The Dictator Game and Generosity

-The dictator game

-Testing for paternalistic altruism

-Charitable giving

Dictator Game

One individual (the dictator) decides how to allocate a sum of money between herself and another person (the recipient).

Prediction of the conventional model?

The degree of anonymity in dictator games (Hoffman et al. AER 1996)

$10 dictator game with the following 6 treatments (ranked in terms of the degree of anonymity):

Forsythe/Horowitz/Savin/Sefton replicaton (FHSS R): Dictators and recipients are seated in different rooms. Dictators fill in a decision form collected by the experimenter. Subjects are paid at the end of the experiment.

FHSS variation (FHSS V): Same as FHSS R, but dropping the phrases suggesting that the dictator and recipient ”has been provisionally allocated” $10 and that the task is to ”divide” the $10.

Single Blind 2 (SB2): Increases the privacy of the decision compared to FHSS V. A subject fills in the decision form behind a cardboard box and put it in an envelope; the experimenter opens the envelope and pay the subject behind another cardboard box and puts the recipient money in an envelope that is dropped in a return box.

Single Blind 1 (SB1): The same as SB2 with the difference that the subject gets an envelope with ten $1 bills and behind the cardboard box decides how many bills to leave in the envelope. The experimenter checks the content of the envelope before it is dropped in the return box.

Double Blind 2 (DB2): As SB1, but the envelope is dropped in the return box without being inspected by the experimenter.

Double Blind 1 (DB1): Same as DB2 but with the addition of two ”blank envelopes” in a session and a ”subject monitor”.

