Framing the Gift of Life: An Empirical Examination of Altruism, Social Distance and Material Incentives in Non-Directed Kidney Donor Motivation

Harry L. Humphries, PhD; Browyn K. Conrad, PhD; Rimal Berry, BA; Shelli Reed; Clara Michelle Jennings, BA, Department of Social Sciences, Pittsburg State University, Pittsburg, KS

This study utilizes frame theory to examine the persuasiveness of the National Kidney Foundation's altruistic "gift of life" frame in improving the number of living kidney donations. We surveyed a sample of 73 individuals to assess the relationship between social distance, increasing material incentives and donor motivation. Our results suggest that altruism is significantly related to donor motivation only for donations to immediate family members and that limited material incentives, as well as strategic "re-framings" that address the social distance between donor and recipient, may be important in enhancing donations among individuals unrelated to kidney transplant recipients.

INTRODUCTION

According to recent data, more than 76,000 individuals are currently listed for a deceased donor kidney transplant in the United States (United Network for Organ Sharing, 2008). Between 5 and 20 of those individuals die every day as a result of a chronic shortage of deceased donor kidneys (OPTN/SRTR Annual Report, 2007). Roughly another 20 million individuals in the United States have unrecognized chronic kidney disease (CKD) that may require either dialysis or transplantation within the next seven years (Matas, 2007). If current trends continue, about 73% of those eventually listed for transplantation will die before a deceased donor kidney becomes available (OPTN/SRTR Annual Report, 2007).

The National Kidney Foundation (NKF), social scientists, renal specialists, nephrologists, transplant surgeons, social workers, potential recipients and concerned citizens and families of the chronically ill are attempting to find innovative solutions to the persistent kidney shortage. After 1954, when live kidney transplantation was first introduced, the NKF sought to improve the living donor pool by characterizing donations from family members and close friends as a "gift of life" (Fox & Swazey, 1978; 1992, p. 33). But, how effective is this narrative in motivating live donations from strangers? One survey concluded that while 77% of Americans think that it is acceptable for an altruistic stranger to donate a live kidney, only 24% are actually motivated to do so (Spital, 2001).

The purpose of this study is to explore the different rhetorical strategies, or "framings," the outreach programs of the NKF and other interested and concerned organizations and individuals might pursue to increase the number of living kidney donations. We are particularly interested in the effectiveness of the NKF's "gift of life" message in motivating donations among altruistic strangers unrelated to kidney recipients. First, we explore the social factors that motivate individuals to become living donors. Second, we examine the social distance between potential donors and recipients to empirically assess the willingness of donors to expand their giving beyond their primary groups (i.e., family and

close friends). Last, we explore the ethics and effectiveness of the use of material incentives as a complement to "gift of life" altruism in the framing of kidney transplantation and live organ donation.

THE GIFT OF LIFE: RENAL TRANSPLANTS AND FRAMING

Organ transplantation has a long history. The first attempts occurred in the early 1900s, with the first kidney transplant performed in 1906 without the use of anti-rejection drugs and using various animal donors (Kutner, 1987). Human-to-human transplantation was first attempted in 1936 using a deceased donor. Although these early attempts failed, it was recognized in 1944 that transplant rejection was based on immunological factors. This gave the scientific community a solid base to change the practice of transplantation from an experimental procedure to an accepted form of treatment (NKF of Southern California, 2003; United Network for Organ Sharing, 2008).

The first successful organ transplant occurred in 1954 when surgeons Joseph E. Murray and John Harrison performed a live donor transplant between identical twins, which allowed the recipient twin to survive eight years (United Network for Organ Sharing, 2008). For the next 20 years, however, successful transplants were severely hindered by the persistent problem of transplant rejection. The subsequent development of effective immunosuppressant drugs, including cyclosporine, tacrolimus and CellCept[®], changed the equation. Their development and pervasive use were key biomedical factors that led to what the transplant community termed a "boom" in the range, number and combinations of tissues and solid organs that were transplanted from the early 1980s to the present (Fox & Swazey, 1992, p. 7; NKF of Southern California, 2003). Consequently, it is the issue of organ availability rather than transplant rejection that is the foremost concern within the transplant community today (Matas, 2007, p. 2).

