent, larger

Note: '*No signal-inconsistent, smaller*': The replication effect size 95% confidence interval includes 0 (no signal) and also excluded the point estimation of the original effect size (inconsistent). The replication effect size is in the same direction but smaller than the original effect size (smaller). '*Signal-inconsistent, larger*': The replication effect size 95% confidence interval excluded 0 (signal) but also excluded the point estimation of the original effect size (inconsistent). The replication effect size is in the same direction but larger than the original effect size (larger). WTC refers to Willingness To Contribute. WTC refers to Willingness To Contribute. This table compares the 2 (singularity: single vs. group of eight victims) × 2 (identifiability: unidentified vs. identified victims) ANOVA findings of the replication with the same from the target article. We used 95% confidence intervals for Pearson's rs and Cohen's d and 90% confidence intervals for η^2_p because η^2_p cannot assume negative values. For the target article, we reported the uncorrected p-values as was reported by the original authors. For the replication and extension analysis, all the p-values reported for the simple effects are Holm's corrected p-values and the p-values reported for the interaction effects are Tukey corrected.

3.1.2. Distress

We conducted a 2 (single victim vs. a group of eight victims) × 4 (unidentified vs. identified vs. identified ingroup vs. identified outgroup) between-subjects ANOVA on distress and did not find support for an interaction between singularity and identifiability on distress, $F(3,1827) = 0.05$, $p = .987$, $\eta^2_p = .000$, 90% CI [0, 1.00], and found no support for an effect of singularity on distress, $F(1,1827) = 1.09$, $p = .296$, $\eta^2_p = .001$, 90% CI [0, 0.004]. We found support for an effect of identifiability on distress, $F(3,1827) = 4.35$, $p = .005$, $\eta^2_p = .007$, 90% CI [0.001, 0.014].

Since we only found support for an effect of identifiability,[5] we then conducted Tukey-corrected posthoc pairwise comparisons to test whether there were any differences between subgroups depending on their identifiability, which showed that participants expressed less distress in the identified outgroup condition compared to the identified ingroup condition ($p_{Tukey} = .027$, $d = -0.19$), the unidentified condition ($p_{Tukey} = .01$, $d = -0.21$), and the identified condition ($p_{Tukey} = .017$, $d = -0.19$).

Kogut and Ritov (2005a) found support for an interaction effect of singularity and identifiability on distress ($p = .01$; for detailed analysis, refer to Supplementary Tables S8 and S9), and our findings are not consistent with their results in several ways. First, we did not find support for their interaction.

[5]The distress evoked by single victim (M = 4.95, SD = 1.79) was similar to that evoked by a group of victims (M = 4.86, SD = 1.85), $t(1827) = 1.05$, $p_{tukey} = .296$, $d = 0.05$, 95% CI [−0.04, 0.14].