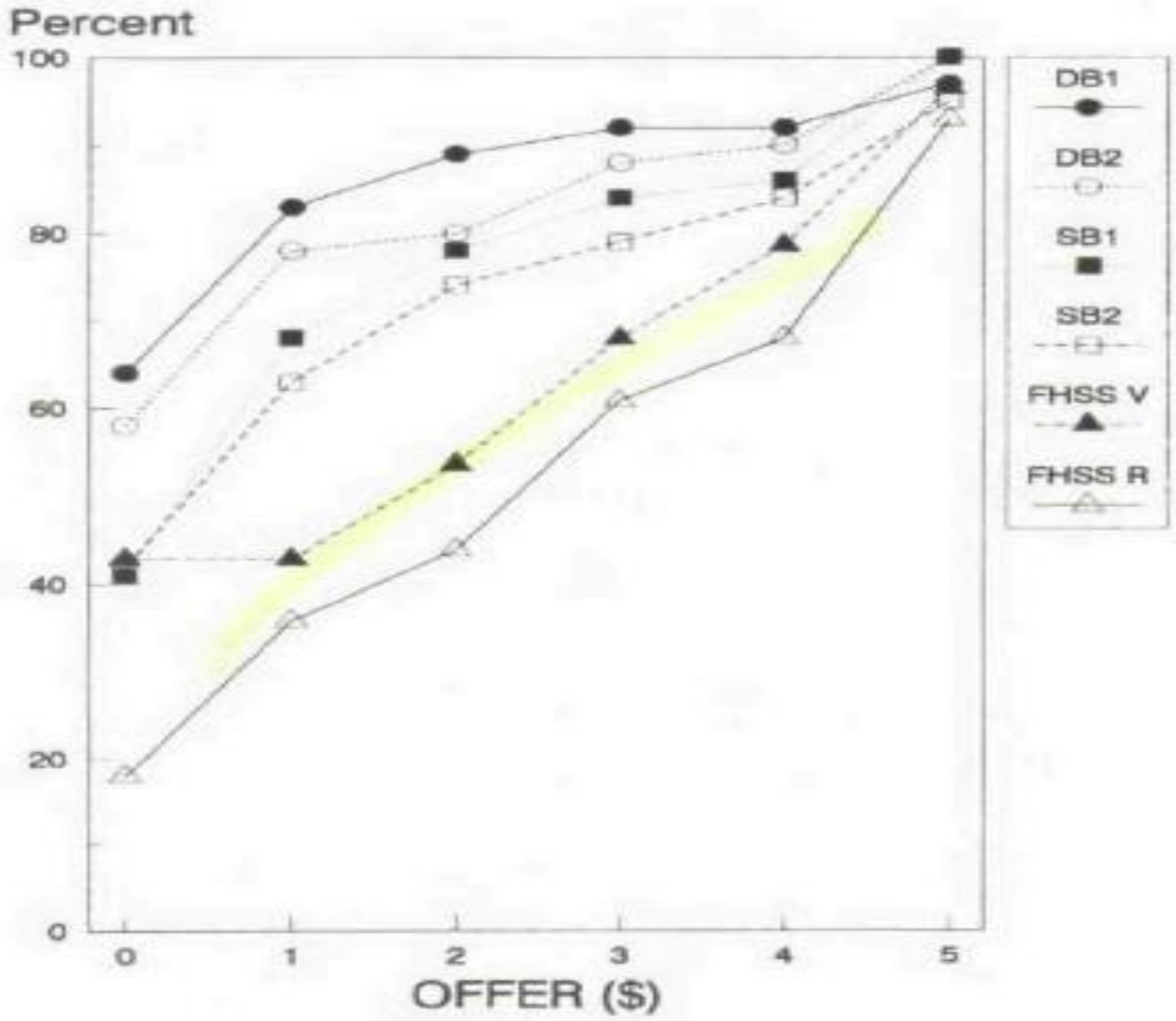

FIGURE 1. CUMULATIVE DISTRIBUTIONS FOR DICTATOR EXPERIMENTS

Motives for dictator game giving

Pure altruism (utility depends on the utility of the recipient)

Warm glow altruism (utility depends on the act of giving/the size of the donation)

Fairness (utility depends on the fairness of the allocation decision; the deviation from the 50/50 split)

Social image/social esteem (utility depends on being perceived as fair/altruistic by others)

Using the dictator game to test for paternalistic altruism in health (Jacobsson et al. EJ 2007)

Pure altruism: the utility of an individual is a function of the utility of another individual (i.e. the individual respects the preferences of the other individual).

Paternalistic altruism (health focused): the individual is more altruistic with respect to the health level of another individual than with respect to other aspects of utility of the other individual (i.e. the individual does not respect the preferences of the other individual). The exreme form is that the individual only cares about the health of the other individual.

Important distinction for the allocation of resources to health care.

Experiment I

Design: The recipients in both treatments are smoking diabetes patients that are recruited based on being willing to try nicotine patches to stop smoking, but they are not willing to pay the price for the patches (and ”dictators” are informed about this). The market price is SEK 20 per nicotine patch.

All subjects in a session donate to the same diabetes patient.

A double-blind design (the decisions are anonymous with respect to all other participants and the experimenters).

Treatment 1: Each subject decides how much of SEK 100 to donate to a smoking diabetes patient (how many SEK 20 bills to donate). All subjects in a session donate to the same patient.

Treatment 2: The same as in treatment 1, but every SEK 20 bill is converted to a nicotine patch.

