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**Near and generous? Gift propensity
and chosen social distance**

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Near and generous? Gift propensity and chosen social distance.

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Abstract

Social interaction matters for quality in the human services. When quality cannot be sanctioned, it can be viewed as a unilateral gift from the personal provider to the recipient. Low “social distance”, by increasing the psychological cost of not delivering good quality, may increase the provider's willingness to give. I argue that the provider herself can increase her social distance. If she delivers low quality she may choose to do so in order to lower her own psychological discomfort, especially if she is responsible or thought to be responsible for the low quality. Conversely, she may reduce her social distance when delivering high quality. Vicious and virtuous circles in the provision of quality then result. If social interaction has direct importance for service quality, reinforcement mechanisms may be particularly strong. A first test of the argument is undertaken in a behavioral experiment, an extended binary dictator game where the dictator (“giver”) can choose to communicate with the recipient after having made her allocation decision. Generous dictators were more likely to communicate.

Section 1 Introduction

The aim of this paper is to explore the role of social preferences in provider-recipient relationships where the recipient cannot sanction low quality, and where good quality typically requires social interaction between the service provider and the service recipient. More

specifically, I want to investigate some determinants of other-regarding behavior and the propensity to interact with others in these settings.

Weak sanctions and the importance of social interaction for quality characterize many personal service contexts, although to varying degree. The most distinct and extreme cases are commonly found within the human services and parts of law enforcement.

Social context and social interaction matters for service quality for two reasons. Firstly, social interaction is often a part of the service itself. Empathy and support from the doctor can help the patient to recover from or cope with his illness, while a poor social relation to the doctor may demoralize or discourage the patient. The quality of social relations is particularly important in services that are to assist or habilitate individuals that lack some capacity for self-care, for example, individuals with intellectual handicaps, mental disorders, dementia or that are very sick or frail.

Secondly, by interacting with recipient, the provider obtains information that is necessary for customizing the product to the recipient's needs and preferences. A medical doctor searching for the right diagnosis has to examine the patient, ask questions, and be attentive to the patient's response. Likewise, a teacher must understand her pupils in order to motivate them and explain well.

The opportunity to sanction low quality is limited (Eika03a). A psychotic person, for instance, cannot judge the quality of the psychiatric treatment that she receives. She may also lack the authority to decline the service or change supplier. A senile nursing home resident, a neglected child in need of care, a prisoner are all examples of service recipients whose opportunity to sanction low quality is often inadequate, because the person lacks either the personal ability or the authority to do so. Likewise, patients have weak sanctions if they do not

have the medical skills required to assess the quality of the doctor's work, or if there is excess demand for doctors.

The prediction of economic theory in such situations is straightforward: Quality that cannot (or will not) be efficiently enforced is not realized. Still, what we commonly observe is not that. There are often substantial amounts of non-contractible effort and investments on the provider side. Moreover, the systems for provision of a large number of services rely to a large extent on non-enforceable contributions. Though a selfish concern for reputation can at least partly account for that, this paper is motivated by the conjecture that social preferences also play a major role.

Given the importance of social interaction it is natural to focus on those persons in the producer organization that interact directly with the recipient. In the following, for simplicity, but also out of realism, I think of this as only one person, and not a group. The key questions addressed are: How is that person's choice of non-sanctionable effort and investment affected by the firm's (or her co-workers') willingness to contribute to service value? Secondly, what determines the degree to which she interacts with or shows an interest in the service recipient? The question takes as a premise that the worker herself can choose the extent or the way she socially interacts with and relates to the service recipient. Moreover, I argue that the quality of the service may influence her choice of social interaction (and social relatedness). For instance, if the worker delivers a low quality product, she may choose not to relate or interact with the service recipient, simply because that may lower her feeling of guilt (if she has contributed little) or discomfort (if it is circumstances outside her control that has reduced product value). This, in turn, gives the worker little information about the recipient's needs and desires. To the extent that the quality of the social service relation is an integral part of the service, it also reduces service

quality more directly. It may make the worker less concerned with the welfare of the recipient, thus reducing the personal cost of providing low quality in the future. These mechanisms are complementary and may contribute to vicious circles when the starting point is low quality and to virtuous circles when the starting point is high quality.

Below, I argue that work effort can be viewed as a gift (section 2). Moreover, when the recipient cannot sanction quality, effort is a one-sided (unilateral) gift. Section 3 discusses the determinants of unilateral gift-giving. Section 4 spells out the argument that a personal provider chooses her social distance (to the recipient), and her motivation for doing so. Section 5 presents in more detail the setting in which service delivery takes place. This description motivates the design of the experiment in section 6. Though an experiment can only mimic the service situation in a stylized way, I argue that the design represents some characteristics that are important for the determination of non-sanctionable service quality. The experiment is an extension of a binary dictator game. Two individuals are matched, a “giver” and a “recipient”. The giver, who is always the better-off of the two, can help the recipient to earn money. The recipient cannot influence payoffs. His earnings are determined through a lottery. “Helping” (choosing a good lottery for the recipient) can be viewed as a non-strategic unilateral gift. The more attractive a lottery, the higher is “quality.” Lotteries are used, so that the giver does not know the recipient's pay-off, but will have to ask the recipient in order to find out. This design feature is to allow for voluntary social interaction, and to see how it relates to the value of the lottery. The value of the lottery (“quality”) is partly determined by the giver's helping behavior (“effort”) and partly by factors outside the giver's control. Results are reported in section 7 and discussed in section 8.

Section 2 Effort as gift-giving

In any efficient employment relationship, work effort has an intrinsic gift element. Even in technically simple work settings, a job well done requires the willing cooperation of the worker and, consequently, an effort level beyond that which can be legally or physically enforced.

Both firms and workers recognize that there is a voluntary aspect to work effort. Work-to-rule is a well-known way to damage the employer in a labor conflict without violating formal agreements. The study discussed by Akerlof (1982) of a group of clerical workers at an American utility company is also illustrative. On average their productivity were more than 15 percent above the minimum standard demanded by the firm, due to high effort from a great majority of workers. In technical and economic terms it was a very simple work setting. It was unskilled work, on-the-job-training was not important and the firm could, and did, measure individual productivity. In more complex work settings, where effort is largely non-verifiable one would expect that gift-giving is even more important for the actual level of effort.

Non-verifiable effort characterizes the services with which this essay is concerned. However, since social interaction is an integral part of the provision in these services, there is an additional reason for viewing effort as a gift. Relational qualities such as friendliness, empathy, receptiveness and respect, which are often essential quality dimensions, cannot in essence be commercialized. They cannot be commercialized because such qualities are not determined by actions and external expressions alone, but also by the provider's true feelings and intentions.

