

Scope insensitivity in helping decisions: Is it a matter of culture and values?

Tehila Kogut¹, Paul Slovic^{2,3} & Daniel Västfjäll²

**Manuscript
January 2015**

Acknowledgements:

This research was supported by the National Science Foundation under Grant No. 1127509

- 1. Ben Gurion University**
- 2. Decision Research**
- 3. University of Oregon**

Corresponding author:

**Dr. Tehila Kogut,
Faculty of Humanities and Social Sciences
Department of Education &
Decision Making and Economic Psychology Center
Ben-Gurion University of the Negev
Beer-Sheva, Israel, 84105.
E-mail: Kogut@bgu.ac.il
Tel: 972-8-64618**

(c) 2015 APA, all rights reserved

doi: 10.1037/a0039708

This article may not exactly replicate the final version published in the APA journal. It is not the copy of record.

Scope insensitivity in helping decisions: Is it a matter of culture and values?

Abstract

The singularity effect of identifiable victims refers to people's greater willingness to help a single concrete victim, as compared with a group of victims experiencing the same need. We present three studies exploring values and cultural sources of this effect. In the first study, the singularity effect was found only among western Israelis and not among Bedouin participants (a more collectivist group). In study 2 individuals with higher collectivist values were more likely to contribute to a group of victims. Finally, the third study demonstrates a more causal relationship between collectivist values and the singularity effect by showing that enhancing people's collectivist values using a priming manipulation produces similar donations to single victims and groups. Moreover, participants' collectivist preferences mediated the interaction between the priming conditions and singularity of the recipient. Implications for several areas of psychology and ways to enhance caring for groups in need are discussed.

Key words: Singularity effect; identifiable victims; helping behavior; cultural differences; individualism; collectivism

Introduction

In today's world where communication is open and available almost anywhere, we regularly encounter information about human life in danger and people in need, including extensive humanitarian crises as well as touching stories describing specific individuals in need. How do we react to such tragic events? Which events are more likely to catch our attention and recruit our willingness to provide aid?

One might expect that extensive humanitarian crises involving a large number of people at risk would attract more attention and motivate greater willingness to help than a smaller number of people in risk, a family or one specific person in need. However, research in the last decade consistently shows that people are insensitive to the magnitude of quantitative outcomes in their willingness to support public causes and in moral decisions (e.g., Baron, 1997; Desvousges et al. 1993; Frederick & Fischhoff, 1998; Kahneman & Ritov, 1994). Particularly, Hsee & Rottenstreich's (2004) research supports the idea that subjective values are highly sensitive to the presence or absence of a stimulus (i.e., a change from 0 to some number) but are largely insensitive to further variations in scope, especially when affect-rich stimuli are considered.

Research on the identifiable victim effect indicates that this scope insensitivity is typical of people's evaluation of human lives, especially when the targets of help are identified (Kogut & Ritov, 2005a, 2005b; Slovic, 2007). According to research in the last decade, identified victims (victims about whom we have some information) evoke greater emotions and recruit greater willingness to help than unidentified victims (Jenni & Loewenstein, 1997; Small & Loewenstein, 2003; Small, Loewenstein, & Slovic, 2006). Moreover, a single identifiable victim evokes greater

Scope insensitivity in helping decisions

willingness to help than a group of people experiencing the same need (whether identified or not). In Kogut and Ritov's (2005a, b) research, for example, a single identified victim produced greater willingness to contribute and stronger affective reactions than an unidentified single victim, or a group of victims regardless of their being identified or not, demonstrating the "singularity effect"—the preference for helping a single identified victim, over a group of victims. Recently, Västfjäll, Slovic, Mayorga, & Peters (2014) showed that the effect of identification diminishes even with two victims.

Following the above results, Slovic (2007) describes a "collapse model" of people's response to numerous victims, suggesting that even with the transition from one to two victims, feelings and meaning begin to fade. As the group becomes larger and represented by numbers rather than images, these large numbers of victims represent dry statistics that fail to spark emotion and feelings and thus fail to motivate actions.

The tendency to respond with greater caring to a specific individual may be explained by the different cognitive processes that are involved in people's perceptions of single targets and groups (e.g. Hamilton & Sherman, 1996 ; Susskind et al. 1999). According to that line of research, a single individual, unlike a group, is viewed as a psychologically coherent unit. This leads to more extensive processing of information about individuals than about groups. Thus, people more readily make extreme attributions about individuals than about groups, they respond more quickly and with greater confidence when asked to make a judgment about an individual as compared with a group. These cognitive processes may increase caring and helping for single recipients (Kogut & Ritov, 2005a; Slovic, 2007). However, these cognitive

Scope insensitivity in helping decisions

mechanisms as well as the singularity effect in helping decisions were found mostly in western societies. It might be that the spontaneous emotional arousal evoked by the single identifiable victim and the preference to help such a victim more than a group of victims experiencing the same need is dependent on culture. Specifically, western societies' individualism (according to which the individual person is the purpose for which society exists; Triandis, 1995) may attract people's attention and enhance their caring for the one victim and less so when the target is a group. If that is the case, we would expect people in eastern societies with collectivist values or individuals in any culture with greater collectivist values (emphasizing the primacy of the group or community rather than each individual person; Triandis, 1995) to show no such preference and to provide similar amounts of help to groups of needy others.

Research examining the broad conceptualizations of individualism and collectivism has shown a host of differences between the two concepts in focus of attention, self-definitions, motivations, emotional connections to in-groups, as well as belief systems and behavioral patterns (Ho & Chiu, 1994; Oyserman et al., 2002; Triandis, 1995; Shavitt, Torelli, & Riemer, 2011; Triandis, Leung, Villareal, & Clack, 1985). Specifically in the context of helping behavior, research suggests that among other reasons, cultural values or norms may cause differences in willingness to help across different cultures (Levine, Norenzayan, & Philbrick, 2001). The important distinction between individualistic and collectivist cultures may explain the different psychological mechanisms that underline the decision to help.

Although helping behaviors are common and valued in both cultures, the motivation for such behaviors might be different (Barrett et al., 2004). Willingness to help in individualistic societies is likely to be compatible with individualistic values

Scope insensitivity in helping decisions

of self-determination, self-promotion, or self-actualization. For example, Kimmelmeier, Jambor, and Letner, (2006) have found higher levels of charitable giving and volunteering in individualistic states (as compared with more collectivist states) in the United States, especially when the causes were compatible with individualistic causes. Helping principals, according to which helpers' choose to whom to offer help, are expected to be more common in individualistic societies. Thus we expect people in individualistic societies to be more influenced by specific information about a person in need, whereas such factors may play a smaller role for people in collectivist societies. Moreover, the focus on the individual as the core of the society might increase willingness to help an individual person. On the other hand, collectivist societies are expected to show no such preference due to their emphasis of the group or community (Triandis, 1995).

From a cultural psychological perspective, individualism and collectivism are important constructs that capture fundamental differences in how people perceive the relationship between individuals and societies and whether individuals or groups are seen as the basic unit of analyses (Oyserman, Coon, & Kimmelmeier, 2002). Specifically, numerous researchers suggest the distinction between 4 components of cultural orientations (e.g. Singelis, Triandis, Bhawuk, & Gelfand, 1995; Triandis & Gelfand, 1998). According to this line of research, besides the distinction between individualism and collectivism, the distinction between horizontal and vertical culture-orientations plays a crucial role in determining culture differences. Horizontal orientation emphasizes equality as opposed to vertical orientation which emphasizes hierarchy. Both individualism and collectivism may be horizontal or vertical; thus 4 different cultural orientations may be diagnosed:

Scope insensitivity in helping decisions

Horizontal Individualism (HI) - assesses the extent to which individuals strive to be distinct without desiring special status. Horizontal Collectivism- assesses the extent to which individuals emphasize interdependence but "do not submit easily to authority." Vertical Individualism (VI) assesses the extent to which individuals strive to be distinct and desire special status. Finally, Vertical Collectivism (VC) assesses the extent to which individuals emphasize interdependence and competition with out-groups.