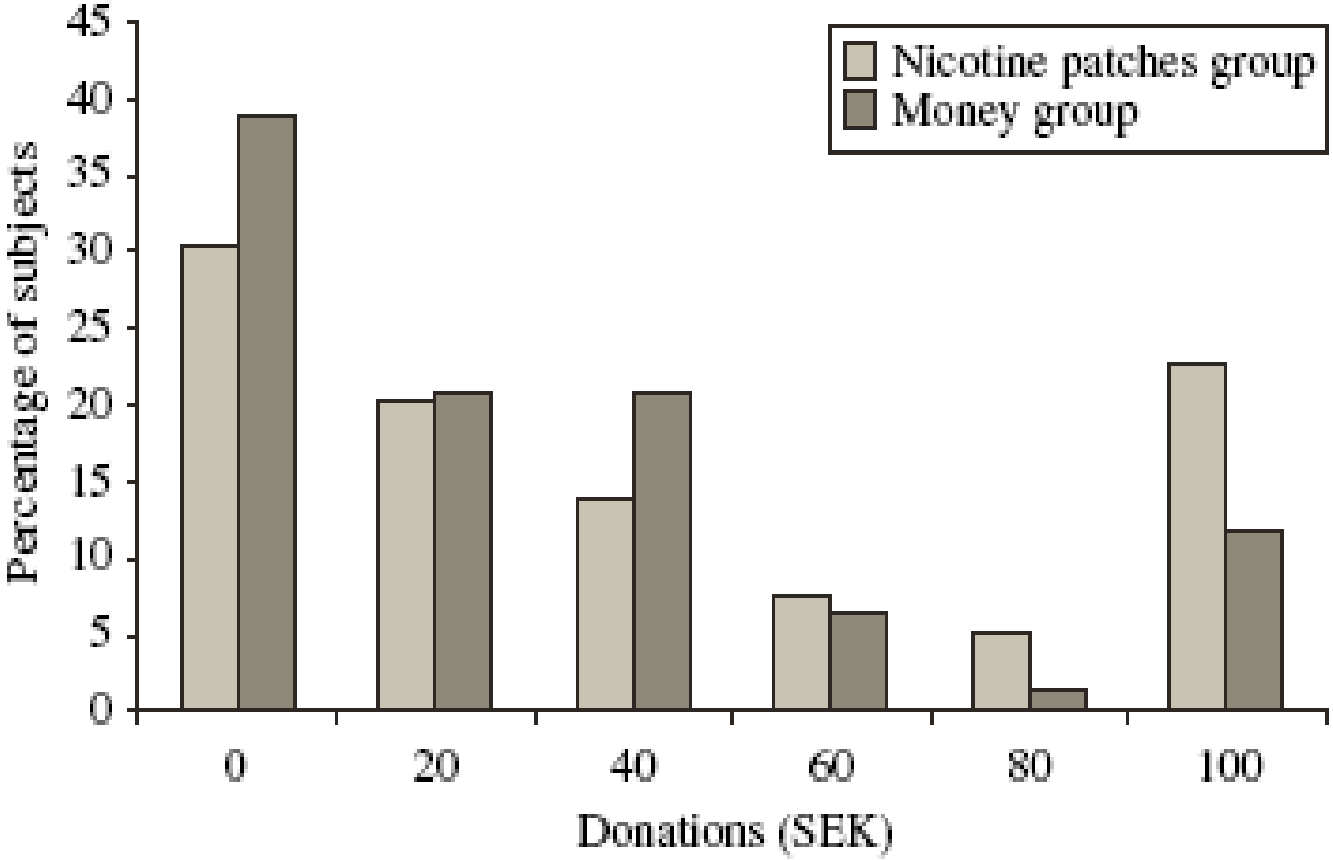

Fig. 1. *The Distribution of Donations in Experiment* I

Mean donation in the money group: SEK 29.35
Mean donation in the nicotine patches group: SEK 41.01
p-value of difference: <0.05

