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Gifts of giving: The role of empathy and perceived benefits to others and self in young adults' decisions to become organ donors

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Abstract

Trait empathy and self-interest exert a strong influence on different prosocial behaviors, but their role in the promotion of organ donation registration is unclear. A survey examined how perceived benefits of organ donation for others and the self affect people's willingness to register as donors. Perceived other-benefits did not predict registration. Those with lower risk and greater self-benefit perceptions were more willing to donate. Empathic concern predicted donation willingness and moderated the effect of other-benefit perceptions, such that other-benefit perceptions predicted donation willingness among those with greater empathic concern. Applications of these findings to organ donation promotion are discussed.

Keywords

altruism, egoism, empathy, organ donation, risk, self-interest

Persistent shortages of organs for transplantation have sparked a need to understand how psychological factors predict or inhibit people's willingness to become organ donors. Research by Morgan et al. (2008b) showed that perceptions about the benefits of organ donation play an influential role in the decision-making process, but their study did not distinguish between perceptions of benefits for the self and benefits for others (e.g. transplant recipients). Perhaps because self-concern is often discussed as a problem that inhibits prosocial behavior (Mansbridge, 1990), research that considers the unique potential of self-interest to motivate organ donation is rare. But studies that do not draw a distinction between different types of benefit perceptions, or focus exclusively on perceptions of how organ donation will benefit others, may be masking the unique influence of self-benefits motivations for donation. Along with risk perceptions, which have also been identified as an influential variable in donation decisions (e.g. Parisi and Katz, 1986), this study examines the relative influence of potential donors' perceptions of other- and self-benefit perceptions on willingness to donate. This study also examines the role that dispositional empathy plays in donation willingness, and whether

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people with varying levels of trait empathy are differentially influenced by perceptions of risk, other-benefits, and self-benefits. The role that empathy plays in donation willingness has not been explored extensively, but it may moderate the influence of risk and benefit perceptions.

Self-interest and prosocial behavior

Organ donation is often considered a selfless, purely altruistic behavior. Morgan and Miller (2002: 165) argue 'organ donors have little if anything to gain by donating their organs after death; it is a purely altruistic act, based on empathy with those who are sick and in need of a transplant'. This rationale is closely aligned with Batson's (1987) empathy–altruism hypothesis, which posits that altruism results from understanding another's suffering and experiencing empathic concern for them. But extant research suggests that self-interest incentive is still a desirable – if not needed – ingredient of many prosocial exchanges. Cialdini et al.'s (1973) Negative State Relief Model, proposes that individuals try to help others in order to replace their distress with mood-enhancing self-rewards that accompany helping. Andreoni (1990) discussed similar positive feelings associated with performing prosocial acts as a 'warm glow' associated with social approval or self-pride. Even Batson (1998) himself acknowledges that individuals inspired by empathic concern to help others can benefit from the positive experience of helping. Hence, while the initial appeal of becoming an organ donor may be grounded in sincere concern for the health of people needing transplants, we propose that the association of additional benefits with organ donation can further motivate and reinforce people's decision to register as a donor.

Self-benefits of organ donation

Several studies suggest that people recognize benefits of organ donation for others, such as saving lives, or contributing to scientific knowledge (Hyde and White, 2009; Morgan and Miller, 2002; Morgan et al., 2008a; Parisi and Katz, 1986; Skowronski, 1997), and research has identified self-benefit perceptions associated with becoming a donor as well. Committing as a donor can enhance self-esteem or feelings of pride and self-worth (Hessing and Elffers, 1986; Parisi and Katz, 1986; Skowronski, 1997). For some, organ donation provides an opportunity to allow a part of themselves to survive after death (Brug et al., 2000; Parisi and Katz, 1986; Morgan et al., 2008b). Social motivations have also been catalogued, such as setting a good example, making a good impression, leaving a positive legacy, and gaining admiration (Brug et al., 2000; Parisi and Katz, 1986; Skowronski, 1997). There is also evidence that the decision to become a donor can elicit positive emotions like pleasure and gratification (Van Den Berg et al., 2005), and combat negative feelings such as guilt (Lindsey, 2005; Skowronski, 1997).