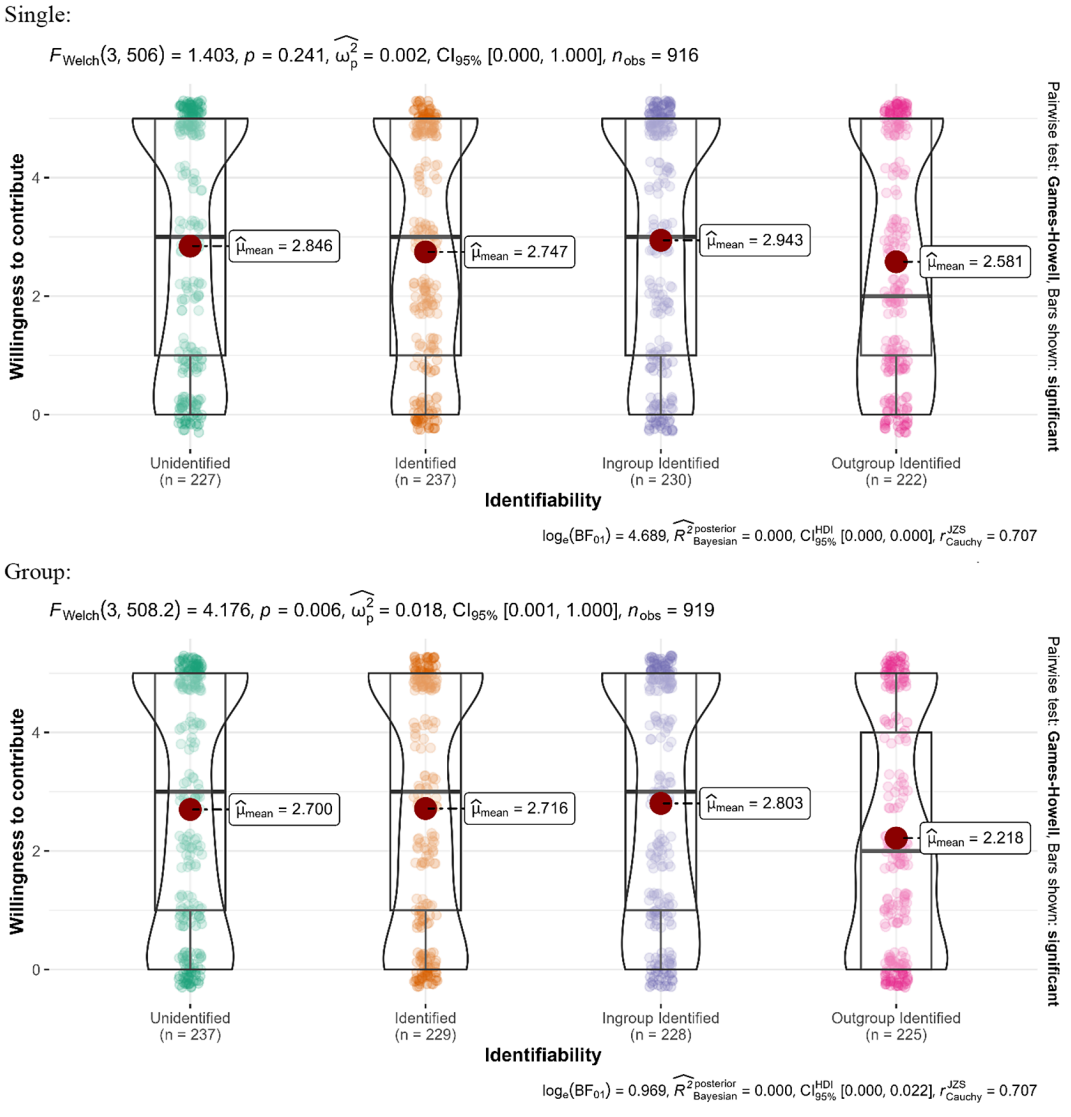

Figure 1. *Willingness to Contribute: Interaction between singularity and identifiability.*

Note: The box plots represent the interquartile range and the median value. The red circles represent average values. Data density is represented by the violin plot, and actual data points are represented as jittered. *p* = Holm's *p*-value.

Second, in the supported main effect, the differences between conditions were about our ingroup-outgroup extension and not about the identifiability effect. The results are depicted in Figure 2.

3.1.3. Empathic concern

We conducted a 2 (single victim vs. a group of eight victims) × 4 (unidentified vs. identified vs. identified ingroup vs. identified outgroup) between-subjects ANOVA on empathic concern and did not find support for an interaction between singularity and identifiability on distress, $F(3, 1827) = 0.57$, $p = .638$, $\eta^2_p = .001$, 90% CI [0, 0.003], and found no support for an effect of singularity on empathic concern, $F(1, 1827) = 0.91$, $p = .340$, $\eta^2_p = .000$, 90% CI [0, 0.004]. We found support for an effect of identifiability on distress, $F(3, 1827) = 4.91$, $p = .002$, $\eta^2_p = .008$, 90% CI [0.002, 0.015].

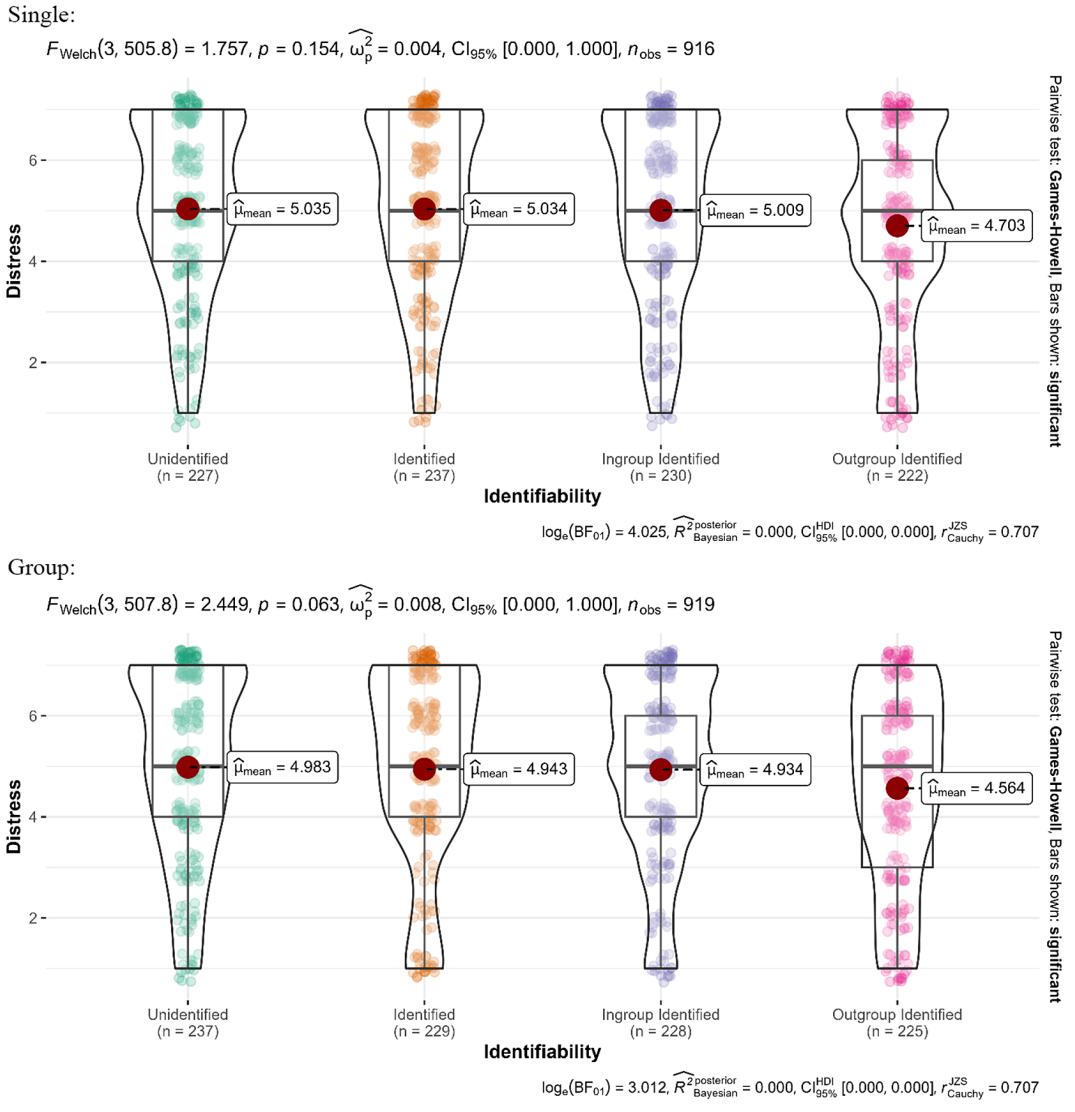

Figure 2. *Distress: Interaction between singularity and identifiability.*

Note: The box plots represent the interquartile range and the median value. The red circles represent average values. Data density is represented by the violin plot, and actual data points are represented as jittered.