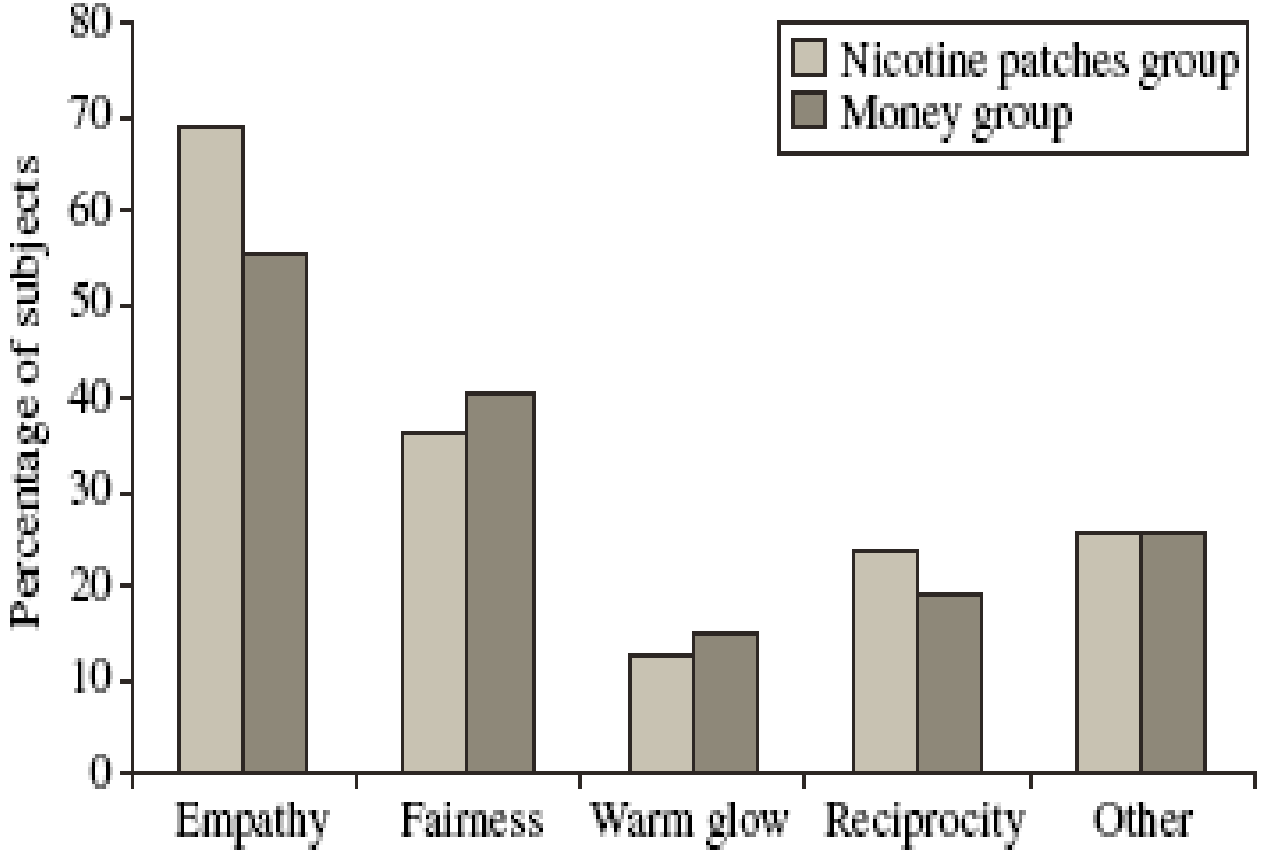

Fig. 2. *Motivations for Donations in Experiment* 1

Experiment III

Design: The same as in experiment I, but now each subject could choose how much to donate in money and how much to donate in nicotine patches (so only one treatment).