Akerlof (1982), with reference to the clerical worker study, models the employment relation as a gift-exchange between the firm and the collectivity of workers. This gift exchange rests fundamentally on workers' social preferences. Firstly, workers develop sentiments for their

co-workers. The clerical workers would dislike if the pay and treatment of workers were differentiated according to individual productivity. Additionally, workers may care about the firm. Such preferences are however, not free of social context. Workers' generosity towards the firm is dependent on the firm's generosity towards the workers. This dictates that the firm pays a “fair” wage, which may be above the alternative wage attainable in the market. The firm also paid all workers the same wage, despite substantial differences in individual productivity. In exchange, work productivity was on average almost 18 percent above the minimum standard.

Akerlof (1982) views the employment relation as a gift exchange between the firm and the group of workers. In the personal services, with social interaction between the service recipient and at least one of the workers, it is natural to see gift-exchange as taking place between more than two parties. The service recipient is a third party additional to the firm and the workers. In the feasibility of gift exchange between the service recipient and the worker or the group of workers with whom the recipient interacts, personal services differ from the production of goods and services that are distributed in impersonal ways. The tipping of hotel employees, waiters, taxi drivers etc. may be seen to have at least in part this function (though norms, in terms of tipping practices and their interpretation, differ geographically).

Pecuniary gift-exchange relationships between the service recipient and the worker(s) (such as tipping) or the firm are, however, very restricted in service contexts where the recipient can use no or only highly inefficient sanctions. In such situations the recipient cannot increase or reduce the pecuniary rewards to the workers or to the firm if quality is respectively high or low, or he may do so only at very high personal costs.

Gift exchange is based on the mutual capacity of the parties to punish and reward behavior that is unfair or fair, respectively, relative to some social norm. If one of the parties (in

this case the service recipient) has no or highly inefficient sanctions, there is no longer a symmetry in the capacity to reciprocate. The provision of quality can then more appropriately be viewed as unilateral gift-giving.

Section 3 Determinants of gift-giving

When the service recipient is unable to sanction low quality, direct reciprocity cannot motivate the provider. In experimental settings this has been found to reduce generosity. Forsythe (1994) compared dictator game experiments with ultimatum game experiments. In a dictator game two participants in the experiment are paired. Only one of them, “the dictator”, is given a sum of money and that person must decide how much to give to the other participant. The amount to be divided is usually relatively small (around 10 dollars in U.S. experiments in the 90ies). Unless otherwise noted in the following, the experimental design is such that dictators and recipients are anonymous to each other. If there is full anonymity, reciprocity is not possible outside the lab. Selfish participants preferring more money to less would then have no incentive to donate money.

The ultimatum game differs from the dictator game in that the recipient can decide whether to accept or reject the proposed allocation. If he accepts, the allocation is the proposed one. If he rejects, both receive 0. In the ultimatum game, negative reciprocity is therefore possible. The recipient can punish the one that makes the proposal (who gets 0, rather than her proposed share) at a personal cost (losing the rejected offer). The subgame perfect prediction is that offers are 0 or the smallest possible amount, since a recipient always prefers some money to nothing (and never has a selfish incentive to reject offers). Contrary to this, experiments in a number of different settings show that recipients do reject low offers, and that in anticipation of

this, proposed allocations to the recipient are consistently higher than in comparable dictator games Forsythe et al. (1994). Fehr et al.(1998) also found reciprocity to be a strong motivational force in gift exchange experiments. Gift exchange games allows for positive reciprocation.

Though donations are lower in dictator games than in ultimatum games, allocations to the passive recipient in dictator games are not insignificant. In Forsythe et al. (1994) only about 20 per cent offered nothing, and equally many offered an equal split. Half of the dictators offered a share of at least 0.3 (with no one offering more than 0.5).

The dictator game is the most direct test of unilateral gift-giving in an experimental setting. One objection that has been raised against dictator games is that results vary markedly across experiments that differ in the specific experimental design, particularly because some of these design differences are seemingly minor. I would like to reverse the argument. The simple structure of the game can make the effects of varying the experimental design relatively tractable. For that reason, differences in design, not least subtle differences, may give valuable insights into the determinants of unilateral gift-giving.

Since the recipient in (anonymous) dictator games has no sanctions, the game has been used to study generosity, or altruism, as a pure preference phenomenon. Hoffman et al. (1994) and Hoffman et al. (1996) are insightful and systematic studies of the dictator game's sensitivity to procedures. They also argue that the donations observed in Forsythe et al. (1994) to a large extent do not stem from true social preferences but from a “social concern for what others may think”, others here being the experimenter observing the dictators' donations. They design a “double blind” dictator experiment with anonymity both between participants and versus the experimenter, and choose a wording of the instructions that in value-terms is allegedly neutral. For example, they avoid using the word “divide” which would suggest that the purpose is to

divide the sum of money. This design, which, in their words, imposes a higher degree of social isolation, results in lower donations than a replication of the experiment in Forsythe et al. (1994).

Hoffman et al.'s interpretation is that the observed other-regarding behavior in socially less isolated experiments (where the recipient nevertheless is anonymous) is the result of “unconscious, pre-programmed rules of social exchange behavior that suit [subjects] well in the repeated game of life's interaction with other people”. Anonymity and neutral framing weaken these automated responses, allowing “reasoning processes that recognize more prominently strictly self-interested actions” (Hoffman et al. (1996)).

Social distance is a multi-faceted concept, though authors rarely make clear what they specifically mean by it. Dufwenberg and Muren (2003) point out that experimental research has focused on one particular aspect, the anonymity of the dictator. In Hoffman et al (1994, 1996) and in Bohnet and Frey (1999) lower dictator anonymity increases donations. In the latter study donations were higher when the recipient could identify the dictator (both stood up and looked at each other for a few seconds) than if only the dictator knew the identity of the recipient (only the recipient stood up). Non-anonymity versus the experimenter (as in Hoffman et al (1994, 1996)) or versus recipients (as in Bohnet and Frey (1999)) allows for reputation effects and in the latter case also for reciprocity outside the lab. One may conjecture that these mechanisms are important, but the experiments are not informative about how lower anonymity in these cases increases donations. Dufwenberg and Muren (2003) find lower anonymity to have unexpected effects. Donations were lower when the dictator's identity and choice were made publicly known. However, their experiment differs from the standard dictator game in several ways, in particular, in their use of lotteries to pick out one dictator and one recipient from a larger group of students.ⁱⁱⁱ I conjecture, that the two treatments differed not only with regard to dictator

anonymity, but possibly also with regard to the fairness principles that the participants perceived as relevant.

