Giving and Volunteering in the Netherlands:
Sociological and Psychological Perspectives

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'Vrijwillig en vrijgevig'
Sociologische en psychologische verklaringen van prosociaal gedrag
(met een samenvatting in het Nederlands)

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CONTENTS

Chapter 1
Introduction

This chapter introduces the research questions that will be addressed in the chapters to follow. Why do people contribute to collective goods? From a sociological and psychological perspective, different answers to this question are described.

1.1. RESEARCH QUESTIONS

In one of the episodes of Monty Python, the famous BBC-series, John Cleese plays a merchant banker, who receives a Mr Ford in his office. Mr Ford, played by Terry Jones, is holding a tin. This is what happens next.

Mr Ford: Oh. I wondered whether you'd like to contribute to the orphan's home. (he rattles the tin) [.....]
Banker: Yes, but you see I don't know what it's for.
Mr Ford: It's for the orphans.
Banker: Yes?
Mr Ford: It's a gift.
Banker: A what?
Mr Ford: A gift.
Banker: Oh a gift!
Mr Ford: Yes.
Banker: A tax dodge.
Mr Ford: No, no, no, no. [.....]
Banker: No? Well, I'm awfully sorry I don't understand. Can you just explain exactly what you want.
Mr Ford: Well, I want you to give me a pound, and then I go away and give it to the orphans.
Banker: Yes?
Mr Ford: Well, that's it.
Banker: No, no, no, I don't follow this at all, I mean, I don't want to seem stupid but it looks to me as though I'm a pound down on the whole deal.
Mr Ford: Well, yes you are.
Banker: I am! Well, what is my incentive to give you the pound?

Mr Ford: Well the incentive is to make the orphans happy.

Banker: (genuinely puzzled) Happy? You quite sure you've got this right?

Mr Ford: Yes, lots of people give me money.

Banker: What, just like that?

Mr Ford: Yes.

Banker: Must be sick!

Merchant bankers and free riders?

The merchant banker in this sketch pretends not to know what giving to charity is all about, because there is no personal gain in giving money to charity. He behaves exactly as a rational choice theory of human behavior, based on a self-interested model of man, would predict. In many cases, orthodox assumptions on self-interest provide an adequate explanation for the things that people do. But for prosocial behavior, the model obviously has drawbacks. Not many people react as the merchant banker do. A completely self-interested *homo economicus* does not contribute to charity, does not hold memberships of voluntary organizations that promote collective interests, and does not volunteer (Archer & Tritter, 2002; Elster, 1989, 1990; Halfpenny, 1999; Heath, 1976). But many people in real life do. The contrast between the self interested model of man in rational choice theory and the apparently non-self interested behavior of real individuals in society has been brought to the fore by Mancur Olson almost 40 years ago (Olson, 1965). This problem has puzzled many social scientists and became known as the 'collective good problem' or the 'participation paradox' (Udéhn, 1993). When people have a choice to contribute to a collective good, their best option usually is not to contribute. In most cases, one extra contribution does not make a noticeable difference for the collective outcome. The personal gain from a contribution does not outweigh the costs involved. The rational actor is a 'free rider'. Whatever the other potential contributors do, he is better off if he does not contribute to the collective good.

However, there are numerous examples of prosocial behavior in real life, which violate this prediction. A good example is blood donation. The blood supply in the Netherlands depends completely on donations from volunteers, who are not paid. Blood collection is organized on a not-for-profit basis by Sanquin, which operates the regional blood banks. In 2002, some 532,000 persons donated blood at least once a

year (Sanquin, 2003). Another example is charitable giving. In 2001, more than 80% of Dutch households donated money to charitable causes and nonprofit organizations. Annual donations totaled an estimated € 1,753 million in 2001, which is about 1.7% of GDP (Schuyt, 2003). The bulk of this money is contributed through direct mail solicitations, which are anonymous in the sense that they are difficult to observe directly by others. They are voluntary in the sense that there is no direct social pressure by a solicitor asking face-to-face for a contribution. Moreover, a considerable portion of philanthropic donations is received by organizations that do not provide services that can be used by the donors. International relief charities and organizations defending human or animal rights are specific examples. These donations are far from trivial. In 2001, € 370 million was donated to international solidarity and € 130 million to environmental organizations, almost 30% of all donations by Dutch households (Gouwenberg, Wiepking, Schuyt, Bekkers & Smit, 2003, p. 39). A third example is membership of voluntary associations. Excluding church membership, which is not voluntary in the sense that many people are born as a church member, more than 60% of the population is a member of at least one voluntary associations supporting some type of collective good, while the average Dutch citizen holds more than 2 memberships (De Hart, 1999). A fourth example is unpaid work for voluntary associations. In 2002, more than 30% of the Dutch population was active as an unpaid volunteer working for a nonprofit organization (Dekker & De Hart, 2003).

Selective incentives and 'other things'

Clearly, many people do not behave as the merchant banker in the Monty Python-sketch. How can these apparently irrational behaviors be explained? The classical explanation offered by Olson (1965) is that voluntary associations provide incentives that make it worthwhile to become a member. Consumer interest groups ("Consumentenbond"), for instance, provide access to test reports of new products to members; the Automobile Association (ANWB) provides on demand repair services at below market prices to members; and many worker unions provide legal assistance and offer insurances at below market prices to members. However, in many cases it is questionable whether the value of these services actually outweighs the membership dues. Furthermore, not all types of voluntary associations offer such services. Many organizations only send magazines to their members, filled with reports on the progress

made in achieving the goals of the organization and requests for (additional) donations. It is hard to imagine how such 'incentives' could convince self-interested free riders to become members. Similar arguments hold for volunteering, donation of money and blood donation: they are not rewarded with money or goods of equal value, reciprocity is impossible, and the act of giving is usually anonymous. But if it is not for personal gain, then why do people contribute to collective goods? This question becomes even more pressing when we consider contributions to organizations working for some abstract ideal such as world peace, human rights, biodiversity, or charities seeking to relieve the needs of others in distant parts of the world. Selective incentives provided by the voluntary association itself generally do not outweigh the costs of contributing to the collective good for an individual actor. There must be other things that people take into account when deciding to contribute time, money, or blood.

What are these 'other things' that people take into account when they decide to contribute to some collective good or not? The chapters in this dissertation consider two types of 'other things' that can make it worth while for an individual to contribute to collective goods: social incentives and psychological characteristics of decision makers. It is definitely possible to model these two 'other things' as additional utility arguments in a rational choice framework (see, e.g., Andreoni, 1989, 1990; Becker, 1974; Duncan, 2004; Soetevent, 2003; Van de Ven, 2003; Weesie, 1994). These models have not addressed the issue how strong the effects of various sources of utility are, whether they interact, and if so, how. This dissertation explores the effects of social conditions generating social incentives, and psychological characteristics generating intrinsic rewards for prosocial behavior. In addition, interactions of psychological characteristics with social and material conditions are investigated, in order to facilitate decisions for model builders which types of utility arguments to focus on in future research and how to model them. There is no good reason to invest a lot of time in formal analyses and mathematical models of the effects of psychological incentives and intrinsic rewards on prosocial behavior when these effects are negligible, or only become apparent in specific conditions.

Social conditions and psychological motives for prosocial behavior

The social environment in which people live determines the social incentives they have for making contributions to collective goods. Many social groups evaluate

such contributions positively, and integration in these groups creates obligations, which have to be realized in order to avoid disapproval. In addition, it should be taken into account that actual prosocial behavior is not only an outcome of a decision making process, but also a function of the exposure to requests for contributions. Some persons are more likely to be asked to become a member of a voluntary association, to donate money or blood, or to volunteer. Before social incentives can come into play, people have to be asked. Therefore, I investigate the effects of social conditions in which people live on their contributions to collective goods in chapters three to seven.

However, differences in the opportunities and social incentives may not fully explain contributions to collective goods. Even when prosocial behavior is anonymous, and approval can hardly be earned, there are still people who contribute. The examples of monetary donations to charitable causes illustrate this. In addition, experimental evidence reviewed below also shows that there must be 'still other things' that make people give besides social rewards. People do not only differ in the exposure to requests for contributions and the social incentives for contributions to collective goods. People also differ in the individual preferences they have for the well being of others. Some types of persons are simply more likely to contribute to collective goods, whatever the circumstances. But who are these Mr Nice guys, the do-gooders? Which psychological characteristics make people have an altruistic personality? And where do these prosocial motives come from? Sociologists and psychologists have given different answers to this question. Sociologists have emphasized the role of parents in setting the right example. Personality and social psychologists have emphasized the role of personality characteristics that people acquire early in life and carry with them from one situation to the next (Oliner & Oliner, 1988; Penner, Fritzsche, Craiger, & Freifeld, 1995). In addition to social conditions, all chapters consider the effects of personality characteristics on contributions to collective goods. I investigate whether contributions to collective goods can be explained more fully by taking these individual differences into account. In the final two chapters (chapter six and seven) I also investigate the effects of socialization by parents. Putting the arguments together, the research question guiding chapters three to seven is:

P1. *To what extent can giving and volunteering behavior be explained by prosocial motives and other psychological characteristics of people and the social conditions in which they live?*

Below (see section 1.2) I will present a selective and very brief review of the overwhelming amount of studies on prosocial behavior in sociology and social and personality psychology, in order to make a reasonable choice of which social conditions and psychological characteristics are most likely to be related to contributions to collective goods.

The second research question behind the chapters concerns the interaction between the effects of material and social incentives and psychological characteristics. It would be naïve to assume that there is a class of people called 'saints' and that these 'saints' always display saint-like behavior. 'Good intentions' do not manifest themselves in every situation. When do people act upon their good intentions? A rational choice theorist would say: especially if it does not cost them too much. When people are asked for a small donation for a charity, they can afford themselves to be altruistic. This idea is called the *'low cost-hypothesis'* (Diekmann & Preisendörfer, 1998, 2003; Mensch, 2000). Another idea in this regard originated in personality psychology, and predicts that people act upon their individual preferences when the expectations of others about their behavior are rather unclear. Only when there is no strict social norm that may guide our behavior, we base our decisions upon our own peculiar preferences. This idea is called the *'weak situation-hypothesis'* (Mischel, 1977, 1993; Snyder & Ickes, 1985). Both the low cost-hypothesis as well as the weak situation-hypothesis will be discussed more extensively below (see section 1.3). Testing these hypotheses can give an answer to the second research question:

P2. *In which conditions are prosocial motives and other psychological characteristics more strongly related to giving and volunteering?*

1.2. SOCIOLOGICAL AND PSYCHOLOGICAL PERSPECTIVES

1.2.1. Sociology

A sociological answer to the question why people contribute to collective goods is found in the classical theory of Emile Durkheim on norm conformity (Durkheim, 1897). Durkheim was not very clear on the mechanisms that explain the effect of group cohesion on individual norm conformity. His theory has been interpreted in at least two ways, depending on the place where the effect of norms is assumed to become visible. In the first interpretation, social norms reside outside the individual, and become visible through the actions of other persons in the intermediary groups and social networks that the individual is a part of. In the second interpretation, social norms reside inside the individual, in his beliefs and internalized value system. According to the first interpretation, individuals are more likely to obey social norms when they are more strongly integrated in intermediary social groups such as the church, the family, or the village. This interpretation is sometimes labeled as a 'structural' interpretation, because it emphasizes the role of group structure, assuming that there are no differences in the strength of these norms between social groups. According to the second interpretation, individuals are more likely to obey social norms when they have internalized these norms through socialization in intermediary social groups, also when they are no longer part of these groups (Ultee, Arts & Flap, 2003). This interpretation is sometimes labeled the 'cultural' interpretation, because it assumes that individuals carry the beliefs and values that they have acquired through socialization with them throughout their life. 'Culture' and 'structure' are often used terms for competing paradigms in the social sciences (De Graaf, 2002). Although the two interpretations lead to different predictions on the conditions in which social norms affect behavior, they are complementary. The 'cultural' interpretation is an addition to the 'structural' interpretation, claiming that social norms affect behavior in a larger class of situations. The work of social scientists such as George Homans, Peter Blau, Robert Axelrod, and James Coleman can be seen as reinventions and specifications of the 'structural' interpretation of Durkheims theory of norm conformity. The 'cultural' interpretation has been advocated by Talcott Parsons (Ultee, 1976). I will discuss the mechanisms that are related to norm conformity identified by various social scientists according to the 'method of decreasing abstraction'

(Lindenberg, 1992), starting with the model of man as a strictly rational actor caring only about his own material well being, and adding more complex assumptions later.

Group size - The assumption of purely self-interested actors, caring only for their own monetary pay-offs in a social dilemma situation, predicts that the likelihood of contributions to collective goods increases as groups become smaller (Olson, 1965, p. 35): the more people with whom the contribution has to be shared, the smaller the private benefit. Experiments with social dilemmas have confirmed that the higher the number of actors benefiting from cooperation, the lower the rate of cooperation (Komorita & Parks, 1994; Stroebe & Frey, 1982; Van Lange, Liebrand, Messick & Wilke, 1992, p. 18). But the effect of group size is more than this. In small groups, individuals are more likely to encounter the same partners in future social dilemmas.

Direct reciprocity - The work of Robert Axelrod (1984) on cooperation in prisoner's dilemmas (PDs) suggests that even completely egoistic rational actors may achieve collectively optimal outcomes when the probability of repeated interaction in the future is high enough. Cooperation may require (even substantial) investments in the short run, but it may be beneficial in the long run, when it evokes cooperative responses from other players in the game. Unconditional defection elicits uncooperative counter-strategies. The converse strategy, unconditional cooperation, however, is too naive: it will give the other player the opportunity to exploit the cooperator. The most successful strategy in repeated PD-games is a simple rule of reciprocity, also known as 'tit for tat' (Axelrod, 1984). As long as people can be sure that they will deal with the same partner(s) in future interactions, they have a stake in maintaining good relations with these partners, and they will be careful not to 'lock themselves in' a series of mutual defections. The work of Axelrod and later sociologists and game theorists studying social dilemmas shows how self-interest leads to norm conformity in the kind of groups that Durkheim studied. The 'shadow of the future', the expectation of repeated interaction, can account for prosocial behavior towards family members, neighbors, friends and even business partners. If there is the possibility of a repeated interaction or a series of repeated interactions with the recipient, helping behavior may pay off in the long run. In this case, the puzzle why people help each other is not very difficult: helping may be motivated by the expectation of future rewards. Coleman (1990) has explained this kind of prosocial behavior as the distribution of 'credit slips', a new metaphor in the study of the well known mechanism of social exchange

(Homans, 1958, 1974; Blau, 1964). When you help your neighbor or colleague, she will feel obliged to return your favor sometime in the future. Research on trust has shown that the expectation of interaction in the future is positively related to trustworthy behavior both among students as well as business partners when it is profitable for them to abuse trust (Buskens, 1999; Gautschi, 2002).