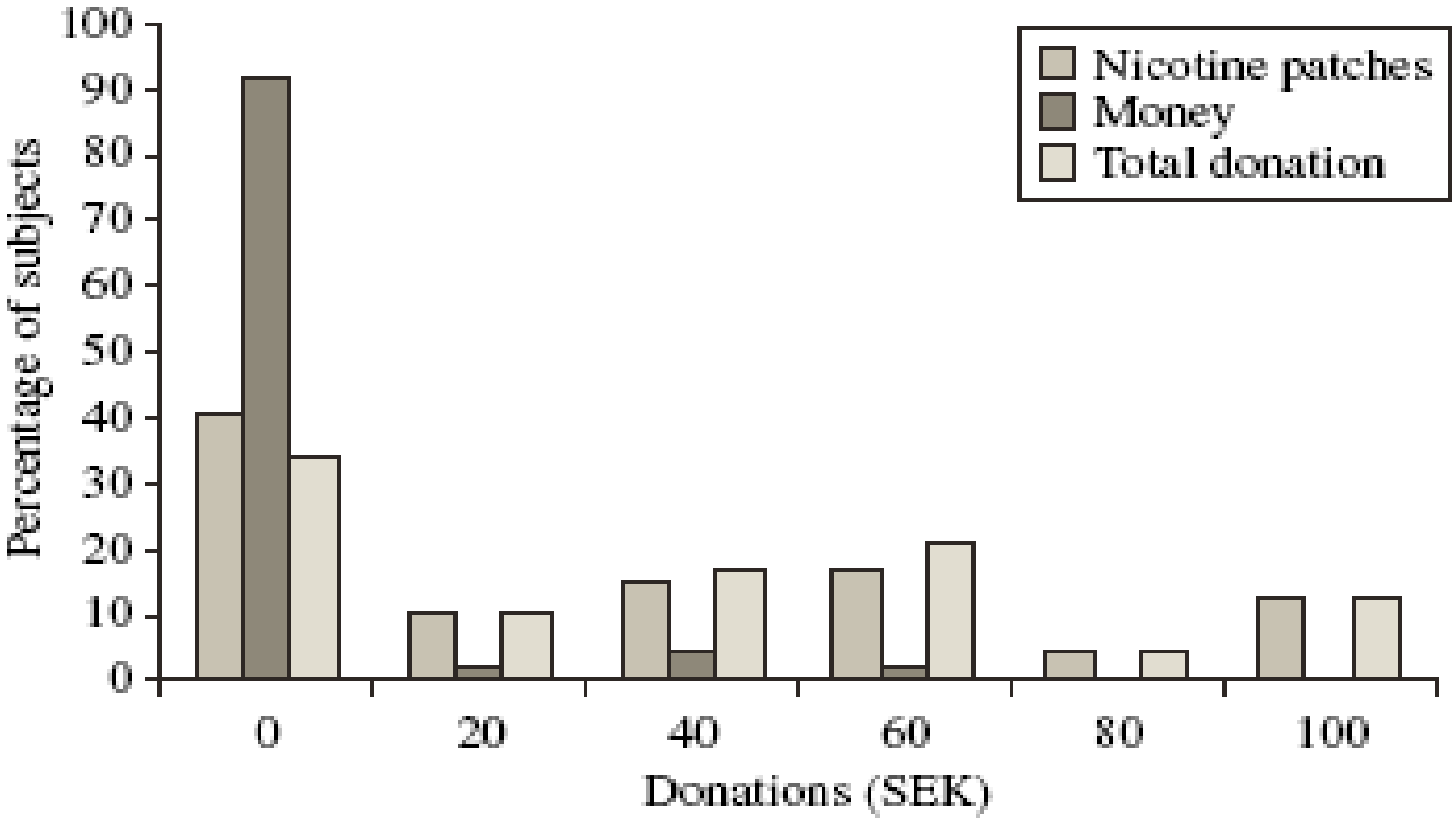

Fig. 4. *The Distribution of Donations in Experiment III*

Mean money donation: SEK 3.40
Mean nicotine patches donation: SEK 34.47
p-value of difference: <0.001

Experiment V

Design: The same as in experiment III, but now each subject could choose how much to donate in ”food stamps” (Rikskuponger) and how much to donate in nicotine patches .