Since we only found support for an effect of identifiability, we then conducted Tukey-corrected posthoc pairwise comparisons to test whether there were any differences between subgroups depending on their identifiability, which showed that participants showed less empathic concern in the identified outgroup condition compared to the identified ingroup condition (p_{Tukey} = .004, d = −0.23), the unidentified condition (p_{Tukey} = .009, d = −0.21), and the identified condition (p_{Tukey} = .027, d = −0.19). These findings are consistent with the original findings by Kogut and Ritov (2005a). The results are depicted in Figure 3.

3.1.4. Replication: Mirroring Kogut and Ritov's (2005a, 2005b) design and analysis

Mirroring the target article's design, we conducted 2 (single victim vs. a group of eight victims) × 2 (unidentified vs. identified) between-subjects ANOVA on all dependent variables (refer to

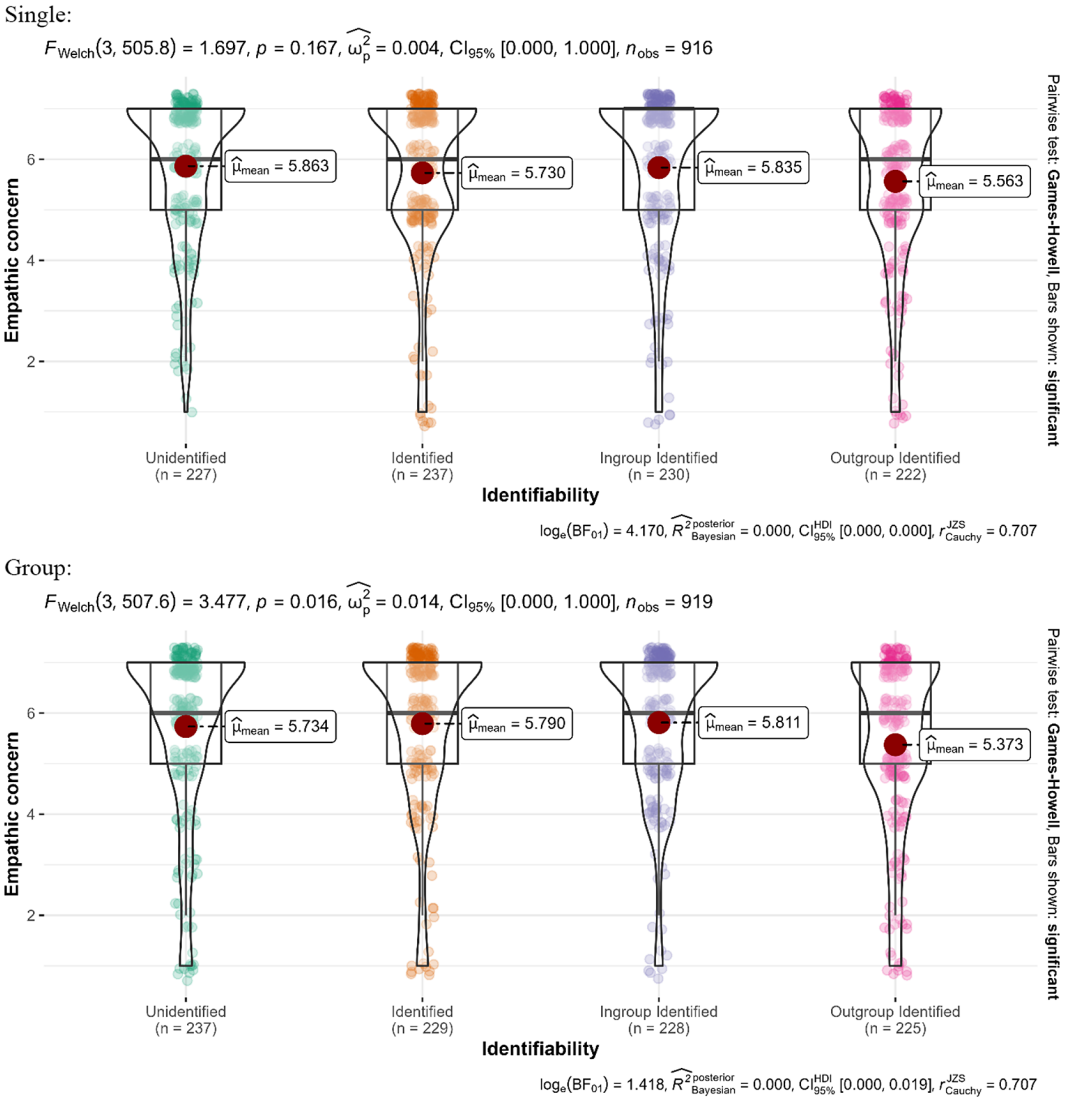

Figure 3. *Empathic concern: Interaction between singularity and identifiability.*

Note: The box plots represent the interquartile range and the median value. The red circles represent average values. Data density is represented by the violin plot, and actual data points are represented as jittered. *p* = Holm's *p*-value.