Generalized reciprocity - In many social dilemma situations in the real world in which we observe prosocial behavior there is no mechanism of direct reciprocity. Very often, the beneficiaries do not give something back to the donors. For instance, the people who make use of the services of a voluntary association usually do not compensate the volunteers who are working for the association, either with money or with services. Charitable giving, blood donation and post mortem organ donation are even stronger examples. Beneficiaries of charities in distant countries often cannot compensate the donors because they lack the resources to do so. Patients who receive blood do not know the donors because blood donation is anonymous. Post mortem organ donors cannot know the beneficiaries because the gift is made when they have died. In these examples, repeated interaction with the beneficiary is not possible. However, there are other forms of reciprocity that may give an adequate explanation for some types of prosocial behavior. Some of these examples of prosocial behavior may be explained by the principle of *generalized reciprocity*, which relaxes the assumption that the beneficiary compensates the donor (Gouldner, 1960). Generalized reciprocity occurs when help provided to someone in the community is compensated by another member of the community, even if this person did not receive help directly from the original helper. Person A helps B, B helps C, and C helps A. Generalized exchange emerges more easily in more cohesive groups because denser networks contain more connections between the individuals. Experimental research has corroborated that past help received from a third party increases the amount of help given (Berkowitz & Daniels, 1968). The principle of generalized reciprocity may explain some examples of volunteering: if person A volunteers for association X, and person B makes use of the services of X, person B may reciprocate by volunteering for association Y, which provides services that person C uses; person C in turn volunteers for association Z, which provides services for person A. This example seems to be far-fetched. However, if the assumption that the service returned to person A must be of the same type as the service rendered by person A is relaxed, this example becomes

more realistic. Person C may not volunteer for Z, but may donate money, which enables Z to perform the service for A by hiring paid workers. Or person C may reward person A directly, with a form of practical support (e.g., by borrowing tools or money).

Social incentives – In the social dilemma paradigm, decision makers can only punish defection by other players by defecting themselves in the next round of the game. Sociologists have stressed that in the real world, sanctioning often takes on more subtle forms. People do not only care for their own monetary pay-offs in future games, they also care about their reputation and social status in the group. When prosocial behavior is visible to others, it may produce social approval. Not only is interpersonal helping often in line with the (long term) material interests of the helper, it is also a way to build up a good reputation, to gain social approval or to avoid a bad reputation and avoid disapproval (Becker, 1974; Soetevent, 2003; Van de Ven, 2003).

The effects of visibility and social approval are in line with both common sense intuition and classical ideas about maintenance of norms in social networks: when others can see whether you contribute or not, you may be subject to sanctioning (Deutsch & Gerard, 1955). Sometimes, social norms lead the individual in the same direction as self-interest. For instance, providing help to others who are able to reciprocate is not only in the long term interests of the helper, but is also prescribed by the norm of reciprocity (Gouldner, 1960). In interpersonal helping and gift-giving, the norm of reciprocity creates a 'Matthew-effect' (Komter, 2003): those who have more financial resources can afford to give away more, and will receive more in return. In these cases, 'helping others' is another way of 'helping yourself'. However, it should be noted that visibility also increases helping behavior that is not in line with some (long term) material self-interest. This is the case, for instance, when the recipient is a third person, and not the person giving approval (Deutsch & Lamberti, 1986). The effect of fear of disapproval by third parties has also been found in laboratory experiments on cooperation (Fox & Guyer, 1978), charitable donations (Satow, 1975), and participating equally in group tasks (Williams, Harkins & Latané, 1981). Recent experiments with have shown that the visibility of prosocial behavior for third parties increases altruistic behavior. These experiments used a very specific type of social dilemma: the dictator game. The dictator game is a 'give some'-dilemma that is not repeated and involves only one player (Camerer, 2003). The player decides about the

division of an amount of money between him/herself and 'another person'. This 'other person' is not involved in the game and has no power to refuse the amount allocated by the dictator. The player does not know the other person and will not meet this person after the experiment. The design of the dictator game resembles the situation in which people decide about donations to charitable causes. Surprisingly, the empirical results of these games reject the prediction based on a completely self-interested model of man that dictators keep all money for themselves (Eckel & Grossman, 1996). The amount allocated to the 'other' decreases as the decisions of the dictator become more anonymous for third parties such as the experimenters (Eichenberger & Oberholzer-Gee, 1998), which indicates that fear of disapproval motivates a fair division of resources in a dictator game.

How do social incentives influence actual prosocial behavior? In voluntary associations, motivation to continue participation is largely embedded in social networks even when the recruitment phase is passed (Pearce, 1993). Participants receive social approval from fellow participants, the people they help, and possibly also non-participants. Involvement in political protest has also been related to such social incentives (Opp, 1996; Visser & Klandermans, 1993). Even economists recognize the strong effects of social incentives on volunteering (Freeman, 1997). Finally, a field study of donations to charitable causes (Long, 1976) has shown that fear of disapproval also motivates actual giving.

Exposure to requests - Furthermore, social networks are the main channels through which individuals get acquainted with the existence of prosocial goals and activities in the first place. Personal networks of family and friends are crucial for recruitment of volunteers (Pearce, 1993; Brady, Schlozman & Verba, 1999) and new members of social movements (Snow, Zurcher & Ekland-Olson, 1980). Social networks appear to have been crucial even for hazardous acts of helping such as the rescue of Jews in World War II (Varese & Yaish, 2000), which are commonly considered to be prime examples of altruistic behavior (Oliner & Oliner, 1988).

Internalized values – The arguments made above implied that self-interest alone can explain prosocial behavior in specific conditions (in small groups where the likelihood of repeated interaction in the future is high enough), and that this set of conditions may be expanded by including a concern for social approval in the explanation. When people are asked for a contribution directly, norm conformity can

be observed and can be rewarded with social approval. However, the game-theoretic interpretation of Durkheim's theory on norm-conformity, focusing on the opportunities for social control, cannot explain norm-conform behavior in anonymous situations. Theories relying on social norms have a hard time explaining anonymous giving. If people would only obey norms if their behavior can be observed, they would not give money to charitable causes through bank transfers or give blood. Thus, social norms seem to operate not only when they are supported by sanctions from others, but also as 'internal forces' (Elster, 1989; Lindenberg, 2000). Psychologists agree with sociologists on the point that people seem to punish themselves with feelings of guilt for a failure to help others (Batson, 1998; Schroeder, Penner, Dovidio & Piliavin, 1995). Norms of fairness for example influence choice behavior in 'one shot' resource dilemmas even when participants do not know each other, cannot observe the other's choice, and do not expect repeated interaction in the future (De Vries, 1991). In dictator games with a double blind procedure, in which the experimenter has absolutely no way to infer the decisions of dictators, still 12% gives away more than 30% of a $10 endowment (Hoffman, McCabe & Smith, 1996). A replication revealed similar results when the recipient of the money is a randomly chosen person from the population instead of a student participating in the experiment (Johanneson & Persson, 2000). When the decision is to split the amount between oneself and a charity, 40% gives away more than 30% of the money (Eckel & Grossman, 1996). Because reciprocity or social approval cannot motivate this type of giving, it is likely that altruistic preferences are the explanation. Other experiments with dictator games have given rise to another interesting conclusion: reciprocity is often generalized to strangers. In these experiments, people are playing several dictator games, each time with different players. The results indicated that generosity of player A towards player B in a first game leads player B to be generous to player C in a next game, 'even if this player is and will remain unknown' to player B, when there is no prospect of ongoing exchange, and when the interaction is zero-sum in nature (Ben-Ner, Putterman, Kong & Magan, 2004; Cason & Mui, 1998). In this case, prosocial behavior occurs despite the fact that there are no immediate social incentives. These results suggest that generalized reciprocity does not only occur within a specific community, but may also be a norm that leads to contributions to collective goods outside the community. Survey research on the exceptional generosity of orthodox Calvinists to secular causes

shows that it cannot be explained by mechanisms of social control, but are rooted in internalized altruistic values (Bekkers, 2003a). The mechanism for charitable donations is different than for volunteering, probably because charitable giving is less observable to others.

Socialization – Anonymous giving can be explained by internalized values. The introduction of values in explanations of prosocial behavior have worried rational choice scholars for various reasons, one of them being that it is unclear where values come from (Hechter, 1992). The classical answer to this question in sociology is that social values are socialized early in life (Parsons, 1956; Inglehart, 1997). In the socialization period people internalize societal norms: thus, the moral system that exists on a macro-level enters the individual. Once internalized, people take these social values with them from one situation to another. Sociologists assume that conditions in youth and adolescence affect the internalization of norms. Of course, this is not a real solution to the problem of the origin of social norms because it merely shifts the problem to the generation before the present generation, ultimately regressing to the question how prehistoric man developed a conscience. Furthermore, one might wonder why parents want their children to internalize social norms. These questions are beyond the scope of this dissertation. For our research problem, focusing on the backgrounds of giving and volunteering behaviors of a specific group of individuals, it suffices to assume that a set of social norms prescribing prosocial behavior exists, which parents want to instill in their children.

Studies of the effects of childhood conditions on the internalization of prosocial values are scarce. Most of the research in this area is focused on negative behavioral outcomes (problem behavior, aggression, conflicts with peers, and maladjustment) and found negative effects of parental disharmony and conflict - which often precede and follow divorce (Grusec & Lytton, 1998, p. 200), poverty in childhood (Hao & Matsueda, 2000) and a lack of social capital (Coleman, 1988; Parcel & Menaghan, 1993, 1994). A few studies of socialization antecedents of prosocial behavior have been conducted. Persons who rescued Jews from the Nazis recall their parents as more strongly emphasizing generosity than non-rescuers (Oliner & Oliner, 1988, p. 164). Others have found that parental volunteerism (Janoski & Wilson, 1995) and generosity (Independent Sector, 2002) increase children's volunteerism and generosity. It is unclear to what extent the parental example of prosocial behavior actually instills

prosocial values in children. The effect of volunteering activities by parents on children's volunteering is partly due to the transmission of resources (Janoski & Wilson, 1995). Developmental psychologists have shown with experiments and observations that prosocial behavior among children can be promoted by modeling: showing the 'right example' (Eisenberg & Fabes 1994). However, most of the experiments and field studies in this area are solely concerned with young children. But what happens when children grow up? Is there still a positive effect of the modeling that parents displayed in childhood on giving and volunteering when the children have a life of their own? These questions will be dealt with in chapters six and seven. In addition, chapter seven also touches upon the question how such socialization effects can be explained.

Hypotheses on the effects of social conditions

Based on the review of previous research above, a large number of hypotheses can be formulated about the relationships of social conditions with prosocial behavior. I will discuss only a few of these conditions: current religious involvement, religious socialization, the level of education, and community size.

Religion – Persons with a stronger attachment to religion are more likely to engage in prosocial behavior because they are requested to donate time or money more often, and because they will be confronted with stronger disapproval for non-participation. For long, societal norms regarding prosocial behavior have been embodied almost exclusively by religion. 'Love thy neighbor' is one of the central commandments in Dutch religion. Not only does religion support altruistic behavior in theology, but also by providing opportunities to volunteer and by requesting donations for charitable causes. Therefore it can be expected that religious involvement will be closely related to prosocial behavior. Previous research shows that this social network-mechanism is indeed the main explanation for the overrepresentation of religious persons among volunteers (Becker & Dinghra, 2001; Bekkers, 2000, 2003a; Dekker & De Hart, 2002; Jackson, Bachmeier, Wood & Craft, 1995; Lam, 2002; Wilson & Janoski, 1995). Previous research has also found positive effects of religious involvement on blood donation, but it is unknown how this relation can be explained (Healy, 2000). A study of intentions to register as organ donors among youth did not find an effect of religious affiliation (Reubsaet et al., 2001). This result, however,

should be considered with caution for three reasons: first, it concerns a study of intentions, not behavior; second, it is limited to youth, for whom religious beliefs may have a smaller influence than for older people; third, the study measured affiliation, and not church attendance. Church attendance is a better measure of social integration than religious affiliation because many people are passive church members.

Religious socialization – Next to current religious involvement, religious socialization may also increase the likelihood that people engage in prosocial behavior. A higher frequency of church attendance in youth indicates that people have been exposed to a more intense socialization of altruistic values. The 'cultural' interpretation of Durkheims theory on norm conformity leads to the prediction that religious socialization increases prosocial behavior also for those who have left the church. There are few studies which have investigated the effects of religious socialization on giving and volunteering. One study reported positive relations between religious socialization and giving and volunteering in the US (Independent Sector, 2002), but this study did not control for present religious involvement. Studies of blood and organ donation have not investigated effects of religious socialization.

Level of education – Indeed, many studies have found positive effects of the level of education on charitable giving (Bekkers, 2002a, 2003a) and volunteering (Kraaykamp, 1996; Lindeman, 1995; Wilson, 2000). A study of willingness to register as organ donors among youth also found a positive effect of the level of education (Reubsaet et al., 2001). Previous research on blood donation did not find effects of the level of education (Healy, 2000). Not many studies have tried to find the mechanisms that are mediating the effect of education. Although the nature of these mechanisms need not necessarily be social, the available evidence does point in that direction. The higher educated have larger networks than the lower educated (Lin, 2001), and are more likely to be asked as a volunteer (Brady, Schlozman & Verba, 1999). With regard to charitable giving, the higher income that comes with a higher education is not the explanation: controlling for household income, a higher education is still associated with a higher incidence of donation as well as with a higher amount donated (Bekkers, 2002a, 2003a, 2003c).