According to the United States Renal Data System (USRDS), in the case of kidney transplantation, more than half of the

available organs in 2006 came from deceased donors, a change due, in large part, to increases in the use of expanded criteria donors (ECDs) and donations following cardiac arrest (USRDS, 2008). ECDs include all deceased donors over the age of 60 and donors over the age of 50 with any two of the following criteria: hypertension, cerebro-vascular brain death or a pre-retrieval serum creatinine level more than 1.5 mg/dL (Stratta, 2004). Between 2003 and 2006, living donations from blood-related donors fell by 36% while living donations from blood-unrelated donors increased by 45% as a result of paired exchange programs (USRDS, 2008). In 2006, the number of transplants rose by 4% while the waiting list grew by 8%. While approximately 50 kidney transplants were performed each day in 2006, up to 12 other people on the waiting list died as a result of unavailable organs (USRDS, 2008).

Limited organ availability has created a renewed interest in xenograft transplants and some new strategies, including genetically altered pigs, which scientists hoped would produce viable organs for transplantation. To date, however, this research has not produced significant results (Williams, 2009). As a result, transplant surgeons, policy makers and other interested parties continue to grapple with the perplexing question of how to increase the organ supply.

Because living donors are the preferred source for transplant surgeons, with live donations increasing life expectancy by more than 12 years over deceased donor transplants, interested organizations and individuals must attend to the perspectives of potential donors (Matas, 2007; USRDS, 2008). These individuals comprise a target audience for persuasive messages about transplantation and live organ donation (Fox & Swazey, 1992, p. 46-47; Matas, 2007). It is our contention that the NKF and other organizations might help contribute to increasing living kidney donations by "framing" the problem of organ shortage differently. Citing Erving Goffman's Frame Analysis (1974), Snow et al. define a frame as a "schemata of interpretation that enables individuals to locate, perceive, identify, and label occurrences with their life space and the world at large. By rendering events meaningful, these schemata function to organize experience and guide action" (1986, p. 464).

In recent years, sociologists of social movements have used the concept of frames to demonstrate the critical importance of interpretation and reality construction processes to such things as movement participation and formation (Benford, 1993, p. 697). This scholarship shows that recruitment of members to a cause depends not only on the amount of resources an organization can devote to that cause but also on how an organization frames its message. Frames, in this context, are messages or narratives purposively manufactured by organizational leaders to have persuasive appeal. To operate effectively as recruitment mechanisms, such frames must "resonate" with the existing belief systems of potential recruits (Snow & Benford, 1988). While resonance is typically conceptualized in terms of a frame's credibility

and salience, frames must also correspond to existing cultural narratives and meanings (Williams, 2006, p. 105). Put differently, they must tap a larger cultural "tool kit" of commonsense understandings, stories, rituals and worldviews and deploy these cultural "tools" in ways that make sense to the intended targets (Swidler, 1986).

Drawing from anthropologist Marcel Mauss (2000 [1954]), Fox & Swazey (1992) observe that the NKF has framed kidney donations from both deceased and live donors as a "gift of life." This narrative, they argue, has rhetorical power because it is organized around a strongly held ethic of volunteerism and freedom of choice (Fox & Swazey, 1992, p. 33). When framed as "gifts of life," transplants are recast from seemingly irrational surgical procedures involving the removal of a healthy live body part from one person and its transplantation into another into opportunities for selfless volunteers to make heroic and altruistic sacrifices (Fox & Swazey, 1992, p. 33).

The framing approach suggests that the persuasiveness of the "gift of life" frame must be understood from the perspective of a target audience (i.e., potential live donors). Traditionally, live donors have been immediate family members who are subject to a number of pressures, including cultural pressures concerning altruism and self-sacrifice (Fox & Swazey, 1992, p. 33; Matas, 2007, p. 8). Appealing to individuals other than relatives or close friends may require "re-framings" that capture cultural meanings other than altruism.

BEYOND THE GIFT OF LIFE: LEGAL AND ETHICAL CONSIDERATIONS

Medical professionals concerned with live donor availability have introduced the idea of material incentives as a means to motivate additional donors. For example, Friedman makes the argument in favor of allowing compensation for living donors, proposing that the availability of organs for transplant will be positively affected (2006). In the current arrangement, she argues, only the donor lacks in receiving tangible benefits from the procedure, and other body material donations such as hair and semen are already legalized for sale. While she recognizes the difference in the safety concerns of such donations, she points out that there is evidence of black market sales of organs already outside the United States, and a legalized system would be much safer for both donor and recipient (see also Osterweil, 2006).