Although studies have investigated both self- and other-benefit perceptions, they are usually collapsed into an overall measure of prodonation attitudes (e.g. Morgan et al., 2008b; Parisi and Katz, 1986; Stephenson et al., 2008). No studies could be located examining the influence of these benefit types separately. This is unfortunate because oversimplified conceptualizations of motives may weaken the explanatory power of models that seek to explain donor decisions. Self- and other-benefit perceptions may have unique roles in the decision-making process, being more or less successful at predicting donation. Because the separate influence of different benefit perceptions has not yet been examined, a primary objective of this study was to determine the relative influence that self- or other-benefit perceptions exert on people's organ donation decisions. We asked:

RQ1: Which is a stronger predictor of organ donation, perceived self- or other-benefits?

Conflicting risk and benefit perceptions

Past research provides evidence that beliefs and/or emotions about the potential risks to the self of becoming an organ donor can restrict the influence of even very strong positive attitudes on the decision to become a donor (Cacioppo and Gardner, 1993; Hessing and Elffers, 1986; Parisi and Katz, 1986), and thus efforts to understand the role of different benefit perceptions in organ donation decisions should take risk perceptions into account. Accordingly, the following hypothesis was proposed:

> H1: Risk perceptions will be a stronger predictor of willingness to donate than self-benefit perceptions or other-benefit perceptions.

Empathy

Empathy for others has already been established as an important antecedent of different helping behaviors (Batson, 1987), and thus, dispositional empathy should also be closely tied to people's willingness to donate organs. Empathy could also have an effect on the influence of benefit perceptions on organ donation decisions by affecting how motivated individuals are by incentives to donate for their self or for others. Yet the role of empathy in organ donation decisions has received surprisingly little attention; only two studies could be located that have examined this issue. Rodrigue et al. (2004) found that felt empathy did not differ among registered organ donors, those who were unregistered, and those who were undecided. Skumanich and Kintsfather (1996) examined how feeling empathy and other responses to an organ donation message related to willingness to donate. This state of empathy was related to issue involvement, which predicted organ donation willingness, but empathy was not directly related to donor behaviors. These studies suggest that the state, or experience of empathy is not directly linked to organ donation. However, they did not investigate how people's stable, empathic tendencies affect organ donation. No studies could be found examining the relationship between different dimensions of dispositional empathy and donation willingness. The current study examines the role of trait empathy dimensions, specifically perspective taking and empathic concern, in people's willingness to become donors.

Dispositional empathy has been described broadly as an individual's reaction tendencies in response to the observed experiences of others (Davis, 1994). Some theorists consider empathy to be primarily a cognitive, intellectual process, whereas others consider empathy to be primarily an affective response to another's emotional state or situation (Davis, 1994; Eisenberg, 2000; Strayer, 1987). There is consensus that trait empathy is best conceptualized as a multidimensional construct that includes *both* cognitive and affective components (Davis, 1983b, 1994; Eisenberg, 2000). Perspective taking, the tendency to adopt the perspective or viewpoints of others, is the most often examined cognitive component of empathy. Empathic concern, the tendency to adopt other-oriented response of compassion or concern for others' welfare, is the most often examined affective component of empathy.

Evidence suggests that perspective taking is an antecedent of empathic concern (Batson et al., 2007; Davis, 1994). Batson et al. (2007: 65) stated that 'perhaps the most plausible and prominent answer to the question of what leads us to feel more or less [empathic concern] for a person in need is perspective taking – actively imagining how the other is affected by his or her plight'. Without a tendency to cognitively take others' perspective, people will have difficultly experiencing emotion in response to others' situation.

Relatively speaking, empathic concern, the affective component of empathy should be a more important factor in people's decision to become organ donors than perspective taking. Research shows that empathic concern is associated with negative emotional responses to the suffering of others, and it leads to prosocial efforts to reduce suffering and provide help

(Davis, 1994). Davis (1983a), for example, found that empathic concern was associated with contributing to the Muscular Dystrophy telethon. Associations between perspective taking and helping behavior have usually been mediated by empathic concern (Batson, 1987; Davis, 1994). Hence, while perspective taking may directly predict prosocial behavior like organ donation registration, the effects of this trait are accounted for by empathic concern. Empathic concern, on the other hand is more likely to influence people's willingness to register as organ donors. Following this logic, we proposed:

> H2: Empathic concern (but not perspective taking) will be a positive predictor of willingness to sign an organ donor card.

Empathic concern may also moderate the effects of perceptions of benefits to others on individuals' willingness to become organ donors. As previously discussed, empathic concern shares a positive relationship with compassion for others and willingness to engage in helping behavior (Davis, 1983a). By extension, individuals with higher levels of empathic concern may be better able to recognize benefits organ donation offers to others, and they may be more moved by and responsive to other-benefit perceptions, while people with lower levels of empathic concern are less motivated by the benefits donation offers others. Accordingly, we expected that:

> H3: Empathic concern will interact with other-benefit perceptions, such that perceived benefits to others will predict willingness to donate more strongly among respondents with greater empathic concern.