Community size - Previous research shows that blood donation, helping and volunteering are more common in smaller communities (Bekkers, 2003a; Oliver, 2001; Putnam, 2000, p. 119; Steblay, 1987). These findings match with the result of

Axelrod's computer tournament that cooperation decreased with group size (Axelrod, 1984). Experiments with helping behavior showed that helping is still more common in smaller communities when the frequency of exposure to requests for help is held constant (Steblay, 1987). This result could indicate that norms on helping behavior in rural areas are different (Foss, 1983). However, the effect of community size can also be explained by differences in the structure of social networks: in smaller communities, networks are more dense and consist of a higher proportion of kin (Van der Poel, 1993), which may lead rural dwellers to expect compensation in the future through generalized reciprocity. Research on charitable giving shows that the incidence of giving is lower in larger communities (Gouwenberg et al., 2003) but that the amount donated does not vary with community size (Bekkers, 2002a, 2003a). This pattern could indicate that exposure to requests for charitable donations is higher in smaller communities.

Together, the relations expected above constitute the hypotheses from a sociological perspective:

H1. The likelihood of prosocial behavior increases with the frequency of church attendance, religious socialization, the level of education, and community size.

1.2.2. Psychology

In experiments, psychologists have identified conditions that affect contributions to collective goods not through social mechanisms, but through cognitive and emotional processes. In addition, psychologists have also identified the personality characteristics of cooperators in social dilemma experiments and the personality characteristics of donors and volunteers in self-report questionnaires.

Conditions for contributions to collective goods

Experiments in two types of research traditions in psychology have contributed to our knowledge of conditions for cooperation in social dilemmas and contributions to collective goods: (a) experiments with social dilemmas; (b) field experiments on helping behavior. I will review a selection of studies from these research traditions that seems most relevant for giving and volunteering behaviors.

Efficacy - Experiments with social dilemmas have shown that the more that an actor perceives his contribution as crucial for collective welfare (Van de Kragt, Orbell & Dawes, 1983), and the higher the returns to the public good (Blackwell & McKee, 2003; Goeree, Holt & Laury, 2002), the higher the likelihood that he will contribute. The effect of perceived efficacy is also found in survey research on membership in voluntary associations such as unions (Chacko, 1985; Visser & Klandermans, 1993), and donations to charitable causes (Bekkers, 2003c): when people perceive the organization they are supporting to be more efficient, they are more likely to contribute. These results match findings of a study showing that civic engagement is correlated positively with a dispositional measure of self-efficacy (Scheufele & Shah, 2000). In addition, there is some evidence that efficacy is also a norm: a more effective contribution is perceived as more appropriate (Horne, 2003). The effect of efficacy is an additional psychological mechanism that explains the negative effect of group size on contributions to collective goods. In large groups, the perceived efficacy of a contribution to a common resource is lower than in small groups, regardless of the objective efficacy (Kerr, 1989; Komorita & Parks, 1994, p. 55-68).

Time lag - The period in which the effect of contribution becomes apparent is not dependent on group size, but also matters. The longer the time lag between a contribution and its effect - the longer it takes before the effect of a contribution appears - the less likely the contribution (Brechner, 1977). The effects of efficacy and time lag are important for charitable giving, because many charities solicit funds for long term objectives such as the development of new drugs through medical research, the conservation of wildlife or the development of disadvantaged regions in the world. Battling these problems is difficult, takes time, and is often not very efficient. Fundraising will be more difficult the less efficient donors estimate their contribution to be, and the longer it takes before the benefits become apparent.

Similarity: identification & empathy - Experiments with helping behavior have shown that people are more likely to provide help when they feel more similar to the recipients (Dovidio, 1984; Schroeder et al., 1995, p. 48), probably because they identify more easily with their needs (Cialdini, Brown, Lewis, Luce & Neuberg, 1997). People also feel more empathy for people whom they are more likely to meet in the future (Cialdini et al., 1997). Numerous experiments have shown that manipulations directed at increasing feelings of empathy for the recipient increases the likelihood of

prosocial behavior (Batson, 1991; 1998). A field study of charitable giving, however, did not provide evidence for the effect of induced empathy (Warren & Walker, 1991), but this study used a very weak manipulation. A study of organ donation showed that manipulated feelings of empathy were positively related to intentions to sign an organ donor card (Skumanich & Kinsfather 1997).

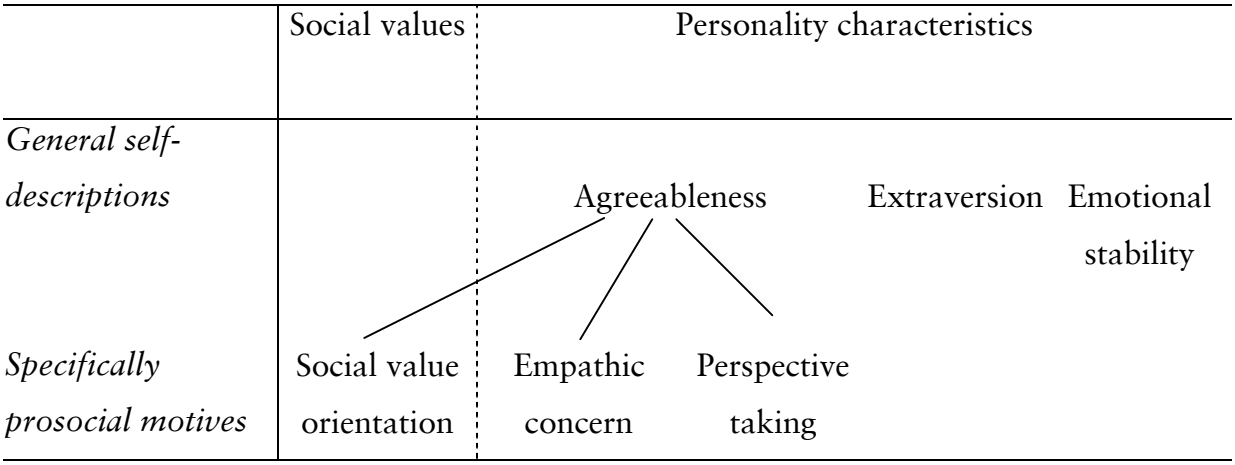
Personality characteristics associated with prosocial behavior

The results obtained in social psychological studies of helping and cooperation discussed above are all concerned with aspects of the choice situation. The experimental methodology used in these studies is perfectly suited to discover in which conditions prosocial behavior thrives, and when it is undermined. However, even in very unfavorable conditions, there are always people who cooperate (Dawes & Thaler, 1988; Ledyard, 1995). Experimental economists have tried to isolate situations in which there are hardly any incentives to cooperate. The results of ultimatum and dictator games are commonly interpreted as evidence for non-instrumental concerns such as fairness or altruism in social dilemma contexts. Even when the choice situation involves no material or social incentives, there are still people who seem to have an eye for the 'other(s)' in a social dilemma. One could assume that across different conditions, some persons are more likely to cooperate than others, and that these persons can be identified most easily when situational incentives are diminished or ruled out by design. Social psychologists have tried to capture these individual differences in the propensity to cooperate in social dilemmas. It is not unreasonable to assume that people may enter a social dilemma with very different goals, and that some people have more prosocial goals, and others have more egoistic concerns. This assumption stands in contrast to the received wisdom in economics that 'de gustibus non est disputandum' (Stigler & Becker, 1977) and to the common view in sociology that 'the desire to do good is more or less evenly distributed, but that the resources to fulfill that desire are not' (Wilson & Musick, 1999, p. 244). I want to treat this issue as an empirical matter (Heath, 1976; Caplan, 2003). Some psychologists assume that there is an 'altruistic personality' (Allen & Rushton, 1983; Eisenberg & Miller, 1987; Oliner & Oliner, 1988). People with altruistic personalities arguably differ in their preferences for the outcomes of others in social dilemma situations from the rational actors assumed by neo-classical economics and orthodox versions of rational choice

theory. Instead of assuming that all people are alike, I take measures of prosocial motives from personality psychology as measures of these preferences, and investigate their effects on different examples of prosocial behavior.

Which characteristics are distinctive of people with an altruistic personality? Previous research shows that the following psychological characteristics are typical of donors and volunteers: empathic concern, perspective taking, prosocial value orientations, agreeableness, extraversion, emotional stability, self-efficacy, and self-esteem (Allen & Rushton, 1983; Cohen, Vigoda & Samorly, 2001; Penner & Finkelstein, 1998; Smith, 1994). Unfortunately, the latter two cannot be studied because there was only limited space available in the Family Survey of the Dutch Population, the survey that will be used to test the hypotheses. How the remaining psychological characteristics are related to each other is shown in figure 1.1.

Figure 1.1. Psychological characteristics of donors and volunteers



First, I distinguish between social values and personality characteristics. Not all of the psychological characteristics in figure 1.1 are stable personality characteristics. Social value orientations appear to be less stable than the other characteristics, and should be understood as cooperative intentions that may change from one situation to the next (Bekkers, 2004b). Second, I distinguish between general self-descriptions and specifically prosocial motives. Agreeableness, extraversion, and emotional stability are very general trait descriptions, while social value orientation, empathic concern, and perspective taking are specific measures of prosocial motives. Below, I will first discuss

agreeableness, then the more specific measures of prosocial motives, and finally the other general trait self-descriptions.

Agreeableness - After a quest of several decades for a universal description of human personality, psychologists today generally believe that five basic traits are sufficient for such a description (John, 1990; Digman, 1990). These five traits are called the 'Big Five'; together, they form the 'Five Factor Model' (FFM). Agreeableness is one of these traits. Extraversion and neuroticism (the opposite of emotional stability) are two other psychological characteristics that are probably related to prosocial behavior, and will be discussed below. The other two, openness and conscientiousness, are not expected to be related to prosocial behavior. The origin and the measurement of the 'Big Five' are discussed in the appendix.

The important point for now is that the FFM relies on general self-descriptions. This is a limitation, because it remains unclear what these self-descriptions mean. To be sure, self-descriptions are not a perfect measure of prosocial motives, because they mix up preferences with past behavior and self-identity. Because agreeableness is simply a trait description of persons who engage in all kinds of prosocial and altruistic behaviors more often than others, it does not give a theoretical explanation of giving and volunteering. Showing an empirical relationship between self-reported agreeableness and prosocial behavior does not really give us an informative idea of why people engage in altruistic behavior. Therefore, we need more specific measures of prosocial motives. Empathy and prosocial value orientations are measures of two specific prosocial motives that may give an explanation of individual differences in prosocial behavior.

Previous research has found that several examples of prosocial behavior are related to agreeableness. Volunteers describe themselves as more agreeable persons than paid workers engaged in the same tasks (Elshaug & Metzer, 2001). Persons who describe themselves as more agreeable are more likely to cooperate in social dilemmas than those who describe themselves as less agreeable (Ben-Ner, Putterman, Kong & Magan, 2004). Agreeableness is positively related to intentions to give money to charity (Paunonen & Ashton, 2001). I am not aware of studies on the relationship of agreeableness to blood and organ donation. However, previous research does indicate that experienced blood donors have a more 'altruistic' self-image than 'rookies' (Piliavin & Callero, 1991) and that post mortem organ donation is considered as

indicative of altruistic concerns (Hessing, 1983). These results suggest that agreeableness will be higher among blood donors and post mortem organ donors than among non-donors.

Social value orientation – In contrast to agreeableness, social value orientations do not refer to a general self-description, but to a specific prosocial motive: the intention to cooperate in a social dilemma situation because of a concern for the joint outcome (Messick & McClintock, 1968; McClintock, 1972; Komorita & Parks, 1994, pp. 110-123; Van Lange, 2000). The social value orientation of a person is a psychological characteristic that may account for the base rate of cooperation in game theory: there is a type of people that is more likely to cooperate in social dilemmas, because they have the tendency to maximize collective welfare. In an ordinary game theoretic framework, actors are assumed to maximize only their own outcomes. In a game theoretic framework including social value orientations, actors are assumed to maximize their own outcomes, and, to some extent, the outcomes for others. Thus, actors are given weights for their own and other's utility, reflecting their social value orientation (Rashevsky, 1950; Sawyer, 1966; Weesie, 1994; Van Lange, 1999).

Social values are commonly considered as stable dispositions with which individuals enter a choice situation (Hulbert, Corrêa da Silva & Adegboyega, 2001; Ligthart, 1995; McClintock & Van Avermaet, 1982; Perugini & Gallucci, 2001; Snijders, 1996; Van Dijk, Sonnemans & Van Winden, 2002; Liebrand & Van Lange, 1989). However, research on the stability of social value orientations has produced disappointing results. Over a period of nineteen months, the stability of the threefold social value orientation typology in a computerized survey among a national sample of the Dutch population was only .19 (Van Lange, 1999, note 6). Correcting for measurement error, and using a linear measure of social value orientation, the stability increased only a little, to .22 (Bekkers, 2004b). These low estimates indicate that social value orientations are not stable personality characteristics. In addition, the classification of subjects in types of social value orientations is sensitive to priming effects (Bekkers, 2004b; Hertel & Fiedler, 1998; Utz, Bovina, Green & Waldzus, 1999).

Tests of the effects of social value orientations on cooperation in experimental social dilemmas have produced mixed results: sometimes, social value orientations allow for significantly better predictions (Van Lange, 1991, p. 20-21; Takács, 2002, p.

90, 95), but sometimes, they do not (Ligthart, 1995; Parks, 1994; Snijders, 1996). Little is known about the external validity of social value orientation. Subjects classified as prosocial in an experiment are reported to be more willing to volunteer for administrative tasks in order to enable future experiments (McClintock & Allison, 1989). Respondents classified as prosocial in surveys more often report gifts to charitable causes (Van Lange, 1997; Bekkers & Weesie, 2003) and higher rates of volunteering (Bekkers, 2004b). A recent observational study confirmed that prosocials actually gave more often to a health charity than competitors (Van Lange, Van Vugt, Bekkers & Schuyt, 2003).

Empathy – Another answer to the question why some people are more likely to give anonymously to strangers than others is that they have a greater tendency to feel empathy for others. While the discussion above focused on manipulated feelings of empathy, induced by experimental stimuli, the present argument is that some people are more likely to feel empathy and experience stronger feelings of empathy than others. Empathy is believed to be the key aspect of the 'altruistic personality' (Eisenberg & Miller, 1987). Empathy has two dimensions, an affective and a cognitive dimension. Both consist of two subdimensions (Davis, 1994, 55-58). The affective dimension consists of empathic concern (feeling bad when others are hurt) and personal distress (emotional control in emergency situations). The cognitive dimension consists of perspective taking (the ability to take another person's perspective) and fantasy (the tendency to transpose oneself in a fictional situation). Research on the relation between empathy and prosocial behavior indicates that perspective taking and empathic concern are the most important aspects of empathy: the more one is able and used to take the perspective of somebody else, and the more one is concerned with the welfare of others, the higher the chance that one will help another person in need (Batson, 1991, p. 93-96; Davis, 1994, p. 126-152; Eisenberg & Strayer, 1987). Empathy may be seen as a specific psychological process that provides an interpretation for the relation between prosocial value orientation and prosocial behavior (Romer, Gruder & Lizzadro, 1986).

