Familiarity breeds compassion: knowledge of disaster areas and willingness to donate money to disaster victims

Article (Unspecified)

Familiarity Breeds Compassion: Knowledge of Disaster Areas and Willingness to Donate Money to Disaster Victims

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We tested whether knowing more about an area where a humanitarian disaster happened would increase willingness to donate to its victims. Knowledge was proposed to have a positive impact on donation proclivity, mediated by greater identification with the victims: The more potential donors know about the victims and their environment, the more are they able to identify with the victims. Identification, in turn, was proposed to positively impact on willingness to donate. Results confirmed these predictions in one correlational study ($N = 111$), one experimental study ($N = 200$), and one quasi-experimental study ($N = 100$), focusing on the Asian Tsunami of 2004 and the Chinese earthquake of 2008. Theoretical and applied implications of the research findings are discussed.

INTRODUCTION

Would we be more willing to donate money to the victims of a hurricane in Guatemala if we had recently visited Guatemala as a tourist and consequently knew a lot about the local people, customs, climate, geography, and general conditions? Common sense and anecdotal evidence suggests that this might be the case. However, to date there is not a single published study that answers this question with empirical evidence. The aim of this paper was to rectify this omission, and to explore whether knowing more about an area

where a disaster happened would lead to an increased willingness to donate to the disaster victims. A further aim was to investigate which processes would underlie and explain such an effect.

The question of what motivates people to donate to victims of humanitarian disasters has attracted some attention within the psychological literature. For example, it has been noted that helping intentions are informed by media effects (Simon, 1997) and by the extent to which victims are infra- and dehumanised (Cuddy, Rock, & Norton, 2007; see also Cheung & Chan, 2000; Kemmelmeier, Broadus, & Padilla, 2008).

Since donations to disaster victims are one type of prosocial behaviour, research on predictors of other types of prosocial behaviour (e.g. Batson, 1998; Dovidio, Piliavin, Schroeder, & Penner, 2006; Penner, Dovidio, & Piliavin, 2005) might also be suggestive of potential predictors of donations. Important determinants are, inter alia, personality attributes of the donor (Knight, Johnson, Carlo, & Eisenberg, 1994; Penner, Fritzsche, Craiger, & Freifeld, 1995), situational factors (Graziano, Habashi, Sheese, & Tobin, 2007), donor cost–reward considerations (Dovidio, Piliavin, Gaertner, Schroeder, & Clark, 1991), empathy with the victims (Batson et al., 1997; Eisenberg & Miller, 1987), a desire to manage the self-image and appear in a good light (Hopkins, Reicher, Harrison, Cassidy, Bull, & Levine, 2007), and kinship considerations (Neyer & Lang, 2003; Van Vugt & Hart, 2004).

A further category of variables which have been studied are the group memberships of helpers and recipients (e.g. Jonas, Schimel, Greenberg, & Pyszczynski, 2002; Nadler, 2002; van Leeuwen, 2007; van Leeuwen & Täuber, 2011). These studies commonly find an enhancing effect of shared group membership on helping intentions and behaviour (Levine, Cassidy, Brazier, & Reicher, 2002; Saucier, Miller, & Doucet, 2005). Another finding is that the motivation to help depends on group membership. For instance, empathy has been found to be a stronger predictor of ingroup helping than outgroup helping (Maner & Gailliot, 2007; Stürmer, Snyder, Kropp, & Siem, 2006; Stürmer, Snyder, & Omoto, 2005).

Last but not least, models of what determines behaviour in general, such as the Theory of Planned Behaviour (Ajzen, 1991), can also provide pointers for predictors of donations. Following this approach, one would expect attitudes, subjective norms, and perceived behavioural control to be of relevance.

Although all these potential antecedents of prosocial behaviour are undoubtedly important, they probably do not exhaust the list of causal variables. In searching for additional determinants, an important practical consideration would be to pay special attention to those variables which lend themselves to being utilised in policy interventions aimed at increasing donations. We suggest that knowledge about the area where a disaster happens fulfils this criterion: one can easily imagine how one might increase the

knowledge about an area where a disaster happened simply by providing potential donors with additional information. Therefore, exploring the effects of knowledge on donation proclivity is a promising endeavour, not only because this aspect has been theoretically and empirically neglected, but also because it has promising applied potential.

