Helping the child or the adult? Systematically testing the identifiable victim effect for child and adult victims

Hajdi Moche\textsuperscript{a}\textsuperscript{*} and Daniel Västfjäll\textsuperscript{a,b}

\textsuperscript{a}Department of Behavioral Sciences and Learning, Linköping University, Linköping, Sweden; \textsuperscript{b}Decision Research, Eugene, OR, USA

\textbf{ABSTRACT}

Is the identifiable victim effect (IVE; helping a single identified victim more than a statistical victim) stronger for child victims than adult victims? In this paper, we test the effect of identifying a victim and whether that victim is a child or adult on helping motivation and donation behaviors. In three studies (\(N = 1508\)) with different samples from different countries, we find no main effect of identifiability on any of our measures, and no support that the IVE mainly occurs for children. However, we find an age effect; child victims receive more help (studies 1a-1b) or evoke a greater motivation to help (study 2) than adult victims.

What are the characteristics of a victim that make people more willing to reach out and help? Two attributes that have been shown to increase willingness to help are if the victim is a child (e.g., Goodwin & Landy, 2014; Li et al., 2010) and if the victim is identified (e.g., Kogut & Ritov, 2005a; Lee & Feeley, 2016). Both young age and identifiability are commonly used both in real charity appeals and in experiments on charitable giving (e.g., Genevsky \textit{et al.}, 2013; Kogut & Ritov, 2005b). However, the effect of combining these two characteristics on helping behavior has not yet been established. This paper addresses this knowledge gap by testing how identifiability (identified or non-identified victim) and victim age (child or adult), both separately and in combination (i.e., an identified child), affect people’s helping motivation and donation decisions.

The presence of an identified victim has been shown to increase the motivation to help compared to when there is no identified victim(s) (the identifiable victim effect [IVE]; Erlandsson \textit{et al.}, 2015; Jenni & Loewenstein, 1997; Kogut & Ritov, 2005a; Lee & Feeley, 2016, 2018; Small \textit{et al.}, 2007). Although the IVE has been found both in the lab and in real life (e.g., Slovic \textit{et al.}, 2017), there are also examples of when the effect does not occur altogether (Hart \textit{et al.}, 2018; Wiss \textit{et al.}, 2015). Instead, the effect appears to be dependent on some specific boundary conditions (Kogut & Ritov, 2005b; Markowitz \textit{et al.}, 2013; Moche \textit{et al.}, 2020). A recent meta-analysis on the IVE found that one such boundary condition can be the victim’s age (i.e., child vs. adult; Lee & Feeley, 2016). However, this has not yet been systematically tested within a single study.
In a previous study, we found support for an IVE for children, but not for adult targets (study 1, Moche et al., 2020). Further, this effect seemed to be driven by the perception of child victims as more needy, sympathy-evoking, and attractive than adult victims. However, in our previous study, the donation scenarios differed between different victims, making it difficult to conclude whether it was the victim’s age or the scenario that created this effect. Therefore, in this paper, we investigate this ‘age effect’ for the IVE whilst keeping the donation scenario constant.

Relatedly, research suggests that compared to older people, younger persons are often regarded as more valuable (Li et al., 2010), more deserving of help (Tsuchiya et al., 2003), and less deserving of dying (Chasteen & Madey, 2003). Erlandsson et al. (2020) found a direct preference for helping children over adults, even when the number of adults that could be saved exceeded the number of children. However, in many of the studies investigating an age effect, the victims are not identified but simply described as adults or children. Therefore, it is unclear how age and identifiability interact when it comes to willingness to help.

**Aim and hypotheses**

The aim of the current set of studies is to investigate if age is a boundary condition for the IVE. We hypothesize that the IVE will be more pronounced for child victims than for adult victims.

**Study 1a and 1b**

In study 1a and 1b, we explore the effect of identifiability for a child versus adult victim. Study 1a was pre-registered on the Open Science Framework (https://osf.io/whn2a). Study 1b was conducted to examine whether the results from study 1a would replicate in another sample.

**Pilot test**

Before conducting the experiments, we conducted a pilot study. In a previous study, as mentioned above, we found that child victims were perceived as significantly more attractive, needy-looking, and sympathy-evoking than adult victims (Moche et al., 2020). To minimize potential confounding effects of these attributes in the present studies, we let a separate group of participants rate sex pictures (three girls and three women) in terms of each of these qualities. They also rated the extent to which the pictures evoked positive and negative feelings, as two new items. Based on the results (see Supplementary materials), we chose the adult and the child picture that differed the least on the first three attributes to be included as the identified victims in the present studies, as these were the attributes previously found to significantly differ between adult and child victims (Moche et al., 2020).
Method

Participants for study 1a

Four hundred and ninety participants \((N = 490)\) consented to participate in the online study. The majority of participants were enrolled through a student subject pool at Linköping University, and a smaller proportion of the participants were recruited through social media (to reach the pre-registered number of participants). Among these, 74 did not complete the full survey and 33 failed an attention check. Therefore, our final sample consisted of 383 participants (49.6% women, \(M_{age} = 27.7, SD_{age} = 10.1\)).