Supplementary Table S21), where we did not find evidence for either the interaction effect or the main effects of singularity and identifiability. See summary of main analyses in Table 2.

Furthermore, we have outlined in the Supplementary Material 2 × 4 ANCOVA analyses on willingness to contribute with different control variables (refer to Supplementary Table S22); and a comparison of the 2 × 4 ANOVA analyses conducted before and after implementing the exclusion criteria (refer to Supplementary Table S23).

4. Discussion

We conducted a replication of Kogut and Ritov's (2005a) Study 2. We summarized our replication findings alongside the findings of the original article for the main hypothesis in Table 5 and the extension hypothesis in Table 6.

Table 6. *Summary of the extension findings.*

Hypothesis	Effect size [90%/ 95% CI]	Extension findings summary
H11: Single-identified ingroup victim will elicit higher **WTC** as compared to single-identified outgroup victim	$d = 0.19$ [0.00, 0.37] $p = .200$	Not supported
H12: Group-identified ingroup victim will elicit higher **WTC** as compared to group-identified outgroup victim	$d = 0.30$ [0.11, 0.48] $p = .008$	Supported
H13: Interaction: Ingroup-outgroup differences for **WTC** will be weaker for a group of victims compared to single victims	$\eta^2_p = 0.00$ [0.00, 0.01] $p = .392$	Not supported
H14: Single-identified ingroup victim will elicit higher **perceived responsibility** as compared to single-identified outgroup victim	$d = 0.19$ [0, 0.38] $p = .180$	Not supported
H15: Group-identified ingroup victim will elicit higher **perceived responsibility** as compared to Group-identified outgroup victim	$d = 0.26$ [0.08, 0.45] $p = .025$	Supported
H16: Identified ingroup victims will elicit higher **perceived responsibility** than identified outgroup victims, but the effect will be weaker for a group of victims as compared to single victims	$\eta^2_p = 0.00$ [0.00, 0.01] $p = .576$	Not supported
H16: Positive correlation between WTC and perceived responsibility (across all eight conditions 4x2)	$r = 0.68$ [0.65, 0.70] $p < .001$	Supported

Note: Results and summary of the extension that used 2 (singularity: single vs. group of eight victims) × 2 (identifiability: identified ingroup vs. identified outgroup victims) ANOVA with willingness to contribute and perceived responsibility as DV. WTC indicates willingness to contribute. All the *p*-values reported are Tukey corrected from the post hoc analysis.

Our results were largely inconsistent with the original results. We were unable to find support for any main effects or interaction effects of singularity (single vs. group) and identifiability (unidentified vs. identified victims) on willingness to contribute, distress, and empathic concern. The willingness to contribute, distress, and empathic emotions evoked by a single victim were similar to those evoked by a group of victims. However, we did find support for participants reporting they were willing to contribute less money, felt less distressed, and less empathically concerned toward the identified outgroup victims compared to the victims in the other identifiability (unidentified, identified, and identified ingroup victims) conditions. We found positive correlations between willingness to contribute, distress, and empathic concern. Overall, our findings failed to find support for the findings by Kogut and Ritov (2005a) on the interaction between identifiability and singularity.

Similarly, in our extension (reported in the Supplementary Material), we did not find support for an interaction effect of singularity and identifiability on perceived responsibility, although perceived responsibility was found to be positively correlated with willingness to contribute. Participants felt a lower degree of perceived responsibility for identified outgroup victims than the victims in the other identifiability conditions.

The main hypothesis about the identified single victim effect was not supported, and thus, we concluded that this study could be classified as an unsuccessful replication using the criteria set by LeBel et al. (2019).

The current study adds to the literature on the identified victim effect. Past research (Kogut and Ritov, 2007) showed that willingness to help was greater when a single victim was identified with details such as name and picture and belonged to the respondent's own group. However, the current study was unable to replicate the interaction effect of singularity and identifiability on willingness to contribute, distress, and empathic concerns.

While the original study failed to find a correlation between willingness to contribute and empathic concern, our results were consistent with other research that provided evidence in favor of the relationship between sympathy and helping behaviors (Ritov & Kogut, 2011; Lee and Feeley, 2016).

We found no interaction effect of singularity and identifiability on perceived responsibility. Participants reported stronger feelings of perceived responsibility in the identified, unidentified, and identified ingroup conditions compared to the identified outgroup condition. Social categorization of the victims belonging to the same group as oneself increases the feeling of responsibility and amplifies the emotional response to their plight (Brewer and Gardner, 1996; Dovidio et al., 1991, 1997). This result is in line with the previous research (Erlandsson et al., 2015) as we see perceived responsibility to be highly correlated with willingness to contribute. This indicates respondents will be more willing to contribute to helping victims they categorize as belonging to their own social category because a greater sense of responsibility is triggered toward the victim compared to outgroup victims.

4.1. Rethinking the effect and its meaning?

Even if people are willing to contribute about the same amount for single and groups of victims (independent of their identifiability), this effect may still be interpreted as evidence of peculiar decision-making. In fact, larger groups of victims *should*—all else equal—evoke stronger feelings such as empathic concern, distress, and perceived responsibility, which in turn should increase willingness to contribute, if anything, because there are more individuals affected by the same tragedy. The fact that we could not find such a difference may be interpreted as violating the principle of proportionality, that is, the notion that larger issues should be tackled with more resources. This interpretation of our results offers a nuanced view of rationality in charity decision-making.