Also in real life social interactions, the degree of anonymity covaries with other factors. Though it is reasonable to expect that lower anonymity often increases generosity, general conclusions are difficult to draw. Social distance, as it is used by Hoffman et al (1994, 1996) and other experimental economists, comprises actually both anonymity (along several dimensions, I would argue) and social context. Hoffman et al.'s conjecture about behavior in environments with high degree of “social isolation” has limited empirical relevance for the personal services. Firstly, there is close social interaction, and thus low anonymity both for the provider and the recipient. Secondly, the social context typically make norms of other-regarding behavior a strong guide to behavior. This is especially true for situations where the recipient has little power to sanction the provider, and particularly if also the demand for the service arises from substantial and basic needs (common in, for example, much of health and social care). There may then be strong moral norms about how to behave. (Eckel and Grossman 1996) demonstrate the obvious importance of the recipient's needs. They make publicly known that the recipient will be the Red Cross, rather than some anonymous (experimental) participant. Compared to a replication of Hoffman et al. (1994)'s double anonymity experiment, this change doubles the amount of money donated, from 10 to 30 per cent of the total pot.

One motivation for generosity is to reduce income inequity. Donations may also increase with the efficiency of gift-giving. In standard dictator games the relative price of giving is unity, the dictator having to pay one dollar in order to give the recipient one dollar. In an extension of the dictator game, Andreoni and Vesterlund (2001) find that donations are inversely related to the relative price of giving. Efficiency and distributional concern may also conflict. Güth et al.

(2003) found that fairness (here regarding the recipient's pay-off relative to the dictator's) dominated efficiency concerns in unilateral gift-giving, while Kritikos and Bolle (2001) arrived at the opposite conclusion. The decision making problem is, however, formulated differently in the two studies.

It is a human trait to care about others. As Adam Smith writes “(h)ow selfish soever man may be supposed, there are evidently some principles in his nature, which interest him in the fortune of others, and render their happiness necessary to him, though he derives nothing from it, except the pleasure of seeing it. Of this kind is pity and compassion, the emotion which we feel for the misery of others” (Smith (1984)). His “Theory of Moral Sentiments” (Part 1, “Of the Propriety of Action”) is a rich and perceptive account of man as a social being that I use in the following.

Perceptions of fairness and other views the agent holds concerning social interaction are set within and thus derive their meaning from the social context. There are also subtle psychological mechanisms that are yet poorly understood, but nevertheless powerful emotional responses affecting decision making. To quote Smith (1984), “(t)hat we often derive sorrow from the sorrow of others, is a matter of fact too obvious to require any instances to prove it”. There is a psychological cost to see the suffering of others. This is a reason for giving, additional to any duty or norm to do so. The spectator may choose to help, to alleviate not only the one in need, but also her own pain.

It has been observed that people react more strongly to the faith of a particular person than to the faith of a statistical person (Schelling 1968). People's willingness to pay for, for example, a costly operation that would save the lives of a known child often far exceeds their willingness to pay for preventive medical policies that in expectation saves many children's lives.

The sick child is an identified life. The latter are statistical lives, the identity of each one of these is neither known nor certain, since who will be affected are determined by probabilistic events in the future.

Understanding the psychological mechanisms that, at least in the public sphere, cause greater generosity towards identified, rather than statistical individuals, can help in the understanding some mechanisms underlying worker behavior in personal service contexts where effort cannot be sanctioned. The position of the recipient resembles that of the identified victim. To the provider, it is a known person, in need of help and whom she has the capacity to help.

“The identifiable victim effect” as it has come to be called is still a puzzle to research, see Jenny and Loewenstein (1997). Bohnet and Frey (1999) and Small and Loewenstein (2002) study identification using dictator games experiments. Bohnet and Frey (1999) think of identification as literally learning who the recipient is through seeing, hearing and acquiring information about the recipient. All participants are gathered in one room. Two one-way identification treatments are performed. In one, recipients had a number in their hand by which dictators could identify them. In another, they also had to tell the audience specific personal information (their name, where they came from etc.). Compared with a double blind anonymous procedure, identification increases donations, though results are statistically significant only when recipients also tell about themselves. This shows that it is more going on than mere rational considerations. But it is difficult to infer from the experiment what it is. The experiments in Small and Loewenstein (2002) are more informative in that respect. In a dictator game, the dictator herself draws the anonymous recipient with whom she can share 10. Donations were higher if the drawing took place before she decided the allocation than when the drawing took place afterwards. A field experiment, where individuals were asked to donate money to an

organization building houses for needy families, resulted in similar strong differences. A list described several families on the waiting lists. Participants were told either that the family “will be selected” or “has been selected” from the list. The latter treatment resulted in more people donating and on average higher non-zero donations. That there is another, rather than there will be another matters significantly, even if no information is provided about the recipient. Small and Loewenstein (2002) hypothesize that “determined victims will be perceived as more tangible and hence evoke greater sympathy.”

Few would argue that different norms apply in the two treatment alternatives, in either the dictator game or the field study; in that sense the behavioral differences are not rational. Still, an ex post condition - “a determined victim” - appears to trigger a stronger emotional response, resulting in, presumably, a higher psychological cost from not giving. In Small and Loewenstein (2002) the experimenters manipulate participants' social distance. I conjecture that participants themselves may also do so, and that they are particularly inclined to do it when confronted with circumstances that appear unpleasant to others.

The cost of observing others in unfavorable conditions is higher when the social distance is low. Increasing perceived social distance is thus a way to reduce one's own psychological cost of either not being able to improve conditions, or choosing not to do so. According to Smith we become sympathetic towards others by forming an image of their situation with our own senses. “As we have no immediate experience of what other men feel, ... it is by the imagination only that we can form any conceptions of what are his sensations. ... It is the impressions of our own senses only, not those of his, that our imagination copies.” Though this applies both to pleasure and pain, Smith argues that the latter “is a more pungent sensation” and “our sympathy with

pain, though it falls greatly short of what is naturally felt by the sufferer, is generally a more lively and distinct perception ...”

For that reason, “... we often struggle to keep down our sympathy with the sorrow of others. ... we endeavour, for our own sake, to suppress it as much as we can ...” (Smith (1984), part 1, section III).

Section 4 Social interaction

The social interaction argument can now be restated. Person A observes person B's situation, which may be favorable or unfavorable. I argue that B's well-being (as perceived by A) influences A's propensity to interact socially with and relate to B.

If A has some concern for B's well-being, she experiences joy if B is well and sorrow if B is not. These feelings are stronger if A perceives herself to be responsible for B's well-being or if she believes that others think that she is (for example, B thinks so). If B's situation is not good, the former occasions guilt, the latter shame. A's feeling of discomfort if B is not well may also be stronger if A would like to help, but does not have the opportunity.