Participants for study 1b

A total of 616 participants from MTurk were recruited and received a small monetary compensation for participating. We only included participants living in the US; non-US residents were blocked from entering the study through a VPN-blocker. One hundred and two participants failed the attention check and were excluded. Therefore, our final sample consisted of 514 participants (38.9% women, \(M_{age} = 37.2, SD_{age} = 11.0\)).

Design

The online study had a 2 (Victim age: child vs. adult) \(\times\) 2 (Identifiability: identified vs. non-identified) between-subjects design. At the start of the study, participants were told that they were enrolled in a raffle in which they had the possibility of winning 200 SEK (study 1b: 20 USD). This was done to incentivize their later donation decision as they would be asked to donate the money they potentially would win in the raffle. This intended to make the decision more realistic. The main dependent variables were willingness to donate (yes or no) and donated amount.

For donated amount, we calculated the results both with and without the non-donors. Non-donors were coded as donating 0 SEK/USD when these were included. The reason to also calculate results including non-donors was to include all participants in the analyses. This is a common way to use donation data within the field (e.g., Kogut & Ritov, 2005a). Importantly, it enables us to compare the results with the previous paper that this study is built upon, which employed this strategy (Moche et al., 2020). Therefore, analyses including non-donors will be presented in the result sections (also for study 2). The analyses when only donors were included showed no significant results for any of the measures or studies included in this paper. These results can be found in the Supplementary materials.
**Procedure**

Before consenting, participants received a short description of the study stating that the study was about decision making in and attitudes regarding charitable giving. Participants read that they would be faced with a scenario in which they would decide whether or not to donate to the presented cause. They were also told about the raffle with the chance of winning 200 SEK/20 USD.

After an attention check, participants were randomly assigned to one of four conditions. In each condition, participants were asked to imagine being at a store checkout and being asked to donate to an organization that helps prevent and eliminate bullying (at schools or workplaces; taken from Moche et al., 2020). Participants read a description of the organization’s work and aim. In the identified conditions, there was a description of a specific individual (child or adult) who was a victim of bullying (at school or at their workplace). The identified victims were described with name, age, a picture, and a short story of their plight. In the non-identified conditions, there was no such information. The descriptions of the victims/organizations were kept as identical as possible across conditions, except for specific details that had to be adjusted to suit the target (e.g., ‘... to reduce bullying at school’ vs. ‘... at workplace’). The exact descriptions of the scenarios can be found in the Supplementary materials.

After reading the scenario, participants were reminded that they had the possibility to win 200 SEK/20 USD and that it was possible for them to donate some of the money to help the organization to reduce bullying. They were asked if they would be willing to donate an optional amount to the cause if they won the raffle (yes or no); and if so, they were also asked how much out of 200 SEK/20 USD they wanted to donate (indicating their answer on a slider scale from 0 to 200 SEK/0 to 20 USD).

Last, participants answered demographic questions and rated the two pictures used as identified victims on the five attributes tested in the pilot test. The results of these ratings can be found in the Supplementary materials. They were then thanked, and participants in study 1a were also asked to enter their e-mail address to be contacted if they wanted a chance to win the money in the raffle.³

**Results study 1a**

**Willingness to donate (WTD)**

Conducting chi-square tests for WTD, we found a main effect of victim age. Significantly more people were willing to donate to organizations helping child victims (56.8%) than adult victims (44.0%). See Table 1 for a full description of the results. Further, although slightly more people were willing to donate to identified victims (54.3%) than to non-identified victims (46.2%), we found no significant main effect of identifiability. Last, we also found an effect between conditions (i.e., interaction effect; see Table 1, IVE and age effect). To further explore this, we performed exploratory simple contrast analyses, which indicated a significant identifiable victim effect for adults,⁴ but not for child victims.
Table 1. Summary of the results from study 1a.