Other prominent surgeons, such as Dr. Arthur Matas, the former president of the American Society of Transplant Surgeons, stand behind Friedman's position. In an article written for *ABC News*, Matas supports the reward of a compensation package to a donor worth between \$60,000 and \$70,000 (McKenzie, 2007). Elsewhere, he argues that a living donor transplant saves taxpayers more than \$95,000 compared to maintaining a patient on long-term dialysis and that some of the savings should be used to pay for donor incentives (Matas, 2007, p. 9).

The debate does not go unanswered by opponents of the incentives view. One notable response to the question of compensation is whether the system would even work. In a 2002 study by the *Journal of the American Medical Association*, researchers demonstrated that material incentives produced a negligible increase in donor availability, as well as limited or no benefit to the economic well-being of the paid live donor (Science Blog, 2002).

Debates over material incentives and organ availability must be understood against the backdrop of a growing underground shadow economy and international black market in organ sales (Fox & Swazey, 1992). Cases of kidnapping, removing live kidneys and the selling of kidneys on the black market in India and other parts of Central and East Asia have been reported (China Daily, 2008; Humanitarian News and Analysis Service, IRIN, 2008). Some recipients have been from the United States and Europe and have used legitimate foreign medical facilities for the transplantation, but have not inquired about the source of the illegally obtained kidney (Humanitarian News and Analysis Service, IRIN, 2008). According to Human Rights Watch, China has used unethical means of organ procurement (1994). Starting in 1983, with its "Crack-down on Crime" campaign, economic and non-violent crimes became punishable by death, with the organs of those executed made available for transplantation (Human Rights Watch, 1994). One surgeon was reported to have removed the organs of prisoners scheduled for execution the following day (Human Rights Watch, 1994).

Many in the United States who are awaiting a kidney or have family members or close friends awaiting one think current methods of obtaining organs for transplant have crossed a moral boundary (Matas, 2007). They fear that allowing everyone's organs to be eligible for donation could result in the same type of system that China has developed. Rewarding donors could result in the unethical and coercive exploitation of the working class and those in poverty, especially in third-world countries (Matas, 2007, p. 17; San Diego News, 2009). The global procurement of live kidneys thus poses a serious outside threat to the inherent problem of supply of both deceased and live kidneys within the United States. Specifically, due to non-standardized health practices and safety concerns, recipients and donors of illegal kidneys risk the long-term consequences of unregulated surgeries and defective kidneys (Osterweil, 2006).

Historically, institutions like the American Medical Association, NKF, federal government and other gate-keepers have imposed strict ethical guidelines concerning potential kidney donations in the United States (Cherry, 2005). The National Organ Transplant Act (NOTA) of 1984 explicitly prohibits material compensation beyond medical expenses for organ donations (Medscape, 2003). Deceased donations are regulated by the 1968 Uniform Anatomical Gift Act (UAGA), which was adopted in different forms by all states by 1973 (Fox & Swazey, 1992, p. 65). It is this

law that enables individuals to choose organ donor status on a driver's license (Fox & Swazey, 1992, p. 56). The rights of patients are further supported by the Patient Self-Determination Act (PSD) of 1990, which enables patients to establish end-of-life plans, including powers of attorney in the event of incapacitation, do not resuscitate (DNR) orders and any plans regarding organ donation or preservation. One recent study, however, found that less than 25% of all patients admitted to a hospital with a critical illness have an end-of-life plan (Verheijde, Rady, & McGregor, 2007). Moreover, the revised version of the UAGA allows doctors to presume that a recently deceased patient is an organ donor and grants them rights to use life support until the family or a power of attorney makes a final decision. This has created an ethical dilemma in the minds of many who are grappling with transplantation and donation issues in the United States (Cherry, 2005; Matas, 2007).

This study explores the use of material incentives as a possible complement to the NKF's "gift of life" frame by examining the potential of such incentives to increase support for live kidney donations from individuals both known and unknown to the recipient. We incorporate ethical concerns into our analysis by utilizing a value-added Ethical-Motivation Scale that allows us to assess declining supportiveness for living kidney donation simultaneous with increasing material incentives. Identifying an ethicallybased tipping point beyond which individuals may be less supportive of linking material rewards to living kidney donations is critical to determining whether and what kind of material incentives should be incorporated into the "gift of life" frame. Although growing recognition of the need to "reduce financial disincentives" has led to the creation of the National Living Donor Assistance Center (NDALC), it is unclear that this language, which casts material incentives in the negative (i.e., financial matters are barriers to giving that need to be removed as opposed to rewards for giving to which donors are entitled), "resonates" with potential nondirected donors (NDLAC, 2008). Additionally, we explore the social nature of donor motivation by using the Bogardus Social Distance Scale (Bogardus, 1925; 1933) to measure willingness to donate. We expect that the less the social distance between donor and recipient, or the closer their social relationship, the more favorable the respondent will be toward live kidney donation.