It is less clear how empathic concern could moderate the effects of self-related risk and benefit perceptions in individuals' willingness to become donors. On the surface it would seem that greater empathic concern for others might distract people from self-concern but the prominent role self-interest plays in prosocial behavior suggests that people with greater empathic concern are also more likely to be motivated by self-benefits.

The effect of empathic concern could also vary depending on how much risk potential donors associate with donation. Batson et al. (1983) found that the presence of high risk could distract individuals from their feelings of empathic concern, among people with high and low empathy levels. However the impact of risk on the effects of dispositional empathy has yet to be examined. Because there is no empirical evidence about whether the effect of trait empathic concern on willingness to donate is moderated by self-benefit or risk perception we asked the following question:

> RQ2: Will empathic concern interact with (a) self-benefit perceptions or (b) perceived risk in predicting willingness to sign an organ donor card?

Method

Participants

The initial sample of 158 young adults (aged 18 to 29) was recruited from classes in a large urban university. Classes used for recruitment were part of a core curriculum, and more than 35 different academic majors were represented in this sample. Twenty-two participants who indicated they had already signed an organ donor card and one participant who reported being on a transplant waiting list were excluded from the study. Four participants who did not report their race/ethnicity were also excluded. Thus, the final sample consisted of 131 young adults (86 female, 45 male) with a mean age of 21.3 years (SD = 2.84). Respondents reported their race/ethnicity as: 29% White/Caucasian, 29% Black/African-American, 19.8% Asian/Pacific Islander, 11.5% Hispanic, and 9.9% multiracial.

Procedure

As part of a related study on news framing (Cohen, 2010), all participants read a news

article about an individual waiting for an organ donation.[1] After reading the article, they signed an informed consent form and completed a questionnaire. An organ donor card was attached to the end of the questionnaire so participants would have an opportunity to sign and keep it. The procedure was approved by the Institutional Review Board.

Main outcome measures

Willingness to donate. Participants first reported whether or not they were registered as organ donors on their drivers' license. Following this question, they read the following passage:

> When you complete this questionnaire you will have the opportunity to take an organ donation card. If you would like, you can take this card and have family members or close friend witness your signature. By signing this card you acknowledge that you wish to be an organ donor. Even if you have already registered as an organ donor on your drivers' license, this card will serve as an additional testament of your wishes to donate.

Participants were asked to indicate their intent to sign the organ donor card, on a five-point scale developed by Skumanich and Kintsfather (1996) (1 = 'I will definitely sign the card', 2 = 'I will probably sign the card', 3 = 'I am unsure as to whether or not I will sign it', 4 = 'I will probably not sign it', and 5 = 'I will definitely not sign it'). A sixth item was added: 'I already have signed an organ donation card.' Participants who chose this option were excluded from analysis. The five remaining responses were reverse coded so that higher scores indicate greater willingness to donate (M = 3.19, SD = 1.38).

Risks and benefit perceptions. Perceptions of risks, self-benefits, and other-benefits were measured using items from Parisi and Katz's Organ Donation Attitude Scale (ODAS). The selected items had the highest factor loadings for each of these three categories, as reported by Boey (2002). From the 46-item ODAS, 20 items addressing risks to the self, self-relevant benefits, and benefits relevant to others were selected. Because this is a new use of the ODAS, a principal axis analysis with direct oblimin rotation was used to identify and remove scale items that were poor indicators. One item from the five-item other-benefit scale was dropped because it cross-loaded with the self-benefit scale. The analysis was performed again and four interpretable factors emerged, including self-, and other-benefits, as well as the two risk factors identified by Boey.[2] The factor structure is displayed in Table 1.

Because the objective of the current study was to study the influence of different types of benefit perceptions with risk perceptions, the two risk factors were combined into one, opposing dimension. After reading each belief statement on the scale, respondents rated the extent of their agreement on a six-point Likert scale (1 = disagree strongly; 6 = agree strongly). The reliabilities for all three of the subscales were high: risks (10 items, α = .85, M = 2.83, SD = .95), self-relevant benefits (five items, α = .89, M = 3.78, SD = .92), and other-relevant benefits (four items, α = .88, M = 4.86, SD = .88).