Studies on the effects of dispositional empathy (for a review, see Davis, 1994) are usually concerned with helping other individuals, mostly strangers (confederates of the experimenters). One should be cautious to relate these results to prosocial behavior in anonymous situations, where there is enough time available to weigh the alternatives

and the beneficiary is not a specific other individual. However, there is some evidence from studies among specific populations that empathy is also important for non-emergency helping. Studies of cooperation among children showed a positive effect of empathic concern (Johnson, 1975a, 1975b). Several studies have shown that volunteers (e.g., for a community mental health organization and a shelter for the homeless) show higher levels of empathic concern than non-volunteers (Allen & Rushton, 1983; Penner et al., 1995; Penner & Finkelstein, 1998; Penner, 2002). There is also evidence from a survey of random sample of the US population for a weak relation of empathy with an index of prosocial behavior (Smith, 2003). Although direct evidence of a relation between the cognitive aspect of empathy and prosocial behavior in anonymous social dilemma situations is lacking, it seems likely that such a relation exists.

Extraversion – Next to general prosocial self-descriptions and specific prosocial motives, other personality characteristics have also been reported as distinctive of donors and volunteers. Extraversion is one of them. In the personality literature, extraversion is described as 'positive emotionality', comprising a cluster of qualities like energetic, ambitious, socially intelligent and warm (Watson & Clark, 1994). These qualities can be divided into two aspects: activity and sociability. These two qualities are distinctive of people who are engaged in voluntary associations, especially when they participate in activities organized by the association or do voluntary work. Extraverted people may be engaged in civil associations because they 'like to do and organize things', it does not matter what kind of collective action. On the other hand, extraverted people may be also be more likely to be asked to become members or volunteers, because they are more visible to recruiters because of their extraverted behavior. Lindeman (1995, p. 156) has shown in a study of participation in voluntary work that a preference for active stimulation (the activity aspect of extraversion) is related positively to the extent of voluntary activity in societal and recreative associations. This result confirmed older research (Smith, 1966). In contrast to expectations, the sociability aspect of extraversion was not related to voluntary work in general, and even had a negative relation with volunteering in recreative hobby clubs (Lindeman, 1995).

Neuroticism – Neuroticism indicates emotional instability, a greater incidence of negative emotions, and a greater risk to fall prey to depression and psychopathology. Previous research has shown that civic engagement is negatively related to a depression

scale used in epidemiologic studies (Lin, 2000) and positively to feelings of optimism (Whiteley, 1999). On the other hand, field experiments on helping behavior have shown that helping may be not only be more typical of people in a good mood (for instance when they have found cookies in a phone booth), but also a means to alleviate bad moods (Schroeder et al., 1995, pp. 30, 47, 65-66). Because neurotic persons experience more bad moods, they may more often be in the position to alleviate these moods by prosocial behavior. A number of studies provide indications that emotional stability may be related to blood donation and post mortem organ donation. With regard to blood donation, many people are afraid of the medical tests involved (Piliavin & Callero, 1993, p. 19-21). In a study of adolescents, fear was indeed the key factor inhibiting intentions to donate organs after death (Reubsaet et al., 2001). Although these results may simply indicate effects of situational anxiety when people are asked to donate, it seems likely that these effects will be higher for more neurotic people.

Together, the relations expected above constitute the hypotheses from a psychological perspective:

H2. The likelihood of prosocial behavior increases with the level of agreeableness, extraversion, emotional stability, prosocial value orientation, empathic concern and perspective taking.

Limitations of psychological studies of prosocial behavior

Laboratory experiments on behavior in social dilemma situations have identified important mechanisms, which are probably also at work when people decide about giving and volunteering. These results are valuable insights for researchers as well as for practitioners. Studies of the psychological characteristics of donors and volunteers have also provided interesting insights. However, several problems remain.

A first problem with the experimental results is that they are not very often tested in the 'real life': it is usually assumed that the social dilemma situation is paradigmatic for many problems in the real world, but it remains unclear to what extent this is really the case. One should be cautious to generalize results from social dilemma experiments to prosocial behavior in anonymous contexts. The dependent variable in these experiments is cooperation in highly abstract games with a given and clearly described reward structure, a given number of players, and a clear set of

alternatives. Actual decision situations are much more unclear, which gives room for different interpretations, which may be shaped by personality characteristics and social values. For instance, people with prosocial value orientations are more likely to view a social dilemma in terms of morality ('defection is the wrong choice'), while people with 'pro-self' orientations are more likely to view the dilemma in terms of intelligence ('cooperation is stupid') (De Bruin & Van Lange, 1999; Van Lange & Kuhlman, 1994). In addition, actual decisions about giving time, money, blood or organs do not take place in an abstract 'game' on a computer screen: the recipients are real people with real needs, which may also increase the role of prosocial motives such as empathy. The external validity of social dilemma games played by subjects in a laboratory is often questionable. These are old complaints (Nemeth, 1972; Pruitt & Kimmel, 1977), but they still apply to much of the gaming literature. Although some work has been done outside the laboratory, it is clear that much can still be learned from a survey-investigation of the effects of social value orientations and material and social incentives in real social dilemma-situations.

A second problem is that the experiments are usually conducted with college students. It is unknown to what extent the results hold when 'ordinary people' decide about contributions to nonprofit organizations. A third problem is that experiments do not allow for a manipulation of many independent variables at once. Experimental studies usually investigate effects of only one or two conditions, sometimes in addition to effects of some psychological characteristics of subjects. The relative effects of the large variety of conditions for cooperation is unknown.

The use of surveys in sociological research is a solution to the problems of the lack of external validity, the lack of a heterogeneous population, and the lack of insight into the relative effects of conditions for cooperation and psychological characteristics of subjects in social dilemma research. Random sample surveys have the advantage that respondents from the full range of societal layers report about real examples of prosocial behavior such as the amount of time they volunteered or the amount of money they donated to a variety of nonprofit organizations. Because surveys usually have a large variety of socio-demographic data available, adding questions on psychological characteristics and prosocial behavior allows for a study of many independent variables at once. Therefore, real life examples of social dilemma

situations as reported in a survey by a random sample of the Dutch population are studied in chapters four to seven.

However, surveys also have drawbacks: it is difficult to show causality in the observed relations, and it is difficult to measure the exact incentive structure for potential donors and volunteers. Volunteering and giving can be related to a large number of indicators for the amount of time and money available and the embeddedness in social contexts which are supposed to support giving and volunteering. The outcomes of the decision making processes whether or not to give or volunteer (and if so, how much) are known, but the exact 'input' for these decisions is not. Relying on the theoretical ideas laid out above, I assume that the social rewards of contributions to collective goods will be higher for persons with more social capital, that the material costs will be lower for persons with more financial and human capital, and that intrinsic rewards will be higher for persons with more prosocial motives and personality characteristics. Although these assumptions seem reasonable, direct manipulation of material, social and psychological costs and rewards in an experiment would be better. Therefore, I will combine the advantages of an experiment and a survey in the scenario study of intentions to give money and volunteer labor for a range of voluntary associations reported in chapter three.

1.3. Interactive effects of psychological characteristics and conditions for contributions to collective goods

Above, I have assumed that people with specific psychological characteristics are more likely to engage in prosocial behaviors that require a material sacrifice of time or money, also when there are little or no social incentives. However, this in itself is not a very informative step. It would be a more important achievement if it is possible to predict *when* psychological characteristics have an influence. One of the reasons why the search for effects of personality characteristics on social behavior may have produced such disappointing results is that the moderating influence of the social context has been ignored (Krahé, 1992). When can we expect the effects of psychological characteristics and prosocial motives to be strong, and when will they be weak (Carlo, Eisenberg, Troyer, Switzer & Speer, 1991)? In what kind of situations we will be more likely to find effects of psychological characteristics and prosocial motives? Interestingly, economists, sociologists and different types of psychologists

have come up with similar ideas about this question. Economists (Eichenberger & Oberholzer-Gee, 1998; Tullock, 1971), sociologists (Diekmann & Preisendörfer, 1998, 2003; Mensch, 2000), personality psychologists (Mischel, 1977, 1993) and social psychologists (Neuberg, Cialdini, Brown, Luce & Sagarin, 1997; Snyder & Ickes, 1985) assume that psychological characteristics and prosocial motives are more strongly related to prosocial behavior when there hardly any material and social incentives. The idea that the effects of psychological characteristics on behavior are stronger when the material costs are lower is called the 'low cost-hypothesis'. The idea that the effects of psychological characteristics on behavior are stronger when the social incentives are weaker is called the 'weak situation-hypothesis'. However, these ideas have rarely been tested systematically. Chapters three to six contain different types of tests of these hypotheses, each time for different types of prosocial behavior: for intentions to give and volunteer (chapter three), for gifts of money, blood, and organs (chapter four), voluntary association membership (chapter five), and membership and volunteering (chapter six).

1.3.1. The low cost-hypothesis

In its most general form, the *low cost-hypothesis* states that values, attitudes, and other 'soft incentives' are more important for behaviors that entail smaller costs. The basic idea of this hypothesis is very old and occurs in many theories across different disciplines of the social sciences. In sociology, the low cost-hypothesis gained popularity in German speaking countries in discussions on the explanatory power of rational choice theory (Zintl, 1989, Kirchgässner & Pommerehne, 1993). It seemed that hypotheses derived from rational choice theory have limited value for predicting behaviors with small opportunity costs (Mensch, 2000). For instance, when recycling behavior costs little time and money, it is related to environmental attitudes, but not when environmental behavior entails higher costs (Diekmann, 1996; Diekmann & Preisendörfer, 1998). Another well-known example is voting behavior. Because one single vote does not affect the outcome of a general election, the opportunity costs of voting for one political party or another can be influenced by non-material concerns (Green & Shapiro, 1994; Tullock, 1971).

A similar logic is followed in social psychology. In the polarized debate on the altruistic nature of empathy, one article asked the rhetorical question: 'Does empathy

lead to anything more than superficial helping?'. The authors concluded their review and reanalysis of previous research as follows: "The ability of empathic concern to predict helping is limited to deciding between providing either relatively costless help or no help at all" and "under conditions of substantial cost to the helper, empathic concern does not facilitate helping" (Neuberg et al., 1997, p. 514-515). Although this conclusion concerned the effects of manipulated feelings of empathy, it can be supposed that it also holds for the effects of dispositional empathic tendencies. The weak power of psychological characteristics may also be the reason why psychologists usually focus on giving trivial amounts of money in their experiments.

The low cost-hypothesis is related to the idea that prosocial behavior is a luxury good (Jencks, 1987; Mansbridge, 1990). The marginal utility of an addition of € 500 to the monthly income – or: the marginal disutility of foregoing € 500 – is much lower for the wealthy than for the average person. When a charitable donation of € 500 is not similar to the monthly rent for the apartment but to a second digital home cinema set, people can afford themselves to act upon their concern for others. It should be noted, however, that the low cost-hypothesis argues that prosocial motivation for prosocial behavior is a luxury good, not prosocial behavior itself. A test of the hypothesis that there are declining marginal costs of altruism requires nothing more than a detailed plot of the effect of income on charitable giving. A test of the low cost-hypothesis, however, requires a detailed plot of the effect of prosocial motives and personality characteristics for different levels of income.

The low cost-hypothesis – although it is not always labeled as such – is often used to explain anomalies to rational choice models of human behavior. For instance, the absence or weakness of effects of material self-interest on voting is often explained by saying that voting involves no or little material costs (Eichenberger & Oberholzer-Gee, 1998; Green & Shapiro, 1994; Tullock, 1971). Maslow's hierarchy of needs (1996), which also formed the basis for Inglehart's (1977) theory of the rise of postmaterialism, reflects the same idea: once basic needs such as safety, food and reproduction are fulfilled, people start worrying about less urgent goals in life, such as social standing, and ultimately self-realization. The decreasing marginal utility of income is often discussed in the literature on happiness: it seems that above a certain level of income, subjective well being is not served by an even higher income but by satisfying 'higher needs' (Csikszentmihalyi, 1999).

The low cost-hypothesis also occurs in the general statement that in human behavior, self-interested choices are the rule, and altruistic choices are the exception, especially when the stakes are high (Lenski, 1966, p. 30). Lenski also argued that at the macro-level, ideologies are more strongly related to social behavior in more advanced societies (Lenski, Lenski & Nolan, 1991). In economics, North (1981) is often credited for inventing a similar hypothesis. An application of the general formulation of the low cost-hypothesis to our research question yields the following expectation:

H3. The stronger the material incentives for prosocial behavior, the smaller the effects of psychological characteristics on prosocial behavior.

If the conclusions about experimental research can be generalized to examples of prosocial behavior outside the laboratory, it follows that psychological characteristics will be related more strongly to examples of prosocial behavior that are demanding smaller sacrifices. This argument is reflected in the order of the examples of prosocial behavior studied in chapters three to seven. In chapter three, intentions to give money and volunteer time are studied with a scenario study. In chapters four to seven, examples of actual prosocial behavior are investigated. Because intentions do not require an actual sacrifice of time or money, the effects of psychological characteristics are expected to be stronger in chapter three than in the other chapters. In chapter four, I study donations of money, blood and organs, which do not take much time either. According to the low cost-hypothesis, the effects of psychological characteristics are smallest for volunteering, which requires a frequent sacrifice of leisure time for some collective good. Volunteering is studied in chapters six and seven.

Another way to test this hypothesis is to compare the impact of individual differences on the decision to participate with the impact on the amount of time and money invested. The low cost-hypothesis would predict that individual differences matter more for the decision to participate, but less for the amount of time and money invested. With regard to the effect of political interest on political participation, this pattern has indeed been found (Brady, Verba & Schlozman, 1995). A comparison of effects of psychological characteristics on decisions to donate versus the decision how much to donate is made in chapters four and six.

A third way to test the low cost-hypothesis is to compare the effects of individual differences in prosocial motives for groups of respondents with varying opportunity costs for giving time or money. Giving to charity, for example, is often considered as a luxury good (Bekkers & Weesie, 2003; Jencks, 1987; Mansbridge, 1990). For people with high incomes, a gift represents a smaller loss than for people with a lower income. The rich can afford themselves more easily to translate prosocial values into action. Similar arguments can be made for the effects of psychological characteristics among persons with higher or lower hourly wages. This strategy will be followed in chapter three, four and six.