In personal service provision either situation can occur; the personal provider delivers a low quality service, and feels guilt because of her own low effort; or feels shame because of low effort or investments in other parts of the provider organization. In the latter case, her frustration may be particularly high if the recipient or others that care about him do not know that it is not her fault, or if she would like to help but exogenous factors are such that she has little opportunity to do so (low efficiency of helping relative to the recipient's needs). The discomfort felt by the personal provider is likely higher the more the recipient needs the service.

To reduce feelings of discomfort if B is not well or to reinforce a feeling comfort if B is well, A can manipulate her perceived social distance to B, increasing it in the former case and decreasing it in the latter. In the personal services where social interaction has direct impact on quality, the result is lower quality if the recipient's situation is not good and higher quality if the recipient's situation is good. Since social distance also affects the costs of effort, manipulations of social distance may contribute to lower effort when the recipient is not well and higher effort when he is well.

If the recipient's well-being is the result of the quality of past service provision, these mechanisms reinforce past quality levels, contributing to, respectively, vicious or virtuous circles in the provision of quality.

The mechanisms described above do not translate into actions that can be viewed as “automated responses” (to use Hoffman et al. (1996)'s phrase). Nor is it meaningful to view it as the result of a person's rational calculations based on given, innate preferences (her “true nature”, so to speak).^{iv} The individual A can choose how her feelings (that she gets from observing B's situation) are to affect her own actions. For example, if B is not well, A may choose to interact socially and to maintain or even decrease her social distance because she wants to help or to comfort. Moreover, she can also seek to alter her emotions (the degree of discomfort, of guilt or shame etc.), and through that any inclination to manipulate social distance. Reasoning is important, or can be made important, for both choices.

Section 5 The service provision setting

The experimental study presented in the following sections is a first attempt to explore relations between an individual's other-regarding behavior, the other's situation and the individual's choice

of social interaction. In order to formulate the questions more precisely I first identify what I consider to be important characteristics of the setting within which the personal provider makes her or his effort decision. This is a necessary step on the way to design an experiment, and to show in what way and which aspects of the decision making situation that the experiment is thought to capture.

The service provision setting has the following distinguishing features:

1. High service quality requires social interaction.
2. The service recipient has limited opportunity to sanction a low value of the product.
Typically, the value of the good is also unverifiable.
3. The recipient interacts with one employee who delivers the good or service.
4. The value of the good or service to the recipient depends in part on this employee's actions and in part on circumstances that she cannot control, such as firm investments and the effort of colleagues, and factors exogenous to the providing organization.
5. The recipient cannot or only to a very limited extent discern the individual contributions to service value.
6. The employee cannot credibly commit to a particular contribution, and knows the contributions made by the other agents and the environment before deciding on his or her own action.

Social interaction matters for quality either because the provider obtains information through that interaction which is necessary to customize the product to the needs or preferences of the recipient, or because social interaction is an integral part of the service (feature 1). Social interaction is generally important in the personal services, though to varying degree. In much of the human services it is an integral part of the service. Feature 2, the limited opportunity to

sanction quality, is more restrictive. I have argued elsewhere Eika (2003) that this is a problem in such services as psychiatric care (for example, to psychotic persons), in long term care (for example, very dependent nursing home patients), in the care for children (without able parents or other personal advocates) and in prisons (socially marginal prisoner with few personal resources). In the human services weak sanctions often coincide with the recipient having substantial needs, and with social interaction being particularly important. Weak sanctions occurs occasionally in regular personal services as well, typically, in services characterized by information asymmetries, one-time purchases and where reputation effects are weak.

I assume that only one in the provider organization interacts with the service recipient (feature 3). This is partly a simplification, but it is also not without realism. The personal provider does not fully control service quality. The determination of service value (or service quality) is depicted in figure 1. The solid arrows are technical relationships. The service value V are determined by factors that are external to the provider (a), and by her own effort (e and s). The dashed arrows are assertions about factors that influence provider behavior.

[Figure 1 here]

As to the first (the solid arrows), the parameter a represents the joint contribution to service value from other agents than the service provider (the firm, and colleagues) and the environment. The higher is a , the higher is service value, V . I assume that the provider cannot influence a . The contributions to service value represented by a are therefore not enforceable by either the provider or the service recipient (features 2 and 6). In the figure, the contribution by the provider is decomposed into a social interaction component, s , and effort to fulfill the more specific and tangible tasks the provider is assigned, e . For a doctor think of e as, for example, the time spent on consultation and the tasks not involving social interaction with the patient, and s as

his attentiveness, interest in and care for the patient. The distinction between e and s is in practice not clear-cut. The physical examination of a patient can be thought of as influenced by both e and s . The higher e and s , the higher V .

The service provider knows a , the contributions from the rest of the organization and the environment, before deciding on her own effort level (feature 6). She then delivers the service to the recipient. The service recipient observes the value of the gift, but cannot discern the individual contributions (feature 5).

In essence, since the recipient cannot sanction low quality, the provider therefore delivers a joint gift (from herself, the firm, co-workers and the larger environment). Complementarity in gift-giving is assumed, so that the higher the contribution made by others in the producing organization or the more favorable environment, the higher is the marginal productivity of effort for the provider ($\partial^2 V / \partial e \partial a > 0$).

The dashed arrows in the figure are assertions about factors that influence the personal provider's willingness and ability to high quality effort. Parts of the experimental literature reviewed in the previous section were concerned with the effect of social context and social distance on individuals' willingness to give. In the figure that relation is approximated by the arrow from s to e , social interaction and social nearness increasing the psychological cost of not doing a good job. My concern is with the two other dashed arrows, in particular with the effect of service value on social interaction. The experiment is motivated by the following questions:

1. The personal provider's opportunity to deliver a high-valued service depends partly on factors she cannot control (contributions from co-workers, the firm and the environment). Is she more willing provide non-sanctionable effort herself if also external factors contribute to high service quality? (This is the arrow from a to e .)

The last two questions concern the possible relation from V to s , while also distinguishing between what has caused service value to be low (or high).

2. Is the provider less inclined to interact socially if service value is reduced because of the provider's own low effort?
3. Is she less inclined to interact socially if service value has been reduced by external factors?

