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Exploring the relationship between adult attachment style and the identifiable victim effect in helping behavior

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HIGHLIGHTS

- The identifiable victim effect is related to the perceiver's adult attachment style.
- Secure people provide similar levels of help to identified and unidentified victims.
- Attachment avoidance is associated with lower donations to both types of victims.
- Anxious people tend to donate relatively higher amounts to identified victims.
- Anxious people tend to donate relatively lower amounts to unidentified victims.

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ABSTRACT

People's preference to help victims about whom they have some information is known as the identifiable victim effect. Results of three studies, in which dispositional attachment styles were measured (study 1) and activated in a between-subjects priming manipulation (studies 2 and 3), suggest that the intensity of this phenomenon is related to the potential helper's adult attachment style. Specifically, we found that secure people provide similar levels of help to identified and unidentified victims. Attachment avoidance is associated with lower donations to both types of victims. Finally, the biggest gap between donations to identified and unidentified victims was found for anxious people, who tend to donate relatively higher amounts to identified victims and lower amounts to unidentified ones. Moreover, people under attachment-anxiety priming tend to perceive less similarity and connectedness between themselves and unidentified victims as opposed to identified victims, a tendency that may underlie the identifiability effect.

Introduction

Research in the last decade indicates that willingness to help victims unrelated to oneself is often greater when the victims are identified rather than anonymous or statistical, even when identification conveys no meaningful information about the victim (Slovic, 2007; Small & Loewenstein, 2003; Small, Loewenstein, & Slovic, 2006). However, Kogut and Ritov (2005a, 2005b) suggest that the effect of identifiability does not extend to a group of people. Their research found that the provision of quite meaningless identifying details (a name and a picture) increased contributions when the target of help was a single victim, but not when the target was a group of victims.

Research examining the role of emotions as a determinant of the above "singularity" effect suggests that feelings evoked by considering the victim's plight play a major role in that context (Small & Loewenstein, 2003). Specifically, Kogut and Ritov showed that when asked about their distress after learning of the victims' predicaments, participants who read about a single identified victim rated their distress higher than participants who read about an unidentified victim or about a group of victims (Kogut & Ritov, 2005a).

Another mechanism underlying the identifiability effect is based on the psychological distance between the target and the perceiver. The extent to which the perceiver's emotions are evoked by the victim's plight depends on the psychological distance between the perceiver and the victim (Cialdini, Brown, Lewis, Luce, & Neuberg, 1997). As the psychological distance increases, the perceiver is less likely to adopt the victim's perspective, and is more likely to process the information at a higher, more abstract construal level (e.g., Trope & Liberman, 2000) even when the victim is identified (Kogut & Ritov, 2007). Indeed, recent research provides further evidence for this idea by showing that feelings of relatedness, reflected by ratings of similarity and connectedness, replicate the pattern found for contributions to identified and unidentified victims, such that identification of the victim increased donations only in situations in which identification enhanced perceptions of similarity and connectedness toward the victim (Ritov & Kogut, 2011).

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The identifiable victim effect represents an apparent deviation from rational models, according to which every human life has equal value. Unless willingness to contribute is driven by a special personal attachment to the particular identified victim, making a greater contribution to an identified victim may not best serve the contributor's goals, as it is unlikely that social benefits will be maximized when resources are made available more to identified, than to unidentified victims. Thus, understanding the sources and boundaries for this effect is of great importance. Previous research has demonstrated that attachment theory can provide an important framework to explain helping behavior phenomena. Especially in the context of the identifiable victim, the relatedness to the specific victim was found to be a main source of the effect. Therefore, the purpose of the present study is to conceptualize the identifiable victim effect in terms of Bowlby and Ainsworth's attachment theory (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1969, 1982), and thus to uncover some of the psychological mechanisms underlying the effect. To our view, accounting for the variance in helping behavior can improve if the perspective taken would combine knowledge from both the attachment and the identifiable victim theories and research.

Attachment theory

Attachment theory argues that early experiences with primary caregivers have a major influence on the way people conduct their intimate relationships (Bowlby, 1969, 1973, 1980). Ainsworth et al. (1978) delineated three attachment styles during infancy — secure, avoidant, and anxious-ambivalent — which they found to be related to the typical interactions between the infant and his/her caregiver (for extensive review see Ainsworth, 1985). Beginning with Hazan and Shaver (1987), this research was extended to adulthood, suggesting that continuous and stable individual differences in attachment style exist and account for a systematic pattern of relational expectations, emotions, and behaviors that result from one's attachment history (Fraley & Shaver, 2000; Waters, Weinfield, & Hamilton, 2000).

The attachment avoidance dimension indicates the extent to which a person distrusts the goodwill of relationship partners and strives to maintain behavioral independence and emotional distance from partners. The attachment anxiety dimension indicates the degree to which a person worries that a partner will not be available or responsive in times of need. High attachment security is manifested by both low attachment avoidance and low attachment anxiety (for a review, see Mikulincer & Shaver, 2003). Research in the last three decades has examined in depth the manner in which adult attachment styles are related to various aspects of life, including emotional experiences, self regulation of emotions and stress, self-image, interpersonal relationships and many behaviors.

Next we discuss two lines of research that are particularly relevant to the current study: One examines the relations between adult attachment style and helping behavior, and the second explores the relations between adult attachment style and subjective perceptions of "self-other similarity." We then suggest how attachment theory can provide an important framework to explain the identifiable victim effect and present our hypotheses based on these two lines of research.

Attachment theory and helping behavior

In his seminal work, Bowlby (1969) already asserted that attachment theory provides an ideal framework to study concern for the other's welfare because distress regulation and the need for sensitive care are core components of both the attachment and caregiving behavioral systems. According to Bowlby (1969), these two (among other) behavioral systems were shaped during the evolution process, because they improved human's survival. The attachment system's function is to protect people in need (e.g. children, sick people) by promising that they would remain close to supporting others who would offer them care. The caregiving system can be seen as serving a complementary function, since it causes people to provide help and support to people in need, and is aimed at reducing the partner's distress. In order to do so, an empathic stance toward others' suffering is required. When the situation is perceived according to the other's experience, fostering the other's welfare is enabled, while lessening the individual's (caregiver) focus on his/her own state of mind (see also Batson, 1991; Mikulincer, Shaver, Gillath, & Nitzberg, 2005). Bowlby (1969) as well as contemporary researchers (Feeney & Collins, 2001; Gillath, Shaver, & Mikulincer, 2005) described an interplay between these two behavioral systems, such that under felt-security it is far more likely that a person would be able to address another person's distress and needs. Therefore, securely-attached individuals are theoretically expected to be able to adopt an empathic stance and to provide help to others in need more than insecurely attached people.