In our view, the preference to help the one identifiable victim over a group of several victims experiencing the same need is related to individualism's focus on personal goals over communal goals; i.e. the strive to be distinct (HI) and is less related to a desire for special status. Likewise, collectivists' emphasis on interdependence and relatedness to the in-group (rather than the competition with out-groups) is expected to mediate this preference; meaning that societies with higher HC values are expected to show no preference to the single individual victim and are expected to assign at least the same amount of resources to help a group of victims.

Besides differences between cultures, within-cultural variations in the extent to which individuals see themselves in terms of their relationships to others and to social groups, may be an important predictor of people's pro-social decisions (e.g. Brewer & Gardner, 1996; Oyserman, Coon, & Kimmelmeier, 2002). Individual differences between people with higher or lower degrees of individualist or collectivist values may influence reactions to single victims and groups in a similar manner; such that people with stronger personal horizontal-collectivist values (i.e. people with greater interdependence values) will be less affected by the singularity effect.

Overview of the studies

We examined these predictions in three studies, collecting real contributions to identified sick children in need of expensive medication. The first study is an explorative attempt to compare reactions of people from two different cultures to single victims and groups. One group is known for its collectivist culture and values and the other group is known as having a more individualistic values. The second study is a correlative one in which we examine the role of individual differences in horizontal and vertical collectivist and individualistic values in predicting contributions to individual victims and to groups of victims in need. Finally, in the third study we experimentally enhance the salience of individualistic or collectivist values, using a priming manipulation, after which participants had an opportunity to contribute either to a single victim or to a group of victims experiencing the same need. This manipulation allows us to examine more causal and direct relationships between collectivist and individualistic values and contributions to single victims and groups.

Study 1

The first study was conducted in order to examine our main hypothesis; namely, that the singularity effect of identified victims found in research conducted in western cultures, is more dominant among people who were brought up in individualistic cultures and weaker among those who were brought up in a more collectivist society. Participants in this study were Bedouin and western Israeli undergraduate students, all studying at the same faculty at the Ben-Gurion University in south Israel and were presented with a single identified sick child or a group of sick children (manipulated between subjects) in need of an expensive medication.

Scope insensitivity in helping decisions

According to Hofstede's individualism index (Hofstede, 1991) Israel (54) is just slightly above the median score in individualistic orientations. However, the Israeli society is a blend of individualistic and collectivist cultures; therefore this average reflects people on both ends of the index. Specifically, western Israelis grew up in a more individualistic society in small families with a focus on the parent-children relationship rather than the extended family. On the other hand, Bedouins in Israel are known for their collectivist culture and lifestyle (e.g., Hofstede, 2001, p. 243; Dwairy, 2004). Some of them still live in extended families, with many children and close ties to all other family members. In order to examine the differences between levels of horizontal and vertical individualism and collectivism among these two ethnic groups, a pilot study was conducted.

Pilot study

The pilot study included 64 Bedouins and 72 western Israeli students at the Ben Gurion University. Participants completed the horizontal-vertical individualism-collectivism scale developed by Triandis, and Gelfand, (1998). The original scale contains 27 items reflecting the 4 different constructs (5 HI, 8 VI, 8 HC and 6 for the VC subscales). In our study we used the 16 highest loading items obtained in Triandis, and Gelfand, (1998) analysis; four for each of the four factors: Vertical-collectivism (e.g. "Parents and children must stay together as much as possible"); Horizontal-collectivism, (e.g. "If a coworker gets a prize, I would feel proud"); Vertical-individualism (e.g. "It is important that I do my job better than others"); and Horizontal-individualism (e.g. "I'd rather depend on myself than others"). To see the list of all 16 items, see Triandis & Gelfand, 1998, Table 2, P.120. This scale is widely used to examine individual differences in collectivism and individualism and was

Scope insensitivity in helping decisions

validated in many cross cultural studies (e.g. Chen, 2007; Chiou, 2001). In the present study *Cronbach's alphas* for the collectivist scales were .74 and .76 for the HC, and the VC scales respectively; and lower for the individualistic scales .50, and .60 for the HI, and the VI scales respectively (note that each scale includes only 4 items).

Results

We conducted 4 independent sample T-tests to examine the differences between the two origin-groups (western Israelis and Bedouins) in ratings of the four sub-scales. Results reveal significant differences between ratings of the two collectivist sub-scales: $t(134)=2.29$, $p=.024$, Cohen's $d =.39$ and $t(134)=5.3$, $p<.001$, Cohen's $d=.91$ for the HC and VC scales respectively; such that the Bedouins' ratings were higher than the western Israelis' ($M=5.21$ $SD=.62$ vs. $M=4.96$ $SD=.64$ and $M=5.49$ $SD=.48$ vs. $M=4.89$ $SD=.75$ in the HC and VC scales respectively). No significant differences were found between western Israelis' and Bedouins' ratings in the two individualistic scales ($M=4.43$ $SD=.72$ vs. $M=4.52$ $SD=.83$; $t(134)=.67$, $p=.50$, Cohen's $d =.12$ in the HI scale and $M=3.94$ $SD=.93$ vs. $M=4.10$ $SD=.77$; $t(134)=1.08$, $p=.28$. Cohen's $d =.19$ for the VI scales). Results of independent t-tests to examine the overall differences between the two origin groups in collectivists and individualistic values (mean of the 8 items in each scale) reveal similar results, suggesting that the two groups significantly differ in levels of collectivist values $t(134)=4.63$, $p<.001$, Cohen's $d=.79$; while no significant difference was found between levels of individualistic values in the two groups $t(134)= 1.14$, $p=.25$, Cohen's $d =.20$.

Scope insensitivity in helping decisions

In summary, the results of the pilot study suggest that the Bedouin students express higher collectivist values than the western Israelis (both horizontal and vertical); while the two groups express similar levels of the two individualistic values. These results may demonstrate that although the Bedouin society in Israel (and especially young students) has been through a process of assimilations in the western Israeli individualistic culture and expresses similar degrees of individualistic values as western Israelis, they still hold the more collectivist values of their culture.

Main study 1

Participants in the main study were Bedouins and Western Israeli students from the same backgrounds as the participants in the pilot study. They were all presented with either single victims or groups of eight victims from their respective ethnicity (in-group) in need of an expensive medication and had a real opportunity to contribute money to save the victim/s' lives.

Method

One hundred and twenty four undergraduate students at the Ben Gurion University (61% of whom were females¹, mean age=23, $SD=2.90$) participated in the study at the end of classes or while working individually at the library. Fifty seven participants were western Israeli students, while sixty seven were Bedouin students. Participants were told that the experimental session includes several unrelated questionnaires, for which they would receive ten shekels. Participants first received the money (given in one shekel coins) and then received a short booklet of questionnaires, which included the questionnaire for the current study.

¹ Statistical analyses revealed no significant gender differences in any of the variables examined, and none of the interactions between gender and the other variables were significant.

Scope insensitivity in helping decisions

Participants were randomly assigned to one of the two experimental conditions manipulating the singularity of the victim: a single identified victim vs. a group of eight identified victims. All participants read the same basic story adapted from Kogut and Ritov (2005a) describing a sick child or a group of 8 sick children, being treated in a medical center, whose lives are in danger. In order to increase the participants' identification with the victims, the victims were always introduced as members of the same origin (ethnic group) as the participant such that western Israelis read about sick western Israeli children while the Bedouin participants read about sick Bedouin children². In addition, the questionnaires were given to the participants in their own native language such that western Israelis read the questionnaire in Hebrew and the Bedouin participants read the same description in Arabic³. Next, the questionnaire reported that: “recently a new drug was developed that cures the disease. Unfortunately this drug is extremely expensive, and unless a sum of 1,500,000 Shekels (about \$500,000) is raised soon, it will no longer be possible to save the lives of the sick children [sick child]”.