Finally, the scenario experiment in chapter three contains a fourth way to test the low cost-hypothesis: by varying the amount of money requested in hypothetical situations, and comparing the effects of psychological characteristics in these conditions.

1.3.2. The weak situation-hypothesis

The weak situation-hypothesis states that psychological characteristics are only relevant in 'weak situations': social contexts that do not involve clear-cut expectations on how to behave (Mischel, 1977; 1993; Snyder & Ickes, 1985, p. 904-906). In contrast, when strong social norms or salient cues guide behavior, there is little room for the expression of individuality. The classical example of a strong situation is a funeral. In this situation, clear and strong expectations are present on how to behave, and individual differences in personality will not have observable effects on behavior.

The weak situation-hypothesis originated in the debate in social and personality psychology on the consistency in social behavior and the effects of 'the person' and 'the situation' (Zanna, Higgins & Herman, 1982; Krahé, 1992). Originally, the basic idea was that situational constraints often inhibit the translation of personality characteristics into behavior. 'Situational constraints' included many things, for instance the presence of experimenters and explicit instructions (Block, 1977; Snyder & Ickes, 1985, p. 905) and high monetary incentives (Monson, Hesley & Chernick, 1982). In this dissertation, I test a specific version of the weak situation-hypothesis, referring to the moderating effects of social incentives. Moderating effects of monetary incentives concern the low cost-hypothesis. Potential moderating effects of experimental methods are not studied; all hypotheses are tested with self-report data,

which should increase the chance that significant effects of personality characteristics emerge.

On a macro level, the weak situation-hypothesis resembles the argument in sociology that modern societies grant the individual more room for expressing his individual preferences and interests because social norms on how to behave have become less strict than in traditional societies (e.g., Van der Loo & Van Rijen, 1990). Movie pictures such as 'The Truman Show' (Niccol, 1998) illustrate the popularity of the idea that modernity has liberated the individual from the strong pressures to conformity. The weak situation-hypothesis resembles this idea: personalities are most clearly visible when there is no social pressure.

Although the weak situation-hypothesis is very well known in personality psychology, empirical tests of this hypothesis are very scarce. A study that is often cited as supporting the weak situation-hypothesis did in fact test the low cost-hypothesis, because it compared the incidence of introvert or extravert behaviour under conditions of high or low monetary incentives (Monson, Hesley & Chernick, 1982). Participants in the weak incentive condition behaved more often according to their dispositional extraversion than participants in the strong incentive condition. Another 'test' of the weak situation-hypothesis compared the effects of prosocial motives on helping when leaving the experiment was made easy or difficult (Carlo et al., 1991). Again, this experiment did not compare weak and strong situations, but low and high cost situations. Nevertheless, the results supported the expectations: when escape was made easy, prosocial motives correlated more strongly with prosocial behavior. In sum, there is no convincing evidence for the weak situation-hypothesis because it has not been tested properly. This makes it worthwhile to conduct such a test. Applied to our research question, the weak situation-hypothesis predicts:

H4. The stronger the social incentives for prosocial behavior, the weaker the effects of psychological characteristics.

The weak situation-hypothesis can be tested with the same strategies that are used to test the low cost-hypothesis. First: by comparing effects of psychological characteristics on different types of prosocial behavior, which differ in the extent to which social incentives play a role. Examples of prosocial behavior that are more

visible for others such as volunteering should be less strongly related to psychological characteristics than more anonymous types of giving such as charitable donations of money. The weak situation-hypothesis is also reflected in the order of the chapters. In chapter four I analyze donations of money, blood, and organs, which are more anonymous than the types of civic engagement investigated in the remaining chapters. A second way to test the weak situation-hypothesis is to compare the effects of individual differences for religious and non-religious people and for citizens in urban and rural areas. Religious people and rural dwellers are more likely to be asked to volunteer and to donate money, and are integrated in denser networks. This means that religious people and rural dwellers face stronger social incentives for prosocial behavior. According to the weak situation-hypothesis, the effects of psychological characteristics should be weaker for religious people and for rural dwellers. Finally, a third way to test the weak situation-hypothesis is to compare the effects of psychological characteristics on intentions to give and volunteer in hypothetical situations that differ systematically in the strength of social incentives for prosocial behavior. This strategy will be used in chapter three.

1.4. The structure of the dissertation

After this introduction, I will present a description of the extent and variety of giving and volunteering in the Netherlands in chapter two. In chapters three to seven, I present detailed descriptions of the persons who are active in different types of giving and volunteering. What are the psychological characteristics of donors and volunteers? What are the social conditions that they live in? Do data on psychological characteristics allow for a more accurate prediction of giving and volunteering when social incentives are taken into account? As shown above, the types of prosocial behavior investigated in chapters three to seven are ordered according to the predictions of the low cost-hypothesis and the weak situation-hypothesis (see table 1.1).

Table 1.1. Overview of dependent variables and main independent variables in chapters three to seven

Chapter	Dependent variable(s)	Main independent variables
3. Who gives what and why?	Intentions to give and volunteer in a variety of hypothetical situations	Material, social and psychological incentives; income, education, religion, urbanization; social value orientation, agreeableness, empathy
4. Anonymous gifts	Charitable giving, blood donation, post mortem organ donation	Income, education, religion, urbanization; social value orientation, agreeableness, empathy
5. Participation in voluntary associations	Membership of voluntary associations; volunteering	Income, education, religion, urbanization; social value orientation, agreeableness, empathy
6. Shifting backgrounds of participation	Membership of pillarized and secular voluntary associations, selective incentives for membership	Income, education, religion, urbanization; social value orientation, agreeableness, empathy, postmaterialism
7. Intergenerational transmission of volunteerism	Volunteering for religious, pillarized and secular associations	Income, education, religion; parental volunteering; agreeableness, empathy, social value orientation

Chapter three, *"Who gives what and why? The power of social and psychological incentives in social dilemmas"*, is a scenario experiment incorporated in the Family Survey of the Dutch Population 2000 (De Graaf, De Graaf, Kraaykamp & Ultee, 2000; henceforth abbreviated as FSDP2000). The respondents answered a questions like "What would you do if your neighbor asked you to help him with something?" The answers to these questions reveal their intentions to contribute to collective goods in hypothetical situations. The characteristics of the situations were varied systematically. Because the respondents indicated their intentions to give and volunteer, they may mirror their psychological characteristics more closely than the self-reports on actual giving and volunteering behaviors, which are restricted by material costs and social rewards.

In chapters four to seven I focus on self-reports of actual behavior instead of giving intentions. In chapter four, *"Anonymous gifts: personal decisions, social backgrounds"*, I investigate examples of prosocial behavior that are relatively anonymous, and are commonly regarded as reflecting altruistic motives, such as blood donation, post mortem organ donation, and charitable giving. The question answered in this chapter is to what extent donations are related to social conditions an psychological characteristics of people. The low cost-hypothesis and the weak situation-hypothesis predict that psychological characteristics will be related more strongly to these examples than to examples of prosocial behavior that may provide material and social rewards such as membership of voluntary associations and volunteering.

Chapter five, *"Participation in voluntary associations: personality, resources, or both?"* is similar to chapter four and investigates the relationship of social conditions and psychological characteristics on membership and unpaid work in voluntary associations.

Chapter six, *"Shifting backgrounds of participation in voluntary associations"*, investigates why membership of voluntary associations has not declined despite the massive secularisation of the Netherlands. If church attendance is declining, and religion is an important factor in participation in voluntary associations, then why did membership rates not decline? It is often assumed that the social process of individualization increases the effects of individual preferences on social behavior. Therefore, chapter six compares the effects of social conditions and psychological

characteristics on participation in organizations that emerged since World War II to the effects on participation in organizations that already existed in the pillarized civil society. In addition, effects of postmaterialistic value orientations and selective incentives for membership are considered.

Chapter seven, *"The transmission of volunteerism"*, investigates how volunteerism is transmitted from one generation to the next. Are children of parents who volunteered more likely to volunteer because they have been subject to parental modeling, or because they have inherited personality characteristics or financial resources and human capital?

Finally, chapter eight, *"Conclusion and discussion"*, gives answers to the two main research questions, discusses limitations of chapters three to seven, and gives some clues for further research.

Chapter 2
Giving and volunteering in the Netherlands

This chapter sketches trends in giving and volunteering in the Netherlands and provides a more detailed view on the size of these phenomena. How many people give and volunteer, and how much do they contribute? The estimates are based on the Family Survey of the Dutch Population 2000, which will be used in chapters three to seven. The estimates are compared with estimates from other data sources.

2.1. Introduction

Forms of contributions to voluntary associations

Contributions to voluntary associations may take various forms, with a more or less altruistic character, depending on the costs for the individual and the benefits for the collective. The most common and least demanding form of participation is nominal membership: paying a membership fee for an organization, without taking part in organizational activities or helping the organization. Nominal membership may be guided by self-interest only, in exchange for services by the organization. A more demanding form of participation is active membership: taking part in activities of the organization such as attending meetings. This form of participation takes more time than simply being a member. The most demanding form of participation is voluntary work: unpaid work for an organization on a frequent basis. Obviously, this form of participation creates the largest obligations for the individual and the largest benefits for the organization.

People do not only give time, but also give money to voluntary associations. On the one hand, charitable donations may be less demanding than active membership or voluntary work because they require less time. This also holds true for donations of blood and postmortem organ donation. On the other hand, these donations are unilateral: they do not produce tangible rewards for the individual. They help the organization or society at large, but not the donor. Active membership and voluntary work may enhance the social network of the member or volunteer and elicit positive

social evaluations by third parties. These benefits are largely absent for donations, because they are more anonymous and unreciprocated.

Trends in civic engagement

In the USA, membership of traditional associations seems to be dwindling, especially the local forms of participation with a high level of face-to-face contacts (Putnam, 2000). These developments have given rise to serious concerns about the 'decline of social capital and cohesion in society'. The claims made by Putnam have been debated by numerous scholars. Re-analyses of the same data that Putnam used on civic engagement in the USA and analyses of other data have given rise to different conclusions: local organizations are declining, but cosmopolitan organizations such as environmentalist groups and organizations defending human rights have grown enormously (Baer, Curtis & Grabb, 2001; Magee & Lin, 2001; Paxton, 1998). In Western Europe, academic observers have been less concerned right from the start. Membership in traditional associations such as those with a religious, political or unionist character have declined, but this decline has been compensated by new associations and social movements like environmentalist groups, human and animal rights organizations, and cultural expressionist groups like amateur theatre, choir, and musical clubs (SCP, 1998). It is clear that modernization does not imply a quantitative decline of involvement in associations (Dekker & Van den Broek, 1998) but rather a qualitative change. This reconfiguration of civic engagement can be described as an individualization of the civil society (SCP, 1994). Civic engagement in the western world is less often coinciding with class interests or bound up with religious involvement, but takes on a more global character, and is more often an expression of values and individual differences in personality.

The number of blood donors has declined slowly from 650,000 in the mid 1990s to 600,000 in 2001, and declined more rapidly to 530,000 in 2002. The recent decline is due to a reorganization of the blood collection regime. The decline in the number of donors has been compensated by a higher number of donations per donor (Sanquin, 2003).

Contrary to expectations, the number of organ donors has declined after the registration campaign by the Ministry of Health in 1998. Recently, the number of organ donors has increased (Volkskrant, 2002). This increase has been called the 'Bart

de Graaff-effect'. Bart de Graaff was TV-celebrity with a kidney disease, appealing mainly to a younger age group with his broadcasting station BNN. Allegedly, his exposure of the lot of kidney-dialysis patients on television has increased the number of organ donors.

An important development in Dutch civil society is the rise of 'checkbook participation' and the growth of tertiary organizations that do not require face-to-face contacts. In the Netherlands, charitable giving by households has increased enormously in the last decades, amounting to an all time high of € 1.7 billion in 2001, which equals about 1.7% of the GDP (Schuyt, 2001a). The corresponding figure for the USA is about 2%, but taxes are much higher in the Netherlands. In the 1990s, fundraising income of the 200 largest charities more than doubled from € 340 million to € 800 million (Bekkers, 2003c). As fundraising income grew steadily, a process of professionalization occurred (Schuyt, 2001b): fundraisers and other charitable organizations have organized themselves in several branch organizations, and an increasing number of charitable organizations employed paid staff for fundraising. A sizeable portion of the donations goes to cosmopolitan associations, which have compensated for the decline in memberships of local associations, and do not require face-to-face contacts. In the Netherlands, the argument that charitable giving has increased as a compensation for the lack of active involvement in voluntary associations does not hold true. While working hours were on the rise, volunteer rates have not dropped since 1975. Furthermore, the relationship between giving money and giving time is not compensatory. Volunteers actually donate more money to charity than non-volunteers (Bekkers, 2001a). The same holds true in the USA (Putnam, 2000).

The Family Survey of the Dutch Population 2000 (FSDP2000; De Graaf, De Graaf, Kraaykamp & Ultee, 2000) contains measures of charitable giving, membership of voluntary associations, volunteer work, blood donation and post mortem organ donation, that will be used as dependent variables in chapters three to seven. These measurements are discussed below. More information on the design and sampling procedure of the FSDP2000 can be found in appendix A. For the descriptive purposes in this chapter, sampling weights were used. In chapters three to seven, sampling weights were not used.

2.2. MEASURES OF GIVING AND VOLUNTEERING

2.2.1. Charitable giving

Because of limited space, charitable giving was measured in the FSDP2000 with two short items. The first question asked whether the respondent had made any donations in the previous year to voluntary associations, charities or nonprofit organizations. The respondents were instructed not to include lotteries and membership dues in their response. Those who said yes were asked how much money they had donated. These amounts were originally reported in Dutch Guilders, and later transformed in Euros. 70% of the respondents indicated having made donations to charitable causes (see table 2.1). The distribution of the amount donated (see figure 2.1) is very skewed: there are many respondents reporting small gifts, but there are also a few respondents indicating large gifts.[*]

The mean amount donated in the past year was € 85,85. The median donation was € 22,86. Among households that donated at least some money, the mean amount donated was € 133,06. The median donation among the group of households that donated was € 45,38 (fl.100,-).