Indeed, research has shown that the sense of having a secure base (expectations that significant others will be available and supportive in times of need) seems to be a crucial factor underlying people's concern for others' welfare, caregiving behaviors, and other pro-social behaviors like greater tolerance of out-group members (Mikulincer & Shaver, 2001) or support provision to relationship partners (e.g., Collins & Feeney, 2000; Kunce & Shaver, 1994). Furthermore, attachment security has also been associated with empathy, in both children (Kestenbaum, Farber, & Sroufe, 1989; van der Mark, van IJzendoorn, & Bakermans-Kranenburg, 2002) and adults (Mikulincer et al., 2001).

More recently, Mikulincer and collaborators (Mikulincer et al., 2001, 2003, 2005) and Gillath and collaborators (Gillath, Shaver, & Mikulincer, 2005; Gillath, Shaver, Mikulincer, Nitzberg, et al., 2005; Gilath, McCall, Shaver, & Blascovich, 2008; Gilath, Selcuk, & Shaver, 2008) directly examined the relationship between attachment style and reactions to another person in need (e.g. Mikulincer et al., 2001, 2005) and voluntarism (e.g. Gillath, Shaver, & Mikulincer, 2005; Gillath, Shaver, Mikulincer, Nitzberg, et al., 2005). They suggest that attachment security makes empathy and altruism more likely, since only a relatively secure person can find the mental resources necessary to provide sensitive and effective care to others. Attachment insecurities impede altruism, because insecure people are more likely to be focused on their own vulnerability and hence they lack the mental resources (attention and energy) necessary to attend to others. Specifically, attachment avoidance was consistently associated with engaging in fewer volunteering activities and being involved in such behaviors for less altruistic reasons. Anxiously-attached people may provide help and engage in pro-social behaviors; however, their behavior is positively correlated with egoistic, rather than altruistic motives for helping and volunteering, (Gillath, Shaver, & Mikulincer, 2005; Gillath, Shaver, Mikulincer, Nitzberg, et al., 2005). Similar results were obtained by Mikulincer et al. (2003) who experimentally enhanced people's sense of attachment security which led to greater compassion and willingness to help another person in distress.

Most importantly, Mikulincer et al. (2005, study 5) examined closeness as a reason for helping. Following Cialdini et al. (1997), they manipulated two levels of closeness: In the high closeness condition, subjects were asked to imagine that a needy woman was a member of their nuclear family, whereas in the low closeness condition they were asked to imagine that she was only an acquaintance. These researchers showed that after "attachment security priming" (by asking them to name specific security-providing attachment figures), participants reported significantly higher compassion and willingness to help the needy woman compared with participants in a "neutral priming" condition, even in the low closeness condition. Moreover, the two attachment dispositional measures (attachment anxiety and avoidance measured to provide actual individual differences in participants global attachment style) had significant roles in predicting feelings of distress and concern and the willingness to

help, such that the higher the attachment anxiety, the higher the reported distress after reading about the needy woman, whereas the higher the attachment avoidance, the lower the compassion and willingness to help.

Mikulincer et al. (2005) argued that attachment security satisfies a person's need for protection, thereby enabling him/her to direct mental resources to other behavioral systems, including the "caregiving" system. On the other hand, attachment insecurities are expected by Mikulincer et al. (2005, relying on Collins & Read, 1994) to interfere with true altruistic helping (driven by real empathy toward the needy other; e.g. Batson, Duncan, Ackerman, Buckley, & Birch, 1981): Highly anxious individuals are preoccupied with their own distress and with their striving to establish a sense of security, while highly avoidant people prefer to avoid closeness and interdependence and disapprove of other people's communications of their need for help.

Attachment theory and estimations of self-other similarity

While attachment style has been associated with helping behavior, it has also been found to be associated with subjective perception of self-other similarity. Mikulincer, Orbach, and Yavnieli (1998) suggest that relative to secure people, anxious-ambivalent persons overestimate and avoidant persons underestimate subjective self-other similarities in the domains of traits and opinions. This tendency was even more accentuated under situations that evoked distress. According to Mikulincer et al. (1998), these findings are explained by the various ways in which people holding different attachment styles use to regulate affect in their lives: Whereas avoidant persons manage distress by deactivating the attachment system (distancing themselves from other persons while reverting to total self-reliance), anxious-ambivalent people deal with distress by hyper-activating the attachment system and maximizing their connectedness to others (making attempts to reach greater proximity, support and love combined with a lack of confidence that it will be provided. For review see Mikulincer & Shaver, 2003). It is possible that the cumulative habitual unconscious strategy of insecure people to distort their level of perceived similarity to others under stressful situations affects their basic ongoing sense of self-other similarity, even under un-stressful situations (Mikulincer et al., 1998).

Since identified single victims arouse greater distress than unidentified ones (Kogut & Ritov, 2005a), we hypothesize that mainly anxious-ambivalent perceivers (who tend to overestimate self-other similarity, especially when confronting distress) will have increased perceptions of similarity and connectedness when encountering an identified victim in need. On the other hand, an unidentified victim, who is less likely to evoke feelings of distress, is far-less likely to cause enhanced perceptions of similarity, even for anxious-ambivalent persons.

In contrast, avoidant persons, who manage distress by deactivating the attachment system, are expected to increase the psychological distance between themselves and the victim, especially since the target of help may be a distressing stimulus. Since feelings of connectedness and similarity are closely related to people's willingness to help (Cialdini et al., 1997; Ritov & Kogut, 2011), we predict that the tendency to help identified victims more than unidentified ones will be smallest for avoidant persons (or those under attachment-avoidance priming manipulation).