| Effect tested                  | Dependent variable | M (SD) | M (SD) | Test statistics | p   | Effect size | df |
|--------------------------------|--------------------|--------|--------|----------------|-----|-------------|----|
| Age effect: Child vs. Adult    | WTD                | Child: 56.8% (79.1) SEK | Adult: 44.0% (69.2) SEK | $\chi^2 = 6.27$ | .012* | $r = .128$ | 1, N = 383 |
| IVE: Identified (Id) vs. Non-identified (No-id) | No-id: 46.2% (72.7) SEK | Id: 54.3% & 51.0% | $\chi^2 = 2.50$ | .114 | $r = .081$ | 1, N = 383 |
| IVE & Age effect               | No-id/Child: 54.3% (72.7) SEK | No-id/Adult: 51.0% & 36.6% | $\chi^2 = 10.3$ | .016* | $r = .078$ | 3, N = 383 |
| Contrasts IVE for adults only  | No-id/Child: 57.6% (88.8) SEK | No-id/Adult: 51.0% & 36.6% | $F = 2.08$ | .150 | $\eta^2 = .005$ | 1, 378 |
| Contrasts IVE for children only| No-id: 36.6% (72.7) SEK | Id: 51.0% & 57.6% | $\chi^2 = 4.05$ | .044* | $r = .146$ | 1, N = 191 |

* = significant results. IVE = Identifiable victim effect. WTD = Willingness to donate. SEK = Swedish crowns.

Donated amount

We conducted a $2 \times 2$ ANOVA with identifiability and victim age as independent factors and donated amount as the dependent variable. Similar to the results for WTD, we found a significant main effect of victim age, indicating that child victims received significantly higher donation amounts ($M = 68.1$, $SD = 79.1$) than adult victims ($M = 48.0$, $SD = 69.2$). There was no main effect of identifiability, and no significant interaction effect.

Results study 1b

Willingness to donate (WTD)

For WTD in study 1b, we found a main effect of victim age, showing that significantly more people were willing to donate to organizations helping child victims (58.8%) than adult victims (47.9%). Table 2 describes the results in detail. Further, we found no main effect of identifiability. Last, we found an overall significant effect between conditions (i.e., interaction effect; see Table 2, IVE and age effect). Exploratory simple contrasts analyses showed that the lack of a significant IVE held both for adult and child victims.

Donated amount

A $2 \times 2$ ANOVA with identifiability and victim age as independent factors and donated amount as the dependent variable was conducted. In contrast to WTD, we did not find a main effect of victim age. Further, we found no significant main effect of identifiability and no interaction effect.
Table 2. Summary of the results from study 1b.

| Effect tested | Dependent variable | M (SD) | M (SD) | Test statistics | p     | Effect size | df |
|---------------|--------------------|--------|--------|----------------|-------|-------------|----|
| Age effect: Child vs. Adult | WTD | Child: 58.8% (5.86 USD) | Adult: 47.9% (5.62 USD) | $\chi^2 = 6.19$ | .013* | $r = .110$ | 1, N = 514 |
| IVE: Identified (Id) vs. Non-identified (No-id) | WTD | No-id: 50.4% (5.58 USD) | Id: 56.3% (5.65 USD) | $\chi^2 = 1.81$ | .179 | $r = .059$ | 1, N = 514 |
| IVE & Age effect | WTD | No-id/Child: 55.0% (5.12 USD) | No-id/Adult: 45.7% (5.65 USD) | $\chi^2 = 8.27$ | .041* | $r = .071$ | 3, N = 514 |
| Contrast IVE for adults only | WTD | No-id: 45.7% (5.58 USD) | Id: 50.0% (5.65 USD) | $F = 0.07$ | .788 | $\eta^2 < .001$ | 1, 510 |
| Contrast IVE for children only | WTD | No-id: 55.0% (5.58 USD) | Id: 62.9% (5.65 USD) | $\chi^2 = 0.47$ | .492 | $r = .043$ | 1, N = 259 |

* = significant results. IVE = Identifiable victim effect. WTD = Willingness to donate. USD = US dollars.

Discussion study 1a and 1b

Study 1a and 1b tested the IVE for child and adult victims. In contrast to our hypothesis, we did not find a stronger IVE for child targets than adult targets in either of the studies. Overall, we found little evidence of an IVE at all. If anything, the results of study 1a revealed an IVE for the adult victim, but not the child victim. However, in both studies we found a main effect of victim age, indicating that participants were more willing to donate to child victims than adult victims. The donated amount was also larger for child than adult victims, but only in study 1a and not in study 1b.