We used two group portraits each with eight children (four boys and four girls) for the identification of the group; one presented Bedouin children and the other presented western Israeli children. In the single victim condition we used two individual portraits (one boy and one girl) that were cut out of each of the group portraits; such that participants in the single victim condition saw one of the two children randomly (a boy or a girl from their respective ethnic in-group). In addition, the name/s of the children were given. After reading about the children's plight,

² The singularity effect of identifiable victims may be restricted to in-group victims (see Kogut & Ritov, 2007)

³ The questionnaires were translated independently by two Bedouin students and were checked by a third Bedouin student to ensure full agreement.

Scope insensitivity in helping decisions

participants were asked whether they were willing to contribute money to help save the victims' lives. If they responded in the affirmative, they could contribute any amount of money they wished. In particular, they could donate any part of the ten shekels they had received in payment for their participation in this study, or they could donate a higher sum by adding as much as they wanted to. Subjects were instructed to put the questionnaire, together with the donation (if any) in a sealed, unmarked envelope. All the money raised in this study was transferred by the experimenter to the Hayim Association, an Israeli organization that helps children with cancer.

Results and Discussion

Participants' contributions ranged between 0 (26 participants) to 80 shekels (1 participant), $M=7.28$, $SD=8.46$. Contributions for the two single identified victims (the boy and the girl within each ethnic group) did not significantly differ; hence responses in the single victim condition were averaged across the two victims. Since the contributions did not distribute normally (skewness=5.33), and due to the use of an open-ended scale (with 9 contributors giving more than the 10 shekels received for participation), we report in all three studies the analyses of the log-transformed contributions. To ensure that the transformation will distinguish between contribution of 0 (no contribution) and contributions of small amounts (1 shekel) we first added 1 to all contributions and then conducted the log transformation. In addition, the analyses on real contribution amounts are reported in footnotes and reveal similar results. Results of a two way ANOVA with subjects' origin (western Israelis vs. Bedouins) and the victims' singularity (single vs. group) as the between-subject factors reveal no significant main effect of subjects' origin (western Israelis vs.

Scope insensitivity in helping decisions

Bedouins; $F(1,120)=.07$, $p=.78$, $\eta_p^2=.001$). The main effect for singularity was significant $F(1,120)=5.01$, $p=.027$, $\eta_p^2=.04$, such that overall single victims ($M=.80$, $SD=.43$) received greater contributions than groups of eight victims ($M=.64$, $SD=.46$). However, this effect was qualified by a significant two way interaction between the two independent variables $F(1,120)=4.37$, $p=.039$, $\eta_p^2=.04$. As can be seen in Figure 1, simple effect tests reveal that the single victim received significantly higher contributions ($M=.91$, $SD=.38$) than the group of victims ($M=.56$, $SD=.49$) only for western Israeli subjects ($p=.004$, effect size $d=.80$) but not for the Bedouins participants (Single victims $M=.72$, $SD=.46$; groups $M=.71$, $SD=.42$; $p=.91$, effect size $d=.04$). Looking at contributions to groups, no significant difference was found between donations by western Israelis and Bedouins ($p=.21$, effect size $d=.33$); while in the single victim condition the difference between donations by western Israelis and Bedouins approached significance ($p=.09$, effect size $d=.55$).

----Insert Figure 1 about here----

Our explorative examination in study 1 gives initial support to the idea that the singularity effect is less dominant in collectivist cultures or among individuals with collectivist values as compared with people with lower collectivist values. Unlike typical studies that examine cultural differences by comparing different cultures (e.g. American and Japanese) who may differ in many other variables besides individualism collectivism, participants in our study were all Israelis and grew up in the same political and pop cultural landscape and currently attend the same university. This likely yields fewer additional variables confounded with collectivism versus individualism and strengthens the assumption that the different reactions observed in

the donation pattern stem from the different cultural backgrounds. However, the two groups may still differ in characteristics other than individualistic/collectivist values. In addition, the role of the collectivist scale in explaining the different donation patterns is yet to be examined, because in study 1 different samples of participants completed the collectivist scale and made the donation decision. In the next study we measure individual differences in horizontal and vertical individualistic and collectivist values and examine their role in predicting contributions to single victims and groups.

Study 2

Method

One hundred and four undergraduate students from Ben-Gurion University participated in the study (66% females, mean age 24.32, SD= 1.98). To avoid possible confounds all participants in this study were western Israelis. The study was conducted in two different sessions. At the beginning of the semester participants completed a booklet of questionnaires at the end of an introductory class in return for course credit. One of the questionnaires was the 16 items horizontal-vertical, individualism-collectivism scale adopted from Triandis, and Gelfand, (1998) as described in the pilot study. In the present study *Cronbach's alphas* were .71, .60, .75, and .76 for the HI, VI, HC, and the VC scales respectively. The other questionnaires in the booklet belonged to another unrelated study. Three months later the participants completed the second part of the study for which they were paid 10 Shekels. The participants were not aware to the fact that the two parts were related. The method of

the second part of the study was the same as the one used in study 1⁴, in which participants read about the one or the group of eight children in need of expensive medicine and had an opportunity to donate money to help the victim/s in a sealed envelope.

Results and Discussion

Participants' contributions ranged between 0 (31 participants) to 25 shekels, $M=5.89$, $SD=5.46$. As in the previous study, here too contributions did not distribute normally and the scale was open ended (7 participants contributed more than 10 shekels), thus we report the analyses of the log-transformed contributions using the same method described in study 1. Overall contributions to the single identified victim ($M\text{-log}=.77$, $SD=.41$) exceeded contributions to the group ($M\text{-log}=.51$, $SD=.48$), demonstrating the singularity effect [$t(102)=2.98$, $p=.004$, *Cohen's d* =.59].

We first examine the role of general collectivist and individualistic values (beyond the horizontal and vertical sub-scales) in predicting donations to single victims and groups. A simple regression analysis on log transformation of donations was conducted with the two sub-scales and the singularity of the victim, as well as all two way interactions as the predictors. The model reveals significant results $F(5,98)=6.44$, $p=.001$, and accounted for 24.7% of the donation variance. Both the role of the collectivist and the individualistic scales were significant, such that collectivist values were associated with overall higher donations ($t = 3.66$, $\beta=.46$, $p=.001$), while individualistic values were associated with overall lower donations ($t = -2.60$, $\beta=-.34$, $p=.011$). The interaction between the singularity of the victim and

⁴ Since there was no difference between contributions to the boy and the girl presented in the single victim condition in study 1, in this study we used the boy's picture only in this condition.

Scope insensitivity in helping decisions

individualistic values was not significant ($t=1.56$, $\beta=.94$, $p=.12$). However, the interaction between the singularity of the victim and collectivist values was significant ($t = 2.51$, $\beta=1.89$, $p=.014$). Simple regression analyses on log contributions conducted on the single victim condition and on the group condition separately, with the collectivist scale as the predictor revealed significant results only in the group condition $F(1,49)=13.36$, $p=.001$ and contributed 21.4% of the donation variance in this condition. In the single victim condition no significant results were found $F(1,51)=.036$, $p=.85$, $R^2=.001$. To examine the unique role of personal horizontal and vertical individualistic and collectivist values in predicting donations to the single victim and to the group, another simple regression analysis was conducted on the log transformation of donations, with the five main effects (the singularity of the victim, HI, VI, HC, VC) and the two way interactions between singularity and each of the sub-scales as the predictors. The model reveals significant results $F(9,94)=3.98$, $p=.001$, and contributed 27.6% of the donation variance. The contribution of the HC scale was significant suggesting an overall positive correlation between HC and donations ($t=2.56$, $\beta=.39$, $p=.01$). The contribution of the HI scale approached significance, suggesting an overall negative correlation between HI and donations ($t = -1.90$, $\beta=-.25$, $p=.061$). The results for VC ($t=1.18$, $\beta=.17$, $p=.24$) and VI ($t=-.74$, $\beta=-.10$, $p=.46$) were not significant. Most importantly, the interaction between the HC scale and the singularity of the victim significantly contributed to the model ($t = 2.61$, $\beta=2.06$, $p=.01$). This interaction was plotted in Figure 2 according to the recommendation of Aiken and West (1991), one SD above the mean of the collectivism scale and one SD below that mean in each condition (single victim and group of victims). A simple regression analysis on log contributions conducted on the

Scope insensitivity in helping decisions

single victim condition and on the group condition separately, with HC scale as the predictor revealed significant results only in the group condition $F(1,49)=15.77$, $p=.001$ and contributed 24.3% of the donation variance in this condition. In the single victim condition no significant results were found $F(1,51)=.40$, $p=.53$, $R^2=.008$ ⁵. The other interactions did not have a significant contribution to the model ($t=1.65$, $\beta=.91$, $p=.10$ for the interaction between singularity and HI: $t=-.19$, $\beta=-.13$, $p=.85$ for the interaction with VC and $t=-.20$, $\beta=-.11$, $p=.84$ for the interaction between singularity and VI).