Empathy. Two seven-item subscales from the Interpersonal Reactivity Index (Davis, 1983b) were employed to measure empathy. Perspective taking measured the cognitive tendency to take the view or perspective of others (e.g. 'I sometimes try to understand my friends better by imagining how things look from their perspective'). Empathic concern gauged the affective tendency to experience sympathy, concern, and compassion for others (e.g. 'I often have tender, concerned feelings for people less fortunate than me'). Respondents indicated their agreement with statements on five-point Likert scales (1 = disagree strongly; 5 = agree strongly). Both subscales had good internal consistency (perspective taking, α = .75, M = 3.71, SD = .50; empathic concern, α = .81, M = 3.79, SD = .65).

Table 1. Factorial structure of risk and benefit items

Item content	Factor structure			
	I	II	III	IV
Factor I: Self-benefits (33.9%)				
Add extra meaning to life	*.86*	−.07	−.11	−.09
Endow death meaning	*.79*	.04	−.05	.06
Make me feel proud	*.75*	−.12	.06	.05
Make more respected by family and friends	*.65*	−.03	−.06	.22
Set a good example	*.62*	.06	−.12	.08
Factor II: Risk – medical neglect (12.9%)				
More likely to declare death prematurely	−.05	*.91*	−.12	.05
Won't get adequate medical care	−.06	*.81*	−.11	−.10
Appropriate medical techniques not used	−.05	*.77*	.01	−.02
Pronounced dead when alive	.07	*.69*	.22	−.03
Factor III: Risk – bodily mutilation (10.9%)				
Want to be buried with original body parts	−.11	−.16	*.89*	−.15
Makes me feel uncomfortable	−.11	−.10	*.79*	.09
Want the whole body with me	−.15	.06	*.74*	−.01
Body cut up makes me uneasy	−.26	−.03	*.72*	−.09
Intact body needed in next life	.22	.13	*.51*	−.17
Body disfigured	.01	.13	*.50*	.08
Factor IV: Other-benefits (5.5%)				
Offer chance for being cured	.36	−.09	.02	*.82*
Giving people hope of survival	.41	−.01	−.04	*.82*
Keep another living	.35	.03	−.09	*.81*
Benefits humanity	.50	−.07	.13	*.61*

Note: Figure in parenthesis indicates the percentage of variance accounted for by the factor. Factors II and III were combined into one measure of risk for the final scale.

Results

Descriptive statistics

The zero-order correlations were calculated for all the variables. Gender was positively correlated with both measures of trait empathy such that females scored higher on perspective taking and empathic concern than males. Age was not significantly correlated with any variables. Risk was negatively correlated with self- and other-benefits, and willingness to donate. Self- and other-benefits were positively correlated with each other, and were both positively correlated with empathic concern. Additionally, empathic concern was positively correlated with perspective taking and willingness to donate.

As previously mentioned, participants who had already signed an organ donor card were not included in this study. But because participants who reported being registered organ donors on their drivers' license were still advised to sign a donor card 'as an additional testament' of their willingness to donate, participants registered as donors on their drivers' license were retained in the final sample. This decision yielded the unexpected finding that many people who had registered as donors on their drivers' license were less than willing to sign a donor card. Half of respondents (52.7%) indicated that they were registered as organ donors on their drivers' license, but these individuals were not universally willing to sign an

Table 2. Regression predicting willingness to donate

	b	Beta	R^2 change
Trait empathy			.09**
Perspective taking	−.25	−.09	
Empathic concern	.71	.34***	
Perceptions of organ donation			.29***
Risk	−.51	−.37***	
Self-benefits	.37	.31**	
Other-benefits	.03	.01	
Interactions			.05*
Empathic concern x Risk	−.32	−.14	
Empathic concern x Self-benefits	.01	.01	
Empathic concern x Other-benefits	.30	.16*	
	Adjusted R^2 = .42 F(12, 129) = 8.84***		

Note: Demographic variables (gender, age, race) were entered in the first step of the equation (R^2 = .04, NS), and message frame (loss, gain) was entered in the second step (R^2 change = .01, NS). None of these control variables reached significance. The b values in the table are unstandardized regression coefficients at entry and betas are standardized coefficients at entry.
*$p \leq .05$; **$p \leq .01$; ***$p \leq .001$.

organ donation card. While 40.6% of these participants reported that they would 'definitely' be willing to sign a donor card, and 26.1% indicated that they would 'probably sign the card', a full third (33.3%) of respondents who were already registered as donors on their drivers' licenses expressed reservation about signing a donor card, indicating that they were unwilling, unlikely, or 'unsure' about how likely they would be to sign it. Of respondents who were not registered on a drivers' license, almost half (48%) reported being 'definitely' or 'probably' willing to sign the card, 35.5% reported being 'unsure', and 16.2% said they would 'probably not', or 'definitely not' sign it.