Section 6 The experimental design

In an experimental setting I explore determinants of unilateral gift-giving and social interaction in situations of extreme asymmetry. Only one in a couple of experimental participants, (“the giver”) can influence payoffs (by being generous) and decide whether to communicate with the other person (“the recipient”). (For ease of exposition, the giver is a she and the recipient a he in the following). The recipient can never make as much money as the giver, and may make considerably less. There are 10 rounds, in each one a giver and a recipient are paired anonymously. The giver first receives a considerable sum while the recipient's earnings are determined through a lottery that the giver chooses for him. Lotteries differ in the probability of drawing a high prize, and in the value of the high prize. At a personal cost, givers can help the recipient by choosing a lottery that very likely gives the recipient a high prize. Givers do not control the value of the high prize, which is randomly determined (representing the parameter a above). Communication (asking how it went, and receiving this information) does not influence payoffs. It is merely an indicator for the propensity of the giver to interact socially with the recipient. I investigate whether the propensity to ask varies systematically with the giver's own contribution (“helping” or “not helping”), and by how much she can increase the recipients

payoffs if she helps (the value of the high prize). I also ask if a giver's propensity to help varies with the productivity of helping (the value of the high prize).

The experimental design is motivated by the description of the setting within which service provision takes place (section 5), viewing non-sanctionable quality as a one-sided gift (sections 2 – 3). The latter corresponds to feature 2 (in section 5). Furthermore, each decision-making situation involves two persons, corresponding to feature 3: The recipient interacts with one person only, the one that delivers the service. In the experiment that person is the “giver”.^v Her task is to choose a lottery from which the recipient draws a ticket. The value of the ticket is the recipient's earnings.

More specifically, the giver chooses between two lotteries in each round. The lotteries differ in the probability of the recipient drawing a high prize. In the “good” lottery he draws the high prize almost for sure (9/10 probability), in the “bad” lottery he draws the low prize with equally high probability. The giver “helps” her recipient if she chooses the good lottery, but to help is costly.

While the cost of helping is constant, the value of the high prize varies from round to round. The giver does not determine the value of the high prize, which is randomly determined. The giver therefore does not fully control the value of the lottery (the value representing “service quality” or “service value”). This corresponds to feature 4; the value of the service depends partly on the actions of the personal provider (in the experiment represented by the giver's helping behavior) and partly on circumstances she cannot control, that is, the value of the parameter a in section 5 (in the experiment represented by the value of the high prize).

With equal probability, the high prize takes one of two values. With the “more valuable high prize”, helping is socially efficient (and the productivity of helping is high). With the “less

valuable high prize”, helping is socially inefficient (and the productivity of helping is relatively low). In the experiment, external factors that influence service value therefore have a very simple representation. The parameter a (represented by the “value of the high prize”) is a random variable, and it determines only the productivity of giving. The giver learns the value of the high prize before she decides if she wants to help, that is, if she wants to give her recipient the “good” lottery. This corresponds to feature 6; the personal provider knows the contributions made by others in the provider organization and the environment (a). Altogether there are four possible lotteries (the four combinations of lotteries having “high” or “low” probability of drawing a high prize, and the high prize being “more” or “less” valuable). The recipient knows the four possible lotteries, but does not know that the giver cannot fully control the value of the lottery. This corresponds to feature 5; the recipient cannot discern the individual contributions to service value.

[Table1 here]

I want to investigate the following hypotheses. H_1 : Givers are more willing to help when the more valuable high prize is drawn (that is, when the productivity of helping is relatively high). Furthermore, does givers' propensity to ask the recipient about the outcome of the lottery vary systematically with how attractive that lottery is? From this I deduce two hypotheses. H_2 : A giver is more likely to ask if she has helped her recipient (that is, chosen a good lottery in the subset available to her). H_3 :: A giver is more likely to ask if the high prize is the more valuable one (that is, if she can choose from the most attractive subset of lotteries). The three hypotheses correspond to the three questions about provider behavior that was raised at the end of the previous section.

There are ten couples, and the sequence is repeated 10 times. Each person remains in the same role throughout the experiment, either a giver or a recipient. In every round the giver is matched with a recipient that she has not met in previous rounds. Interaction is anonymous between participants. The giver and the recipient that are matched are sitting right opposite each other on either side of a table, but they cannot see each other. A non-transparent cloth runs across the table both above it and below. Neither can givers observe the choices of other givers. The instructions are included in the appendix.

At the very beginning of the experiment, the participants are seated together (on one side of the cloth). Not knowing which role each is going to get (to be determined randomly), they are informed about the structure of the game. In each round the giver gets 80 kroner (about 10 Euro). If she helps her recipient, she pays 20 kroner, and keeps 60 kroner. Each recipient will be offered one of the lotteries in table 1. How much the recipient earns depends on the color of the lottery ticket that he draws. Some recipients earn the high prize if they draw a blue ticket, others earn the high prize if they get a green ticket. In two lotteries the high prize is 55 kroner (“the more valuable high prize”), in the other two it is 20 kroner (“the less valuable high prize”). Tickets in a wrong color have low value (the low prize is always 10 kroner). The giver can help her recipient to earn some money, but in order to do that, she must ask him what is the color of the tickets that will give him a high prize.

After roles are drawn, and givers and recipients are separated, givers (but not recipients) learn that they cannot freely choose between the four lotteries in the table (cf. feature 5 in section 5). In each round a giver is only presented with a subset, one good and one bad lottery.

Each round consists of the following sequence.

1. The giver first get to know whether the high prize is the more or less valuable one. If it is the more valuable high prize (55) she gets to choose from the most attractive subset, if it is the less valuable high prize (20) she chooses from the least attractive subset.
2. The giver asks her recipient what is the color of the tickets that have high value to him. She does this by showing the note “What is your color?” (The recipient replies by lending a color crayon which she uses to fill out her reply form.)

The giver now makes two decisions (step 3 and 4 below).

3. The giver decides whether to help the recipient (choosing the good lottery, that costs the giver 20), or NOT helping the recipient (choosing the bad lottery, this costs the giver zero).
4. The giver waits while the recipient is handed the chosen lottery and draws a ticket. During this time, she can decide if she wants to ask the recipient how it went. If she does, she shows the note “How much money did you get?” The recipient then shows her the ticket (with the value printed on it).

In each round the giver's pay-off is \$80\$ if she has not helped, and \$60\$ if she has. The recipient's pay-off is \$10\$ if the recipient draws the low prize. If he draws the high prize he earns 20 or 55 depending on the value of the high prize in that round.