----Insert figure 2 about here----

As can be seen in the figure, the singularity effect is more pronounced for people who score lower on the horizontal-collectivist scale than for people who score higher on this scale. Moreover, HC enhances contributions to a group of victims and has no effect on contributions to single individuals.

The results of the second study provide strong evidence for our hypothesis that the singularity effect is less pronounced in helping decisions made by people with

⁵ Repeating the same regression analysis on the raw donation amounts reveals similar results: Specifically, the interaction between HC scale and the singularity of the victim approached significance, $t = 1.90$, $\beta=1.58$, $p=.06$. Here too, a simple regression analysis reveals significant results only in the group condition $F(1,49)=14.70$, $p<.001$, $R^2=.23$ and not in the single victim condition $F(1,51)=.001$, $p=.98$, $R^2=.001$.

A regression analysis with the singularity of the victim, the collectivist scale (mean of the 8 collectivist items) and individualistic scales (mean of the 8 individualistic items) as well as the interactions between singularity and the two scales, reveals significant results $F(5,98)=6.44$, $p=.001$, and contributed 24.7% of the donation variance; with a significant interaction between the collectivist scale and the singularity of the victim ($t = -2.51$, $p=.014$).

Scope insensitivity in helping decisions

higher collectivist values in general, and more specifically people with higher horizontal collectivist values (as compared with people with lower collectivist values). People with stronger overall collectivist values and HC values in particular donated similar amounts to single victims and groups; while people with lower collectivist values (and specifically lower HC values) decreased giving when the victim was a group. Importantly, the individualistic scales did not significantly interact with the type of victim (single or group), suggesting that the singularity effect is more affected by collectivist values rather than by individualistic values. Donations to single victims were not significantly affected by individualistic or collectivist values. These results may suggest that the spontaneous reaction toward single victims is not dependent on individualistic or collectivist values. As suggested by Kogut & Ritov (2005) the singularity effect may stem from the different cognitive mechanisms underlying our perceptions of single persons and groups (e.g. Hamilton & Sherman, 1996; Susskind et al. 1999). The extensive processing of information about individuals (as compared with the processing of information about groups) may increase caring and helping single recipients for both individualistic and more collectivist individuals. On the other hand, collectivist values may increase interdependence and caring for groups.

Individualism and collectivism may be conceived as opposite ends of the same underlying continuum. However, our findings are in line with the notion that at the individual level of measurement, a multidimensional view of individualism and collectivism is more appropriate (Leung, 1989; Triandis, 1989).

The findings that the individualistic scale was negatively correlated with donations are at odds with Kemmelmeier et al. (2006) who found higher levels of charitable giving in individualistic states (as compared with more collectivist states) in

the United States. There might be several reasons for this discrepancy: First, Kimmelmeier's et al. research examined the state level as compared with the investigation of the individual level in the current study. Second, Kimmelmeier's et al. used a continuum scale with individualism and collectivism as opposite ends, while the current research treated individualism and collectivism in a multidimensional view using different scales for each. Finally, Kimmelmeier et al. suggest that individualism is positively related to charitable giving mostly for causes that are compatible with core individualist values. In their study the data describes people's natural behavior during the year. Hence participants were free to choose if, when and how much to donate at any moment. In the current study participants were asked to donate to one cause, during the time of the experiment. This type of request is less compatible with individualistic values according to which people are free to choose the targets of help and the goals that are perceived most important to them. It might be that confronting participants with such a direct request resulted with the negative correlation between individualistic values and donations.

In the third study we examine more causal relationships between collectivist / individualistic values and the singularity effect by activating these values using a priming manipulation.

Study 3

Besides the more global social values (more independent values in individualistic cultures as opposed to more interdependent values in collectivist cultures; Markus & Kitayama, 1991), immediate influences in the social situation may temporarily shape people's immediate values. A number of studies have shown that values like individualism–collectivism may be situationally primed, so that a

Scope insensitivity in helping decisions

particular set of values becomes salient to the subject (e.g., Brewer & Gardner, 1996; Gardner, Gabriel, & Lee, 1999; Goncalo & Staw, 2006; Oyserman, Coon & Kimmelmeier, 2002). Thus for example, when collectivist values were primed, European and North American students mentioned more group attributes and fewer personal attributes as compared to a condition in which individual values were primed (Gardner et al., 1999). In a meta-analytic review Oyserman and Lee (2008) describe the most common priming techniques used to study culture influences. In one of the most common techniques participants are asked to write about their similarities or their differences with friends and family (e.g., Trafimow, Triandis & Goto, 1991). Another common task includes participants reading a passage with either singular (I, me, mine) or plural first-person (we, us, our) pronouns asking them to circle these pronouns (e.g., Gardner, Gabriel, & Lee, 1999). Oyserman and Lee (2008) conclude that activating the concepts “I” and “we” activate relevant values, ways of describing oneself, and engagement with others (p. 316). Such priming manipulations may help to examine more causal direct relationships between collectivist and individualistic values and behaviors.

In the current study we aim to demonstrate causal relationships between individualistic vs. collectivist values and the singularity effect by using such a priming manipulation and confronting participants with either a single victim or a group of victims experiencing the same need. Specifically, we sought to use a priming assignment that would activate horizontal-individualism (i.e. activate individuals' independent and distinctive aspects of self without desiring special status) and horizontal-collectivism (i.e. activating individuals' interdependent aspects of self without the aspect of being submitted easily to authority). Hence, we combined the

Scope insensitivity in helping decisions

two common priming techniques described above by asking participants to write either about themselves (using the words I, me or mine) or about a significant reference group, such as their family or another meaningful group (using the words we, us, our). We did not ask participants to write about their similarities or their differences to friends and family since we suspected that this will also manipulate closeness/distance from others and may reduce overall donations in the prime individualistic conditions. Perceptions of similarity tend to increase relatedness to another person leading to greater subsequent helping behavior (e.g. Cialdini et. al. 1997). The opposite pattern is expected when increasing perceptions of dissimilarity (possibly leading to less helping behavior).

Method

One hundred and twenty four undergraduate students from the Ben-Gurion University participated in the study at the end of classes or while working individually at the library (59% females, mean age 23.94, SD=2.14) in return for 10 shekels as payment. Participants were told that they would complete two unrelated short questionnaires that were gathered for reasons of convenience. They received the questionnaire in an envelope with their payment (given in one shekel coins). They randomly received one of the six versions of the questionnaire (priming collectivist values, individualistic values, or a control condition and introducing a single victim or a group of 8 victims) and were asked to complete the questionnaire accordingly, without referring to previously completed pages.

On the first part of the questionnaire participants completed the priming manipulation. Participants in the prime individualism condition (IND-prime) were asked to write 7 sentences describing themselves. They were instructed to use at least

Scope insensitivity in helping decisions

one of the words "I", "me" or "mine" in each sentence. Participants in the collectivism priming condition (COL-prime) were asked to write 7 sentences describing a significant reference group (such as their family or another meaningful group). They were instructed to use at least one of the words "we", "us" or "ours" in each sentence. Participants in the control condition did not receive this part of the questionnaire.