4.2. Limitations and future research

4.2.1. Measurement

We were unable to replicate the interaction effect of singularity and identifiability on willingness to contribute. We found no difference in willingness to contribute between single victims and groups of victims or in the identified versus unidentified condition. One factor that might explain these findings may be the willingness to contribute measures used in the current study. In the original study, participants were asked whether they were willing to contribute money to save the victim('s) lives and, if so, how much money they would donate at the moment. It was an open-ended question (i.e., no scale was provided), and participants could choose any amount they would like to donate. However, the scale we used to measure participants' willingness to contribute was round numbers from $0 to $5. We observed that a proportion of subjects in all conditions had a maximum willingness to contribute scores. With the instrument measuring hypothetical donation in the current study, consequently, the participants might be willing to maximize their contribution to helping the victim. If many subjects had scores of willingness to contribute at the upper limit of our instrument, it might reduce variability in the gathered data to some extent, and some actual variation in the data might not be reflected in the scores obtained from the instrument. Furthermore, we point out that the average willingness to contribute for all conditions of singularity and identifiability was approximately $3, and approximately 36% of

the participants were willing to contribute the maximum amount for the identified ingroup condition. The new measure might have reduced the sensitivity of our design to some extent, where the highest amount of $5 contribution might have been felt not enough by the participants, such that the average score of willingness to contribute for the single identified victim was similar to the average of other groups. Future research can use the original dependent variable of open-ended questions to measure willingness to contribute, although that would likely require a logarithmic transformation of the values for further analysis.

4.2.2. Participants

The original study was conducted with 112 undergraduate students at the Hebrew University. The current study recruited U.S. American participants on Mechanical Turk. One might argue that a different sample might have caused the failed replication. MTurk workers represent a more diverse population than undergraduate students (Berinsky et al., 2012; Mullinix et al., 2015). Yet, there are several findings where the sample from Amazon MTurk produces similar results to U.S. American representative samples (Coppock, 2019; Coppock et al., 2018; Mullinix et al., 2015). Further, previous research (Ziano et al., 2021c, 2021b) showed consistent results between MTurk and other samples (e.g., university students). Hence, we believe that, at the very least, the present replication can be used to update our understanding of how the effect may generalize to other populations. Future research can attempt to replicate this result with Israeli undergraduates to test the effect in closer settings to that of the original paper. Note that if the identified victim effect is limited to a specific group of participants, this reduces its generalizability and, therefore, its theoretical and practical importance.

4.2.3. Time (on or before 2005 vs. 2019)

Our replication study was conducted in 2019, whereas for the original study, the authors collected data on or before 2005. We believe that it is not likely that the passage of time has caused the anomaly between our results and the original results. Further, past replication research (Ziano et al., 2021c, 2021b) successfully replicated findings of studies on the better-than-average effect and money illusion originally conducted in 1985 and 1997, respectively. Thus, we believe it unlikely that this failed replication is due to the passage of time.

4.2.4. Stimuli

In the original study, a group portrait of eight children was used for identification.[6] We used the same pictures, which were slightly distorted, in order to remain as close as possible to the original procedure. It is possible that this slight distortion may have affected our results. Previous research (Cryder et al., 2017) showed that a recipient's attractiveness can lead to greater psychological distance from the donor, which might influence their donation decision. However, to the best of our knowledge, no research evaluated the interaction of singularity and attractiveness of the recipient on the donation intention. In such a situation, we might anticipate that a number of considerations, including the donor's perceived distress and the level of sadness that may be provoked, may outweigh the attractiveness component when deciding whether or not to donate. Prior studies (Harel and Kogut, 2021; Kogut, 2011; Västfjäll et al., 2014) on charitable donation have explicitly specified the identification condition with both the names and photographs of the victims, which indicates that a picture by itself cannot compromise the

[6]The photo stimuli included real children. Due to confidentiality, the original authors were not allowed to share and publish the image. As a result, the photo stimuli were not included in the article. For the current replication study, we asked the original authors whether we could have the access to the original stimuli, and one of the authors sent us an edited version of the picture in which the children's faces are slightly distorted. After examination, we thought that the distorted image would not affect our ability to replicate the original effect and thus we chose to use it in our replication for the identification of the children. In our survey, we notified the participants the reason for using distorted and blurred images was to protect the identity of the child/children.

elicitation process in the participants. Furthermore, Hart et al. (2018) found no significant effect of image on donation amount in their study 2 (p = .42). Future research may nonetheless attempt to use the unmodified original pictures to attempt to replicate the present effect. If the identified victim effect can only be replicated with a specific set of stimuli, this might nonetheless reduce its theoretical and practical implications.

In the original study, the names of the eight children provided in the identified condition were Sharon, Avi, Ronit, Shiran, Yonatan, Rachel, Oma, and Yotam, all common Israeli names. We recruited U.S. American participants in the current replication, and thus, we picked eight common American names in 2015 for the children in the identified and identified ingroup conditions (Pappas, 2018). In our replication, the children in the identified outgroup condition were described as Russian. Hence, we also chose eight common Russian names: Vladimir, Dmitry, Sergey, and Mikhail for boys and Anastasia, Yelizaveta, Yelena, and Ludmila for girls (Nikitina, 2019). In Studies 2 and 3 of Kogut and Ritov (2007), the authors used Indian, Argentinian, and African names for outgroup victims and Israeli names for ingroup victims. The authors were able to find results consistent with their hypothesis, which showed greater willingness to contribute for ingroup victims compared to outgroup victims. This is in line with our finding from the replication analysis, in which respondents were willing to contribute more to ingroup victims than outgroup victims. Furthermore, Västfjäll et al. (2014) conducted studies with Swedish participants and used common African and Muslim names for the identified condition. Thus, we believe that having American and Russian victim names was unlikely to influence our results. However, future research may attempt to replicate the identified victim effect using the Israeli names used in the original study for ingroup names and Indian, Argentinian, and African names for outgroup names. As we observed above, however, if the identified victim effect can only be observed with a specific set of stimuli, it is hard to draw wide-ranging theoretical or practical implications from it.