Overview of the experiments

We examined the above hypotheses in three experiments presenting participants with an identified or an unidentified child in need of a donation that could save his life. In the first experiment, attachment styles were measured on the two dimensions of anxiety and avoidance, and the relationships between these dimensions and donations to the two types of victims were examined. The second study aimed to show causal relations between attachment style and donations to identified and unidentified victims. Experimentally-enhanced attachment primes (avoidance, anxiety and security schemas) were activated in a between-subjects priming manipulation, after which participants had the opportunity to donate to the identified or the unidentified victim. Finally, the third experiment was conducted to shed some light on the suggested psychological mechanisms that may be related to the patterns of behaviors that characterize specific attachment styles/primes. Here, too, participants were primed for one of the attachment style conditions and their accessibility of thoughts regarding relatedness and similarity was examined using a word completion task.

Study 1

The first study was designed to test our main hypothesis, that although both attachment anxiety and attachment avoidance are related to a decrease in donations to unidentified victims, identification of a victim in need will increase donations for people with higher scores on attachment anxiety, while those expressing high attachment avoidance will donate lower amounts regardless of the victim's identification. Participants completed an attachment style measure that estimated the two attachment dimensions and then had an opportunity to donate to an identified or an unidentified child whose life was in danger.

Method

Seventy nine undergraduate students at the Ben-Gurion University (46% of who were females, mean age = 24.28)[1] participated in the study. They were paid 10 shekels (approximately $2.5), given in one-shekel coins for their participation in the experiment, which consisted of the present study and another, unrelated study.

Participants were given a booklet containing questionnaires for both studies. They were instructed to complete the questionnaires without referring to previously completed pages. As a measure of individual differences in attachment style, we used the 36-item self-report measure of adult attachment, the "Experiences in Close Relationships" scale (ECR; Brennan, Clark, & Shaver, 1998), which includes an 18-item scale to measure each of the two major dimensions of attachment (avoidance and anxiety). Each item is rated on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). Higher scores indicate greater attachment avoidance or attachment anxiety. (For example, an item for the attachment anxiety reads, "I worry that romantic partners won't care about me as much as I care about them," while an item for attachment avoidance reads, "Just when my partner starts to get close to me I find myself pulling away.") The reliability and validity of these scales are well documented (e.g., Brennan et al., 1998; Fraley, Waller, & Brennan, 2000). Cronbach's alphas in the current sample were also high for both scales (for the anxiety subscale $\alpha = 0.87$ and for the avoidance subscale $\alpha = 0.90$). Therefore, average scores for all items within each scale were computed for each participant.

The next two pages included a questionnaire for an unrelated study (which served as a distracter for the current experiment). Upon its completion, participants received a description of either the identified or the unidentified victim (which were randomly distributed) and had an opportunity to donate money to that victim. Participants in the identified victim condition read about Tom, a three year old child diagnosed with cancer who is in need of a bone marrow donation. Participants were told that many blood samples were collected in an earlier bone marrow donation campaign for Tom, but that at the moment, it was most important to raise more money to fund the testing of the existing samples to find out whether a

[1] In all studies reported here, statistical analyses revealed no significant gender differences in any of the variables, and none of the interactions between gender and the other predictor variables were significant.

potentially life-saving match for Tom had already been found. Participants were informed that the cost to test each blood sample was about $60, and that owing to the urgency of Tom's condition, it was imperative to collect the money as soon as possible to ensure that a bone marrow donor would be found in time to save Tom's life. Accompanying the text was a picture of the child. Participants in the unidentified condition read the same description about a sick child that was devoid of any identifying information (name, age or picture).

On the next page, all participants were asked whether they were willing to donate money to help save the child's life. If they responded in the affirmative, they could contribute any amount of money they wished. Specifically, they could donate any part of the 10 shekels they had received as payment for their participation in this study, or they could donate a larger sum by adding money at their discretion. 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

Participants' contributions were in the range of 0–10 shekels, $M = 6.01$, $SD = 4.54$. To examine the role of the two attachment dimensions in predicting participant contributions to identified and unidentified victims, a stepwise regression analysis was conducted on the amounts donated. The three main effects were entered in the first step (attachment avoidance, attachment anxiety and the victim's identifiability). The two-way interactions were entered in the second step, while the three-way interaction was entered last. Findings suggest that identifiability (a dummy variable, $t = 2.15$, $p < .05$, $\beta = 1.34$) was uniquely associated with donations, such that the identified victim received greater overall donations ($M = 6.78$) than the unidentified victim ($M = 5.18$), replicating earlier research on the identifiable victim. However, this effect was qualified by a significant two-way interaction between identifiability and attachment anxiety ($t = 2.14$, $p < .05$, $\beta = 1.24$). Pearson correlations revealed that while the correlation between attachment anxiety and contributions was negative in the unidentified condition, $r(38) = -.309$, $p = .059$, (replicating earlier research), in the identified victim condition, the correlation was positive, $r(45) = .214$, $p = .18$. Mean donations to identified and unidentified victims as a function of attachment anxiety levels are reported in Table 1. This table further demonstrates that although identified victims received more contributions overall than unidentified ones, this difference was pronounced for people with higher scores on the attachment anxiety measure and negligible for people with lower scores.

Although both attachment avoidance and attachment anxiety ratings were negatively related to donations ($t = -1.43$, $p = .15$ and $t = -.667$, NS, respectively), their contributions to the model did not approach significance. All other interactions were not significant.

The results of the first study support our assumption that attachment anxiety strengthens the identifiability effect: the difference between donations to identified and to unidentified victims (experiencing the same need) was greater among people who rated higher on the attachment anxiety scale. This difference seems to stem from both the lower donations given by anxious people to the unidentified recipient and the higher donations given by them to identified recipients. Although attachment anxiety was associated with lower willingness to help in previous studies (e.g. Gillath, Shaver, & Mikulincer, 2005; Gillath, Shaver, Mikulincer, Nitzberg, et al., 2005; Mikulincer et al., 2005), the results of study 1 suggest that this tendency is pronounced mostly when the recipient is not identified. Attachment avoidance, on the other hand, was associated with lower overall contributions, regardless of the identification of the victim (note that this negative correlation did not approach significance).