It is surprising that this topic has escaped prior investigation. A search of PsycInfo (in July 2011) for "donation or donations or helping" and "knowledge or familiarity" in the title yielded just 52 hits. However, none of these consider the effect of "knowledge" on monetary donations; they focus on blood, tissue, or organ donations (e.g. Feeley, 2007; Morgan, Miller, & Arasaratnam, 2003; Vinokur, Merion, Couper, Jones, & Dong, 2006). A typical finding is that improved knowledge has a positive effect on donation intentions. For example, Arriola, Robinson, Perryman, and Thompson (2008) found that increased knowledge of the allocation system and experiential knowledge of a transplant recipient are positively associated with donation intentions.

It seems reasonable to hypothesise that increased knowledge would also exert such a positive effect on willingness to donate to victims of humanitarian disasters. However, because one must not simply extrapolate results from one type of donation to quite a different context, it seems prudent to test empirically whether knowledge effects will generalise to monetary donations following humanitarian disasters.

What are the theoretical reasons why knowledge about the area where a disaster took place might impact on willingness to donate to disaster victims? We propose that this effect might be mediated by identification with the victims. To identify with someone means to feel connected to this person, to feel similar to them, and to feel that one has commonalities (Ashmore, Deaux, & McLaughlin-Volpe, 2004; Ellemers, Kortekaas, & Ouwerkerk, 1999; Leach, van Zomeren, Zebel, Vliek, Pennekamp, Doosje, Ouwerkerk, & Spears, 2008). A related concept is that of oneness (Cialdini, Brown, Lewis, & Neuberg, 1997), whereby a greater extent of overlap between the mental representations of the self and the other engenders a certain degree of perceived interchangeability. Importantly, although identification will generally be higher with those others who hold the same group membership as the self (ingroup members), it is still possible to identify with members of outgroups (see e.g. Stürmer et al., 2005). Potential donors can hence display varying degrees of identification with disaster victims even if those victims hold a different nationality from themselves and even if they are geographically very remote from the donors.

Being familiar with and knowing more about an area where a disaster happened can be assumed to increase identification with the victims of the disaster. After all, identification should come about more naturally the easier it is to imagine and form a mental image of the victims and to picture their

plight. If one knows about a region where a disaster happened, one can imagine more easily how it might be affected by the disaster. It should be harder to relate to the suffering of victims which is less tangible because of a lack of knowledge about their situation. If one knows little about the victims and their customs and culture, and the geographical, political and cultural, and climatic particularities of their environment, it will be harder to form a mental image of the victims, and to appreciate the impact of the disaster. In contrast, knowing more about a disaster area facilitates an ability to relate to the event and its victims, which should result in increased identification with the victims.

The extent to which potential donors identify with the victims should, in turn, impact on willingness to donate, as can be inferred from various studies on the effect on prosociality of perceived oneness (Cialdini et al., 1997) and shared group memberships (Levine, Prosser, Evans, & Reicher, 2005). In sum, then, we would expect increased knowledge about the disaster area to impact positively on donation proclivity because knowledge makes the victims and their environment more tangible, and therefore increases the ability to relate to, feel one with, and identify with the victims.

This hypothesis was tested focusing on two real-life events: One study focused on responses to victims of the Asian Tsunami of 2004; a second study focused on that same disaster; and a third study focused on the large earthquake in China in 2008.

STUDY 1

Method

Participants.   One hundred and eleven students at a British university participated in the study early in 2005 in exchange for course credits. The mean age was 19.75 years. There were 16 male and 95 female participants.

Procedure and Measures.   Participants were asked about the Tsunami disaster in Asia in 2004, which at the time of data collection was still very well covered in the media. Items were preceded by the following text: "Thousands of people died when the big tidal wave hit the coast of several Asian countries last year, and many more had their livelihoods destroyed. They depended on outside help to survive and rebuild their lives." This was followed by the following scales.

Participants' *knowledge* about the disaster area was measured with five items: "How much do you know about the area where the disaster happened? How much do you know about the (a) geography, (b) political situation, (c) culture, and (d) climate?" (1 = *not much* to 7 = *a lot*); $\alpha = .81$.