The next page included a manipulation check in which participants read: "Most people perceive their independence and individuality as important. In addition, people find it important to belong to meaningful groups such as a family or a community. In the following question we ask you to indicate the relative weight of each of these two values for you personally." Participants then rated their preference on a 5 point scale ranging from 1- independence and individuality (individualistic preference) to 5 - family and community (collectivist preference). They could also choose the mid-point (3) if they care for the two values equally. This manipulation check reflects horizontal-individualism and collectivism, referring to independent and distinctive values vs. interdependent values (without a reference to special status or authority). Since individualistic / collectivist priming methods may have various different consequences (Oyserman and Lee, 2007), the manipulation check is especially important to examine whether our goal - to activate individualistic vs. collectivist values- was achieved. Specifically, the manipulation check was based on questions from Triandis, and Gelfand's (1998) horizontal-individualism and horizontal-collectivism scales used in the previous studies. For example "My personal identity, independent of others, is very important to me" from the HI scale and "I feel good when I cooperate with others" from the HC scale.

Scope insensitivity in helping decisions

After completing this assignment participants read the story of the sick child or the eight sick children in need of expensive medicine (used in the previous study), and had the opportunity to contribute money to help save the victims' lives. Participants could contribute any amount of money they wished. They were instructed to put the questionnaire, together with the donation (if any) in the envelope which they received at the beginning of the experiment.

Results and Discussion

Manipulation check: we first examined whether participants' preferences toward individualistic or collectivist values differ by condition. As expected, results of an independent t-test on participant's responses to the manipulation check question in the two priming conditions reveals a significant difference between IND-prime condition ($M= 2.83$, $SD=1.32$) and COL-prime condition ($M= 3.51$, $SD=1.33$); [$t(74)=2.21$, $p=.03$; Cohen's $d=.51$]. The results of a one way ANOVA on participants' ratings by the three priming conditions approached significance $F(2, 118) =2.61$, $p=.078$; $\eta_p^2=.04$. Post hoc comparisons reveal that only the above mentioned difference between COL-prime and IND-prime was significant while the control condition ($M=3.17$, $SD=1.21$) was in-between the two other conditions and did not significantly differ from either of them ($p=.24$, effect size $d=.28$ for the difference between the control condition and the IND-prime and $p=.24$, effect size $d=.26$ for the difference between the control condition and the COL=prime respectively).

Participants' contributions ranged between 0 (28 participants) to 25 shekels, $M=7.89$, $SD=5.90$. As in the previous studies, here too contributions did not distribute normally, and 14 of the participants donated more than the 10 shekels received for

participation, thus we report the analyses of the log-transformed contributions as in the previous studies.

A two-way ANOVA on log donations with the two independent variables (the priming manipulation and the singularity of the victim) was conducted. No significant main effects were found. However, the interaction between the two variables was significant [$F(2, 118) = 3.06, p = .05, \eta_p^2 = .05$]. As can be seen in Figure 3, simple effect tests reveal that the singularity effect was found under the IND-priming condition, where single victims ($M = 1.00, SD = .29$) received higher donations than did groups ($M = .70, SD = .51; p = .037$; effect size $d = .73$) and in the control condition, under which single victims ($M = .80, SD = .51$) received higher donations than did groups ($M = .62, SD = .50$; this difference did not approach significance $p = .17$; effect size $d = .35$). Finally, the opposite pattern occurs under the COL-priming condition where groups received higher donations ($M = .87, SD = .36$) than did single victims ($M = .69, SD = .46$); this difference did not approach significance ($p = .19$, effect size $d = .43$). Results of a one way ANOVA on contributions to single victims as a function of the three priming conditions approached significance $F(2, 60) = 2.58, p = .08; \eta_p^2 = .08$. Post-hoc comparisons reveal a significant difference only between individualistic and collectivist priming ($p = .03$; effect size $d = .80$); while the control condition did not significantly differ from the two priming conditions ($p = .14$, effect size $d = .47$ for the difference between the control and the IND-priming condition; $p = .42$, effect size $d = .27$ for the difference between the control and the COL-priming condition). A one way ANOVA on contributions to groups by the three priming

Scope insensitivity in helping decisions

conditions reveals no significant results $F(2, 59) = 1.58, p = .21; \eta_p^2 = .05$.⁶ Most importantly, an ANOVA of log-donations with singularity and the two priming conditions (without the control group) reveals a highly significant interaction between priming and singularity [$F(1, 75) = 6.61, p = .012, \eta_p^2 = .081$].

We next examine the role of participants' ratings of their preferences toward individualistic or collectivist values - assessed by the manipulation check question (hereafter INV-COL ratings) - in explaining the above interaction. A regression analysis on log-donations with INV-COL ratings, singularity and the interaction between them reveals significant results [$F(3, 117) = 3.84, p = .012$] and contribute 9% of donation variance. Both the role of the singularity of the victim ($t = 1.96, \beta = .46, p = .053$) and the interaction between singularity and INV-COL ratings ($t = 1.67, \beta = .55, p = .097$) approached significance. Simple regression analyses conducted separately on donations to single victims and to groups with INV-COL ratings as the predictor reveal no significant results in the single victim condition [$F(1, 58) = .59, p = .44, r^2 = .01$]. However, INV-COL ratings significantly predicted donations to the group [$F(1, 59) = 8.93, p = .004$] and contributed 13% of donation variance in this condition. In addition, we conducted a moderation-mediation analysis on log-donations (Preacher, Rucker, & Hayes, 2007, model 2), with the priming condition as the independent variable, singularity as the moderator, and INV-COL ratings as the mediator. The interaction between singularity and INV-COL ratings was significant ($t = 3.13, p = .002$). Moreover, results of the indirect effect on the two levels of

⁶ Analysis of actual donation amounts revealed similar results with a significant interaction between the priming manipulation and singularity [$F(2, 118) = 3.06, p = .05, \eta_p^2 = .047$].

Scope insensitivity in helping decisions

singularity approached significance when the target of help was a group ($Z=1.85$, $p=.06$); while in the single victim condition no significant results were found ($Z=.33$, $p=.74$). These results show that collectivist (as opposed to individualistic) values mediate the interaction between the priming conditions and singularity, indicating that collectivist values mediate the relationship between the priming manipulation and donations only in the group condition, and did not play a significant role when a single recipient was presented.

----Insert Figure 3 about here----

The results of study 3 give further support to the idea that the singularity effect is less likely to occur for people who hold strong collectivist values (or primed to those values) than for people who hold more individualistic values. While participants under the IND-prime condition donated higher amounts to a single identified child, participants under the COL-priming condition showed no such preference and tended to donate more money to the group of sick children. Moreover, results of the moderation mediation analysis suggest that collectivist values (which were higher under the prime collectivism condition) enhance donations to groups. This experimental study suggests more causal relationships between the singularity effect and individualistic vs. collectivist values. Moreover, since the manipulation check was based on items from Triandis, and Gelfand's (1998) individualism and collectivism scales (used in the first two studies), the results of study 3 give further support to the idea that collectivist values moderate the singularity effect by enhancing donations to groups. Having said that, we note that the manipulation check scale allowed

participants to indicate that the two values are equally important or unimportant to them; however, it did not distinguish between these two possible options. Still the information regarding the relative preference for one of the values was provided.