RESEARCH DESIGN AND METHODS

Conceptualization and Measurement

Our exploratory study assesses willingness of respondents to undergo a living kidney donation with the Bogardus Social Distance Scale (Bogardus, 1925; 1933), which is an efficient measure of the willingness of individuals to associate with other kinds of people (Babbie, 2004). It is also used to assess respondents' relative comfort level with various social relationships (Neuman, 2000). It has not previously been used to measure the willingness of individuals

to undergo a living kidney donation. Our use of the Bogardus Social Distance Scale is as follows:

- 1. I would donate one of my kidneys to a member of my immediate family.
- 2. I would donate one of my kidneys to members of my extended family (e.g., aunt, uncle).
- 3. I would donate one of my kidneys to a close friend.
- 4. I would to donate one of my kidneys to an acquaintance or a friend of a friend.
- 5. I would donate one of my kidneys to a stranger.

As the above items illustrate, the Bogardus Social Distance Scale assumes that individuals who would donate their kidney to a stranger would also donate a kidney to an acquaintance, a close friend, members of their extended family and their immediate family. Based on their responses to this one-to-five scale, respondents were grouped into distance levels, which we used as an indicator of altruism (e.g., individuals who answered "yes" to item five were categorized as more altruistic than individuals who answered "yes" to item four but "no" to item five). This allowed us to measure the intensity of respondents' altruism with regard to the "gift of life."

To measure ethical considerations concerning material incentives, we use a cumulative summated-rating scale that links various material rewards to living kidney donation. This Ethical-Motivation Scale consists of nine dimensions of increasing material incentives, which were developed based on characterizations in the literature concerning both donor motivation and ethical issues related to donor compensation (see, e.g., Matas, 2007; Satel, 2008). On a scale of one to five, with five being the most favorable, respondents were asked to indicate the extent of their agreement with each of nine statements. These nine items, which we use as an indicator of donor motivation, are as follows:

- Living kidney donors should not be compensated.
 The donation should be considered a free-will donation and purely altruistic.
- Living kidney donors should be entitled to compensation for medical expenses related to the procedure.
- Living kidney donors should be entitled to compensation for medical expenses and lost wages relating to the procedure.

- 4. Living kidney donors should be compensated for medical expenses, lost wages related to the procedure and should receive a "reward" package that may include a weekend getaway.
- 5. Living kidney donors should be compensated in the form a form of a federal deduction tax incentive.
- Living kidney donors should be compensated for medical expenses and lost wages relating to the procedure and should also receive a "reward" package that may include cash or tax credit incentives.
- Living kidney donors should be compensated for medical expenses and lost wages relating to the procedure and should also receive a "reward" package that includes lifelong medical coverage.
- 8. Living kidney donors should be compensated for medical expenses and lost wages relating to the procedure and should also receive a "reward" package that includes lifelong medical coverage, plus an amount of instant compensation up to \$60,000 to \$70,000.
- Living kidney donors should be able to freely negotiate the price, compensation and reward they receive for their donation with no limitation on the amount or criteria.

Data Collection

Data for this research is based on a self-administered, selfreport survey using a non-representative sample of convenience at a moderate-sized Midwestern State University. The University has a total enrollment of about 7,000 students, including 5,500 undergraduate and 1,500 graduate students. Although the majority of students are from four Midwestern states, 6% are international students from countries such as Russia, China, Japan, India and Finland. The University offers undergraduate degrees in the liberal arts, education, science and technology. For this study, two upper division social science courses and two lower division introductory sociology courses were selected to participate in the 2008 spring semester. The study was approved by the Department of Social Sciences' Internal Committee for the Protection of Human Subjects. A total of 73 students completed the survey (RR = 100%). All were undergraduates. Table 1 illustrates the demographic characteristics of the sample.