Table 1
Mean donation amount (SD) for identified and unidentified victims as a function of attachment anxiety level. Attachment anxiety was divided to high and low by the median (3.39), study 1.

	Identified	Unidentified
High anxiety	8.05 (3.55)	4.56 (5.05)
Low anxiety	5.68 (4.70)	5.88 (4.21)
Total	6.78 (4.32)	5.18 (4.66)

Study 2

The results of study 1 indicate that the tendency to increase contributions to identified victims, and to decrease contributions to unidentified ones, is related to attachment anxiety, while the relation between contributions and attachment avoidance did not approach significance (although higher attachment avoidance tended to lead to decreased donations overall). The aim of the second study was to show causal relations between attachment styles and the identifiability effect by priming participants with mental representations of relationships they have or had to specific attachment figures.

Research has shown that although attachment style is usually perceived as a global orientation in close relationships and thus functions as a chronic disposition within personality (Mikulincer & Shaver, 2003), people in fact possess multiple attachment schemas that may include representations both of supportive and of non-supportive others (e.g., Baldwin, Keelan, Fehr, Enns, & Koh Rangarajoo, 1996; Pierce & Lydon, 1998). Those specific attachment figures may temporarily activate particular attachment orientations, even if they are incongruent with a person's usual, more general attachment style (e.g., Mikulincer et al., 2001). Priming participants with mental representations of relationships to specific attachment figures can activate schemas of such experiences ("relational schemas"), thereby generating temporary attachment styles.

Based on this line of research, participants in the second study were primed with relational schemas (primed attachment avoidance, primed attachment anxiety and primed attachment security). Subjects were asked to recall and write about a specific relationship with an attachment figure, after which they were confronted with an identified or an unidentified victim and were asked for a donation. In light of our previous results and the literature cited here, we predicted that participants in the primed attachment anxiety condition would contribute significantly more money to the identified victim than to the unidentified one. We expected participants in the primed attachment security condition (compared to other participants) to show greater overall contributions and to be less affected by the identification of the victim. Likewise, we expected participants in the primed attachment avoidance condition to show lower overall contributions compared to the primed attachment security condition and possibly with their donation lowest when the victim was identified (since the identification of the victim causes greater distress, which in turn might create greater motivation to distance oneself from the victim).

Method

One hundred and twelve undergraduate students at the Ben-Gurion University (56% of who were females, mean age = 24.95) participated in the study in exchange for 15 shekels (given in one shekel coins).[2] They were told that they would participate in a series of unrelated

[2] Payment in the current study was higher due to the longer time required to complete the booklet of questionnaires.

studies presented as such for reasons of convenience. At the beginning of the experimental session they completed a questionnaire for an unrelated study. Next, participants were randomly divided into the six experimental conditions of the two identification (identified vs. unidentified victim) × three temporal attachment styles (avoidant, anxious or secure) study design. Participants in the primed attachment avoidance condition were asked to recall a close relationship in which they felt uncomfortable being close to the other person, found it difficult to trust and depend on that person, and felt nervous when the other person was too close to them. Participants in the primed attachment anxiety condition were asked to recall a close relationship in which they felt that the other person did not share the same desire for closeness, they were worried that the other person did not really love them or want to stay with them, and felt that their desire to get closer sometimes scared the other away. Participants in the primed attachment security condition were asked to recall a close relationship in which they felt comfortable getting close to and depending on the other person and having that person depend on them and in which they did not worry often either about being abandoned or about the other person getting too close to them. The three attachment descriptions were formulated by utilizing descriptions from Hazan and Shaver (1987), as done in previous research (Kogut & Kogut, 2011). To encourage them to think further about their experiences with the attachment figure, participants in all conditions were asked to write a short paragraph about the relationship and to answer a few questions about the relationship, such as when it took place, how long it lasted, what type of relationship it was (e.g., romantic, friendship, family) and to explain what about the relationship made them feel as described.

Because mood may influence people's willingness to help (e.g., Cialdini et al., 1997, 1987) and priming participants with the insecure attachment styles may have induced negative emotions that influenced their moods, we asked participants to rate their current moods (on a seven-point scale) immediately after the priming manipulation to enable us to rule out the potentially confounding affect of mood on donations. Finally, participants read one of the two descriptions (identified or not) of the sick child presented in the previous study and were asked for their willingness to donate. As in study 1, participants were free to contribute any amount of money they wished. Specifically, they could donate any part or all of the 15 shekels they received as payment for their participation in this study, or they could donate a larger sum by adding money at their discretion. As in the previous study, the money raised in the current study was also transferred to the "Hayim Association".

Results

We first note that no significant difference was found between mood-ratings under the three priming conditions, ruling out the possible confound of mood on donations.

Participants' contributions ranged from 0 to 25 shekels, $M = 8.03$, $SD = 5.63$. A two-way ANOVA on donation amounts with attachment priming and identification as the independent factors revealed a significant main effect for identification, such that overall, contributions were greater for the identified child ($M = 9.05$, $SD = 5.36$) than for the unidentified one ($M = 6.86$, $SD = 5.74$), $F(106,1) = 4.37$, $p < .01$. The main effect of the priming manipulation did not approach significance, though mean contributions were higher for participants in the attachment security priming condition ($M = 8.61$) than in the two other conditions ($M = 7.65$ and $M = 7.83$, for the attachment anxiety priming and attachment avoidance priming conditions, respectively). Most importantly, the interaction between the two independent variables approached significance, $F(106,2) = 2.40$, $p = .09$. As can be seen in Fig. 1, the difference between contributions for the identified and for unidentified victims was significant only in the attachment anxiety priming condition, $t(36) = 2.84$, $p < .01$ (but not in the two other conditions $t(34) < 1$, NS and $t(36) < 1$, NS). Although results of one way ANOVAs conducted separately on donations to identified and to unidentified victims as a function of the priming manipulation did not approach significance, Fig. 1 indicates that while in the identified condition participants under attachment anxiety tended to contribute more than participants under the two other priming conditions, in the unidentified condition their donations were lowest.