General discussion

The results of the three studies presented support the idea that the singularity effect (the preference for helping one identified victim more than a group of victims experiencing the same need) is more dominant in individualistic cultures or among people who hold individualistic values than in collectivist cultures, or among people with higher collectivist values. In the first study, the singularity effect was found only among the western Israeli students (the more individualistic group) and not for the Bedouin students (the more collectivist group), who showed no significant difference in their contributions to a single child and a group of eight sick children. The second study shows that although the singularity effect occurs overall for western participants, the effect is more pronounced with lower collectivist individuals. People with lower collectivist values exhibit the singularity effect by donating more money to one identified child than to a group of children, while people with higher collectivist values contributed similar amounts to single victims and to groups. Study 3 provides more causal, direct relationships between collectivist and individualistic values and donations to single victims and groups; demonstrating that when enhancing people's collectivist values situationally using a priming manipulation, people donate similar amounts of money to a group of people than to single individuals (or even tend to donate more to a group). The results of the moderation-mediation analysis using the manipulation check, which was based on items from Triandis and Gelfand's (1998)

Scope insensitivity in helping decisions

scale, suggest that collectivist values play a significant role in explaining the above pattern.

The differences found between the two ethnic groups in study 1 are consistent with the important line of research started by Markus and Kitayama (1991), emphasizing that growing up in individualistic versus collectivist cultures influences ideology and beliefs, and shape people's values and social decisions. However, as suggested by other researchers (e.g. Brewer & Gardner, 1996; Oyserman, Coon, & Kemmelmeier, 2002), in addition to such differences between cultures, we found that within-cultural variations between people with higher or lower degrees of individualistic vs. collectivist values influence reactions to single victims and groups as well. Specifically, the results of the second study suggest that when encountering a group of people in need, individuals with higher collectivist values are likely to contribute more than those who hold lower collectivist values.

Although our results suggest that collectivist values in general are related to greater willingness to donate to groups of victims, our study demonstrates the importance of the distinction between horizontal and vertical collectivism and individualism (e.g. Singelis et al. 1995; Triandis & Gelfand, 1998). Specifically, we found that horizontal collectivism, representing the extent to which individuals emphasize interdependence, but not their tendency to submit to authority, increases donations to groups.

The question of what motivates people to help others without expectation of reward has been of great interest to social psychologists in the last decades. Specifically this research examines personal factors (e.g. the altruistic personality, Oliner & Oliner, 1988; personal value orientations, Van Lange et al., 2007),

Scope insensitivity in helping decisions

situational factors (e.g. the bystander effect, Latané and Darley 1968; incidental mood, Isen, 1984) and societal factors such as norms (e.g. Simon, 1990) that may increase or decrease pro-social behaviors. Our study contributes to this extensive line of research by examining the interaction between two main characteristics on helping behavior: the victim's singularity (a situational factor) and the helper's individualistic vs. collectivist values (personal and societal factors) suggesting that motivation to help may be dependent on the interaction between these two variables. In addition, the '*empathy-altruism hypothesis*' (e.g. Batson, 1987) posits that real altruistic motivation stems from empathic concern (other-oriented emotions elicited by and congruent with the perceived welfare of someone else; like sympathy, caring and concern for the other). The singularity effect suggests that empathic concern is more likely to emerge when a single specific target of help is available.

The current research raises the question of whether the tendency to feel greater empathy toward a single recipient is cultural dependent and raises the question of whether we can impart feelings for groups in need. Besides the contribution to the social psychological literature on pro-social behavior and to cultural psychology (addressing the important role of individualistic and collectivist values in helping decisions) we offer insights and future directions to various areas of psychological research including behavioral economics, cognitive psychology and developmental psychology as we discuss in the following paragraphs.

Behavioral economists have paid much attention to altruism and pro-social behaviors in the last few decades, in part due to the growing body of experimental evidences indicating that people are strongly motivated by other-regarding preferences like fairness and social norms in their resource allocation decisions (e.g.

Scope insensitivity in helping decisions

Fehr & Schmidt, 1999; 2003). These findings contradict traditional models that view human behavior as purely self-interested. Cooperation, the provision of public goods, charitable-giving, and informal helping behaviors are all difficult to explain in self-interested terms. The singularity effect contradicts rational economic thinking according to which one should save as many people as possible given a fixed amount of money. Our study suggests that one should pay careful attention to cultural aspects when trying to understand and predict social preferences in economic exchange situations pertaining individual recipients and groups.

As mentioned earlier, the singularity effect may be explained by the different cognitive processes that are involved in people's perceptions of single targets and groups found in western societies (e.g. Hamilton & Sherman, 1996; Susskind et al. 1999). While these cognitive studies show that people perceive single individuals as a more psychologically coherent units than groups, it may be that collectivists' perceptions of groups (especially small groups, belonging to their own nationality and ethnicity) are more coherent, leading to greater confidence when making judgments and decisions about groups; which may in turn increase their helping behavior. Future cognitive research should examine these assumptions by comparing processing of information regarding single individuals and groups in collectivist vs. individualistic cultures.

Our research addresses questions fundamental to understanding what motivates people to provide charitable aid and humanitarian assistance to human beings in need. Research on the development of pro-social behavior has struggled with the question of whether these processes are genetic (inborn) and what is the relative role of society, education and socialization processes in the development of

such behaviors (e.g. Eisenberg & Fabes, 1998; Knafo, & Plomin, 2006). Our findings are congruent with the notion that beyond genetic factors, cultural and educational factors play an important role in shaping people's reactions to the needs of others and raise the important question of whether we can impart the feelings that are needed for rational action, enhancing caring for groups in need. In ongoing research we are examining the development of the singularity effect among children suggesting that the tendency to provide more resources to single identifiable targets develops around the age of 7, when children tend to feel more obliged to behave according to social norms (e.g. Kogut, 2012).

The current research examined the influence of individualistic and collectivist values on willingness to help single victims and groups. However, the victims we introduced to the participants in our studies always belonged to the perceivers' ethnic in-group (western Israelis were introduced with western Israeli sick children; while the Bedouin participants saw Bedouin sick children). Recent research examining the role of social categorization as a constraint on the effect of victim identifiability has found that in some social settings identifiable single victims received more donations only if they were members of the perceivers' in-group (Kogut and Ritov, 2007). In other settings (such as when groups are in conflict), single identified victims received more donations only if they were not members of the perceivers' in-group (Ritov and Kogut, 2011). In ongoing research we are studying reactions of people from collectivist societies to single and group victims who belong to their in-group and those that may be perceived as out-group. We examine whether the reaction to the two targets differs when perceived as in-group or out-group. Specifically, it might be that collectivists' greater willingness to help groups is restricted to in-group victims.

Scope insensitivity in helping decisions

Small, Lowenstein and Slovic (2006) attempted to interfere in the spontaneous reaction toward the identifiable victim by teaching people about the effect and encouraging them to think analytically about the greater value of more lives at risk. They showed that engaging in a deliberative mode of thought decreases contributions to single victims. However, no increase in contributions to groups was observed. Our research suggests that increasing collectivist values (specifically, interdependence values) may enhance caring for groups without a reduction in donations to single individuals.

References

- Aiken, L. S., & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Newbury Park: Sage.
- Baron, J. (1997). Biases in the quantitative measurement of values for public decisions. *Psychological Bulletin*, *122*, 72–88.
- Barrett, D. W., Wosinska, W., Butner, J., Petrova, E., Gornik-Durose, M., & Cialdini, R. B. (2004). Individual differences in the motivation to comply across cultures: The impact of social obligation. *Personality and Individual Differences*, *37*, 19–31.
- Batson, C. D. (1987). Prosocial motivation: Is it ever truly altruistic? In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 20, pp. 65-122). New York: Academic Press.
- Brewer, M. B., & Gardner, W. (1996). Who is this “we”? Levels of collective identity and self representations. *Journal of Personality and Social Psychology*, *71*, 83–93.
- Cialdini, R. B., Brown, S. L., Lewis, B. P., Luce, C., & Neuberg, S. L. (1997). Reinterpreting the empathy-altruism relationship: When one into one equals oneness. *Journal of Personality and Social Psychology*, *73*, 481-494.
- Chen, G. H. (2007), Evaluating the Individualism and Collectivism Scale for Use in Mainland china. *Psychological Reports*, *101*, 93–99.
- Chen, Y., Brockner, J., & Katz, T. (1998). Toward an explanation of cultural differences in in-group favoritism: The role of individual versus collective primacy. *Journal of Personality and Social Psychology*, *75*, 1490–1502.
- Chiou J. S. (2001) Horizontal and Vertical Individualism and Collectivism Among College Students in the United States, Taiwan, and Argentina. *The Journal of Social Psycholog*, *141*, 667–678.
- Chiao, J.Y., Harada, T., & Komeda, H., et al. (2010), Dynamic cultural influences on neural representations of the self. *Journal of Cognitive Neuroscience*, *22*, 1-11.