A natural logarithm transformation of the amount donated was used to reduce the skewness of the distribution in order to use an ordinary least squares regression analysis. The transformation reduces the skewness of the distribution from 4.06 to 0.27 and the kurtosis from 18.58 to 0.37.

[*] One respondent indicated a very large gift (fl. 100,000 = € 45,378). Inspection of the original write-in questionnaire revealed that there was no mistake in the data entry. However, the partner of this respondent reported a much lower amount donated: the partner reported annual donations of fl. 300,- (€136.18). The report of the very large gift was recoded into the value for the spouse.

Figure 2.1. Distribution of amount donated

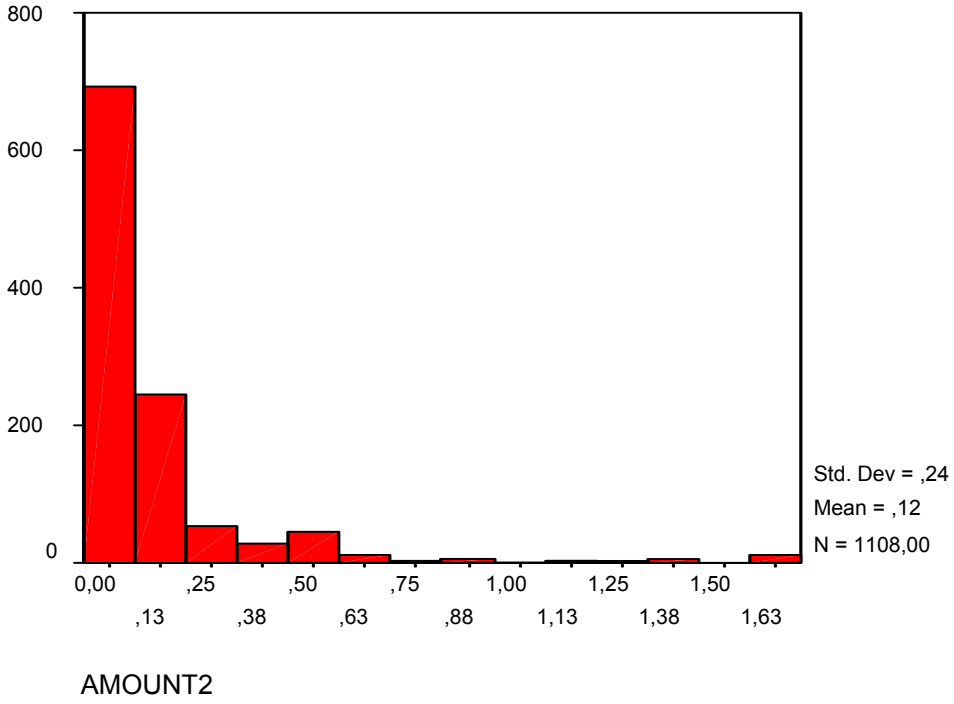


Figure 2.2. Distribution of natural logarithm of amount donated

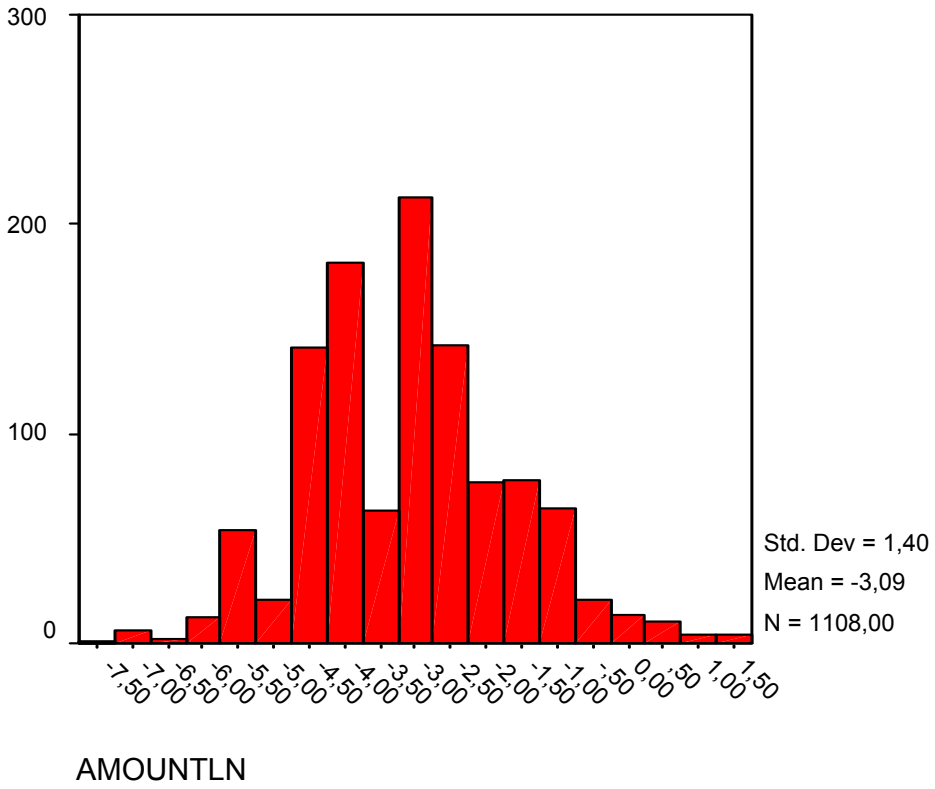


Table 2.1. Amount donated in past year (FSDP2000, weighted sample, n=1554)

	% [a]	% [b]	n
No donation	29.7		462
€ 1-15	16.2	23.0	251
€ 15-25	10.8	15.3	167
€ 25-50	17.6	25.0	273
€ 50-100	9.7	13.8	151
€ 100-200	6.1	8.7	95
€ 200-400	4.9	7.0	76
€ 400-800	3.2	4.5	49
€ 800-1,600	1.4	1.9	21
More than € 1,600	.5	0.7	8

% a - Among all respondents; % b - Among donors only

The reports on charitable giving in the FSDP2000 are considerably lower than the reports by respondents in the GIN2001-survey. The differences are not due to different definitions of charity: both surveys excluded membership dues and contributions that may generate a profit (e.g., lotteries). The GIN-survey used a much more extensive questionnaire on charitable giving, cueing respondents first with a list of 24 different types of requests for contributions. Next, respondents in the GIN-survey were asked whether they had donated any money to 9 different types of charitable causes in the past year, and if so, how much. Using this extensive questionnaire, the GIN-survey uncovered donations among 86% of the households, with a mean amount of € 235 and a median donation of € 90 among households that donated at least some money. The differences between the GIN-data and the FSDP-data are in line with the results of an experiment using different types of questionnaires on charitable giving in the US (Rooney, Steinberg & Schervisch, 2001, 2002). Using a concise questionnaire, a smaller proportion of households is classified as donating money, and the amounts donated are underestimated.

The underestimation of donations using concise questionnaires as in the FSDP2000 is not necessarily problematic for the main purpose of this dissertation. The issue not whether the absolute magnitude of charitable giving is correctly estimated, but whether statistical tests of hypotheses are robust to the underestimation of giving.

This could be the case, for instance, if charitable giving is systematically underreported in specific categories of respondents. This assumption is not unreasonable, because some categories of respondents (e.g., the lower educated and the elderly) will be more likely to forget some of their donations. In addition, it can be expected that the extensive cues in the GIN-survey mainly help respondents to remember small donations, and some groups will be more likely to have made many small donations (e.g., females (Andreoni, Brown & Rishall, 2003), and those with a lower income).

Appendix B contains a comparison of the effects of relevant independent variables in the FSDP2000 on charitable giving with the effects of the same variables in the GIN-survey. This comparison suggests that the incidence of giving in the FSDP2000 may have been underreported by lower educated persons and by Catholics, and that the amount donated in the FSDP2000 may have been underreported by the elderly, by protestants, and to a smaller extent also by the lower educated. These analyses suggest that the effect of the level of education on charitable giving may have been somewhat overestimated in the FSDP2000.

2.2.2. Donation of blood

There were two short questions on blood donation in the FSDP2000. In the first question, respondents indicated whether they were currently registered as a blood donor. If not, they were asked whether they had ever served as a blood donor. If so, the respondents indicated from when to when they had donated blood. Current blood donors indicated since when they were donors. Table 2.2 summarizes the responses to these questions.

Table 2.2. Blood donation (FSDP2000, weighted sample, n=1561)

	n	%
Currently registered as blood donor	166	10.6
Used to be registered	202	12.9
Never registered	1193	76.4

About one in ten of the respondents indicated being a blood donor right now (10.6%). An additional 12.9% had been a donor in the past. The longest 'career' of blood donation was 50 years. On average present donors had served 14.93 years. Among past donors, the average career was 6.13 years.

Sanquin (2003) reports only 4% blood donors in the Dutch population. This estimate is considerably lower than in the percentage of self-reported blood donors among the respondents of the FSDP2000. There are at least three possible reasons for this discrepancy. First, the Sanquin-estimate is based on the whole population. The FSDP-sample has a limited age range (18-70). Unfortunately, the proportion of blood donors in this age range among the whole population is unknown. Second, not all potential blood donors are called for a donation every year. Third, there may be a self-selection of blood donors among survey respondents. To the extent that blood donation and cooperation with a request to participate in a survey are motivated by the same underlying disposition or the same social conditions, the proportion of blood donors may be overestimated. This issue will be addressed in section 2.5.

2.2.3. Post mortem donation of organs

In the FSDP2000, the questionnaire on organ donation was introduced by mentioning the registration campaign that the Ministry of Health started in 1998. Every adult Dutch citizen received a registration form, in which a decision on organ donation was asked. After this introduction, the first question was whether the respondents carried a donor card before the registration campaign. More than one quarter of the respondents indicated they had carried a donor card (26.4%). Then it was asked whether the respondents had sent back the registration form. Slightly more than half of the respondents (51.5%) indicated that they had. This was considerably more than the proportion of the Dutch population who actually received a questionnaire (36.0%), according to the Ministry of Health (Reubsaet et al., 2001). A small number of respondents claimed they had never received a registration form (1.7%). 46.9% indicated they had not returned the form; seven respondents did not provide a valid answer.

Table 2.3 shows the choices made by the respondents on the registration form. About 30% of the respondents indicated they had consented with post mortem donation of all organs. This was the majority (58.4%) of all respondents who had

returned the registration form. A small number had given their consent for post mortem donation of specific organs, but not for others (8.9% of those who returned the form). Compared with the choices registered of the total population, our respondents were more likely to send back the form and to give consent for donation. This is not strange, because sending back registration forms, consenting with donation as well as participating in household surveys are all examples of prosocial behavior. Because post mortem organ donation is one of the few behaviors for which population values are known (another example is voting behavior), it is an interesting variable that can be used for weighting data. To the extent that organ donation correlates positively with other examples of prosocial behavior, the difference between the FSDP2000 respondents and the potential donor population suggests that population estimates of other examples of prosocial behavior may be overestimated. In this case, applying a sampling weight based on responses to the organ donation question would lead to lower estimates of giving and volunteering. This issue is discussed below (2.5).

Table 2.3. Choices on the post mortem organ donation registration form issued in 1998 (FSDP2000, weighted sample, n=1561; Reubsaet et al., 2001)

	% [a]	% [b]	n	%[c]
I donate all my organs	29.9	58.4	466	36.0
I donate some of my organs	4.5	8.9	71	7.7
My family has to decide	5.5	10.7	86	10.1
I do not donate any organs	11.2	22.0	176	34.5

a - Among all respondents; b - Among respondents who indicated they had returned the registration form (n=800); c – Choices among the potential donor population (source: Reubsaet et al., 2001)

There were a large number of changes in organ donor status since 1998 (see table 2.4). Although the majority of the respondent who carried an organ donor card before 1998 (54.6%) decided to donate all their organs, more than one quarter did not even return the registration form (26.4%), which turned them from donors into non-donors. In addition, of those who carried an organ donor card before 1998, 14.1% left the decision up to their next of kin or decided to donate only specific organs; among those who did not carry a donor card this was almost the same (10.5%). Of those who decided to donate their organs, 50% did not carry a donor card before 1998.

Table 2.4. Changes in organ donor status since 1998 (FSDP2000, not weighted, n=1536)

	Did not send back form	No donation	Family decides	Some organs	All organs	n
Did not have donor codicil	633	151	72	46	222	1124
Did have donor codicil	111	18	26	32	225	412
n	744	169	98	78	447	1536

All respondents were asked whether they had had discussions with others about their decision on post mortem organ donation, and if so, with whom. Table 2.5 shows the responses to these questions.

Table 2.5. Discussions about post mortem organ donation decision (FSDP2000, weighted sample, n=1563)

	% [a]	% [b]	n
Had no discussions	30.8		470
Had discussions	69.2		1058
With partner	57.0	84.1	890
With family members	31.2	46.1	488
With friends	19.3	28.5	301

a - Among all respondents; b - Among respondents who had discussed the donation issue

Three in ten respondents (30.8%) indicated that they had not discussed their decision with anybody. The majority of all respondents had discussed the donation issue with their partner (84.1% of those who had discussed the issue). About three in ten had discussed the issue with family members (46.1% of those who had discussed the issue). About twenty percent of the respondents (28.5% of those who had discussed the issue) talked about organ donation with friends. These results indicate that post mortem organ donation is far from anonymous in the sense that nobody knows about the donation decision. As a consequence, social incentives may be important for post

mortem organ donation. However, organ donation is anonymous in the sense that there is no contact between organ donor and recipient: it is a form of unilateral giving, that cannot be motivated by a 'quid pro quo'.

2.2.4. Membership and volunteering in nonprofit associations

Membership and volunteering in nonprofit associations were measured in the Computer Assisted Personal Interview (CAPI; see appendix A). The interviewer had a list of ten different types of voluntary associations: a union or professional association, political party, church group, societal group, environmental association, cultural association, youth organization, school, sports club, or 'other organization'. The interviewer mentioned these types of associations one by one, and asked the respondents whether they were presently members of these associations. When the respondents indicated they were members, the interviewer asked whether the respondents were also active members (attended meetings, participated in activities organized by the association). Finally, the interviewer asked whether the respondents had performed any unpaid work for this type of organization on a regular basis. With this method, membership is assumed to be a precondition for volunteering, which excludes 'episodic volunteers'. Table 2.6 shows how many respondents were members, active members, and volunteers in the ten types of voluntary associations.