To our knowledge, these studies are the first to systematically test the IVE for child and adult victims. The lack of an IVE for the child victims was surprising, as the child scenario used was identical to the one used in Moche et al. (2020), which found a robust IVE in two studies. The only difference between studies 1a-1b and the studies by Moche et al. (2020) was the picture of the child victim. Based on the results from the pilot study (see Supplementary materials), we implemented this change to reduce the number of perceived differences between the child and adult picture. Compared to the adult victim, the child picture used here was rated as less attractive than the child picture used by Moche et al. (2020). This might indicate that the attractiveness of the identified child plays an important role for the IVE. This suggestion is in line with previous studies showing that attractive children are rated more positively (Langlois et al., 2000) and receive more help (Cryder et al., 2017) than less attractive children. However, the role of attractiveness has not yet been experimentally investigated in the context of the IVE. Therefore, future studies could test whether attractiveness is a boundary condition for the IVE, for example by manipulating the attractiveness of the identified victim and...
investigating how it affects helping behavior. Taken together, studies 1a-1b lend support to the notion that the IVE depends on several moderating factors and is not consistently observed (Hart et al., 2018; Lee & Feeley, 2016).

Although age was not a boundary condition for the IVE in the present studies, we consistently found that participants were more willing to donate to organizations helping children than those helping adults. This is in line with previous studies showing that there is a preference for helping children over adults (Erlandsson et al., 2020; Li et al., 2010; Rodríguez & Pinto, 2000; Tsuchiya et al., 2003). This might in part depend on perceived innocence (Van Leeuwen & Wiepking, 2012; Zagefska et al., 2011) or perceived injustice (Chasteen & Madey, 2003), which is greater for children than for adults, as adults are more often viewed as responsible for their own plight (Back & Lips, 1998). However, perceived innocence and injustice were not measured in these studies, so we cannot conclude that these are the driving mechanisms (see Tsuchiya et al., 2003). Also, had the bullying scenario depicted an older adult, the results might have differed. In such a scenario, people might perceive the bullying to be more unjust than if a younger adult had been bullied, leading to increased or similar levels of helping behavior as to a child. However, for the unidentified scenarios, where exact age was not mentioned, the results still indicate a preference for helping the child over the adult. Alternative mechanisms for the age effect could be perceived utility or perceived responsibility. Participants seeing the child scenario might intuitively think that organizations helping children can have a bigger impact or bigger responsibility to help than those seeing the adult scenario (Erlandsson et al., 2014, 2015).

**Study 2**

Study 2 was conducted to control for possible confounds and to measure helping motivation more extensively compared to studies 1a-1b. For example, the pictures of the identified adult and child victims in studies 1a-1b had different backgrounds, facial expressions, and other characteristics. Study 2 controls for this by using the same picture but manipulating the perceived age of the victim through image manipulation. Further, the bullying scenario used in studies 1a-1b could be perceived differently based on victim age and perceived responsibility. Therefore, study 2 uses a different scenario, namely cancer. Last, in addition to measuring willingness to donate and donated amount, study 2 includes a measure of helping motivation. In this way, we combine behavioral and preference-related measures as these sometimes can yield different results (e.g., Erlandsson et al., 2018).

**Method**

**Participants**

A total of 643 participants from MTurk were recruited to the study. All participants were US residents and received a small monetary compensation for participating. Non-US residents were blocked from entering the study through a VPN-blocker. Thirty-two participants failed the attention check and were excluded from the analyses. Therefore, our final sample consisted of 611 participants (40.1% women, $M_{age} = 37.1$, $SD_{age} = 10.9$).
Similar to studies 1a-1b, this study had a $2 \times 2$ between-subjects design. In addition to willingness to donate and donated amount, we added three questions aimed to measure helping motivation (presented below).

**Procedure**

The procedure was very similar to studies 1a-1b, but the scenarios were different. In each condition, participants were asked to imagine being at a store checkout, being asked to donate to an organization that prevents and fights cancer (in children or adults). Participants were given a description of the organization’s work and aim. In the identified conditions, there was a description of a specific victim of cancer (child or adult). The identified victims were described with name, age, a picture, and a short story. The pictures used for the adult and child victim were identical in all aspects (e.g., background, facial expression, clothes) except the perceived age of the victim. This was achieved by manipulating the same picture through a so-called ‘aging app’ (see pictures below, Figure 1). Similar to the scenarios used in studies 1a-1b, the descriptions of the victims/organizations were kept as identical as possible across conditions, except for specific details that had to be adjusted to suit the target (e.g., ‘... to fight cancer in children’ vs. ‘... in women and men’). The exact descriptions of the scenarios can be found in the Supplementary materials.