To familiarize all participants with the use of lotteries in the experiment, participants received a simple questionnaire by e-mail (included in the appendix), and were told to fill this out on beforehand. As the experiment began participants were asked to consult each other to check that they had the same answers. If they disagreed, they could consult the experimenters. The purpose was to help participants understand the lotteries, and to contribute to a social atmosphere. Groups of 2-3 (sometimes 4) were spontaneously formed, the larger groups usually

the result of some having forgotten to bring the form with them. Coffee and biscuits were served when the participants arrived. Furthermore, after the roles were drawn and the participants seated on each side of the cloth that separated givers and recipients, givers had to answer questions in writing about the likely gains to the recipient, and their own pay-off if they helped or not, in the two alternative subsets of lotteries. (Questions are reported in the appendix.) There was also one trial round prior to the ten rounds in each session.

The experiment is deliberately designed so as to make the “giver” feel that she should give, whether or not she actually chooses to do so. Firstly, the position of the giver and the recipient is clearly asymmetric, with the recipient in the weak position. Only the giver can influence payoffs, and ensure that the recipient has a fair chance of making a sizeable amount of money. In each round the giver is always better off than the recipient. Secondly, the instructions state that the giver can help the recipient, a verb with a strong and literal moral content (“to help a person in need”) even if it is also often used for more “practical” tasks (could you help with the door). The term “recipient” signals passivity or lack of power. Relying on the findings in Small and Loewenstein (2002), instructions used *ex post* formulations such as “the recipient that you are (or have been) matched with”, rather than “will be matched with”. The intention was to encourage identification, increasing the psychological cost to the giver of not contributing.

Section 7 Results

I report results from a first test of the presented hypothesis. The experiment was run twice, with 10 givers and 10 rounds in each session. Excluded from the data set is one giver in the first session who did not follow the instructions. For reasons that are made clear below, I include the data from the pilot study (4 givers and 10 rounds) in the analysis of the social interaction

hypothesis. To test for robustness, the experiment should be repeated, and I would like to do that if time and money allows it.

The giver is the only one that can influence payoffs in the experiment. Since interaction is anonymous and helping the recipient (choosing the “good” lottery) is costly to the giver, there is no selfish reason to help. Always giving the recipient the “bad” lottery is the dominant strategy, maximizing the giver's pay-off.

The analysis presumes that social preferences and a concern for others do play a major role. In fact, none of the givers behaved entirely selfish. In the terminology of the experiment, all helped at least twice during the ten rounds forsaking no less than 40 kroner of their own endowment. On average, givers helped in nearly half of the rounds (49 per cent). That is not unexpected in view of the experimental results surveyed in section 3 and the design features of this experiment. All givers got the opportunity to help when this was socially efficient (lotteries having the “more valuable high prize”). On average givers could choose between lotteries with the “more valuable high prize” in 51 percent of the choice situations (close to the ex ante probability of 50 percent).

The previous section presented three hypotheses. I now present results.

H₁: Givers are more willing to help when they can choose between lotteries with “the more valuable high prize” (55 kroner), than when they can choose between lotteries with “the less valuable high prize” (20 kroner).

The likely gain to the recipient in the former case is 45 kroner (the difference between the high and the low prize), while it is only 10 kroner for lotteries with “the less valuable high prize”. Since the cost of helping is always 20, the productivity of helping is socially efficient

only with “the more valuable high prize”. Participants were more willing to help in the former case, than in the latter. The average help frequency was, respectively, 70 per cent and 25 per cent. A panel data logit model for the probability of “helping” rejects the null hypothesis (that the value of the high prize has no significance) in favor of H_1 . Regression results are reported in table 2, part (a).

[Table 2 here]

Of 19 givers, 16 had higher help frequency when the high prize was the “more valuable” one (55 kroner). All but one of those that never gave with the “less valuable” high prize was very likely to give when choosing between lotteries with the “more valuable” high prize (a relative frequency of 50 per cent or above). Those that gave only a few times seemed less guided by social efficiency considerations (maximizing social surplus) than those that gave often.

The last two hypotheses concern givers' propensity to ask the recipient about the outcome of the lottery. After having picked a lottery for her recipient, the giver can choose to send a note to the recipient asking “How much money did you get?” The conjecture is that givers are less likely to get in touch with the recipient if the value of the lottery is relatively low, especially if the recipient has reason to believe that the giver is responsible for a “low”-valued lottery. There are two factors that can reduce the value of the lottery: The high prize being the “less valuable one” (outside the control of the giver) and a decision by the giver not to help. Recipients are not told that givers do not themselves decide the value of the high prize. The intention of the design, therefore, is make it impossible for a recipient to distinguish exogenous factors from the contribution of the giver. From this I deduce two hypotheses:

H_2 : A giver is more likely to ask if she has helped her recipient (that is, chosen a good lottery in the subset available to her).

H₃: A giver is more likely to ask if the high prize is the more valuable one (that is, if she can choose from the most attractive subset of lotteries).

Table 3 shows the frequency of asking when “helping” and when “not helping”, and the frequency of asking when choosing between lotteries with either the “more valuable high prize” and the “less valuable high prize”. Only a few givers are included in the table because most of the givers asked in every round. Those givers are not represented in the table. Little variation in the propensity to ask was a problem in the two main sessions, and especially in the first session, but not in the pilot study. For that reason, I have included the data from the pilot study when analyzing the propensity to ask. The main sessions had bigger groups than the pilot, and group size introduced a bias in favor of asking because of the way the experiment was implemented in practice. The session differences are discussed in the next section.

The frequency of asking is lower when a giver did not help, or when the giver had to choose from the least attractive subset (the “less valuable high prize”). However, since “not helping” and “less valuable high prize” were correlated (givers were less willing to help when they had to choose from the least attractive subset of lotteries), one cannot infer from the table whether a lower propensity to ask derives from not having helped (H₂), or from having to choose from the least attractive set of lotteries (“the less valuable high prize”) (H₃). A logit analysis of the probability of asking supports H₂, but not H₃. The giver is more likely to ask how much money the recipient made when she has herself helped, that is, when she has chosen the best one of the available lotteries. A dummy for the first session was included, and made the coefficient significant. Regression results are reported in table 2, part (b).

Section 8 Discussion

In the personal services, social interaction has a direct impact on service quality. Firstly, social interaction is often a part of the service itself. The way a patient is informed about a serious illness may affect the patients' ability to cope with the disease. Secondly, the personal provider obtains information through that interaction which may be necessary for customizing the product to the needs or preferences of the service recipient. Diagnosing a patient, for example, typically requires that the doctor interrogates the patient.