In summary, the results of the second study further support the hypothesis that attachment anxiety is related to the observed discrepancy between donations to identified and unidentified victims. Although the identified victim received overall more donations than the unidentified victim, this discrepancy appeared to be significant only in the attachment anxiety priming condition. In line with the findings of study 1, the results of study 2 suggest that the gap between donations to the identified and the unidentified victims found under attachment anxiety priming stems from both the increase in anxious people's donations to identified victims, as well as a decrease in donations to unidentified ones.

However, participants in the primed attachment avoidance condition contributed similar amounts to identified and unidentified victims, exhibiting no decrease in contributions to identified victims. Yet, as expected, their overall donations were lower than those given in the primed attachment security condition. We discuss this issue further in the general discussion section.

Study 3

The third study is an exploratory attempt to examine the psychological mechanism that may explain the interaction between adult attachment style and identification found in participants' donation behavior in the previous two studies. As discussed earlier, adult attachment style was found to be related to subjective estimations of self-other similarity, especially in distressing situations (Mikulincer et al., 1998). In addition, feelings of connectedness and similarity were related to and significantly mediated the identifiable victim effect in our previous research (Ritov & Kogut, 2011). Taking those two lines of research together, we assume that the tendency of anxious-ambivalent people to provide more help to identifiable victims and less help to unidentifiable ones is related to their tendency to overestimate subjective self-other similarity between them and the identified victim. This tendency is less likely when they are

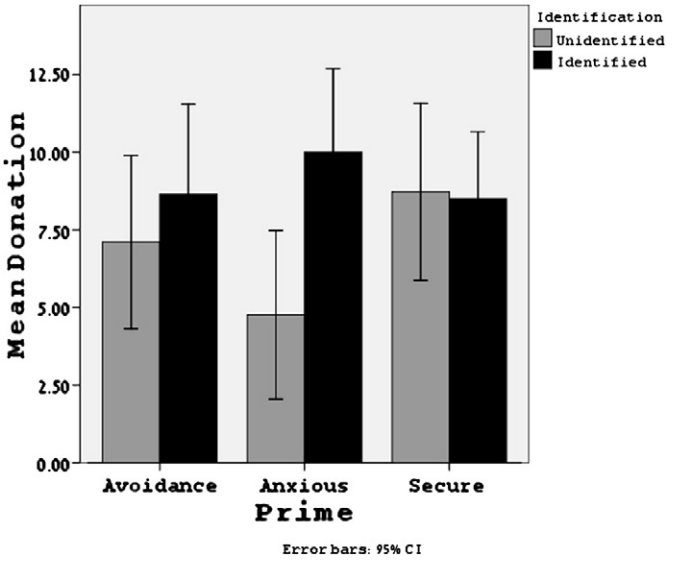

Fig. 1. Mean donation amount for identified and unidentified victims, as a function of the priming attachment condition (study 2).

confronted with an unidentified victim, as it is difficult to relate or feel similar to an abstract target. In addition, identified victims were found to arouse greater distress than unidentified victims in previous research (Kogut & Ritov, 2005a). The tendency of anxious ambivalent people to overestimate the similarity between them and others is expected to be stronger in a distressing situation. As suggested by Mikulincer and collaborators, overestimation of self-other similarity is an affect-regulation strategy that enables anxious ambivalent people to feel less lonely and more cared for. Stressful situations augment this unconscious strategy (Mikulincer et al., 1998).

On the other hand, the tendency of avoidant persons to underestimate such similarities may be greater when the victim is identified. Avoidant persons are likely to unconsciously attempt to maintain their detachment from the victim, especially in the distressing case of the identified victim. Mikulincer et al. (1998) found that avoidant people underestimate self-other similarity as a part of their "compulsive self reliance" (Bowlby, 1988), a behavior pattern that is even more pronounced in distressing situations. Finally, secure people — who evaluate self-other similarities more realistically and whose self-other similarity evaluations are not affected by distressing situations (Mikulincer et al., 1998) — are expected to perceive about the same amount of similarity between them and the victim, regardless of the latter's identification.

We therefore expected feelings of connectedness and similarity between the perceiver and the victim to be similar to the pattern found for contributions. In line with the above literature and the findings of the first two studies, we expected that participants under the attachment anxiety priming manipulation would feel greater similarity and connectedness to an identified than to an unidentified victim. Participants under attachment avoidance are expected to express their desire for detachment from the distressing victim by perceiving less similarity and connectedness to any victim, a tendency that may be even more pronounced when they are confronted with an identified victim (a target that evokes greater distress). Participants under the attachment security priming condition are expected to show similar connectedness to the two types of victims. We examined the above hypotheses in the following study, in which subconscious sense of connectedness toward the victim was measured using a word completion task.

Method

One hundred and forty four undergraduate students at the Ben-Gurion University (55% of whom were females, mean age = 25.16) participated in the study in exchange for extra course credit. Participants were randomly assigned to one of six conditions of a three (attachment priming condition) by two (victim's identification) design (described in detail in study 2). First, they completed the attachment priming task (see study 2), in which they were asked to recall and write about a close relationship in which they felt in a way that resembled the description given of one of the three attachment styles. As in study 2, participants next read about the child in need (identified or not). To examine participants' subconscious sense of connectedness toward the victim, we used a word completion task entailing words that could be completed with either neutral or connectedness-related words. This procedure has been used successfully in previous research to examine people's accessibility of various subconscious contents (e.g., Arndt, Greenberg, Pyszczynski, Solomon, & Simon, 1997; Greenberg, Pyszczynski, Solomon, Simon, & Breus, 1994; Mikulincer & Florian, 2000). The word completion task included 16 Hebrew word fragments which participants were instructed to complete according to the first word that came to their mind by filling in one or two missing letters. Eleven of the 16 Hebrew word fragments could be completed with neutral or connectedness-related Hebrew words. For example, possible connectedness words were the Hebrew words for connection, relation, close, alike, resemble and friendship. The dependent measure was the number of connectedness words with which a participant completed the fragments. In this study we did not ask for donations, since the pattern of results found in a pilot study, that was conducted on a small sample in order to structure the study design, and in which we varied the order of the two tasks (completing the connectedness words or making a decision regarding the donation) suggests that the priming manipulation affects only the adjacent task (and has a much weaker effect on the second task). We assumed that being employed in one of the tasks may distance the participants from the priming manipulation, hence weakening its effect on the second task.