After reading the scenario, participants answered three questions about their helping motivation: 1) ‘How good does this charity organization seem to you?’; 2) ‘How important does this charity organization seem to you?’; and 3) ‘How worthy of financing does this charity organization seem to you?’ Participants answered each question on a slider scale from 0 (= Not at all) to 100 (= Extremely). These questions were later aggregated to a single helping motivation measure (all Cronbach’s $\alpha > .915$). After this, the rest of the procedure was identical to studies 1a-1b, except that the ratings of the two pictures at the end of the study were removed.

![Stimuli pictures used in identified victim conditions in study 2, child victim (left) and adult victim (right).](image)
Results

Helping motivation

We conducted a 2 × 2 ANOVA with victim age and identifiability as independent factors and helping motivation as the dependent variable. We found a significant main effect of victim age, indicating that people were significantly more motivated to help the organization helping child victims ($M = 77.4$, $SD = 21.0$) than adult victims ($M = 73.7$, $SD = 21.3$). See Table 3 for a full description of the results. There was no significant main effect of identifiability and no significant interaction effect.

Willingness to donate (WTD)

For WTD, there was no significant main effect of victim age or identifiability. Further, we found no significant difference between conditions (i.e., interaction effect; see Table 3).

Donated amount

We conducted a 2 × 2 ANOVA with victim age and identifiability as independent factors and donated amount as the dependent variable. The results revealed no significant main effects or interactions (see Table 3).

Discussion study 2

Study 2 set out to replicate the findings of studies 1a-1b, but with another scenario and full experimental control of the picture so that only age and no other victim characteristics differed, as well as with an additional measure of helping motivation. Taken together, the results of study 2 were similar to studies 1a-1b, in that we neither found an age effect for the IVE, nor an IVE effect overall. Again, this suggests that the IVE is not as strong as previously suggested, even when using innocent children (see General discussion).

Further, in contrast to studies 1a-1b, study 2 did not find an age effect for willingness to donate. A possible explanation for this is that the cancer scenario used in study 2 differed significantly from the bullying scenario used in studies 1a-1b (see General discussion). However, we found an overall age effect for the helping motivation measure. This indicates that although people feel more motivated to help children than adults, it does not necessarily show in their decisions.

General discussion

This paper has investigated if age is a boundary condition for the IVE. In three studies, we compared the effect of identifiability for child versus adult victims. Contrary to our hypothesis, we did not find that the IVE is stronger for child than adult victims. Instead, we found a tendency toward an IVE mainly for adult victims in study 1a, but overall, no effect at all. Further, we found that significantly more people were willing to donate
Table 3. Summary of the results from study 2.

| Effect tested | Dependent variable | M (SD)        | M (SD)        | Test statisticsp | Effect size | df  |
|---------------|--------------------|---------------|---------------|------------------|-------------|-----|
| Age effect: Child vs. Adult | Help motivation | Child: 77.4 (21.0) | Adult: 73.7 (21.6) | F = 4.52 .034* | η²p = .007 | 1, 607 |
| WTD           | Child: 51.4%       | Adult: 48.6%   |               | x² = 0.59 .444   | r = .031    | 1, N = 611 |
| Donated amount| Child: 6.36 (6.32) USD | Adult: 6.16 (6.49) USD | F = 0.15 .702 | η²p < .001 | 1, 607 |
| IVE: Identified (Id) vs. Non-identified (No-id) | Helping motivation | No-id: 76.9 (21.2) | Id: 74.2 (21.5) | F = 2.45 .118  | η²p = .002 | 1, 607 |
| WTD           | No-id: 50.1%       | Id: 49.9%      |               | x² = 0.09 .767   | r = .012    | 1, N = 611 |
| Donated amount| No-id: 6.29 (6.44) USD | Id: 6.23 (6.37) USD | F = 0.02 .901 | η²p < .001 | 1, 607 |
| IVE & age effect | Helping motivation | No-id/Child: 78.1 (20.2) | No-id/Adult: 75.7 (22.1) | F = 0.56 .454  | η²p = .001 | 1, 603 |
|               | Id/Child: 76.7 (21.8) | Id/Adult: 71.7 (21.0) |               | x² = 0.83 .843   | r = .022    | 3, N = 611 |
| WTD           | No-id/Child: 66.0%  | No-id/Adult: 61.5% |               | x² = 0.83 .843   | r = .022    | 3, N = 611 |
| Donated amount| No-id/Child: 6.21 (6.28) USD | No-id/Adult: 6.37 (6.61) USD | F = 0.49 .486 | η²p = .001 | 1, 607 |
|               | Id/Child: 6.51 (6.38) USD | Id/Adult: 5.95 (6.36) USD |               |               |           |

* = significant results. IVE = Identifiable victim effect. WTD = Willingness to donate. USD = US dollars.
(studies 1a and 1b), donated a higher amount (study 1b), or were more motivated to help (study 2) when the charitable organization aimed to help child victims, compared to adult victims.