- Desvousges, W. H., Johnson, F. R., Dunford, R. W., Boyle, K. J., Hudson, S. P., & Wilson, K. N. (1993). Measuring natural resource damages with contingent valuation: Tests of validity and reliability. In J. A. Hausman (Ed.), *Contingent valuation: A critical assessment* (pp. 91–164). Amsterdam: North-Holland.
- Dwairy, M. (2004). Individuation among Bedouin versus urban Arab adolescents: Ethnic and gender differences. *Cultural Diversity and Ethnic Minority Psychology, 10*, 340–350.
- Eisenberg, N., & Fabes, R. (1998). Prosocial development. In W. Damon (Ed. in Chief) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development* (5th ed., pp. 701–778). New York: Wiley.
- Fehr, E., & Schmidt, K., (1999). A theory of fairness, competition, and cooperation. *Quarterly Journal of Economics 114*, 817-868.
- Fehr, E., & Schmidt, K., (2003), Theories of fairness and reciprocity: evidence and economic applications. In: Dewatripont, M., Hansen, L., Turnovsky, S. (Eds.), *Advances in Economics and Econometrics*. Cambridge University Press, Cambridge, pp. 208-257.
- Frederick, S., & Fischhoff, B. (1998). Scope (in)sensitivity in elicited valuations. *Risk, Decision and Policy, 3*, 109–123.
- Gardner, W. L., Gabriel, S., & Lee, A. (1999). “I” value freedom but “we” value relationships: Self-construal priming mirrors cultural differences in judgment. *Psychological Science, 10*, 321–326.
- Goncalo, J. A., & Staw, B. M. (2006). Individualism-collectivism and group creativity. *Organizational Behavior and Human Decision Processes, 100*, 96–109.
- Hamilton, D.L. & Sherman, S. J. (1996). Perceiving persons and groups. *Psychological Review 103*, 336-355.
- Ho, D. Y. F. & Chiu, C. (1994). Component ideas of individualism, collectivism, and social organization: An application in the study of Chinese culture. In U.

- Kim, H. C., Triandis, C., Kagitcibasi, S., Choi, & G. Yoon. (Eds.) *Individualism and Collectivism Theory, Method, and Applications*. Thousand Oaks, CA: Sage.
- Hofstede, G. (1991). *Cultures and organizations: Software of the mind*. London, England: McGraw-Hill.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations* (2nd ed.). Thousand Oaks, CA: Sage.
- Hsee, C., & Rottenstreich, Y. (2004). Music, pandas, and muggers: On the affective psychology of value. *Journal of Experimental Psychology General*, *133*, 23–30.
- Isen, A. M. (1984). Toward understanding the role of affect in cognition. In R. S. Wyer & T. K. Srull (Eds.). *Handbook of social cognition* (Vol. 3, PP. 179-236). Hillsdale, NJ: Erlbaum.
- Jenni, K., & Loewenstein, G. (1997). Explaining the “identifiable victim effect.” *Journal of Risk and Uncertainty*, *14*, 235–257.
- Kahneman, D., & Ritov, I. (1994). Determinants of stated willingness to pay for public goods: A study in the headline method. *Journal of Risk and Uncertainty*, *9*, 5–38.
- Kimmelmeier, M., Jambor, E., & Letner, J. (2006). Individualism and good works: Cultural variation in giving and volunteering across the United States. *Journal of Cross-Cultural Psychology*, *37*, 327–344.
- Knafo, A., & Plomin, R. (2006). Prosocial behavior from early to middle childhood: Genetic and environmental influences on stability and change. *Developmental Psychology*, *42*, 771–786.
- Kogut, T. (2012). Knowing what I should, doing what I want: From selfishness to Inequity aversion in young children's sharing behavior. *Journal of Economic Psychology*, *33*, 226-236.

- Kogut, T., & Ritov, I. (2005a). The “identified victim” effect: An identified group, or just a single individual? *Journal of Behavioral Decision Making*, *18*, 157–167.
- Kogut, T., & Ritov, I. (2005b). The singularity of identified victims in separate and joint evaluations. *Organizational Behavior and Human Decision Processes*, *97*, 106–116.
- Kogut, T., & Ritov, I. (2007). Saving one of us: Outstanding willingness to help rescue a single identified compatriot. *Organizational Behavior and Human Decision Processes*, *104*, 150–157.
- Latané, B & Darley, J.M. (1968). Group inhibition of bystander intervention in emergencies. *Journal of Personality and Social Psychology*, *10*, 308-324.
- Leung, K. (1989). Cross-cultural differences: Individual-level vs. cultural-level analysis. *International Journal of Psychology*, *24*, 703-719.
- Levine, R. V., Norenzayan, A., & Philbrick, K. (2001). Cross-cultural differences in helping strangers. *Journal of Cross-Cultural Psychology*, *32*, 543–560.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*, 224–253.
- Oliner, S.P., Oliner, P.M., 1988. *The Altruistic Personality*. Free Press, New York.
- Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin*, *128*, 3–72.
- Oyserman, D., & Lee, S. W. S. (2007). Priming “culture”: Culture as situated cognition. In S. Kitayama & D. Cohen (Eds.), *Handbook of cultural psychology* (pp. 255 – 279). New York: Guilford Press.
- Oyserman, D., & Lee, S. W. S. (2008). Does culture influence what and how we think? Effects of priming individualism and collectivism. *Psychological Bulletin*, *134*, 311–342.

- Ritov, I. & Kogut, T. (2011). Ally or adversary: the effect of identifiability in inter-group conflict situations. *Organizational Behavior and Human Decision Process*, 116, 96-103.
- Shavitt, S., Torelli, C., & Riemer, H. (2011), Horizontal and vertical individualism and collectivism: Implications for understanding psychological processes, in *Advances in Culture and Psychology*, eds. M. Gelfand C-y Chiu, and Y-y Hong, Vol 1, Oxford University Press. pp. 309-350.
- Simon, H. (1990). A mechanism for social selection and successful altruism. *Science* 250, 1665–1668.
- Singelis, T. M., Triandis, H. C., Bhawuk, D., & Gelfand, M. J. (1995). Horizontal and vertical dimensions of individualism and collectivism: A theoretical and measurement refinement. *Cross-Cultural Research: The Journal of Comparative Social Science*, 29(3), 240-275.
- Slovic, P. (2007). “If I look at the mass I will never act”: Psychic numbing and genocide. *Judgment and Decision Making*, 2, 79–95.
- Small, D. A., & Loewenstein, G. (2003). Helping a victim or helping the victim: Altruism and identifiability. *Journal of Risk and Uncertainty*, 26, 5–16.
- Small, D. A., Loewenstein, G., & Slovic, P. (2006). Sympathy and callousness: The impact of deliberative thought on donations to identifiable and statistical victims. *Organizational Behavior and Human Decision Processes*, 102, 143–153.
- 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, 181-191.
- Trafimow, D., Triandis, H. C., & Goto, S. G. (1991). Some tests of the distinction between the private self and the collective self. *Journal of Personality and Social Psychology*, 60, 649-655.
- Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview.