A five-item scale measured participants' *willingness to donate* money to the victims of the disaster (1 = *not at all* to 7 = *very much*): "I would be willing to give donations to the victims of the disaster"; "I think it is important to give donations to the victims"; "I think it is the right thing to do to give donations to the victims"; "I think everyone should donate money to the victims"; and "I would give the maximum amount I could afford to the victims"; α = .83.

The questionnaire also included some questions about demographic information and some items which are not of relevance in the present context. Upon completion of the study, participants were thanked and debriefed. All aspects of this and the following studies conformed to APA ethical guidelines.

Results

A regression analysis was performed, predicting willingness to donate from knowledge. Age and gender were also added in the regression as additional controls. The R^2 was .13; $F(3, 107) = 5.46$, $p < .01$. Age was not a significant predictor, β = .14, *ns*; but gender was significant, β = .23, $p < .05$. As predicted, knowledge was positively associated with willingness to donate, β = .23, $p < .05$. Men overall tended to report less willingness to donate than women (*M*s 4.63 versus 5.31).

Discussion

This study yielded preliminary evidence in favour of an association between how much people know about an area and how willing they are to donate to the victims of a disaster there. This association held even when controlling for the participants' age and sex. The gender difference should be interpreted with caution, given that there were many more females in the sample than males. However, it is in line with what one might expect due to different societal expectations placed on women and men; with women often being expected to be compassionate with others and willing to help (Kahn, McGill, & Bianchi, 2011). The main finding, however, was that knowing more about an area was positively associated with willingness to donate to victims of a disaster there. With these encouraging results, in the next study we tested whether the association between knowledge and donations might be causal.

STUDY 2

An experimental methodology was employed in Study 2 to test whether knowledge positively and causally affects willingness to donate, and to rule out spuriousness and other problems commonly associated with correlational designs (Rogosa, 1980). By enhancing the knowledge about the area where the

disaster took place for half the participants (i.e. those who completed a quiz on Thailand) but not the other half (i.e. those who completed a quiz on Japan), we sought to test whether knowledge would causally impact on willingness to donate. Hence, the design of this study had one factor with two levels. The study was conducted early in 2006, i.e. after the large Asian Tsunami of 2004, but before the more recent earthquake disaster in Japan in 2011.

Method

Participants.   Two hundred students at a British university participated in the study. The mean age was 21 years. There were 46 male and 152 female participants (two participants did not indicate their gender).

Procedure and Measures.   Participants were told that they would complete two unrelated studies. The first study was introduced as a project looking at students' general knowledge about the world; the second study was purported to explore students' reactions to natural disasters. Students were asked to complete a "quiz" about one of two countries (Thailand versus Japan). They were asked to write down their answers to 16 questions, including questions about the country's geography, political situation, culture, and climate (e.g. the name of the capital, whether it is customary in the country to shake hands to greet each other, the name of the longest river in the country, whether it is considered rude in the country to not take off one's shoes before entering a house, what is considered the national sport of the country). Upon completion of the quiz, they were told that they might be interested in the correct answers, and they were presented with PowerPoint slides containing the correct information. The answers were illustrated with pictures. This manipulation was designed to selectively enhance half the participants' knowledge about the area where the disaster of interest had happened.

Participants were then told that they would now proceed with Study 2. They read a fake newspaper article about a fictitious congress of Thai students. The article reported that the Asian Tsunami of 2004 had a devastating impact on the Thai education sector, and that many universities remained shut due to flooding and damaged lecture and residential halls. The congress allegedly concluded that Thai students should directly contact university students abroad to make calls for donations.

Upon reading the article, students were told that Study 2 was interested in their views of the Thai students affected by the Asian Tsunami. Participants indicated their willingness to donate to the Thai students by answering the first four items measuring willingness to donate as described for Study 1 (1 = *low willingness to donate* to 7 = *high willingness to donate*); α = .79.

We also measured participants' *actual donations*. To do this, participants received £5 in the form of ten 50 pence coins, allegedly to compensate them

for their time. An envelope containing this payment was stapled to the back of the questionnaire. There was a further envelope entitled "donations". Participants read that they could donate some, none, or all of their payment to the Thai students by putting the appropriate amount into the second envelope. We counted the number of coins participants donated, which yielded an 11-point scale (0 = *no 50p coin donated* to 10 = *all coins donated*).