The lack of an IVE across the three studies suggests that the identifiability of a victim does not always increase people’s motivation or willingness to help. Previously, a meta-analysis found that using children who are not responsible for their need as donation targets increases the likelihood of finding the IVE (Lee & Feeley, 2016). Our studies were designed to systematically test this, but we found little evidence for the IVE even among child targets. Thus, the present results are not in line with previous work suggesting that age could be a boundary condition for the IVE (Lee & Feeley, 2016; Moche et al., 2020) or studies finding an IVE in situations where children are the recipients of the help (Kogut & Ritov, 2005a, 2005b; Small et al., 2007). However, it is important to note that the age range of the child (and adult) victims differs across studies. In the present studies, the identified child was in a pre-puberty age (12 years), which differs from several previous studies which used younger children in the age range of 2–7 years (e.g., Erlandsson et al., 2015; Kogut & Ritov, 2005a; Lee & Feeley, 2018). Future studies could investigate this further by systematically varying the age of the child victim.

Further, previous studies have shown that stronger emotional reactions in the IVE scenarios elicit greater willingness to donate (Erlandsson et al., 2015; Lee & Feeley, 2018). Thus, our lack of an IVE across the three studies could be a result of weak emotional reactions to the identified victim. We deliberately avoided including assessments of emotional reactions toward the victims before participants were asked to donate, as this can make donors aware of their feelings and bias judgments and decisions (Siemer & Reisenzein, 1998). We also did not include emotion measures after the donation as it is possible that these would have been affected by the donation decision (Västfjäll et al., 2016). As we do not have a manipulation check, it is difficult to know with certainty if our IVE manipulation was too weak. However, we previously found the effect with the scenario that was used in studies 1a-1b (but with a different picture; Moche et al., 2020), suggesting that lack of emotional reactions here cannot explain the results fully. Also, our results for the IVE are in the same direction as the effect found by Lee and Feeley (2018), but with small effect sizes (ranging from $\eta_p^2 = < .001–0.019$, $r = .01-.15$). Thus, in line with other studies failing to find the effect (Hart et al., 2018; Wiss et al., 2015), our studies suggest that the IVE is not a strong helping effect that always will occur (in line with Erlandsson, 2021). However, as there are some clear real-life examples of this effect (e.g., Slovic et al., 2017), we do not deny the existence of the effect altogether, although its boundary conditions need further investigation.

A consistent finding in the studies was that organizations helping child victims were more likely to receive help than those helping adult victims, as indicated by the increases in WTD (studies 1a-1b), donation amounts (study 1a), or helping motivation (study 2). Thus, keeping other factors constant, donors seem to prefer to help children over adults (Goodwin & Landy, 2014; Li et al., 2010; Rodriguez & Pinto, 2000). However, it should be noted that this preference does not always translate to actual behavior as WTD and donated amount did not significantly differ between children and adults in study 2. Nevertheless, study 2 found an age effect for helping motivation, indicating that people still might prefer helping children over adults.
The age effect might be due to the perceived innocence (Erlandsson et al., 2020), injustice (Chasteen & Madey, 2003), or helplessness of child victims compared to adult victims (Back & Lips, 1998). However, children might also be the preferred targets of help based on different impact assessments, such as number of life years gained or the number of quality-adjusted life years (QALYs) gained (Goodwin & Landy, 2014; Li et al., 2010). Perceived utility of helping a child over an adult might be especially relevant in the scenario with cancer (study 2), but less so for the bullying scenario (studies 1a-1b). Therefore, there might be an interactional effect between scenario and the victim’s age. For example, willingness to help might differ depending on whether the victim is a child with cancer or a child that is bullied, and whether that child is very young or a teenager. Future studies could systematically test this, for example, by varying the nature of the plight, identifiability, and the victim’s age. This could clarify if age is a boundary conditions for the IVE, or if the results here are indicative that the age effect and the IVE are caused by distinct mechanisms (see Erlandsson et al., 2015). Taken together, this suggests that multiple mechanisms and factors interplay when people respond to helping scenarios where age and identifiability vary, such as impact of helping the victims, emotional reactions, and moral responsibilities (Erlandsson et al., 2015; Tsuchiya et al., 2003).