Table 2.6 shows that the more than 35% of the respondents were members of a sports club, which was the most popular type of association. Somewhat more than one quarter of the respondents indicated membership of a union or professional association, and almost one quarter indicated membership of environmental associations. Political parties and youth organizations had the lowest number of members. Sports clubs by far had the highest number of active members (32.1%) and volunteers (11.9%). Cultural groups ranked second: 9.2% of the respondents were active members, and 4.4% were volunteers. Active membership and volunteering were least common in political parties (1.2% and 0.8%, respectively) and youth organizations (1.9% and 1%). If one looks at the participation rates among members only, the picture is somewhat different. Although religious organizations have only a small group of members (6%), almost all of the members are also active members, and more than half of the members also volunteer for the same (type of) organization. The same holds for schools and cultural groups. Almost all members of sports clubs are

also active members, and about one third of the members of sports club also volunteer this type of association.

Table 2.6. Engagement in voluntary associations (FSDP2000, weighted sample, n=1560)

	Membership		Active membership			Volunteering		
	% [a]	n [c]	% [a]	% [b]	n	% [a]	% [b]	n
Union or professional association	26.5	414	5.4	20.5	85	1.9	7.2	30
Political party	3.5	54	1.2	33.3	18	0.8	22.2	12
Church group	6.0	94	5.3	87.2	82	3.3	54.3	51
Societal group	10.6	165	2.9	27.3	45	2.2	20.6	34
Environment	24.7	385	3.3	13.2	51	1.3	5.5	21
Culture	10.2	158	9.2	91.1	144	4.4	43.0	68
Youth	2.7	42	1.9	71.4	30	1.0	35.7	15
School	3.9	61	3.4	86.9	53	2.7	68.9	42
Sport	36.7	573	32.1	87.3	500	11.9	32.3	185
Other	18.8	293	14.7	78.2	229	8.1	43.3	127

[a] - Among all respondents; [b] - Among members only; Row totals exceed 100% because people can hold multiple memberships in different types of associations

Table 2.7 contains information on the number of memberships in voluntary associations. At the time of the interviews, 74.4 % of the respondents was a member of at least one type of voluntary association. Multiple memberships are quite common. More than one fifth holds two memberships, about one in seven respondents hold three memberships, and 9% is a member of four or more types of associations. 55.2 % was an active member for at least one type of association. The majority of active members are involved with one association (30.8% of all respondents, and 56.9% of all active members). 28.5% was volunteering for at least one type of association; 63.7% of all volunteers was active for one type of association.

Table 2.7. Number of voluntary associations engaged in (FSDP2000, weighted sample, n=1560)

	Membership			Active membership			Volunteering		
	% [a]	% [b]	n	% [a]	% [b]	n	% [a]	% [b]	n
0	25.6		399	45.8		714	71.5		1117
1	28.4	38.8	451	30.8	56.9	484	18.1	63.7	283
2	21.7	29.2	339	13.4	24.7	210	6.4	22.5	100
3	14.3	19.3	224	7.7	14.1	120	2.9	10.4	46
4	6.1	8.2	95	1.6	2.9	25	0.4	3.2	14
5	2.0	3.5	41	0.5	1.1	9	0.1	0.2	1
6	0.7	0.9	10	0.1	0.2	2			
7	0.1	0.1	1						
mean		1.37			1.07			0.44	

% a - Among all respondents; % b - Among members only

The proportion of volunteers among the respondents of the Family Survey of the Dutch Population is similar to other research using a similar definition of volunteering (Schuyt, 2001; Knulst & Van Eijck, 2003). In the 'Giving in the Netherlands' (GIN) survey that was held in the same period as the Family Survey of the Dutch Population, for instance, 25% reported volunteering activities at least once a month (Van Daal & Plemper, 2001, p. 96). When volunteering is more loosely defined, including irregular volunteering activities and providing informal help to people outside the household is included, the proportion of volunteers is usually about 10% higher. In the GIN-survey, 37% reported volunteering activities in the past year (Van Daal & Plemper, 2001, p. 95). The number of organizations that volunteers are active for as reported in the GIN-survey is also very similar to the data from the FSDP2000.

The volunteers were asked how they became a volunteer: whether they were asked by someone, or whether they approached the association on their own initiative. Table 2.8 shows that almost two thirds of the volunteers (64.2%) were asked. Almost all volunteers who were asked (95.2%) to become a volunteer were recruited by someone who was already volunteering for the association. In contrast to reports from previous research in the USA (Snow, Zurcher & Ekland-Olson, 1980), it appears that volunteers are not found through strong ties, but are recruited by persons who have

rather weak ties to the new volunteer. On the other hand, the results in table 2.8 reinforce the conclusion of previous research that the start of a career in volunteering depends on social selection.

Table 2.8. How current volunteers were recruited (FSDP2000, subsample of volunteers, n=444)

	%	n
Own initiative	35.8	159
Recruited by partner	2.0	6
Recruited by family member	2.0	6
Recruited by friend/acquaintance	29.7	85
Recruited by colleague	9.5	27
Recruited by somebody else	56.8	161

Table 2.9. Type of volunteer activity (FSDP2000, weighted sample, n=1560)

	% [a]	% [b]	n
Management, organizing	19.9	69.9	310
Supervision of activities	20.3	71.5	317
Helping or caring for people	3.3	11.5	51
Maintenance, technical work	7.2	25.4	113
Fundraising, member acquisition	8.3	29.3	130
Other	1.4	5.0	22

% a - Among all respondents; % b - Among volunteers only. Row totals exceed 100% because respondents can hold multiple memberships in different types of associations

Table 2.9 shows which types of activities the volunteers performed. The majority of volunteers was performing management tasks, and supervised or organized activities (about 70%). Fundraising and technical work were less common. Although volunteering is often associated with helping people, caring tasks were performed by

only 11.5% of the volunteers. The numbers in table 2.9 are very similar to the data from the Giving in the Netherlands survey (Van Daal & Plemper, 2001, p. 97).

Table 2.10 shows that two thirds of the volunteers perform more than one of the activities mentioned in table 2.9. The mean number of tasks performed was 2.13. The volunteers also indicated how many hours they spent volunteering in an average month. The mean number of hours volunteered was 11.0 (among volunteers only). The distribution of the number of hours volunteered is very skewed (see table 2.11).

Table 2.10. Number of types of volunteering activities (FSDP2000, weighted sample, n=1560)

	% [a]	% [b]	n
1	9.2	33.7	143
2	12.1	44.6	189
3	2.8	10.4	44
4	2.5	9.2	39
5	0.6	2.1	9

% a - Among all respondents; % b - Among volunteers only

Table 2.11. Number of hours volunteered (FSDP2000, weighted sample, n=1560)

	% [a]	% [b]	n
0	77.8	22.1	98
1-5	8.3	29.3	130
6-10	5.7	20.0	89
11-20	4.5	15.7	70
20 or more	3.7	12.9	58

% a - Among all respondents; % b - Among volunteers only

2.3. RELATIONS AMONG PROSOCIAL BEHAVIORS

If some people with specific psychological characteristics are indeed more likely to engage in prosocial behavior, different examples of prosocial behavior should be positively related to each other. The same is true for the assumption that social

incentives promote prosocial behavior. Table 2.12 shows the relations of the examples of prosocial behavior that will be studied in this dissertation with each other. The relation of membership of voluntary associations with volunteering is not shown because the questionnaire assumed that all volunteers were also members of voluntary associations. As expected, all forms of anonymous giving were positively related to each other. Charitable giving was most strongly related to the other examples of prosocial behavior. Post mortem organ donation showed the weakest relations with the other examples of prosocial behavior. This result is fortunate because organ donors were overrepresented among the respondents who participated in the FSDP2000. The relatively weak correlation of post mortem organ donation with the other examples of prosocial behavior suggests that the population estimates of giving and volunteering made above may be overestimated, but are less strongly biased than in the worst case scenario.

Table 2.12. Relations among different examples of prosocial behavior

	1	2	3	4	5
1. Charitable giving	-----	**17.7	**10.0	***20.3	***17.1
2. Blood donation	1.99	-----	**8.2	*5.5	*6.1
3. Post mortem organ donation	1.60	1.59	-----	*6.6	~3.0
4. Membership of voluntary associations	1.89	1.61	1.38	-----	-----
5. Volunteering	1.92	1.50	1.22	-----	-----

Entries represent Chi Squares (above diagonal) and odds ratios (relative risk ratios, below diagonal)
*** p<.001; ** p<.01; * p<.05; ~p<.10

Table 2.12 shows that different examples of prosocial behavior can be found among specific clusters of respondents. The question to be answered in the chapters to follow is: what is so characteristic of these people who give money, time and body parts now and in the after life? Do they share specific personality characteristics and prosocial motives with each other? Or do they live in similar circumstances? These are the questions that will be addressed in the chapters to follow.

Chapter 3
Who Gives What and Why?
A quasi-experimental study of the power of social and psychological incentives in social dilemmas*

This chapter investigates the effects of material, social, and psychological incentives on intentions to give and volunteer with a scenario study. Social incentives for giving turn out to be very important for intentions to give money and time. In addition, requests for more effective ways of contributing as well as requests for contributions to local as opposed to (inter)national organizations are more likely to be honored. The results do not give much support for the hypotheses that the influence of personality characteristics on giving and volunteering is larger when the material costs of helping are lower ('low cost-hypothesis'), and social rewards are smaller ('weak situation-hypothesis'). More empathic respondents were more likely to contribute, sometimes even more so when material and social incentives were weaker, and were more sensitive to the psychological rewards of helping.

3.1. INTRODUCTION

Why do people contribute to collective goods that they may never profit from? Donations of money and time to charitable causes constitute a significant part of the economy (AAFRC, 2003; Schuyt, 2003). What principles govern the donation of money and time? Or, in parallel to Lenski (1966): Who gives what, and why? A large body of research has shown that a wide variety of motives can underly prosocial behavior (for a review, see Schroeder, Penner, Dovidio and Piliavin, 1995). Simplifying the complicated picture, it can be argued that many of these factors affect three different types of incentives for prosocial behavior: material, social, and psychological incentives (Wilson, 1973; Klandermans, 1984). Next to these aspects of the choice situation, individual differences in personality and prosocial motivation are also related to prosocial behavior. However, the effects of personality may be relatively weak when

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material and social incentives are strong, as suggested by the low cost-hypothesis (Diekmann and Preisendörfer, 2003; Mensch, 2000) and the weak situation-hypothesis (Mischel, 1977, 1993; Snyder and Ickes, 1985).

This chapter presents a scenario study of the effects of material, social and psychological incentives simultaneously with the effects of personality characteristics and prosocial motivations on contributions of time and money to nonprofit organizations and charitable causes. Using a factorial survey (Rossi and Anderson, 1982), the advantage of an experimental design can be combined with the advantage of survey research with a large sample of respondents in households: having a natural variation in personality and socio-demographic characteristics. With this design, the low cost and the weak situation-hypothesis can be tested. Furthermore, it is investigated how the sensitivity to material, social and psychological incentives in the decision to contribute to a charitable cause is related to the economic value of time and money, measures of social integration, and prosocial motives and personality characteristics.

3.2. THEORY AND HYPOTHESES

The observation that economic models of behavior, relying on the assumption that persons will rationally seek to maximize their utility, have difficulties explaining many forms of prosocial behavior such as voting, membership of unions, volunteering for non-profit organizations, charitable giving and blood donation has become a commonplace (Elster, 1989, 1990; Green and Shapiro, 1994; Heath, 1976; Olson, 1965; Wilson, 1973). How such behaviors should be modelled with a theory based on rational choice is subject to much debate. According to the *Logic of collective action* (Olson, 1965), rational persons will not easily contribute to such collective goods, because the expected benefits of contributing are in most cases lower than the costs. However, Olson (1965) already noted that selective incentives could make it worthwhile for an individual to contribute to a collective good. Selective incentives are individual benefits that have the character of private goods. Unions, for instance, often provide legal assistance to their members. Membership, which is a contribution to the public good of advocating the collective rights of workers, gives the member the individual right to use these legal assistance services. This chapter investigates how two types of selective incentives may make citizens willing to contribute to public goods

that they may never profit from: social incentives, and psychological incentives. Although Olson (1965: 144-148) mentioned the possibility that selective incentives are social or psychological in nature, he excluded contributions to philanthropic organizations and concentrated on examples of collective goods that seemed more strongly affected by material selective incentives. This is strange, because Olson's theory is in essence a very general theory of prosocial behavior of individuals. Even for philanthropic contributions to collective goods that the individual may never profit from, the theory can be used. Decision makers are responsive to the incentives of possible actions, and consider three broad types of incentives in situations in which they may display prosocial behavior: the immediate material costs required, social incentives, and psychological incentives. The likelihood that a person gives his time or money to some collective good, be it the well being of another person, a group of persons, or society as a whole, will increase as a function of the total net benefits. The decision maker weighs the material costs of a contribution against the social rewards and the psychological rewards that will be obtained. In other words, the utility of helping is determined by the net social and psychological benefits relative to the direct material costs. If the social and psychological rewards for helping outweigh the material cost of helping, people will help. This entails that the higher the social rewards for helping (or the higher the social costs for not helping), the more likely that a person will spend some of her resources to help. The same holds for psychological rewards.

Others have expressed parts of this decision process in utility functions, adding components representing altruistic concerns for the utility of others (Becker, 1974; Weesie, 1994), the satisfaction of the act of giving (Andreoni, 1989, 1990) and the social prestige obtained by giving (Harbaugh, 1998; Van de Ven, 2003). These models have not addressed the issue how strong the effects of various sources of utility are, whether they interact, and if so, how. This chapter explores the effects of psychological incentives and intrinsic rewards and their potential interactions in order to facilitate decisions for model builders which types of utility arguments to focus on in future research and how to model them. There is no good reason to invest a lot of time in formal analyses and mathematical models of the effects of psychological incentives and intrinsic rewards on prosocial behavior when these effects are negligible. Although I do not present utility-functions to explain prosocial behavior, I do want to argue that thinking about giving and volunteering as a weighing of the material, social and

psychological pros and cons is a useful perspective. It is not a new perspective; neither is it confined to economics or rational choice sociology. The 'costs-rewards model' is a basic insight in social psychological textbooks on altruism and prosocial behavior (e.g., Schroeder et al., 1995), and others have proposed similar threefold typologies of costs and benefits (e.g., Wilson, 1973; Klandermans, 1984). What this chapter adds to the literature is that I test several hypotheses based on this perspective simultaneously with a scenario experiment incorporated in a household survey. Usually, hypotheses about the effects of material, social and psychological incentives are tested separately or at best two at a time because experiments with college students allow for a limited number of conditions only. Furthermore, using a large sample of respondents, hypotheses on the effects of individual differences in prosocial motives can be tested as well, while experimental research usually regards effects of psychological characteristics either as error variance within conditions, or does not allow for an estimation of these effects due to the low number of observations.