Results

The number of connectedness words completed by the participants ranged between 0 and 11, $M = 4.83$, $SD = 2.06$. A two-way ANOVA on the number of connectedness words by the two independent variables (attachment priming and identifiability) was conducted. The main effect of the priming manipulation approached significance, $F(2,138) = 2.78$, $p = .06$, such that participants in the attachment security condition completed more connectedness words ($M = 5.36$) than participants in the attachment avoidance ($M = 4.70$) and in the attachment anxiety conditions ($M = 4.41$). No significant main effect was found for the identification of the victim ($M = 4.89$ and $M = 4.77$ for the identified and the unidentified conditions respectively). Most importantly, as expected, the interaction between the attachment priming and identifiability was significant, $F(2,138) = 3.40$, $p < .05$. As can be seen in Fig. 2, participants in the primed attachment anxiety condition tended (with marginal significance) to complete more connectedness words in the identified condition ($M = 4.96$) compared to the unidentified one ($M = 3.86$), $t(45) = 1.80$, $p = .08$. The opposite pattern was obtained (with marginal significance) for participants in the primed attachment avoidance condition, in which they completed less connectedness words after being exposed to an identified victim ($M = 4.20$), $t(46) = 1.92$, $p = .06$ vs. after exposure to an unidentified one ($M = 5.22$). Finally, there was no significant difference between the number of connectedness words completed in the identified ($M = 5.56$) and the unidentified ($M = 5.15$) conditions in the primed attachment security condition, $t(49) < 1$, *NS*. One way ANOVAs conducted on the number of connectedness words completed in the identified and the unidentified conditions separately, revealed a significant difference between the three priming conditions in the unidentified condition, $F(2, 68) = 3.39$, $p < .05$; such that participants under attachment anxiety priming completed fewer connectedness words than both participants in the avoidance priming condition ($p = .06$) and secure priming condition ($p = .07$, in post hoc comparisons, *Tukey* measure). The latter two did not significantly differ.

The difference between the three priming conditions for the identified victim condition approached significance, $F(2, 70) = 2.67$, $p = .07$. Post hoc comparisons suggest that only the difference between the avoidance prime and the security prime conditions approached significance ($p = .06$), such that under the attachment security condition participants completed more connectedness words. However, the attachment anxiety condition did not significantly differ from the other two priming conditions, where in this condition participants' responses were in between the two other priming conditions.

The results of the third study indicate that only in the primed attachment anxiety condition did the provision of identifying details about the victim (age, name and a picture, as opposed to no details) increase the number of connectedness words completed, reflecting greater accessibility of relatedness and similarity thoughts after being exposed to the identifiable (vs. the unidentifiable) victim. This pattern is similar to the one found for donations in the previous study, where identification of the victim increased donations only in the primed attachment anxiety condition. Like the donation pattern,

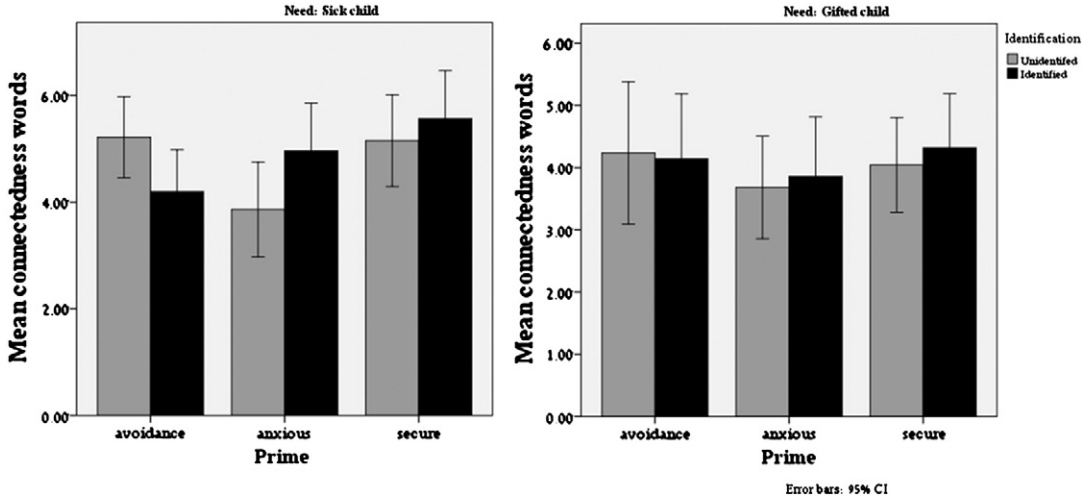

Fig. 2. Mean connectedness words completed after reading about the sick child (left panel) and the gifted child (right panel) as a function of the priming attachment condition and the target's identifiability (study 3 and addendum study).

this gap seems to stem from both the decrease in connectedness to the unidentifiable victim (participants under attachment anxiety priming completed fewer connectedness words than both participants in the avoidance and the security priming condition) and the relative increase in connectedness to the identified victim (participants' responses under attachment anxiety were in between the two other priming conditions).

Contrarily, in the primed attachment avoidance condition, identification (vs. no details) decreased the accessibility of connectedness-related thoughts, which might stem from avoidant people's need to increase the psychological distance between themselves and the identifiable victim, who is known as arousing more stress. Finally, in the primed attachment security condition no significant difference was found between accessibility of relatedness and similarity thoughts expressed after being exposed to identified and unidentified victims. As expected, participants primed with the attachment security condition completed more connectedness words overall than in the two insecure priming conditions, reflecting the empathic, more altruistic motives evoked by both types of victims under this condition.

Although in study 2 the overall effect of identifiability on donations was significant, this effect did not approach significance for connectedness. As can be seen in Fig. 2 (left panel), this lack of identifiability effect stems from participants under attachment avoidance priming who manifested especially lower connectedness in the identified condition, yet contributed similar amounts to identified and unidentified victims in study 2. We further discuss this gap in the general discussion. However, since study 3 did not measure helping behavior, further research is needed to directly examine the relationship between helping and connectedness to identified and unidentified victims under the different attachment priming conditions.