When the opportunity to sanction low quality is very limited, service provision can be viewed as unilateral gift-giving. The absence of sanctions is yet a third reason for social interaction to matter for service quality, albeit indirectly. Social interaction, to the extent that it reduces perceived social distance, increases the cost of not showing regard for those with whom one interacts. Behaviors of that kind are not mechanic, but depend on individual perceptions and choices. Specifically, individuals can change their own perception of social distance, and may choose to do so as a way to reduce their own psychological cost of not delivering high quality. This contributes to vicious circles (or if the converse is true, to virtuous circles) in the provision of quality as shown in figure 1. The first condition is that low service quality reduces the propensity to interact socially (the dashed arrow from V to s). The other condition is that social interaction (or a lower quality of social interaction) reduces service quality directly (the solid arrow from s to V) *or* indirectly (the dashed arrow from s to e). Quality reinforcement mechanisms may therefore exist even if social interaction does not have direct importance for quality (for example, by being part of the service). It is sufficient that social interaction affects the willingness of the provider to do a good job (the psychological cost of effort). I conjecture,

however, that such reinforcement mechanisms tend to be stronger when the provider, in order to do a good job, *has to* relate to the recipient.

Within an experimental setting I have explored determinants of one-sided gifts and social interaction. The experiment was an extended binary dictator game with inter-subject anonymity. There were 10 rounds and 10 dictators (“givers”). A giver would always be better off than a recipient. At a personal cost a giver could increase her recipient's earnings opportunities (“help”), choosing a lottery that most likely would give the recipient a high prize. The productivity of helping (the value of the high prize) was randomly determined. After a giver had chosen a lottery, she decided if she wanted to ask the recipient about the lottery outcome.

All givers chose to help at least a couple of times, on average about half the times. There was therefore a significant amount of helping behavior. The experiment was deliberately framed so as to induce generosity. Roles were determined randomly, so a favorable position (being a giver, rather than recipient) was the result of luck not ability; the experiment was not double-blind; value-laden words such as “giver”, and “help” were used; and ex post formulations (“are matched with”, rather than “will be matched with”) chosen to create identification. Moreover, donations could only make the recipient less worse off than the giver, so that generosity could not conflict with inequity aversion.

The results on helping behavior (gift-giving) accord with findings in other experiments that were reviewed in section 3. Givers helped much more frequently when the productivity of helping was relatively high (and helping was socially efficient). Those that gave only a few times seemed less guided by efficiency considerations.

Drawing the parallel to personal service provision, the results suggest that non-sanctionable effort is more willingly provided if the worker's ability to improve the well-being of

the recipient is relatively high. That ability is not only determined by personal characteristics, but also by the effort and investments made by co-workers and the firm, and possibly by environmental factors. Co-workers and the firm influence the provider's productivity because the service (as seen by the recipient) is a team product, even if only one person delivers the service.

My primary concern is with the influence of quality on the willingness to interact socially (and to relate to the recipient); in the experiment with the relations between the value of the lottery and givers' propensity to ask the recipient about the lottery outcome. The conjecture that givers were more likely to ask when they could choose from the most attractive set of lotteries (having the “more valuable high prize”) was not supported by the data. The variation in the propensity to ask was low, with most givers asking most of the time. This was particularly a problem in the first session. It is likely that weaknesses in the design caused this.

In the first session all givers asked all the time, except for one giver who let be asking in the last two rounds. It appeared that not all givers in the first session had understood that they had a choice of whether to ask or not ask about the lottery outcome. In the second session, we took greater care in checking that givers had understood the instructions. Furthermore, the design made the propensity to ask recipients about the lottery outcome sensitive to how rapidly each round proceeded. After givers had picked out a lottery to their respective recipient, the givers had to wait while the choice of lottery were communicated and the correct lottery chosen for each recipient in the session and all recipients had drawn a ticket. During that period givers could at any time decide to send a note to their recipient asking about the outcome. The longer each round took, the longer did each giver have this opportunity. That introduced a bias in favor of asking. A giver who initially decided not to ask, could after some time change her mind, whereas a giver who had asked already, could not redo that decision. Also, as time elapses an initial emotion of

discomfort (at the thought of asking) may give way to curiosity and just doing something to make time pass. After the first main session, we understood that this was a problem. With one more assistant in the last session (5 persons rather than 4), the 10 rounds in that session took 1 hour, compared to 1 1/2 hours in the first session.

There was more variation in the asking variable in the second session. The pilot study had the highest variation in the asking propensity^{vi}. For that reason, I chose to include the pilot in the data set when analyzing the asking propensity. My preliminary conclusion is that the design was not well enough calibrated to detect if the propensity to ask differed with the value of a .

Detecting whether there is a psychological cost to asking if a is low, as hypothesized, requires further empirical investigation.

Givers were, however, more likely to ask the recipient how it went, if the giver had chosen (at a personal cost) the most attractive lottery in the set of lotteries that she could choose from. Though the propensity to ask was very high, the observed variation was consistent with the hypothesis, and statistically significant when including a session dummy variable for the first main session (in which there was hardly any variation in the propensity to ask). The experiment, with minor adjustments (intended to improve calibration), should be repeated to test the robustness of the results regarding social interaction.

When interpreting the propensity to ask as an indicator of givers' chosen social nearness (social distance), the results indicate that a service deliverer is more inclined to socialize with the service recipient when the service deliverer has herself contributed to high quality. For services where social interaction has direct importance for quality, the existence of such a mechanism may reinforce high quality when that is provided, because the social interaction or social

nearness in itself improves quality, and reinforce low quality when low quality is provided because less or worse social interaction and lower social nearness in itself lowers quality.

I use the propensity to ask as an indicator for giver's (consciously or subconsciously) chosen social distance. I do not know how good an indicator it is. In principle, a giver can choose not to ask for other reasons than discomfort from not helping. I intend to investigate if this claim can be substantiated. Interviews with the pilot study givers are suggestive. One giver (number 1 in table 3) only asked when helping and when the lottery had the most valuable high prize. To ask when the value (of the high prize) was low (in which case he never helped, except for once) would be to “put salt on the [recipient's] wound”^{vii}.

The significance of social context is a largely unexplored field in economics. Except for in parts of game theory, social interaction plays no role^{viii}. In particular, economic theory does not differentiate between social contexts as concerns motivation. Experimental economics have, however, shown that motivations differ across social contexts in ways that have economic significance. One concept researchers have focused on is social distance. It is not a well-defined concept, but what it is meant to capture is neither easy to define precisely. For that reason it might be a useful concept to maintain.

I have argued that social distance and social interaction do not only affect individuals *willingness* to care for others, which experimental research has been concerned with till now, it may also affect their *ability* to do so. Moreover, social interaction and social distance are at least in part a decision variable for the individual. This paper represents a first step in analyzing the significance of the latter.