Table 1

Demographic Characteristics of the Sample

					Totals
Gender	Males	Females			
	$46.4\% \ (n=34)$	$53.4\% \ (n=39)$			$100\% \ (N = 73)$
Age	16–18	19–21	22–30	30+	
	$4.1\% \ (n=3)$	$68.5\% \ (n = 50)$	$26.0\% \ (n=19)$	$1.4\% \ (n=1)$	$100\% \ (N = 73)$
Year in School	Freshman	Sophomore	Junior	Senior+	
	$24.7\% \ (n=18)$	$17.8\% \ (n=13)$	$34.2\% \ (n=25)$	$22.3\% \ (n=17)$	100% (N = 73)

Data Analysis

SPSS 16 was utilized for the statistical analysis of these data. Percentages and simple cross tabulations were used for nominal and ordinal variables to observe bivariate relationships. Descriptive statistics, including means and standard deviations, were used for ordinal-level scales. Cronbach's alpha was used to test the reliability of the Ethical-Motivation Scale. A Spearman correlation technique was used to examine the relationship between the Bogardus Social Distance Scale and the Ethical-Motivation Scale.

RESULTS

One purpose of this study was to examine the relationship between the social distance of donors to recipients and willingness to donate a kidney. We used the Bogardus Social Distance Scale based on the hypothesis that those who had the least social distance from the respondent would be the most likely choice for a donation (Bogardus, 1925; 1933). The data in Table 2 support the hypothesis that as social distance increases, the willingness of respondents to donate one of their kidneys decreases. Of respondents, 94.5% indicated they would donate one of their kidneys to an immediate family member while 86.3%, or approximately 6% less, were willing to donate a kidney to a close friend. Those who were willing to donate a kidney to a member of their extended family totaled 83.6%, or approximately 12% less. Interestingly, although our scale ranked extended family (e.g., aunts, uncles) as less distant than close friends, the 2.7% difference between willingness to donate a kidney to a close friend and willingness to donate a kidney to a member of one's extended family is statistically significant at the p = 0.01 level and may be explained by primary group relationships that predominate in the Midwest and in university life, especially as sources of social solidarity and support (Cooley, 1964 [1902]).

<u>Table 2</u>
Social Distance and Kidney Donation (N = 73)

	Yes	No
I would donate one of my kidneys to an immediate family member.	94.5% (n = 69)	5.5% (n = 4)
I would donate one of my kidneys to a member of my extended family.	83.6% (<i>n</i> = 61)	16.4% (n = 12)
I would donate one of my kidneys to a close friend.	86.3% (<i>n</i> = 63)	13.7% (n = 10)
I would donate one of my kidneys to an acquaintance.	37.0% (n = 27)	63.0% (n = 46)
I would donate one of my kidneys to a stranger.	26.0% (n = 19)	74.0% (n = 54)

<u>Table 3</u>
Supportiveness for Linking Material Incentives to Living Donation (N = 73)

	Mean	SD
Living kidney donors should not be compensated. The donation should be considered a free-will donation and purely altruistic.	3.08	1.12
Living kidney donors should be entitled to compensation for medical expenses related to the procedure.	4.10	.92
Living kidney donors should be entitled to compensation for medical expenses and lost wages related to the procedure.	3.95	1.0
Living kidney donors should be compensated for medical expenses, lost wages relating to the procedure and should also receive a "reward" package that may include a weekend getaway.	2.84	1.14
Living kidney donors should be compensated in the form of a federal tax deduction.	3.34	1.0
Living kidney donors should be compensated for medical expenses and lost wages relating to the procedure and should also receive a "reward" package that my include cash or a tax credit.	2.95	.98
Living kidney donors should be compensated for medical expenses and lost wages relating the procedure and should also receive a "reward" package that includes lifelong medical coverage.	3.01	1.11
Living kidney donors should be compensated for medical expenses and lost wages relating to the procedure and should also receive a "reward" package that includes lifelong medical insurance coverage plus an amount of instant compensation of up to \$60,000 to \$70,000.	2.47	1.07
Living kidney donors should be able to freely negotiate the price, compensation and reward they receive for their donation with no limitation to the amount or criteria.	2.64	1.22

In contrast to the high willingness associated with donations to family and close friends, 37% of respondents were willing to donate a kidney to an acquaintance and 26% were willing to donate to a complete stranger. Hence, 60% fewer respondents were willing to donate a kidney to a stranger than to an immediate family member.