Perceptions of organ donation and willingness to donate

A hierarchical regression analysis was conducted to examine the relative role of trait empathy and risk and benefit perceptions in predicting willingness to donate. Demographic variables (gender, age, and race) were included as controls. Because the data for this study were collected after participants were exposed to one of two message frames (a loss or gain frame) used in a different study, message frame was included as a control.

The results for this model are displayed in Table 2. The model accounted for 42% of the variance in participants' willingness to sign an organ donation card (adjusted R^2 = .42, $F(12, 129) = 8.84$, $p > .001$). Perception of risk was a significant negative predictor of willingness to donate (b = –.51, $p > .001$). H1 was not confirmed; although the standardized regression coefficient for risk perceptions (beta = –.37) was larger than the standardized regression coefficient for self-benefits (beta = .31), a *t*-test showed that there was not a statistically significant difference between these coefficients, $t(120) = .05$, p = NS.

Interestingly, although other-benefits perceptions was not a significant predictor of willingness to donate, self-benefit perceptions did emerge as a significant, positive predictor (b = .37, $p > .01$). A *t*-test confirmed that the standardized regression coefficient for self-benefit perceptions was significantly larger

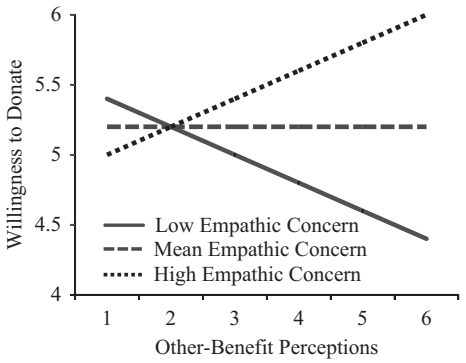

Figure 1. Empathic concern x Other-benefit perceptions.

than the coefficient for other-benefit perceptions (beta = .01). Regarding RQ1, the results show that self-benefits was a stronger predictor than other-benefits.

The role of empathy in willingness to donate

To examine the role of perspective taking and empathic concern in predicting willingness to donate, these variables were entered in the third step. Empathic concern was a positive predictor of willingness to donate but perspective taking was not. Hence, H2 was confirmed.

In support of H3, there was a significant interaction between empathic concern and other-benefits. Variables were mean centered, and the interaction was probed using Preacher et al.'s (2006) multiple linear regression interaction tool. The online utility provided a plot of the simple slope of willingness to donate regressed on other-benefits at three different (centered) values of empathic concern: the mean (.01), and 1 SD above (.66) and below (–.67) the mean, revealing that other-benefits predicted willingness to become an organ donor only among high-empathy participants. The interaction effect displayed in Fig. 1 shows that as empathic concern increases, other-benefit perceptions increases. Regarding RQ2, empathic concern did not interact with perceived risk or with self-benefit perceptions.

Discussion

'Self-interest' often has a negative connotation in the literature on prosocial behavior. But because self-concern is often presumed to inhibit altruistic concern for others (Mansbridge, 1990), past research has tended to focus rather narrowly on the benefits that organ donation offers to recipients, and studies on the motivational potential of self-interest in organ donation decisions are rare. But although people may have the capacity to engage in purely altruistic acts (Batson, 1987), the idea of such acts may not always be desirable without self-interest as a motivator. Indeed, arguably the most important finding of this study is that self-benefit perceptions – but not other-benefit perceptions – predicted willingness to donate.

This research illustrates that it is useful to conceptualize benefit-perceptions related to organ donation using two dimensions that have different effects on the decision of whether or not to become an organ donor: benefits for the self and benefits for the other. Self-interest motivations to donate are often included in attitudes scales but prior to this study, their unique effects have not been examined. The role of self-benefits perceptions in predicting willingness to donate in the current research suggests that potential donors who associate self-benefits with organ donation, such as pride or satisfaction, are more likely to make a commitment. At this point it is unclear if the 'warm glow' of organ donation is primarily a product of concern for others (Batson, 1987), or instead, an antecedent to helping others, consistent with negative state relief (Cialdini et al., 1973). More research is needed to determine the specific source of positive self-referent emotions associated with becoming an organ donor.