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Table 1

	Tickets in the <i>right</i> color is worth	Tickets in the <i>wrong</i> color is worth	The recipient most likely earns
The best lottery (9 of 10 tickets have right color)	55	10	55
The second-best lottery (9 of 10 tickets have right color)	20	10	20
The next to the poorest lottery (1 of 10 tickets has right color)	55	10	10
The poorest lottery (1 of 10 tickets has the right color)	20	10	10

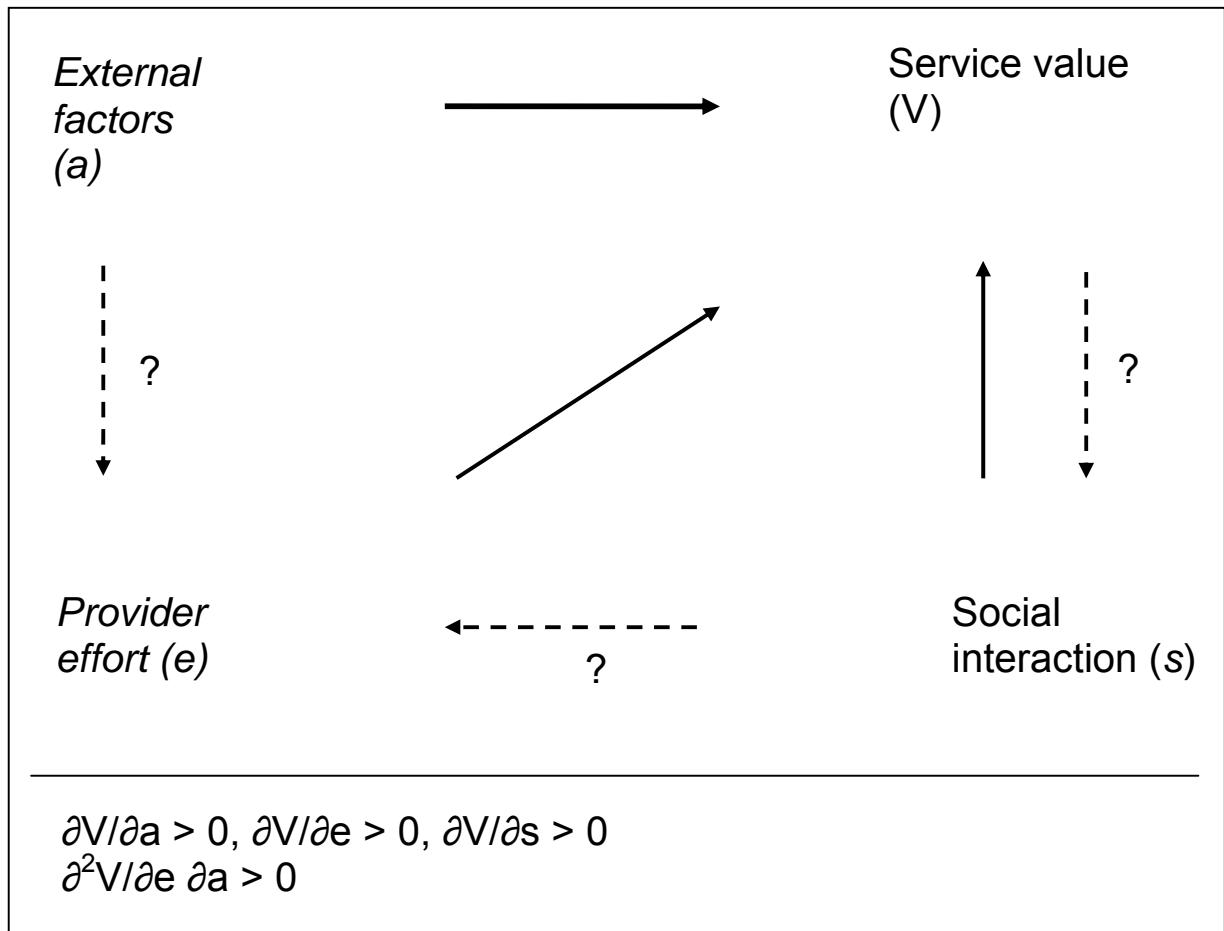
Table 2

	Coefficient	p-value
a) Probability of helping High efficiency of helping (“the more valuable high price”)	0.06	0.000
b) Probability of asking The giver has helped (“chosen the good lottery”)	1.90	0.012
Dummy session 1	4.02	0.012

Table 3 Givers that did not ask all the time

Giver	Number of times <i>not</i> asking	Frequency of <i>not</i> asking (%), when			
		helping	not helping	<i>a</i> = 55	<i>a</i> = 20
1	6	33	100	20	100
2	1	33	0	33	0
3	2	0	67	14	33
4	4	20	60	33	57
5	1	0	20	0	20
6	1	0	14	0	20

Figure 1



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ⁱⁱⁱ A large number of students replied to a questionnaire about how they would allocate 1000 Swedish kronor (about 110 USD) between themselves and one other participating student if she/he was to be picked out in a lottery to receive this amount. (The likelihood of that happening was about 1 per cent). The drawing of a dictator and a recipient took place in public (in the lecture hall). Donations were higher if the dictator would have to stand up to receive the money, than if she/he was not identified and could pick up the payment in private. (The recipient's identification was not disclosed). The authors point out that the choices made in the "public" treatment may be influenced by the preferences of the observers as perceived by each participant when deciding her or his allocation. I suggest that also the effect of the lottery differed across treatments. It is not unreasonable that the students perceived their proposed allocation as prizes, the dictator and the recipient winning, respectively, the first and second prize, while the majority gets nothing. The natural reference group for how much to allocate to the recipient can well be the majority (earning 0), rather than the dictator himself. This effect of the lottery may be stronger when the dictator that is drawn must stand up in public (with cheering and applause it turned out).

^{iv} Such a view is similar to what Skjervheim 1996 calls the "the instrumentalist fallacy"

^v If the experiment were to be held in English, I would have used "provider" instead of "giver". I found no Norwegian equivalent to the word "provider" that worked well in the abstract experimental setting.

^{vi} The pilot study used the same instructions, but had only 8 participant, compared to 20 in the main sessions. This may have affected the atmosphere. Moreover, a giver would meet the same recipient several times. Because of the low number participants, each round proceeded more quickly than in the main sessions. The bias introduced by lengthy rounds was less of a problem in the pilot. The pilot (and session 1) had 4 assistants.

^{vii} Two of the other givers also did not feel like asking when the high prize was the less valuable one (20 kroner), in which case they almost never helped. The fourth giver in the pilot study always asked, because she saw no reason not to do so.

^{viii} In game theory, social interaction may allow for coordination (through cheap talk) and the building of reputations. Neither mechanism is important in settings where only one out of two parties can influence pay-offs.