A second purpose of this study is to understand the motivations of potential donors. Nine statements were created for this study and arranged into a cumulative summated-rating scale to examine the amount of support associated with increasing material incentives. A Cronbach's alpha of = 0.72 illustrates that this Ethical-Motivation Scale is an internally consistent and reliable measure of support for linking material incentives to living kidney donation (Voght, 2005, p. 71). As illustrated in Table 3, respondents agreed that living donors should be compensated for medical expenses (4.10). They also agreed that donors should be compensated for lost wages (3.95) and should receive a federal tax deduction (3.34). In declining order of importance, less agreement was expressed for: altruistic giving (3.08); compensation for medical expenses, lost wages and a reward package

<u>Table 4</u>
Correlations Between Social Distance and Support for Material Incentives

	Immediate Family	Extended Family	Close Friend	Acquaintance	Stranger
Altruism	0.303**	0.209	0.218	0.048	0.074
Medical expenses only	-0.101	0.070	0.096	-0.017	-0.028
Medical expenses and lost wages	-0.304**	-0.094	-0.068	-0.254*	-0.318**
Medical expenses, lost wages and weekend getaway	-0.114	-0.041	-0.157	-0.087	-0.287**
Federal tax deduction	0.128	0.210	0.069	0.058	0.134
Medical expenses, lost wages and cash or a tax credit	-0.289**	-0.040	-0.136	-0.170	-0.231*
Medical expenses, lost wages and lifelong medical coverage	-0.093	0.007	-0.149	-0.024	-0.081
Medical expenses, lost wages, lifelong medical coverage and a lump-sum cash payout	-0.024	-0.026	-0.181	-0.064	-0.093
No limits to compensation	-0.317**	-0.163	-0.030	-0.047	-0.194

^{**}p < 0.01, 2-tail test

consisting of lifelong medical coverage (3.01); compensation for medical expenses, lost wages and a tax credit reward package (2.95); compensation for medical expenses, lost wages and a weekend getaway reward package (2.84); free negotiation of compensation without limitation (2.64); and compensation for medical expenses, lost wages and an instant cash payout of up to \$60,000 to \$70,000.

As illustrated in Table 4, a statistical examination of the relationships between the statements comprising the Social Distance Scale and the Ethical-Motivation Scale revealed positive correlations between willingness to donate a kidney to close or distant others and altruism and a tax deduction. Also positive was the relationship between willingness to donate to an extended family member or close friend and paid medical expenses and willingness to donate to an extended family member and life-long medical coverage. Except for the relationship between altruism and willingness to donate to an immediate family member, none of these relationships were statistically significant. Willingness to donate a kidney to a close or distant other was negatively correlated with support for all other material incentives.

DISCUSSION

This research assesses the potential limitations of the "gift of life" frame as used by the NKF. The results support earlier research (e.g., Spital, 2001) by indicating that respondents are more likely to want to donate their kidney

to their relatives and close friends than to acquaintances or strangers. Unlike previous research, however, this study used an established empirical tool (i.e., the Bogardus Social Distance Scale) to provide evidence of the impact of social distance on willingness to undergo a living kidney donation. Additionally, the framing approach we used suggests that while willingness to donate a kidney is confined primarily to family and close friends and declines considerably when more distant others are taken into account, it may be possible for the NKF to "strategically fashion" primary group intimacy among members of occupational, religious or ethnic groups, social clubs, athletic associations and the like. Although the precise forms this reframing should take are a topic for further study, research using frame theory has demonstrated the persuasiveness and hence mobilizing potential of a language of "rights" (Oliver & Johnston, 2000; Snow & Benford, 1992). Perhaps this language of equal, human or civil rights could be combined with both altruistic terms that invoke generosity and self-sacrifice, as well as communitycentered messages that emphasize the common humanity and frailty of "people like us." Because such "social justice" terms are familiar to social workers, they may have a unique and important role to play in any future efforts to re-frame the "gift of life" (Congress, 1999).

The findings of this research also suggest that altruism alone is not a significant motivating factor for non-directed donations to distant others. Given these findings, the NKF

^{*}p < 0.05, 2-tail test

might consider re-framing the "gift of life" to include material incentives such as tax deductions (see also Satel, 2008). Importantly, our research suggests that there is a limit to material concessions. In comparison to combination reward packages, respondents indicated stronger support for rewards linked directly to the transplant. Perhaps high-cost incentives unrelated to the procedure, especially the one-time cash payout of \$60,000 to \$70,000 together with other compensating benefits, create the "distasteful" impression that one's organs are commodities that are for sale. Additional research is needed to determine if a language of "compensation" is preferable to a language of removing or reducing financial "disincentives" (Gaston et al., 2006).