**Limitations**

Although these studies systematically test the IVE for child versus adult victims, some limitations are worthy of discussion. For example, in all studies, we only used female victims. This might limit the generalizability of our results to an overall IVE and age effect. Previous studies have found a preference for helping female victims over male victims (Eagly & Crowley, 1986). However, more recent studies have shown that this gender effect is only present when people are forced to choose between men and women in joint evaluation mode (Erlandsson et al., 2020). The present studies were conducted in a separate evaluation mode, where participants made decisions about a single victim rather than choosing between two or more victims that were presented side-by-side. Therefore, it is less likely that the results would be much different if we had used male victims, or if we had mixed male and female victims. However, this is an open question for further research to explore.

Further, in all studies reported here, the scenarios described the charity organization’s work. It is possible that the results would have been different if the scenarios had focused on the specific victims or a specific help project. Previous studies have tested this possibility in various ways, for example by putting either the organization (Ein-gar & Levontin, 2013) or the victims in focus (even non-identified, e.g., Dickert et al., 2016). Here, we placed the organization in focus so that the scenario would be more believable (i.e., being at the check-out in a store) and to ensure that the identified and non-identified versions would be more similar. However, future studies could investigate if the IVE is affected by whether the organization or the non-identified victims are in focus.

Last, this study is a laboratory study where participants make semi-hypothetical decisions. This factor can have affected the results, and future studies should therefore test if these results hold in a field study with real donations.
Conclusion

This study tested if the IVE is stronger for child victims than adult victims. The results of three studies did not support our hypothesis that the IVE is stronger for child than adult victims. Also, we did not find a main effect of identifiability for any of the measures or in any of the studies. However, we found that people were more willing to help or donate to an organization aiming to help child victims, compared to adult victims.

Notes

1. These were excluded because the informed consent described that participants could end their participation by closing down the page. Therefore, we excluded all who did not complete the full survey. However, among these, 24 completed the main survey except the last rating questions. Therefore, we conducted analyses with these extra participants as well (N = 404). Results from these analyses showed a similar pattern as the presented results, with a few exceptions. We note these discrepancies in footnotes at the appropriate places.
2. The high number of participants failing the attention check was probably due to the format of the attention check. If attentive, participants were asked to not click on any of the presented options and just move on to the next page. Therefore, participants who accidentally pressed something could not correct their mistake. This interpretation gains credibility after having changed the attention check in study 2, in which we included more alternatives and participants were asked to choose one of these, which radically reduced the number of excluded participants due to the failed attention check.
3. We informed participants that the anonymization would be broken if they entered their e-mail, but that the person giving them the potential money won from the raffle would not know what decisions participants had made in the study. In study 1b, participants were not asked to enter their e-mail and the procedure ended after participants had rated the pictures.
4. The analyses based on the data including 404 participants revealed that the identifiable victim effect for the adult victim did not reach significance, $\chi^2(1, N = 203) = 3.101, p = .078$.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by the Swedish Research Council (VR) under Grant [Vetenskapsrådet 2014-1158]

ORCID

Hajdi Moche [http://orcid.org/0000-0001-8494-8701]
Daniel Västfjäll [http://orcid.org/0000-0003-2873-4500]

Data availability statement

The data sets for the three studies are publicly available at [https://osf.io/6akj7/].
References

Back, S., & Lips, H. M. (1998). Child sexual abuse: Victim age, victim gender, and observer gender as factors to contributing to attributions of responsibility. *Child Abuse & Neglect, 22*(12), 1239–1252. https://doi.org/10.1016/S0145-2134(98)00098-2

Chasteen, N. L., & Madey, S. F. (2003). Belief in a just world and the perceived injustice of dying young or old. *Omega: Journal of Death and Dying, 47*(4), 313–326. https://doi.org/10.2190/W7H7-TE9E-1FWN-B8XD

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

Dickert, S., Kleber, J., Västfjäll, D., & Slovic, P. (2016). Mental imagery, impact, and affect: A mediation model for charitable giving. *PLoS ONE, 11*(2), 1–16. https://doi.org/10.1371/journal.pone.0148274

Eagly, A. H., & Crowley, M. (1986). Gender and helping behavior: A meta-analytic review of the social psychological literature. *Psychological Bulletin, 100*(3), 283–308. https://doi.org/10.1037/0033-2909.100.3.283

Ein-gar, D., & Levontin, L. (2013). Giving from a distance: Putting the charitable organization at the center of the donation appeal. *Journal of Consumer Psychology, 23*(2), 197–211. https://doi.org/10.1016/j.jcps.2012.09.002

Erlandsson, A., Björklund, F., & Bäckström, M. (2014). Perceived utility (not sympathy) mediates the proportion dominance effect in helping decisions. *Journal of Behavioral Decision Making, 27*(1), 37–47. https://doi.org/10.1002/bdm.1789

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

Erlandsson, A., Lindkvist, A., Lundqvist, K., Andersson, P. A., Dickert, S., Slovic, P., & Västfjäll, D. (2020). Moral preferences in helping dilemmas expressed by matching and forced choice. *Judgment and Decision Making, 15*(4), 452–475.