Scope insensitivity in helping decisions

- Triandis, H. C., & Gelfand, M. J. (1998). Converging measurement of horizontal and vertical individualism and collectivism. *Journal of Personality and Social Psychology*, 74(1), 118-128.
- Triandis, H. C., Leung, K., Villareal, M., & Clark, F. L. (1985) Allocentric vs. idiocentric tendencies: Convergent and discriminant validation. *Journal of Research in Personality*, 19, 395-415.
- Van Lange, P. A. M., De Cremer, D., Van Dijk, E., & Van Vugt, M. (2007). Self-interest and beyond: Basic principles of social interaction. In A. W. Kruglanski & E. T. Higgins (Eds.), *Social psychology: Handbook of basic principles* (pp. 540-561). New York: Guilford.
- Västfjäll, D., Slovic, P., Mayorga, M., & Peters, E. (in press). Compassion fade: affect and charity are greatest for a single child in need. *PLOS ONE*.

Figures

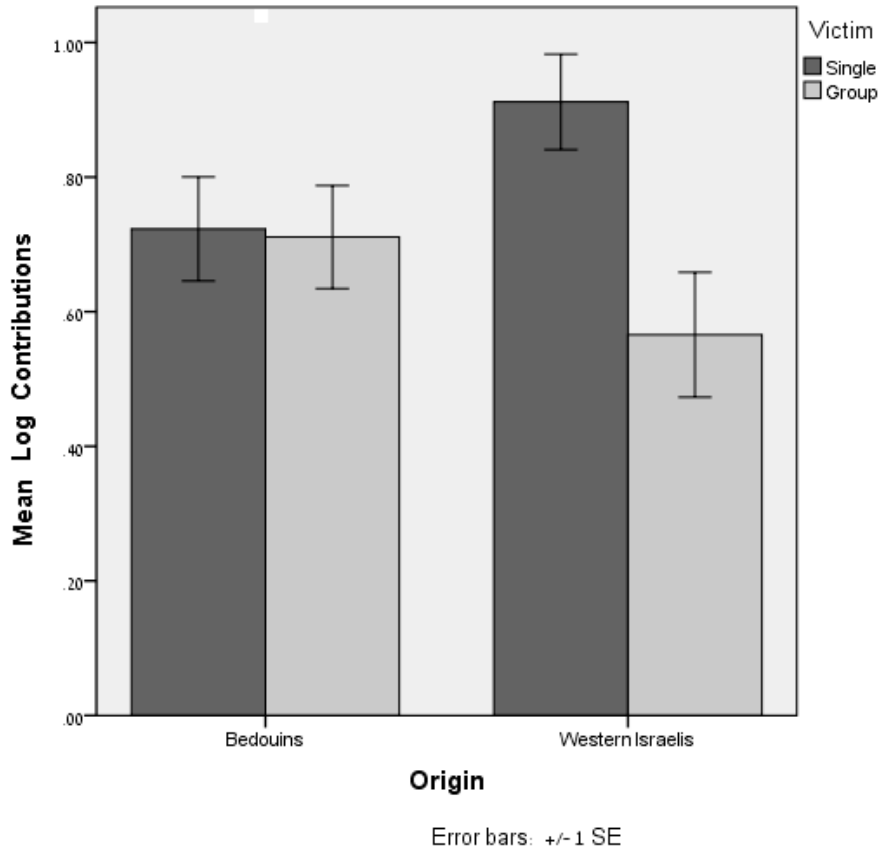


Figure 1: Mean log contributions as a function of the participant origin (western Israelis vs. Bedouins) and the singularity of the victim (single vs. group), Study 1; Error bars represent +/-1 standard error of the mean

Scope insensitivity in helping decisions

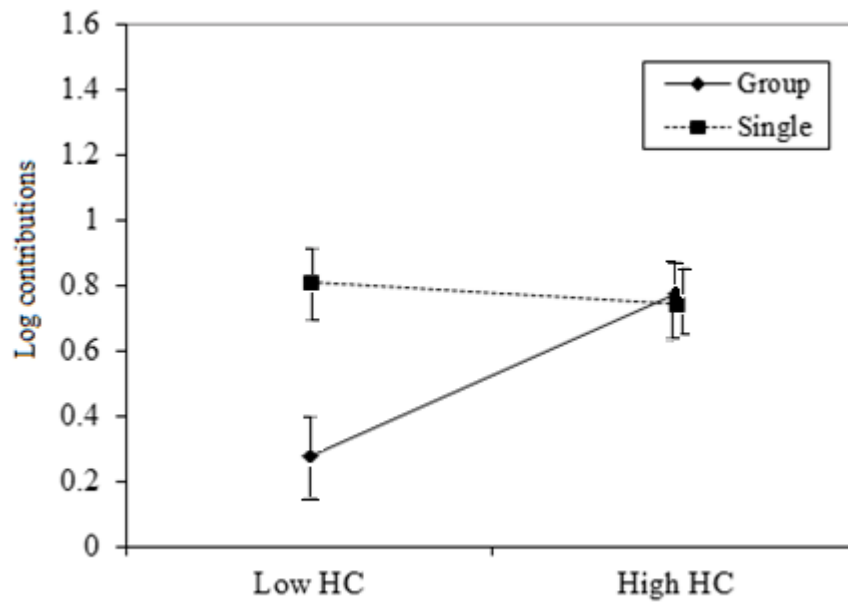


Figure 2 – Log contributions to single victims and to groups as a function of individual differences in Horizontal collectivist values. The interaction was plotted according to the recommendation of Aiken and West (1991) one SD above the mean of the HC scale ($5.01 + .64$) and one SD below that mean ($5.01 - .64$) in each condition (single victim and group of victims), Error bars represent ± 1 standard error of the mean

Scope insensitivity in helping decisions

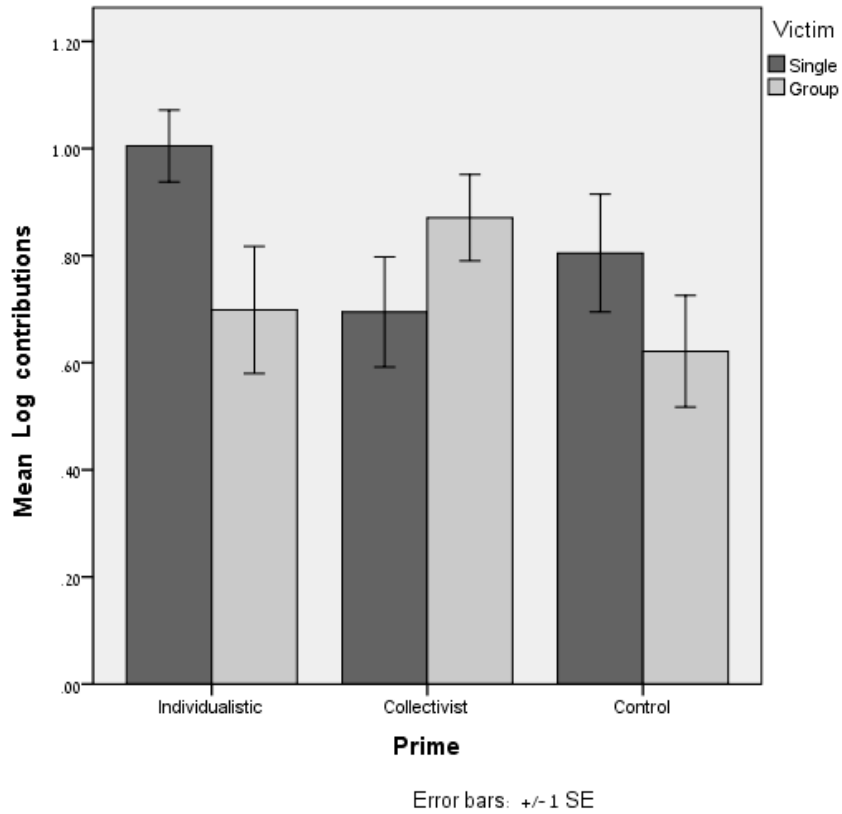


Figure 3: Mean log contributions as a function of the priming condition and the singularity of the victim, Study 3; Error bars represent +/-1 standard error of the mean