5. Conclusion

We summarized the current research as an unsuccessful replication of Kogut and Ritov's (2005a) Study 2. Our findings failed to replicate the interaction effect of singularity and identifiability on both willingness to contribute and empathic emotions. Hence, the main hypothesis about the identified single victim effect and empathic emotions as the source of the effect was not supported. However, our investigation showed a positive relationship between willingness to contribute, distress, and empathic concerns. Apart from replicating findings from Kogut and Ritov (2005a), the current study also added 2 extension designs on top of the original study. Despite finding no support for the interaction effect of group belonging and identifiability (and therefore finding not in support of Kogut and Ritov, 2007), we were able to identify the ingroup bias in helping behaviors and the contribution of both empathic emotions and perceived responsibility.

Supplementary material. The supplementary material for this article can be found at https://doi.org/10.1017/jdm.2024.31.

Data availability statement. All pre-registration, materials, data, and code were made available on the OSF: https://osf.io/9qcpj/.

Acknowledgments. We thank Prasad Chandrashekhar and Maximilian Maier for their useful and kind feedback on an earlier draft. We thank the authors of the target article—Prof. Kogut and Prof. Ritov, for providing us with their stimuli, data, and materials, which have greatly helped us with our replication efforts.

Author contributions. Conceptualization: Y.L.T.; Data curation: Y.L.T.; Formal analysis: R.M., Y.L.T., I.Z.; Funding acquisition: G.F.; Investigation: Y.L.T.; Methodology: Y.L.T.; Pre-registration: Y.L.T.; Pre-registra tion peer review/verification: G.F.; Project administration: Y.L.T., G.F.; Resources: G.F.; Validation: R.M., I.Z.; Visualization: R.M., Y.L.T., I.Z.; Writing—original draft: R.M., Y.L.T., I.Z.; Writing—review and editing: R.M., I.Z., G.F. R.M. and Y.L.T. contributed equally to this work and joint first authors.

Funding statement. The authors received no financial support for the research and/or authorship of this article.

Competing interest. The authors declared no potential conflicts of interest regarding the authorship and/or publication of this article.

Ethical standards. The authors confirm that the manuscript adheres to ethical guidelines specified in the APA Code of Conduct as well as the authors' national ethics guidelines. This includes requirements that research is conducted ethically, results are reported honestly, the submitted work is original and not (self-) plagiarized, and authorship reflects individuals' contributions.

References

Berinsky, A. J., Huber, G. A., & Lenz, G. S. (2012). Evaluating online labor markets for experimental research: Amazon.com's mechanical turk. *Political Analysis*, *20*(3), 351–368. https://doi.org/10.1093/pan/mpr057

Brewer, M. B., & Gardner, W. (1996). Who is this "We"? Levels of collective identity and self representations. *Journal of Personality and Social Psychology*, *71*(1), 83–93. https://doi.org/10.1037/0022-3514.71.1.83

Byrd, N., & Białek, M. (2021). Your health vs my liberty: Philosophical beliefs dominated reflection and identifiable victim effects when predicting public health recommendation compliance during the COVID-19 pandemic. *Cognition*, *212*, 104649. http://doi.org/10.1016/j.cognition.2021.104649

Coppock, A. (2019). Generalizing from survey experiments conducted on mechanical turk: A replication approach. *Political Science Research and Methods*, *7*(3), 613–628. https://doi.org/10.1017/PSRM.2018.10

Coppock, A., Leeper, T. J., & Mullinix, K. J. (2018). Generalizability of heterogeneous treatment effect estimates across samples. *Proceedings of the National Academy of Sciences*, *115*(49), 12441–12446. https://doi.org/10.1073/pnas.1808083115

CORE Team, & Feldman, G. (2023). Comparing charities: Psychological science factors in charitable giving. https://doi.org/10.17605/OSF.IO/KRDNG

Cryder, C., Botti, S., & Simonyan, Y. (2017). The charity beauty premium: Satisfying donors' "want" versus "should" *Desires. Journal of Marketing Research*, *54*(4), 605–618. https://doi.org/10.1509/jmr.14.0658

Dickert, S., Kleber, J., Peters, E., & Slovic, P. (2011). Numeracy as a precursor to pro-social behavior: The impact of numeracy and presentation format on the cognitive mechanisms underlying donation decisions. *Judgment and Decision Making*, *6*(7), 638–650. https://doi.org/10.1017/S1930297500002679

Dovidio, J. F., Gaertner, S. L., Validzic, A., Matoka, K., Johnson, B., & Frazier, S. (1997). Extending the benefits of recategorization: Evaluations, self-disclosure, and helping. *Journal of Experimental Social Psychology*, *33*(4), 401–420. https://doi.org/10.1006/jesp.1997.1327

Dovidio, J. F., Piliavin, J. A., Gaertner, S. L., Schroeder, D. A., & Clark III, R. D. (1991). The arousal: Cost-reward model and the process of intervention: A review of the evidence. In M. S. Clark (Ed.), *Prosocial behavior* (pp. 86–118). Sage Publications Inc. https://psycnet.apa.org/record/1991-97117-004