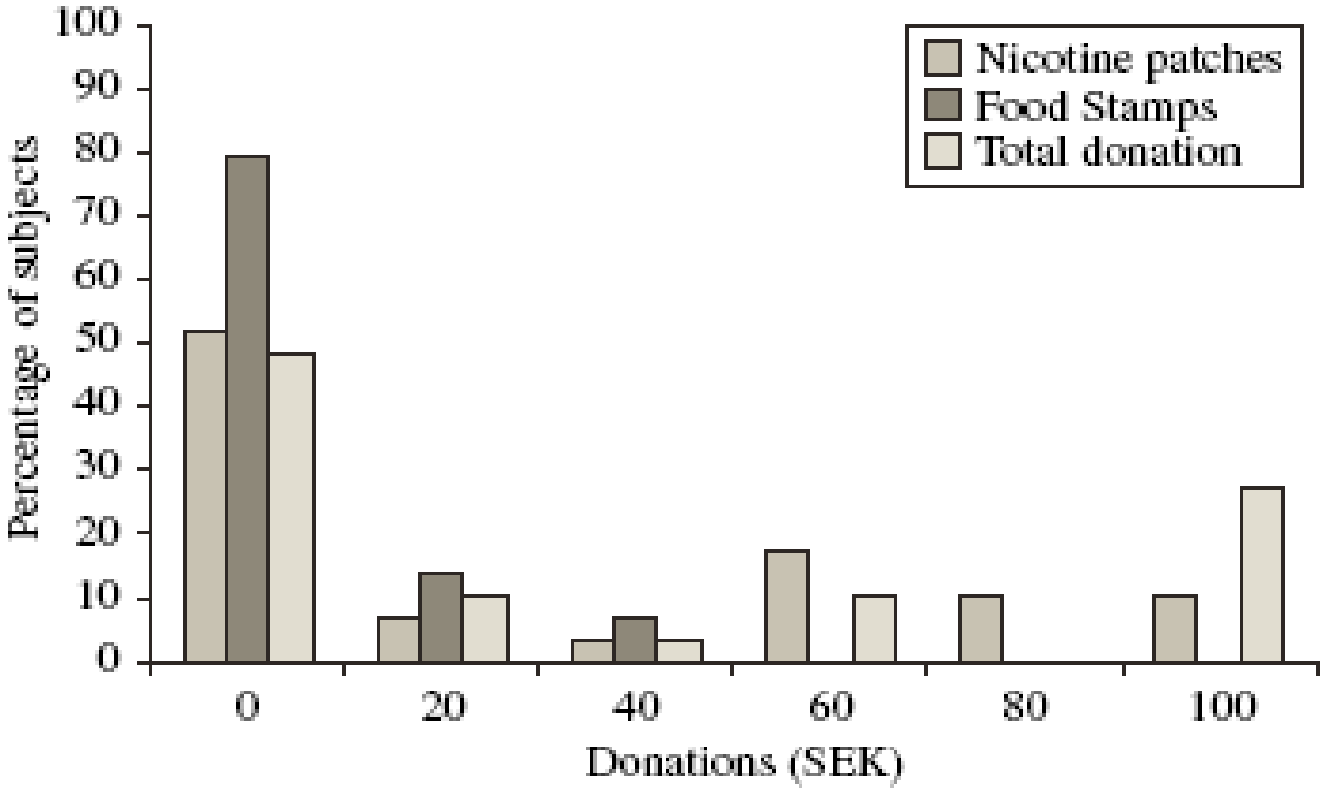

Fig. 6. *The Distribution of Donations in Experiment V*

Mean food stamps donation: SEK 5.52
Mean nicotine patches donation: SEK 31.72
p-value of difference: <0.001

Experiment VI

Design: The same as in experiment III, but now each subject could choose how much to donate in money and how much to donate in aerobics visits.

The recipients now diabetes patients recruited based on being willing to try aerobics visits as an exercise method, but not being willing to pay the price of aerobics visits (SEK 20 per visit).

Every SEK 20 bill donated is converted to a coupon entitling the holder to one aerobics visit provided by the Swedish Exercise Association (Korpen).