Most importantly, our research shows how the framing approach can inform studies of interpretive processes as they relate to the problem of organ supply. Much sociological scholarship attests to the value of attending critically and empirically to the crafting of rhetorical campaigns directed at the recruitment of individuals to a cause. Hence, to effectively address the question of how to increase non-directed live kidney donations, more research should consider both the packaging and the persuasiveness of organizational frames.

LIMITATIONS OF THE STUDY

There are several limitations to this study, including its small, non-representative sample and exploratory design. Of particular note is the use of attitude measures (i.e., willingness to donate a kidney and support for linking various material rewards to living kidney donations) as "indicators" of the motives and behaviors of living kidney donors. Research in psychology suggests that attitudes are an imperfect predictor of behavior and that motives are often more complex than can be assessed through a study of attitudes alone (Meyers, 1999). While this design feature cautions against generalizing from the results of this study, there are also limits to retrospective accounts provided postoperatively by those whose views may have been altered by the process and experience of giving the "gift of life." Those closest to the process (i.e., the transplant team, nephrology social workers, donors and recipients) are best situated to provide insight, through future research and analysis, into the motives that drive the "gift of life" and hence, the most effective strategies for increasing the organ supply.

ACKNOWLEDGMENT

We wish to express our thanks to the anonymous reviewers of the *Journal of Nephrology Social Work (JNSW)* for their helpful comments on an earlier draft of this manuscript.

REFERENCES

- Babbie, E. (2004). *The practice of social research* (10th ed.). Belmont, CA: Thomson-Wadsworth Learning.
- Benford, R. D. (1993). Frame disputes within the nuclear disarmament movement. *Social Forces*, 71, 677–701.
- Bogardus, E. S. (1925). Measuring social distance. *Sociology* and *Social Research*, 9 (March), 299–308.
- Bogardus, E. S. (1933). A social distance scale. *Sociology* and *Social Research*, *3*, 265–271.

- Cherry, M. J. (2005). *Kidney for sale by owner: Human organs, transplantation, and the market.* Washington, D.C.: Georgetown University Press.
- China Daily. (2008). 3 hospitals rapped for illegal organ transplants. Retrieved December 2, 2008 from www.chinadaily.com/china/2008-11/03/content_7165575/htm.
- Congress, E. P. (Ed.). (1999). Social work values and ethics: Identifying and resolving professional dilemmas. Belmont, CA: Wadworth/Thomson Learning.
- Cooley, C. H. (1964). *Human nature and the social order*. New York: Schocken. (Original work published 1902).
- Fox, R. C., & Swazey, J. (1978). *The courage to fail: A social view of organ transplants and dialysis.* (2nd ed., revised). Chicago: University of Chicago Press.
- Fox, R. C., & Swazey, J. (1992). Spare parts: Organ replacement in American society. New York: Oxford University Press.
- Friedman, A. L. (2006). Payment for living organ donation should be legalized. *BMJ*, *333*(7571), 746–748.
- Gaston, R.S., Danovitch, G. N., Epstein, R. A., Kahn, J. P., Matas, A. J., & Schnitzler, M. A. (2006). Limiting financial disincentives in live organ donations: A rational solution to the kidney shortage. *American Journal of Transplantation*, 6(11), 2548 2555.
- Goffman, E. (1974). *Frame analysis*. New York: Harper and Row.
- Humanitarian News and Analysis Service, IRIN. (2008). Pakistan: Under pressure to sell a kidney. Retrieved November 28, 2008 from www.irinnews.org/Report.aspx?ReportId=81132.
- Human Rights Watch. (1994). Organ procurement and judicial execution in China. Retrieved April 22, 2008 from www.hrw.org/reports/1994/china1/china_948. htm# 1 19.
- Kutner, N. G. (1987). Issues in the application of high cost medical technology: The case of organ transplantation. *Journal of Health and Social Behavior*, 28, 23–36.
- Matas, A. J. (2007). A gift of life deserves compensation: How to increase living kidney donation with realistic incentives. *Policy Analysis*, Report No. 604. Washington, D.C.: Cato Institute.
- Mauss, M. (2000). *The gift: The form and reason for exchange in archaic societies*. New York: W. W. Norton and Company. (Original work published 1954).
- McKenzie, J. (2007). Doctor proposes sales of kidneys. Retrieved February 8, 2008 from www.abcnews. go.com/WNT/Health/story?id= 2977619&page=1.
- Medscape. (2003). National Organ Transplant Act of 1984 (NOTA) bans buying and selling. Retrieved February 6, 2009 from www.medscape.com/viewartcile/46500 2.
- Meyers, D. G. (1999). *Social psychology*. (6th ed.). Boston, MA: McGraw-Hill.
- National Kidney Foundation of Southern California. (2003). Milestones in organ transplantation. Retrieved November 28, 2008 from www.kidneysocal.org/milestones.html.