The questionnaire also included some other items, for example about demographic information. Upon completion of the study, participants were thanked and debriefed. Any donations participants had made were subsequently donated to one of the major UK charities involved in disaster relief.

Results

A MANOVA was conducted to test the effect of "knowledge" (experimentally enhanced due to Thailand quiz versus not enhanced due to Japan quiz) on self-reported willingness to donate and on actual donations. The multivariate effect was significant, $F(2, 194) = 5.26$, $p < .01$, $\eta^2_p = .05$. Both univariate effects were significant, $F(1, 195) = 5.75$, $p < .05$, $\eta^2_p = .03$ for self-reported willingness to donate, and $F(1, 195) = 8.66$, $p < .01$, $\eta^2_p = .04$ for actual donations. The mean self-reported willingness to donate was 4.79 ($SD = 1.23$) in the Thai quiz condition, and 4.35 ($SD = 1.25$) in the Japan quiz condition. The mean actual donation was 2.42 coins ($SD = 1.99$) in the Thai quiz condition (equal to £1.21), and 1.61 coins ($SD = 1.88$) in the Japan quiz condition (equal to £0.81).

Discussion

These results suggest that knowing more about the area in which a disaster happened causally increases people's willingness to donate to the victims of this disaster. When participants' knowledge about Thailand was experimentally increased by providing them with information about that country, they reported being significantly more willing to donate to Thai disaster victims. Importantly, these self-reports translated into actual behaviour: Participants donated more of their participation money to the Thai victims after having had their knowledge about Thailand experimentally increased. However, Study 2 did not address *why* increased knowledge leads to increased donation proclivity. A further study was conducted in order to replicate the effects of knowledge in another setting, and in order to shed light on the mediating processes at play.

STUDY 3

To maximise the ecological validity of the research, Study 3 did not manipulate knowledge experimentally but rather made use of a variation that

naturally occurs in the field: The fact that people tend to know more about their own national country than about other countries. It was expected that knowledge about the area where the disaster happened would again be positively associated with donation proclivity, and that this relationship would be mediated by identification with the victims: More knowledge would make it easier to relate to, feel one with and identify with the victims. Identification, in turn, was predicted to be positively associated with donation proclivity.

Method

Participants.   An opportunity sample of one hundred participants took part in the study. The mean age was 25.47 years. There were 43 male and 57 female participants. When asked to indicate their nationality, 52 participants classified themselves as Chinese, and 48 participants reported being non-Chinese (coded 0 for Chinese and 1 for Non-Chinese). Of these, 29 were British, and 19 had other nationalities (nine Japanese, four Koreans, three Nigerians, two Gambians, one Taiwanese).

Procedure and Measures.   Participants were approached on university campuses in 2009 and asked to complete a brief survey. They were presented with some factual information about the earthquake that hit the Chinese Province of Sichuan in 2008, citing the very high death toll and the fact that many people were injured or were still missing. They were also reminded that funds were still needed to deal with the effects of this disaster. Following this introduction, the participants completed the following scales.

Willingness to donate was measured with the same four items as for Study 2, except that this time items obviously asked about the "victims of the Chinese earthquake" rather than about Thai students (1 = *low willingness to donate* to 7 = *high willingness to donate*); α = .83.

Knowledge about the area where the disaster happened was measured, as in Study 1, by asking participants how much they knew about the area where the disaster happened, particularly about the (a) geography, (b) political situation, (c) culture, and (d) climate (1 = *not much* to 7 = *a lot*); α = .97.

Identification with the victims was measured with four items (1 = *not at all* to 7 = *very much*): "I have much in common with the victims"; "I think I am similar to the victims"; "I feel strong ties with the victims"; "I identify with the victims"; "I feel connected with the victims"; and "I would use the term 'we' to describe my relationship with the victims"; α = .97.

The questionnaire also included some other items, for example about demographic information. Upon completion of the study, participants were thanked and debriefed.