Although other-benefit perceptions were not a significant predictor of willingness to donate, we do not interpret these findings as evidence that other-benefit perceptions are not important components of people's attitude toward organ donation. On the contrary, the other-benefit perceptions could act as a foundation for intrinsic self-benefits. Notably, most of

the intrinsic self-benefits of organ donation that were measured in this study are linked to perceptions of other-benefits. After all, it is more difficult to feel satisfied or proud about becoming an organ donor if one does not perceive that becoming a donor has potential benefits for others. Although self-benefits accounted for more variance in individuals' willingness to donate, other-benefits are still an integral part of the decision-making process.

This study's findings have practical applications for organ donation campaigns and promotions, which may benefit from appealing to potential donors' self-interest using admirable role models or offering displayable souvenirs (e.g. bumper stickers, pins and buttons, or social networking icons). Although these mementos provide some extrinsic incentive for donation they also give donors an opportunity to 'show off' their status as a donor, potentially gaining social approval and enhancing intrinsic benefits associated with becoming a donor.

Those wanting to incorporate self-benefit appeals into their messages would also do well to remember that risk perceptions can inhibit the influence of benefit perceptions. Consistent with past research (e.g. Parisi and Katz, 1986), risk perceptions emerged as a significant negative predictor of willingness to donate in this study. This is not a new finding but it underscores the need to reduce apprehensions associated with organ donation by combating inaccurate perceptions of donation and developing interventions to reduce people's existing concerns (Morgan et al., 2008a).

Perspective taking and empathic concern

This study is among the first to document the role of trait empathy in the decision to become an organ donor. Perspective taking was not a direct predictor of willingness to donate although it was highly correlated with empathic concern, and as predicted, empathic concern was a predictor of willingness to donate. Empathic concern also moderated the effects of other-benefit perceptions on willingness to donate, such that other-benefit perceptions were a predictor only for those with high levels of empathic concern. These findings are consistent with past research that has found empathic concern to play an influential role in prosocial behavior (Batson, 1987; Davis, 1994). Intuitively, it makes sense that individuals who are naturally more other-oriented would be more sensitive and responsive to how becoming a donor could benefit others. The interaction between empathic concern and other-benefit perceptions observed in this research also exposes a possible limitation of motivation strategies that focus exclusively on highlighting the benefits that organ donation provides for others. These appeals may only motivate individuals who were already prone to respond empathetically. More research is needed to explore how people who are naturally less empathetic can be persuaded to register as donors.

Limitations

This study has several limitations. The status of many participants' commitment to organ donation is not clear. Half of the sample had already indicated their wishes to be an organ donor on their state drivers' license, and many of the participants who were registered donors on their drivers' license nonetheless reported that they were not willing to sign an organ donor card even though they were encouraged to sign the card to reinforce their commitment. Reasons for this seeming contradiction were not investigated, but it highlights the complex nature of the donation decision. In a sample of willing and unwilling organ donors, Radecki Breitkopf (2006) found that participants who thought they might reconsider their decision in the future were less willing to discuss their decision with family. This finding suggests that nondonors and donors alike can change their mind. But researchers have tended to view the decision to become a donor as a one-time choice result rather than an ongoing commitment for good reason. Once a person registers as a donor, they are an organ donor for all intents and purposes unless they actively seek to remove their name

from the registry. How frequently donors reevaluate their decision and actually change their status is unknown, but the findings from this study suggest that many current donors are not entirely satisfied with their decision. If donors regret their decision they may be less likely to renew their registration and may even discourage others from registering. This possibility underscores the importance of combating negative perceptions and myths of organ donation that could lead to donor regret (Morgan et al., 2008a).

Additionally, because intentions to sign an organ donor card were measured instead of whether or not respondents actually committed to becoming organ donors, the findings of this study should be interpreted with caution (Radecki and Jaccard, 1999). Future research on benefit perceptions associated with organ donation should include behavioral response measures, including the documentation of actual donor commitment behaviors like card signing or even the public advertisement of their donor decision to others. Examining the relative success of self- and other-benefits at motivating individuals to positively influence others' donor decisions would be a fruitful line of research.

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Competing Interests

None declared.

Notes

1. *T*-tests comparing respondents' scores on all of the independent variables and the dependent variable for both versions of the experimental message did not uncover any significant differences between versions. Thus, we feel confident concluding that the message conditions from the previous study did not have any effect on the variables examined in the current study.
2. Boey's (2002) risk factor structure was replicated, with one exception. The item, 'intact body needed in next life', loaded on the bodily mutilation factor instead of the medical neglect factor.

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