Erlandsson, A. (2021). Seven (weak and strong) helping effects systematically tested in separate evaluation, joint evaluation and forced choice. *Judgment and Decision Making*, *16*(5), 1113–1154. https://doi.org/10.1017/S1930297500008378

Erlandsson, A., Björklund, F., & Bäckström, M. (2015). Emotional reactions, perceived impact and perceived responsibility mediate the identifiable victim effect, proportion dominance effect and ingroup effect respectively. *Organizational Behavior and Human Decision Processes*, *127*, 1–14. https://doi.org/10.1016/j.obhdp.2014.11.003

Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*(2), 175–191. https://doi.org/10.3758/BF03193146

Fetherstonhaugh, D., Slovic, P., Johnson, S., & Friedrich, J. (1997). Insensitivity to the value of human life: A study of psychophysical numbing. *Journal of Risk and Uncertainty*, *14*(3), 283–300. https://doi.org/10.1023/A:1007744326393

Goetz, J. L., Keltner, D., & Simon-Thomas, E. (2010). Compassion: An evolutionary analysis and empirical review. *Psychological Bulletin*, *136*(3), 351–374. https://doi.org/10.1037/a0018807

Gordon-Hecker, T., Yaniv, I., Perry, A., & Choshen-Hillel, S. (2024). Empathy for the pain of others: Sensitivity to the individual, not to the collective. *Journal of Experimental Social Psychology*, *110*, 104561. https://doi.org/10.1016/j.jesp.2023.104561

Hagman, W., Tinghög, G., Dickert, S., Slovic, P., & Västfjäll, D. (2022). Motivated down-regulation of emotion and compassion collapse revisited. *Frontiers in Psychology*, *13*, 801150. http://doi.org/10.3389/fpsyg.2022.801150

Hamilton, D. L., & Sherman, S. J. (1996). Perceiving persons and groups. *Psychological Review*, *103*(2), 336–355. https://doi.org/10.1037/0033-295x.103.2.336

Harel, I., & Kogut, T. (2021). The effect of the number and identification of recipients on organ-donation decisions. *Frontiers in Psychology*, *12*, 5841. https://doi.org/10.3389/FPSYG.2021.794422/BIBTEX

Hart, P. S., Lane, D., & Chinn, S. (2018). The elusive power of the individual victim: Failure to find a difference in the effectiveness of charitable appeals focused on one compared to many victims. *Plos One*, *13*(7), e0199535. https://doi.org/10.1371/journal.pone.0199535

Kogut, T. (2011). Someone to blame: When identifying a victim decreases helping. *Journal of Experimental Social Psychology*, *47*(4), 748–755. https://doi.org/10.1016/J.JESP.2011.02.011

Kogut, T., & Ritov, I. (2005a). The "identified victim" effect: an identified group, or just a single individual? *Journal of Behavioral Decision Making*, *18*(3), 157–167. https://doi.org/10.1002/bdm.492

Kogut, T., & Ritov, I. (2005b). The singularity effect of identified victims in separate and joint evaluations. *Organizational Behavior and Human Decision Processes*, *97*(2), 106–116. https://doi.org/10.1016/j.obhdp.2005.02.003

Kogut, T., & Ritov, I. (2007). "One of us": Outstanding willingness to help save a single identified compatriot. *Organizational Behavior and Human Decision Processes*, *104*(2), 150–157. https://doi.org/10.1016/j.obhdp.2007.04.006

LeBel, E. P., McCarthy, R. J., Earp, B. D., Elson, M., & Vanpaemel, W. (2018). A unified framework to quantify the credibility of scientific findings. *Advances in Methods and Practices in Psychological Science*, *1*(3), 389–402. https://doi.org/10.1177/2515245918787489

LeBel, E. P., Vanpaemel, W., Cheung, I., & Campbell, L. (2019). A brief guide to evaluate replications. *Meta-Psychology*, *3*, 1–8. https://doi.org/10.15626/MP.2018.843

Lee, S., & Feeley, T. H. (2016). The identifiable victim effect: A meta-analytic review. *Social Influence*, *11*(3), 199–215. https://doi.org/10.1080/15534510.2016.1216891

Levine, M., Cassidy, C., Brazier, G., & Reicher, S. (2002). Self-categorization and bystander non-intervention: Two experimental studies. *Journal of Applied Social Psychology*, *32*(7), 1452–1463. https://doi.org/10.1111/j.1559-1816.2002.tb01446.x

Levine, M., Prosser, A., Evans, D., & Reicher, S. (2005). Identity and emergency intervention: How social group membership and inclusiveness of group boundaries shape helping behavior. *Personality and Social Psychology Bulletin*, *31*(4), 443–453. https://doi.org/10.1177/0146167204271651

Levine, M., & Thompson, K. (2004). Identity, place, and bystander intervention: Social categories and helping after natural disasters. *The Journal of Social Psychology*, *144*(3), 229–245. https://doi.org/10.3200/SOCP.144.3.229-245

Litman, L., Robinson, J., & Abberbock, T. (2017). TurkPrime.com: A versatile crowdsourcing data acquisition platform for the behavioral sciences. *Behavior Research Methods*, *49*(2), 433–442. https://doi.org/10.3758/s13428-016-0727-z

Maier, M., Wong, Y. C., & Feldman, G. (2023). Revisiting and rethinking the identifiable victim effect: Replication and extension of small, Loewenstein, and Slovic (2007). *Collabra: Psychology*, *9*(1), 90203. https://doi.org/10.1525/collabra.90203