- National Living Donor Assistance Center (NLDAC). (2008). About us. Retrieved December 2, 2008 from www.livingdonorassistance.org/aboutus.aspx.
- Neuman, W. L. (2000). *Social research methods: Qualitative and quantitative approaches*. (2nd ed.). Boston: Allyn and Bacon.
- Oliver, P. E., & Johnston, H. (2000). What a good idea! Frames and ideologies in social movement research. *Mobilization*, *5*(1), 37–54.
- OPTN/SRTR Annual Report. (2007). United States Department of Health and Human Services. Retrieved September 5, 2008 from www.optn.org/AR2007/106_dh.htm.
- Osterweil, N. (2006). WTC: Black market kidney surgery offers no guarantees. Retrieved December 2, 2008 from www.medpagetoday.com/Nephrology/GeneralNephrology/3814.
- San Diego News. (2009). El Cajon man tries to sell kidney: Economy has many looking for creative ways to make money. Retrieved February 2, 2009 from www.10news.com/news/18584736/detail.html.
- Satel, S. (Ed.). (2008). When altruism isn't enough: The case for compensating kidney donors. Washington, D.C.: American Enterprise Institute Press.
- Science Blog. (2002). Selling a kidney does not benefit the seller. Retrieved February 8, 2008 from www.science-blog.com/community/older/2002/F/20021880.html.
- Snow, D. A., & Benford, R. D. (1988). Ideology, frame resonance, and participant mobilization. In B. Klandermans, H. Kriesi, & S. Tarrow (Eds.), *International Social Movement Research*, Vol. 1 (pp. 197–218). Greenwich, CT: JAI.
- Snow, D. A., & Benford, R. D. (1992). Master frames and cycles of protest. In A. D. Morris & C. M. Mueller (Eds.), *Frontiers in Social Movements Research* (pp. 133–155). New Haven, CT; Yale University Press.
- Snow, D. A., Rochford, R. B., Worden, S. K., & Benford, R. D. (1986). Frame alignment processes, micromobilization, and movement participation. *American Sociological Review*, 51, 464–481.

- Spital, A. (2001). Public attitudes toward kidney donation by friends and altruistic strangers in the United States. *Transplantation*, 71, 1061–1064.
- Stratta, R. O. (2004). Expanded criteria donors in kidney transplantation: A treadmill or bandwagon effect? Retrieved February 2, 2009 from www.medscape. com/viewarticle/488926.
- Swidler, A. (1986). Culture in action: symbols and strategies. *American Sociological Review*, *51*, 273–286.
- United Network for Organ Sharing. (2008). *Transplant living: Organ donation and transplantation information for patients*. Retrieved September 5, 2008 from www.transplantliving.org.
- United States Renal Data System (USRDS). (2008). USRDS annual report: Atlas of end-stage renal disease in the United States. Bethesda, MD: National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases.
- Verheijde, J. L., Rady, M. Y., & McGregor, J. L. (2007). The United States Revised Uniform Anatomical Gift Act (2006): New challenges to balancing patient rights and physician responsibilities. Retrieved April 22, 2008 from www.pubmedcentral.nih.gov/articlerender.fcg i?tool=pubmed&pubmedid=17850664.
- Voght, W. D. (2005). *Dictionary of statistics and methodology: Non-technical guide for the Social Sciences*. (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Williams, R. (2006). The cultural contexts of collective action: Constraints, opportunities, and the symbolic life of social movements. In D. Snow, S. Soule, & H. Kriesi (Eds.), *The Blackwell Companion to Social Movements* (pp. 91–115). Malden, MA: Blackwell.
- Williams, R. D. (2009). Organ transplants from animals: Examining the possibilities. Retrieved February 9, 2009 from www.fda.gov/fdac/features/596_xeno. html. INSW