Erlandsson, A., Nilsson, A., & Västfjäll, D. (2018). Attitudes and donation behavior when reading positive and negative charity appeals. *Journal of Nonprofit and Public Sector Marketing, 30*(4), 1–31. https://doi.org/10.1080/10495142.2018.1452828

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.

Genevsky, A., Västfjäll, D., Slovic, P., & Knutson, B. (2013). Neural underpinnings of the identifiable victim effect: Affect shifts preferences for giving. *Journal of Neuroscience, 33*(43), 17188–17196. https://doi.org/10.1523/JNEUROSCI.2348-13.2013

Goodwin, G. P., & Landy, J. F. (2014). Valuing different human lives. *Journal of Experimental Psychology. General, 143*(2), 778–803. https://doi.org/10.1037/a0032796

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

Jenni, K. E., & Loewenstein, G. (1997). Explaining the “Identifiable victim effect.”. *Journal of Risk and Uncertainty, 14*(3), 235–257. https://doi.org/10.1023/A:1007740225484

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
Langlois, J. H., Kalakanis, L., Rubenstein, A. J., Larson, A., Hallam, M., & Smoot, M. (2000). Maxims or myths of beauty? A meta-analytic and theoretical review. Psychological Bulletin, 126(3), 390–423. https://doi.org/10.1037//0033-2909.126.3.390

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

Lee, S., & Feeley, T. H. (2018). The identifiable victim effect: Using an experimental-causal-chain design to test for mediation. Current Psychology, 37(4), 875–885. https://doi.org/10.1007/s12144-017-9570-3

Li, M., Vietri, J., Galvani, A. P., & Chapman, G. B. (2010). How do people value life? Psychological Science, 21(2), 163–167. https://doi.org/10.1177/0956797609357707

Markowitz, E. M., Slovic, P., Västfjäll, D., & Hodges, S. D. (2013). Compassion fade and the challenge of environmental conservation. Judgment and Decision Making, 8(4), 397–406.

Moche, H., Erlandsson, A., Andersson, D., & Västfjäll, D. (2020, January). Opportunity cost in monetary donation decisions to non-identified and identified victims. Frontiers in Psychology, 10, 1–11. https://doi.org/10.3389/fpsyg.2019.03035

Rodriguez, E., & Pinto, J. L. (2000). The social value of health programmes: Is age a relevant factor? Health Economics, 9(7), 611–621. https://doi.org/10.1002/1099-1050(200010)9:7<611::AID-HEC540>3.0.CO;2-R

Siemer, M., & Reisenzein, R. (1998). Effects of mood on evaluative judgements: Influence of reduced processing capacity and mood salience. Cognition & Emotion, 12(6), 783–805. https://doi.org/10.1080/026999398379439

Slovic, P., Västfjäll, D., Erlandsson, A., & Gregory, R. (2017). Iconic photographs and the ebb and flow of empathic response to humanitarian disasters. Proceedings of the National Academy of Sciences, 114(4), 640–644. https://doi.org/10.1073/pnas.1613977114

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

Tsuchiya, A., Dolan, P., & Shaw, R. (2003). Measuring people’s preferences regarding ageism in health: Some methodological issues and some fresh evidence. Social Science & Medicine, 57(4), 687–696. https://doi.org/10.1016/S0277-9536(02)00418-5

van Leeuwen, M. H. D., & Wiepking, P. (2012). National campaigns for charitable causes: A literature review. Nonprofit and Voluntary Sector Quarterly, 42(2), 219–240. https://doi.org/10.1177/0899764012467084

Västfjäll, D., Slovic, P., Burns, W., Erlandsson, A., Koppel, L., Asutay, E., & Tinghög, G. (2016). The arithmetic of emotion: Integration of incidental and integral affect in judgments and decisions. [Review]. Frontiers in Psychology, 7(325), 1–10. https://doi.org/10.3389/fpsyg.2016.00325

Wiss, J., Andersson, D., Slovic, P., Västfjäll, D., & Tinghög, G. (2015). The influence of identifiability and singularity in moral decision making. Judgment and Decision Making, 10(5), 492–502.

Zagefka, H., Noor, M., Brown, R., Moura, G. R. D. E., & Hopthrow, T. I. M. (2011). Donating to disaster victims: Responses to natural and humanly caused events. European Journal of Social Psychology, 41(3), 353–363. https://doi.org/10.1002/ejsp.781