Results

To test whether Chinese and non-Chinese participants do differ in their willingness to donate, in their knowledge about the disaster area, and in their identification with the victims, a MANOVA was conducted. "Nationality" (Chinese versus Non-Chinese) was entered as an independent variable and donation proclivity, knowledge, and identification were dependent variables. The multivariate effect was significant, $F(3, 93) = 46.03$, $p < .001$. All three univariate effects were significant. Univariate Fs and cell means are displayed in Table 1. As can be seen and as expected, Chinese participants were more willing to donate than non-Chinese participants, and they reported knowing more about the disaster area, and they identified more with the victims.

Next, structural equation modelling was employed to test whether the causal direction of effects was as hypothesised, namely that the Chinese participants knew more about the area where the disaster happened, which in turn increased their identification with the victims, which in turn enhanced their willingness to donate to the victims. A model was specified where "nationality" predicted "knowledge" which predicted "identification" which predicted "donations" (see Figure 1). A direct path from "nationality" to "donations" was also included.

This model fit the data well. Even though the χ^2 was significant, $\chi^2 (2) = 7.68$, $p < .05$; the arguably more important fit indices revealed a good fit with the data, CFI = .97; GFI = .96; SRMR = .04. The model accounted for 52 per cent of the variance in donations. As can be seen in Figure 1, all the

TABLE 1
Mean Level Differences between Chinese and Non-Chinese Participants

	Donation proclivity	Knowledge	Identification with victims
Chinese	6.31 (0.84)	5.68 (1.38)	4.46 (1.79)
Non-Chinese	4.58 (1.48)	2.54 (1.73)	2.13 (1.39)
F	52.84***	101.57***	52.29***

Note: *** $p < .001$. *SD*s in parentheses.
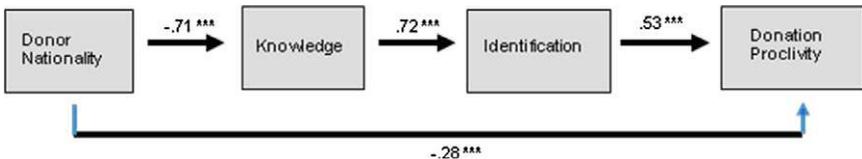

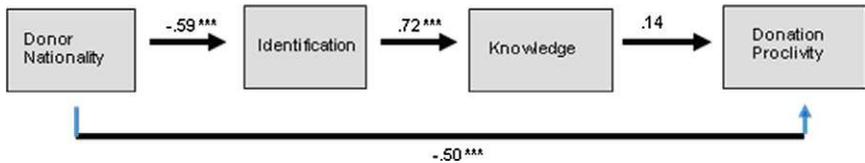FIGURE 1.   Effect of knowledge on donations mediated by identification.

FIGURE 2.   Effect of identification on donations mediated by knowledge.

individual paths were significant and in the hypothesised direction. What is more, nationality had a significant indirect effect on donations ($z = -.28$, $p < .001$), as did knowledge ($z = .39$, $p < .001$).

An alternative model was tested, to yield further support for the predicted direction of the effects. This time, identification and knowledge were swapped around, so that now nationality predicted identification, which predicted knowledge, which predicted donations (see Figure 2). Although no a priori hypothesis was held about this, it is likely that people identify more with victims if they are members of their national ingroup. Further, it is not entirely implausible that identification would causally and positively impact on knowledge, because people might be more interested in and actively seek out more information about those others they identify with. This alternative model fit the data considerably less well than the hypothesised model, $\chi^2 (2) = 67.22$, $p < .001$; CFI = .70; GFI = .75; SRMR = .14. Neither nationality ($z = -.06$, ns) nor identification ($z = .10$, ns) had significant indirect effects on donations, yielding further support for the hypothesis.

Discussion

Study 3 confirmed that knowing more about the area in which a disaster happened causally increases people's willingness to donate to the victims of this disaster. This time, rather than manipulating knowledge experimentally, we made use of a naturally occurring variation in knowledge, i.e. the fact that people tend to know more about their national ingroup than about national outgroups. Study 3 also shed light on the processes that mediate the effects of knowledge on donations: The results suggest that people who know more about the disaster region identify more with the victims, which causes their enhanced willingness to help. The reverse was not true: The effect of identification on donation proclivity clearly was not mediated by knowledge.