Addendum study

Since the target presented to the participants in study 3 was always a sick child, it remains unclear whether the pattern of connectedness found under the different attachment-priming conditions is unique to cases where the target is a victim in need or whether it is a general effect that does not depend on the target's neediness. An addendum study was conducted to clarify this issue. In this study we employed the same design used in study 3, but with a different target: a gifted child that was diagnosed as suitable for a special, highly expensive study program. This scenario is adapted from Kogut and Ritov (2005b), who showed that the identifiable victim effect is largely restricted to needy targets and diminishes when the target is not perceived as being in critical need. In line with their research, we suggest that the connectedness pattern found for identified and unidentified targets under the different attachment priming conditions is largely restricted to needy victims who are likely to evoke distress in the perceiver (and weaker when the target is not in critical need).

Method

One hundred and twenty seven undergraduate students (65% of whom were females; mean age = 25.23) participated in the study. They were randomly assigned to one of the six conditions of a three (attachment priming condition) by two (target's identification) design employed in study 3. After completing the priming task they all read about a three year old child who was recently diagnosed as suitable for a special 15-year, extremely expensive study program, to fully develop his high potential. In the identified condition, the name and the picture of the child were added, using the same name and the same picture used for the identification of the sick child in study 3. After reading about the gifted child, participants received the same word-completion task used in study 3.

Results

The number of connectedness words completed by the participants ranged between 0 and 9, $M = 4.04$, $SD = 2.00$. Mean number of connectedness words as a function of the attachment priming and identification of the target are presented in Fig. 2 (right panel). A two-way ANOVA on the number of connectedness words by these two independent variables was conducted. No significant results were obtained. Specifically, the interaction of interest, between the priming manipulation and identification was far from significance, $F(2,121) = .089$, $p = .91$, suggesting that the connectedness pattern found in study 3 under the different attachment conditions is restricted to situations where the target is in critical need.

Although study 3 (along with the addendum study) suggests some support to the idea that feelings of connectedness underlie the dominance of the identifiable victim effect in anxious people's helping decisions, further research is needed to explore this psychological mechanism. Specifically this research should explore the role of feelings of distress in increasing perceptions of connectedness to a victim in need, as well as possible mediation mechanisms (like distress and connectedness) to actual donation patterns.

General discussion

The current research demonstrates the effects of adult attachment styles on donation behavior and connectedness to identified victims relative to unidentified victims experiencing exactly the same need. The findings of the three studies emphasize the relevance of attachment theory for explaining the identifiable victim effect. In the first study, the chronic sense of attachment anxiety was significantly related to an increase in contribution to identified victims, as opposed to a decrease in contributions to unidentified ones. Similarly, in the second study, under the attachment anxiety relational schema (via priming manipulation), there were significantly higher contributions in the identified victim condition compared to the unidentified one. The results of the third study replicate this pattern (using the same priming manipulation) by showing that in the primed attachment anxiety condition, participants exhibited greater accessibility of relatedness and similarity thoughts after being exposed to the identifiable victim and lower accessibility to such thoughts after being exposed to the same scenario without identifying details. This pattern occurs only when the target was a victim experiencing a critical need, and not when a non-distressing target (a gifted child) was presented.

Mikulincer et al. (2005) described highly anxious people as absorbed in their own distress, such that their exposure to needy victims generated distress without leading to actual help being offered. Indeed, previous research consistently shows that attachment anxiety is related to a decrease in helping behavior and volunteering. However most of these studies examined general volunteer activities without a reference to a specific victim to whom the participant could relate. For example, Gillath, Shaver, and Mikulincer (2005), and Gillath, Shaver, Mikulincer, Nitzberg, et al. (2005) examined participation in teaching, reading, counseling troubled people, providing health care to the sick, etc. Similarly, Mikulincer et al. (2003) examined people's transcendent values (such as benevolence and universalism). In Mikulincer et al. (2005) the needy target was identified, but the helping task used in this study included replacing the other participant in aversive tasks (e.g. touching a live tarantula) which might affected participants' willingness to help in general, and anxious people's willingness to help in particular.

Our study replicates the findings that attachment anxiety decrease helping — only in the unidentified condition, in which anxious people tended to donate less than secure people. However, our findings suggest the possibility that attachment-anxiety can lead to helpful behavior. This occurs when helping requires easy or convenient actions, such as small monetary donations (as opposed to frightening, aversive or effortful actions required in Mikulincer et al., 2005) and when the target is identified, thus allowing the fulfillment of attachment-related, frustrated needs.

In any case, we assume that the help provided under the attachment anxiety condition differs from the more altruistic help provided under attachment security. This fits with the findings of Batson et al. (1981), suggesting that pro-social behavior stemming from egoistic motives is carried out mainly in situations when it is difficult to escape or when it does not require strenuous effort.

In terms of the two behavioral systems of attachment and caregiving, it can be said that the 'attachment-caregiving balance' is in favor of the former component among anxious-ambivalent people, who are chronically preoccupied with the need to establish a sense of attachment security. Providing help to others is limited, due to these people's focus on their own distress, diminishing their ability to take the needy person's perspective and to meet his/her needs through real empathy (Mikulincer et al., 2005). The stronger tendency to donate, and the greater accessibility of connectedness words in front of identified victims suggest that under attachment anxiety priming people get more involved with the victim when he/she is more suitable as an attachment-need fulfiller (when some details are known and enable a sense of emotional tie). On the other hand, when the target is unidentified there is far less help, probably as the help provided needs to base more on real caregiving.

As for the two other attachment styles, our results suggest that the lack of the identification effect in both the attachment security and the avoidance priming conditions may stem from different mechanisms, as suggested by the third study. Participants in the primed attachment avoidance condition showed greater accessibility of relatedness and similarity thoughts after their exposure to an unidentified vs. identified victim. It seems that under the attachment avoidance condition, people who encountered an identified victim in need (a more distressing situation than encountering an unidentified victim) indeed felt the need to increase the psychological distance between themselves and the victim and to draw away from the victim. As mentioned earlier, Mikulincer et al. (1998) see the underestimation by avoidant people of self-other similarity, especially under distress-arousing stimuli, as a strategy that assures one's over-differentiation from his/her social surroundings. Attachment-avoidance seems related to distancing from both the attachment and the caregiving behavioral systems since these two systems 'force' connectedness with other people, which contradict the compulsive self reliance held by avoidant people.