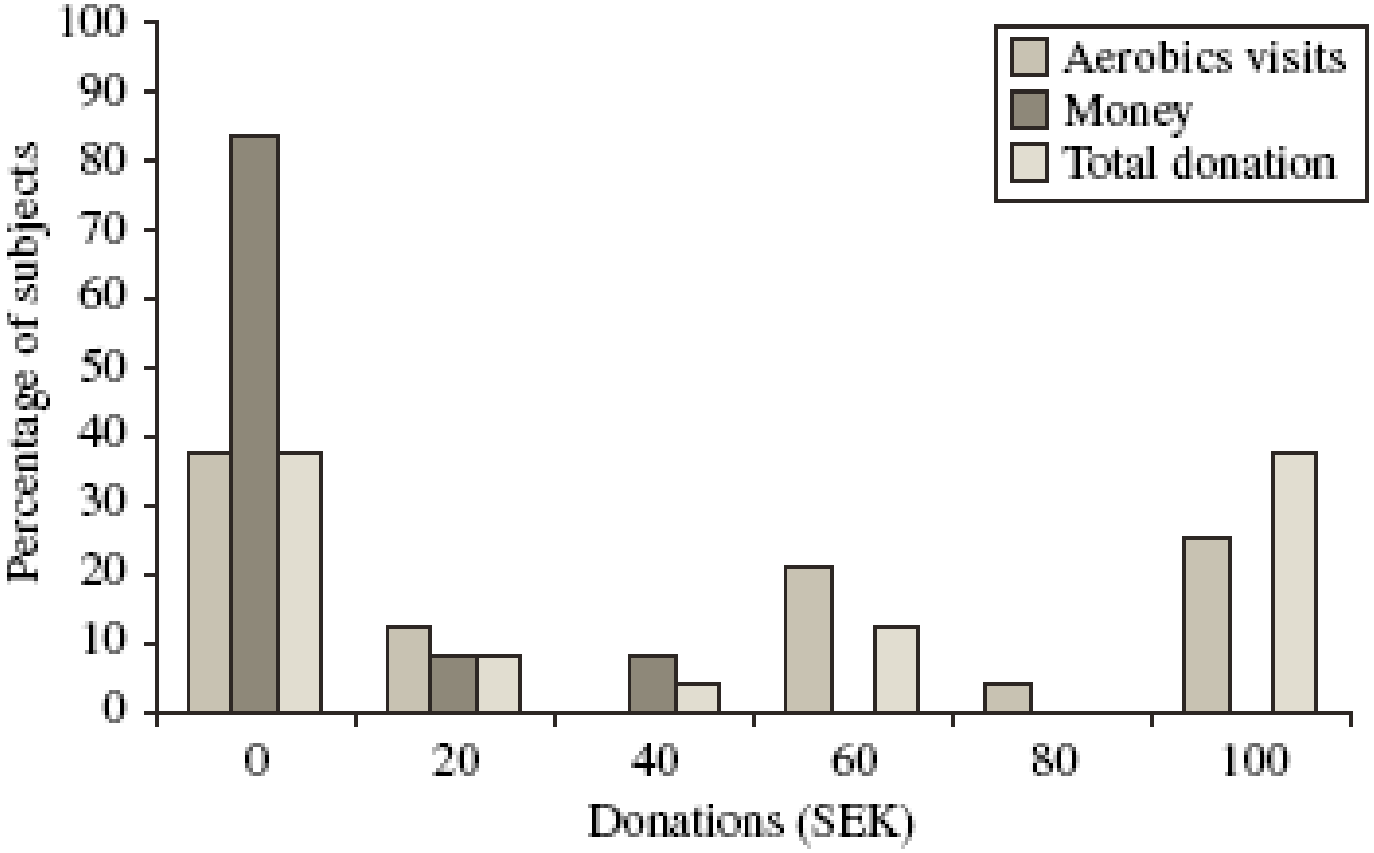

Fig. 7. *The diStribution of Donations in Experiment VI*

Mean money donation: SEK 5.00
Mean aerobics visit donation: SEK 43.33
p-value of difference: <0.001

Charitable giving (Landry et al. QJE 2006)

Design: A field experiment of door-to-door fundraising solicitation. Households in predetermined neighboorhood blocks in North Carolina approached by a paid solicitor and asked if they were willing to make a paid contribution to support the Center for Natural Hazards Mitigation Research at East Carolina University. 44 solicitors employed; they were randomly allocated to neighborhoods and treatment (each solicitor participated only in one weekend and treatment).

The physical attractiveness rated for each solicitor (and the scores standardized so that an increase in one unit corresponds to a one-standard deviation increase in physical attractiveness).

Treatment 1: A voluntary-contributions-mechanism (VCM); i.e. households asked to make a contribution.

Treatment 2: A VCM with seed money; households informed that the Hazards center had already received a commitment of $1000 from an anonymous donor.

Treatment 3: Single prize lottery; each dollar contributed gave the household one ticket for a raffle with one $1000 prepaid credit card as the prize.

Treatment 4: Multiple-prize lottery; each dollar contributed gave the household one ticket for a raffle with four $250 prepaid credit cards as prizes.

TABLE II

SUMMARY STATISTICS

	VCM	VCM with Seed Money	Single-Prize Lottery (SPL)	Multiple-Prize Lottery (MPL)
Total households approached	1186	1282	963	1402
Total households home	446	453	363	493
# of households that contributed	113	67	165	177
Percent of households contributing	25.3%	14.8%	45.5%	35.9%
Total amount raised	\$452.27	\$526.00	\$688.04	\$752.00
Average donation per household that answered the door	\$1.01 (2.52)	\$1.16 (4.13)	\$1.89 (4.39)	\$1.52 (3.45)

TABLE III

TOTAL HOUSEHOLD CONTRIBUTION LEVELS AND SOLICITOR CHARACTERISTI

	Model A	Model B	Model C	Model D	Model E	Model F
Overall constant—VCM is baseline	1.07**	1.07**	0.95**	0.21	0.95**	1.00**
	0.17)	(0.47)	(0.42)	(0.53)	(0.47)	(0.41)
VCM with seed money	0.29	0.56	0.58	0.64*	0.56	0.61
	(0.33)	(0.38)	(0.38)	(0.38)	(0.36)	(0.37)
Single-prize lottery	1.00**	0.91**	0.95**	1.03**	0.84**	0.94**
	(0.36)	(0.35)	(0.34)	(0.35)	(0.35)	(0.35)
Multiple-prize lottery	0.79**	1.06**	1.14**	1.19**	1.12**	1.11**
	(0.33)	(0.29)	(0.30)	(0.32)	(0.31)	(0.31)

TABLE III

(CONTINUED)

	Model A	Model B	Model C	Model D	Model E	Model F
Beauty—male solicitor and male solicitee						−0.42
						(0.31)
Beauty—male solicitor and female solicitee						0.16
						(0.23)
Beauty—female solicitor and male solicitee						0.79**
						(0.27)
Beauty—female solicitor and female solicitee						0.31
						(0.27)