GENERAL DISCUSSION

Knowing more about the area in which a disaster happened increases willingness to donate to the disaster victims. This was shown across two different

disasters and two different national victim groups. The effect of knowledge on donation proclivity was shown to be mediated by identification with the victims: Knowing more about the disaster victims and their environment facilitated identification with the victims, which in turn had a positive impact on willingness to donate to them.

While others have concluded from their findings that social category relations are more important than geographical proximity or emotional reactions in increasing helping behaviour after natural disasters (Levine & Thompson, 2004), the current findings show that perceived social category relations themselves are influenced by a hitherto neglected factor, i.e. knowledge. Therefore, the present research builds on and extends previous theorising on the effects of intergroup relations on helping by going one step further back in the causal chain, and by investigating knowledge as a causal antecedent of identification with the victims.

The present contribution has a number of strengths and weaknesses. In terms of weaknesses, because Study 3 made use of a quasi-experimental design, one cannot with any great degree of certainty exclude the possibility that confounds might have played a role: Chinese and non-Chinese participants might not only have differed in their knowledge about the disaster area, but also in some other unmeasured respects. Still, the fact that Study 2 demonstrated an experimental effect of knowledge and the fact that the alternative model did not fit well in Study 3, lend further support for the proposed hypothesis.

Also, in terms of strengths, the use of different methodologies across the three studies (correlational methods for Study 1, experimentation for Study 2, and natural experiment in Study 3) assures us that the findings have not only internal validity but also external and ecological validity. A further strength of this contribution is that this is the first time the effect of knowledge on donation proclivity has been investigated for donations to victims of humanitarian disasters. This paper therefore addresses a new and neglected issue. It does so by not only considering self-reported willingness to donate (Studies 1, 2, and 3), but also actual donations (Study 2). Too little psychological research investigates actual behaviour, and this represents another strength of the present contribution. Finally, this paper addresses not only the effects of knowledge on donations but also the mediating processes. As is evident from the literature review, mediating processes have also been neglected in those contributions that have focused on blood/tissue/organ donations. This present focus on the *why* of hypothesised effects therefore presents another theoretical and empirical contribution.

Because the present topic has not been addressed previously, naturally there are plenty of avenues for future enquiries. First, it would be interesting to simultaneously test the relative predictive power of knowledge together with other potential predictors, such as attitudes, norms, and behavioural

control as highlighted by the Theory of Planned Behaviour (Ajzen, 1991). Such an approach would be well suited to calibrating the relative importance of different predictors.

Second, it would be important to explore the effects of other potential mediators of the knowledge–donation relationship. It is possible that identification with the victims is not the only mediator, but that simultaneously other mechanisms are in place. For example, does increased knowledge lead to an increased ability to empathise, which in turn impacts on donation proclivity? Might one further mediator be counterfactual thoughts, whereby a belief that the same could have happened to the self increases donation proclivity? The possible existence of such additional mediation processes does not call into question the mediation by identification demonstrated here. Rather, many mechanisms might exist simultaneously, and should be explored in future research.

Third, mediating processes for the effects of knowledge on donations of goods other than money remain to be explored. Does identification with the recipients play a similar pivotal role in explaining the effect of knowledge on donation proclivity when the effect is on organ donations? And does identification maybe even mediate the effects of knowledge for types of helping behaviour other than donations, e.g. volunteering one's time and energy for the good of others?

Fourth, and maybe most importantly given the potential applied value of the findings, it would be fascinating to design and evaluate a donation-appeal campaign to capitalise on the effects of increased knowledge. For example, although many charities provide on their websites information about how their help is implemented, few provide extensive background information about the national contexts in which the help is delivered. The present findings suggest that in order to generate more donations for a specific disaster, charities would be well advised to provide potential donors with some very basic information about the cultural, climatic, geographic, and political circumstances in the affected region. To make maximum use of the potential applied value of the present findings, one could design such an information campaign, using information provided on the internet and/or leaflet postings, and evaluate the impact this has on donation proclivity. Potentially, simply providing some easily digestible information about the background of the area where help is needed could be an efficient and economical way of boosting donations to those causes which would otherwise be forgotten.

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