It seems plausible that reading about a helpless sick child was a particularly threatening stimulus for avoidantly-primed participants. Similar to feelings aroused by the prospect of death (Mikulincer, Florian, & Tolmacz, 1990), sickness seems to be a major challenge and threat to self-reliance for highly avoidant people. It may be that avoidantly-primed participants responded in a similar way to dispositional avoidant people. As such, they were more comfortable reading about the unidentified victim, from whom they can maintain a safe distance, than when reading about the identified victim, the account of whom includes certain information that effectively "forces" them to take interest and to get closer. In turn, accessibility of relatedness and similarity thoughts was lower when the victim was identified. This mechanism may have weakened the identifiability effect, resulting in similar contributions to identified and unidentified victims. Although in the current research accessibility to connectedness words was measured without a donation request, previous research (Ritov & Kogut, 2011) showed that feelings of connectedness underlie the identifiability effect. Future research should further explore the relationship between these variables.

While the accessibility of connectedness thoughts (study 3) resembles the pattern found for donations (study 2) in both the attachment security and attachment anxiety priming conditions, in the case of attachment avoidance priming, some gap was observed between the two patterns. While the donations to identified and unidentified victims did not differ (study 2), connectedness thoughts were significantly lower after being exposed to identified victims (vs. unidentified ones). Since avoidant people react to stressful events by using a coping style that involves distancing themselves from the source of stress (see Mikulincer & Florian, 1998, for review), the easiest way to distance themselves from the victims (in study 2) may be to donate a relatively small amount of money, regardless of the target's identification (note that the avoidance scale was related to overall lower donations in study 1, and similarly, avoidantly-primed participants tended to donate less then securely-primed ones in study 2). Reluctance to donate any amount could be perceived as detrimental to their ability to distance themselves from the victim (e.g., after reluctance to donate any amount, one can ruminate around guilt feelings), and therefore, participants may have been prone to donate relatively small amounts in both the identified and the unidentified conditions. In a recent study, Dickert, Sagara, and Slovic (2011) suggest a two-stage model demonstrating affective influences on the decision to donate. In their studies, mood management, which includes self-oriented emotions (e.g., the extent to which donating would make the donor feel better), plays a major role in the decision of whether or not to donate, while other-oriented emotions (e.g., empathy, compassion) are related to the second stage of the decision, where the amount of money contributed is decided upon (for

those who decided to contribute). According to this model, the decision by avoidant (or avoidantly-primed) people to donate a small amount may reflect their wish to feel good by deciding to donate in the first stage while not becoming too involved in the needs of the other, hence donating a small amount in the second stage without paying substantial attention to the identity of the recipient (whether identified or not). Further research should examine this assumption, especially in cases where the request for help requires large monetary donations or greater effort and greater cognitive/emotional involvement.

In the attachment-security priming condition, we suggest that a different mechanism is reflected by the lack of the identification effect: This condition was significantly associated with greater accessibility of relatedness and similarity thoughts overall, regardless of the identification of the victim. Thus, the lack of identification effect in this condition seems to stem from the increase in connectedness to the unidentified victim rather than from a decrease in connectedness to identified victims (exhibited by avoidantly-primed participants). Attachment security — either dispositional (study 1) or primed (study 2) — tended to be related to higher donations. Moreover, under an attachment security prime there were no differences between donations (study 2) or connectedness thoughts reflected after being exposed to identified and to unidentified victims (study 3), thereby demonstrating that attachment security (as opposed to insecurity) enables more balanced cognitive evaluations and behaviors (see also Hazan & Shaver, 1990; Mikulincer, 1997; Mikulincer & Arad, 1999).

Our results are very much in line with previous research on the influence of adult attachment style on willingness to help or to support a needy other (Fraley & Shaver, 1998; Mikulincer et al., 2001, 2003, 2005; Simpson, Rholes, & Nelligan, 1992). In that line of research, attachment security was associated with cognitive openness and empathy, strengthening self-transcendent values and fostering support to close others and strangers and tolerance toward out-group members. Specifically, attachment security was found to be related to volunteering to help others in everyday life and to unselfish motives for volunteering (Gillath, Shaver, & Mikulincer, 2005; Gillath, Shaver, Mikulincer, Nitzberg, et al., 2005; Gilath, McCall, Shaver, & Blascovich, 2008; Gilath, Selcuk, & Shaver, 2008). The current study extends this line of findings by examining willingness to help in the unique case of the identified victim. Overall, from the abovementioned literature and from our own study, it seems that attachment security is characterized by 'attachment-caregiving' balance, as it enables individuals to both lean on others, as well as to empathically support other people in need.

In summary, the presented research examined the relationship between adult attachment style and willingness to help identified and unidentified victims. We used both correlational design — assessing individual differences in dispositional levels of attachment anxiety and avoidance, as well as an experimental design — using a priming manipulation, to demonstrate how the different attachment styles may interact in how people's helping behavior is extended to identified and unidentified recipients. Our results show that attachment anxiety is related to the greater willingness to help identified victims relative to unidentified ones. We further demonstrate that under attachment anxiety priming people tend to perceive greater similarity and connectedness toward the identified victim as opposed to the unidentified one, a tendency that may underlie the identifiability effect.

Our work contributes to the literature of both the identifiable victim effect — by exploring individual differences and suggesting a possible psychological mechanisms behind it — and to the literature on the relationship between adult attachment style and helping behavior, suggesting that in some cases attachment anxiety may be channeled to increase helping behavior (such as in the case of an identified victim in need of monetary help). These studies presented participants with actual situations of victims in need of donations, and real donations were collected for the victims (as opposed to asking about one's hypothetical willingness to help). This procedure increases the studies' external validity and their relevance in predicting people's behavior in real world helping situations.

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