Moche, H., Erlandsson, A., Dickert, S., & Västfjäll, D. (2023). The potential and pitfalls of unit asking in reducing scope insensitivity. *Judgment and Decision Making*, *18*, e28. https://doi.org/10.1017/jdm.2023.27

Moche, H., Gordon-Hecker, T., Kogut, T., & Västfjäll, D. (2022). Thinking, good and bad? Deliberative thinking and the singularity effect in charitable giving. *Judgment and Decision Making*, *17*(1), 14–30. https://doi.org/10.1017/s1930297500009001

Moche, H., Karlsson, H., & Västfjäll, D. (2024). Victim identifiability, number of victims, and unit asking in charitable giving. *Plos One*, *19*(3), e0300863. https://doi.org/10.1371/journal.pone.0300863

Moche, H., & Västfjäll, D. (2021). Helping the child or the adult? Systematically testing the identifiable victim effect for child and adult victims. *Social Influence*, *16*(1), 78–92. https://doi.org/10.1080/15534510.2021.1995482

Morvinski, C., & Gordon-Hecker, T. (2023). Identifiability theories in the wild: Evidence from large-scale real-world and context-dependent donation appeals. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4546640

Mullinix, K. J., Leeper, T. J., Druckman, J. N., & Freese, J. (2015). The generalizability of survey experiments. *Journal of Experimental Political Science*, *2*(2), 109–138. https://doi.org/10.1017/XPS.2015.19

Nikitina, M. (2019, October 15). *Top 50 most common Russian names*. ThoughtCo. https://www.thoughtco.com/common-russian-names-4770041

Pappas, S. (2018, May 11). *The 50 most popular baby names of 2017 | Live Science*. Live Science. https://www.livescience.com/62544-50-most-popular-baby-names-2017.html

Ritov, I., & Kogut, T. (2011). Ally or adversary: The effect of identifiability in inter-group conflict situations. *Organizational Behavior and Human Decision Processes*, *116*(1), 96–103. https://doi.org/10.1016/j.obhdp.2011.05.005

Sherman, S. J., Beike, D. R., & Ryalls, K. R. (1999). Dual-processing accounts of inconsistencies in responses to general versus specific cases. In S. Chaiken & Y. Trope (Eds.), *Dual-process theories in social psychology* (pp. 203–227). The Guilford Press. https://psycnet.apa.org/record/1999-02377-009

Slovic, P. (2007). "If I look at the mass I will never act": Psychic numbing and genocide. *Judgment and Decision making*, *2*(2), 79–95. https://doi.org/10.1017/S1930297500000061

Slovic, P. (2010). *If I look at the mass i will never act: Psychic numbing and genocide* (pp. 37–59). The International Library of Ethics, Law and Technology. https://doi.org/10.1007/978-90-481-8647-1_ 3

Slovic, P., & Västfjäll, D. (2010). Affect, moral intuition, and risk. *Psychological Inquiry*, *21*(4), 387–398. https://doi.org/10.1080/1047840X.2010.521119

Small, D. A., & Loewenstein, G. (2003). Helping a victim or helping the victim: Altruism and identifiability. *Journal of Risk and Uncertainty 26*(1), 5–16. https://doi.org/10.1023/A:1022299422219

Small, D. A., Loewenstein, G., & Slovic, P. (2007). Sympathy and callousness: The impact of deliberative thought on donations to identifiable and statistical victims. *Organizational Behavior and Human Decision Processes*, *102*(2), 143–153. https://doi.org/10.1016/j.obhdp.2006.01.005

Susskind, J., Maurer, K., Thakkar, V., Hamilton, D. L., & Sherman, J. W. (1999). Perceiving individuals and groups: Expectancies, dispositional inferences, and causal attributions. *Journal of Personality and Social Psychology*, *76*(2), 181–191. https://doi.org/10.1037/0022-3514.76.2.181

Västfjäll, D., Slovic, P., Mayorga, M., & Peters, E. (2014). Compassion fade: Affect and charity are greatest for a single child in need. *PLoS One*, *9*(6), e100115. https://doi.org/10.1371/journal.pone.0100115

Vu, L., Molho, C., Soraperra, I., Fiedler, S., & Shalvi, S. (2024). Giving (in) to help an identified person. *Journal of Experimental Social Psychology*, *110*, 104557. https://doi.org/10.1016/j.jesp.2023.104557

Ziano, I., Li, J., Tsun, S. M., Lei, H. C., Kamath, A. A., Cheng, B. L., & Feldman, G. (2021c). Revisiting "money illusion": Replication and extension of Shafir, Diamond, and Tversky (1997). *Journal of Economic Psychology*, *83*, 102349. https://doi.org/10.1016/j.joep.2020.102349

Ziano, I., Mok, P. Y., & Feldman, G. (2021b). Replication and extension of Alicke (1985) better-than-average effect for desirable and controllable traits. *Social Psychological and Personality Science*, *12*(6), 1005–1017. https://doi.org/10.1177/1948550620948973

Ziano, I., Xiao, Q., Yeung, S. K., Wong, C. Y., Cheung, M. Y., Lo, C. Y. J., . . .Feldman, G. (2021c). Numbing or sensitization? Replications and extensions of Fetherstonhaugh et al. (1997)'s "Insensitivity to the value of human life". *Journal of Experimental Social Psychology*, *97*, 104222. https://doi.org/10.1016/j.jesp.2021.104222

Cite this article: Majumder, R., Tai, Y. L., Ziano, I., and Feldman, G. (2024). Revisiting the impact of singularity on the Identified Victim Effect: Replication and extension of Kogut and Ritov (2005a) Study 2. *Judgment and Decision Making*, e26. https://doi.org/10.1017/jdm.2024.31