3.2.1. Material incentives: costs of contributing

Considering the decision whether or not to help some (group) of other individual(s), the first thing that an actor will consider is the immediate material costs for him/herself. The more time or money is requested, the less likely that it will be given. In other words: the higher the amount of time or money requested, the higher the social and psychological rewards have to be to make helping an attractive option. The amount of money or time that a person is willing to spend in an act of helping depends on the amount of social and psychological rewards that are gained. Many results of field experiments in social psychology showing that characteristics of the situation in which a request for help is made affect the likelihood that help will be given, can be explained as the effect of increasing material costs of helping (Dovidio, Piliavin, Gaertner, Schroeder and Clark, 1991). Laboratory experiments with social dilemmas also show that contributions to collective goods are less likely as the costs increase (Komorita and Parks, 1994; Rapoport and Chammah, 1965). Therefore, the hypothesis is tested that

H1. The higher the material costs of contributing, the less likely a contribution will be offered.

3.2.2. Social incentives: rewards through repeated interaction

Next to the material costs, an actor will consider selective social incentives that are produced when others observe the act of helping. When it is socially desirable to help others, which is usually the case, not helping entails the risk of negative social sanctions, while helping may bring social rewards or may avoid social sanctions. The magnitude of the effect of social incentives depends most strongly on the relationship with bystanders who are in the position to (dis)approve of the observed behavior. The social distance to the intermediary is a very important aspect of the relation between giver and observer. When a friend acts as an intermediary on behalf of a charitable cause, and asks for a contribution, it is much harder to refuse than when a stranger makes the same request. Socially undesirable behavior is more easily displayed towards strangers than towards friends. With a computer tournament, Axelrod (1984) showed that the likelihood of future interaction determines the value of mutual cooperation in the Prisoner's Dilemma. The positive effect of future interaction on cooperation is observed in many types of social dilemmas (e.g., Cialdini, Brown, Lewis, Luce and Neuberg, 1997; Shapiro, 1975) and reinforces the effect of material incentives. However, there are also important effects of social incentives that do not coincide with material self-interest. Prosocial behavior is more likely when the giver has positive past experiences with the receiver, also when there is no prospect of future interaction (Gautschi, 2000). Prosocial behavior is more likely when the giver can expect social approval from third parties outside the dilemma, who are not able to reciprocate, even when there is no prospect of future interaction with them (Deutsch and Lamberti, 1986; Eichenberger and Oberholzer-Gee, 1998). These results can be understood as the effect of increasing social rewards for helping. Field studies of charitable giving have also supported the insight that the expectation of repeated interaction in the future with an intermediary person making the request increase the likelihood of a contribution, as well as the amount contributed (Long, 1976). In sum, the hypothesis will be tested that

H2. The smaller the social distance to the intermediary, the more likely a contribution will be offered.

3.2.3. Psychological incentives: distance to the beneficiary and the efficacy of contribution

Finally, a person who is asked for help will probably experience psychological rewards when helping increases the welfare of another person or the collective. Experimental studies of mood effects of giving show that giving makes people feel good about themselves (Schroeder, Penner, Dovidio and Piliavin, 1995). In the economic literature on philanthropy, the 'warm glow' from giving is assumed to be an important ingredient in donor motivation (Andreoni, 1989; Ribar and Wilhelm, 2002). This chapter focuses on two dimensions of helping situations that affect the magnitude of the psychological rewards of giving: the efficacy of the contribution for relieving the need of the beneficiary, and the psychological distance to the beneficiary. The key assumptions are that more effective contributions and contributions to causes that are psychologically closer are more rewarding, and generate a 'wamer glow'.

Distance - The psychological value of a contribution to a public good for an individual depends on the psychological distance to the beneficiary. For many forms of prosocial behavior, it is unclear to the actor what the exact consequences are of his contribution to a collective good. Hypotheses on the effects of control and learning in social dilemmas (Buskens and Raub, 2002) predict that people will be more strongly attracted to collective goods in the local community than to the problems of a third world country or to global issues. People are more able to monitor and influence the provision of local collective goods such as schools or leisure clubs than global collective goods such as 'the environment'. In addition, the benefits of contributions to local collective goods can be observed more easily, reducing uncertainty on the quality of the public good. Finally, biological evolution has equipped humans with a general tendency to be more emotionally responsive to the well being of persons who are closer to them (Davis, 1994). Empathy more easily leads to contributions to the needs of a specific person than to contributions targeting group needs (Batson et al., 1995; Batson and Moran, 1999). In sum, it can be assumed that the closer a person feels towards the beneficiary (or beneficiaries), the higher the degree of psychological satisfaction of a contribution to the well being of this (group of) person(s). This gives rise to the hypothesis that

H3. The larger the psychological distance to the beneficiary, the less likely a contribution will be offered.

Efficacy - Next to the psychological distance to the beneficiary, the efficacy of the contribution for relieving the need of the beneficiary affects the psychological reward for giving. When it is uncertain whether the contribution actually relieves the need of the beneficiary, people are less inclined to give (Bekkers, 2003a). When charities are said to be inefficient in spending their resources, e.g. by paying large salaries for CEOs, corruption or other misgivings, public support declines rapidly. It can be expected that the same holds for differences between types of activities as contributions to charitable causes. The less certain that a type of contribution yields a benefit for a group in need, the less likely people will help in this way. For instance, while distributing flyers in which people are asked to become members or donors is not very efficient because it is likely that many people will disregard them, a direct monetary gift is a more efficient contribution. Evidence on the relation between efficacy and likelihood of prosocial behavior is found in experimental studies on cooperation in social dilemmas and in studies on mobilization strategies by social movements for collective action. Experimental social dilemma studies have shown that the more effective people feel their contribution will be, the more likely they will contribute (Komorita and Parks, 1994: 55-68). Persons in small groups (Kerr, 1989) and with more prosocial value orientations (Kerr and Harris, 1996) are more likely to think their contribution is effective. Mobilization studies have shown that persons who think collective action is more effective are more likely to take part in collective action (Klandermans, 1984). In sum, it is expected that

H4. The less effective the act of contributing to increase the well being of the beneficiary, the less likely that a contribution will be offered.

3.2.4. Individual differences in the value of material, social and psychological incentives

Implicitly, it was assumed above that the effects of material, social and psychological incentives are the same for all persons. This is probably an unrealistic assumption. Persons facing stronger constraints in their time and financial budgets will be more responsive to the material costs of helping. And persons with more empathic abilities and a more prosocial value orientation will be more responsive to the psychological rewards of helping.

The value that a person attaches to the material costs of helping will be determined by the availability of leisure time and the hourly wages (for giving time), or household income (for giving money). Because the opportunity costs of helping are higher for persons with higher hourly wages and less leisure time available, they will be more sensitive to the material costs of helping. The same holds for income: a contribution of €10 represents a smaller value for those with higher household incomes than for those with lower household incomes.

The value that a person attaches to the social incentives that may be associated with helping is assumed to be constant. According to the classical theory of Durkheim (1897) on suicide, persons in more cohesive intermediary social groups are more likely to follow social norms because they are more likely to experience social sanctions for not helping (or social approval for helping). Examples of intermediary groups are religious groups, the village, and schools. From the perspective of rational choice theory, the mechanism of social control may explain these regularities. Persons in religious networks, in smaller communities and higher educated persons are more strongly embedded in groups holding positive norms on giving and volunteering than the non-religious, urban residents, and the lower educated. Note that it is not necessary to assume that this embeddedness results in a higher sensitivity to social norms. It is more parsimonious to assume that a stronger embeddedness results in a higher willingness to give, simply because it is more likely that violation of the group norm on helping will be punished more severely in these groups. Survey research on giving and volunteering shows that the greater contributions of church members compared to non-members are mainly rooted in the social incentives for giving in religious networks, and not in (religious) norms (Bekkers, 2000, 2003a; Jackson et al., 1995; Park and Smith, 2000).

The value that a person attaches to the psychological rewards of helping will also vary between persons. This value will depend on individual differences in prosocial motives. These motives may also be expected to have direct effects on the willingness to give money and time for public goods because they indicate a preference for the well being of others. The literature on prosocial behavior in social and personality psychology suggests at least three kinds of psychological characteristics that may be related to helping: social value orientations, empathy, and agreeableness. Agreeableness is one of the 'Big 5' (McCrae and John, 1992). Agreeable persons are described as

friendly, helpful and sympathetic. This trait description leads to the expectation that agreeableness is positively related to volunteering and donation of money (Ben-Ner, Putterman, Kong and Magan, 2004; Graziano and Eisenberg, 1994; Elshaug and Metzer, 2001; Kraaykamp and Vullings, 2002). However, agreeableness as a personality trait may not be the panacea in the explanation of prosocial behavior, because it does not specify a process through which people come to value the utility of others. More specific individual characteristics that make people pay attention to the well being of others are social value orientations and empathy.

Social psychological experiments on the effects of social value orientations on cooperation show that people differ widely in the goals they strive for in situations of interdependence (Van Lange, 2000). Some persons are motivated primarily by their own outcomes, while others are more concerned for joint outcomes. Previous research has indicated that social value orientations are not very stable (Bekkers, 2004b; Van Lange, 1999), but that they are related to cooperation in abstract social dilemma games (e.g., Kuhlman and Marshello, 1975; McClintock and Liebrand, 1988), motives for charitable donations (Bekkers, 2004b), and several forms of prosocial behavior in the 'real life': negotiation behavior (De Dreu and Van Lange, 1995), helping behavior (McClintock and Allison, 1989), volunteering (Bekkers, 2004b) and charitable giving (Van Lange, 1997; Van Lange, Van Vugt, Bekkers and Schuyt, 2003).

Empathy (Davis, 1994) is an alternative explanation for how people come to be concerned for the welfare of others. Empathy is often divided in two dimensions: an affective and a cognitive dimension. The cognitive dimension is also called 'role taking' or 'perspective taking' and refers to the ability to see the world from another person's viewpoint. The affective dimension is also called 'empathic concern' and refers to the emotional responsiveness to the situation of others. There is substantial evidence that there are stable individual differences at the trait-level on these two dimensions of empathy (Davis, 1994), and that these differences are correlated with prosocial behavior (Batson, 1998; Eisenberg et al., 1989), also in experimental social dilemmas (Batson et al., 1995; Batson and Moran, 1999). Recent research has shown that empathic concern is the most distinctive personality characteristic of charitable donors (Bekkers, 2004a) and volunteers (Bekkers, 2004b). In sum, it is expected that

H5. The higher the level of empathic concern, perspective taking, agreeableness and prosocial value orientation of a person, the more likely that this person offers a contribution.

3.2.5. Interactions among psychological, social and material incentives: low cost and weak situation

Low cost-hypothesis - Many social scientists, especially those holding strong assumptions on self-interest, such as game theorists, economists and rational choice sociologists, doubt the causal force of 'soft' psychological incentives. They prefer to believe that 'hard' incentives such as time and budget restrictions, and legal or social sanctions have a much more powerful effect on human behaviour. This general belief leads to the hypothesis that the effects of material and social incentives on contributions to collective goods are stronger than the effects of psychological incentives. Of course, such a general statement cannot be tested easily. However, it does lead to the expectation that socio-demographic characteristics are more strongly correlated to the willingness to give money and time than personality characteristics and social values. A more specific hypothesis that is based on the general belief in 'hard incentives' holds that values, attitudes, cognitions and so on, may play a role when stakes are small, but will ultimately lose their causal power when stakes are high. In sociology, this idea is often called the 'low cost-hypothesis' (Diekmann, 1996; Diekmann and Preisendörfer, 2003; Mensch, 2000). Although the low cost-hypothesis is very general, its empirical support is mainly limited to the specific domain of environmental behavior. Pro-environmental attitudes may lead to pro-environmental behavior when it is relatively cheap, but not when it involves substantial costs (Diekmann, 1996; Diekmann and Preisendörfer, 1998, 2003). Psychologists also believe that psychological rewards for helping will have an influence on prosocial behaviour when it is relatively costless, but not when it is relatively costly (Neuberg, Cialdini, Brown, Luce and Sagarin, 1997). This insight echoes the claim by Lenski (1966: 30) that 'altruistic action is concentrated on the level of lesser events and decisions'. Psychological rewards can be derived from the situation (such as the distance to the beneficiary and the efficacy of the act of helping) as well as from the person (prosocial motives such as social value orientations and empathy). This chapter tests the generality of the low cost-hypothesis by investigating the effect of

psychological incentives, prosocial motives and personality characteristics on intentions to contribute to collective goods under high and low cost conditions.

Weak situation-hypothesis - The low cost-hypothesis in rational choice sociology bears some resemblance to the 'power of the situation-hypothesis' in social and personality psychology (Mischel, 1977; Snyder and Ickes, 1985). This hypothesis states that personality characteristics have larger effects in 'weak situations' than in strong situations. In strong situations, individual behavior is constrained by social norms, while in weak situations, actors' decisions are free. Consider the difference between a picnic and a funeral (Mischel, 1977). At a picnic, it is perfectly natural to talk loud, make jokes and do other things that can be seen as expressions of personality traits. At a funeral, however, everyone is expected to behave in the same way, quietly mourning over the deceased. At the picnic, human behavior is pretty unrestricted by social norms, and individual differences in personality become apparent. The power of the situation hypothesis predicts that when a friend acts as an intermediary for a collective goal and asks for a contribution, psychological rewards gained by a more efficient contribution or by an empathic warm glow will be relatively unimportant because most people would comply with a request from a friend anyway. But when a stranger asks for a contribution, only persons with high levels of empathy will comply.

The low cost-hypothesis and the power of the situation hypothesis are two forms of the same idea: the larger the situational constraints, either in the form of material or social incentives, the smaller the influence of personality traits. The power of the situation hypothesis and the low cost-hypothesis are two different answers to the question 'Under which conditions do prosocial dispositions predict prosocial behaviour?' (Carlo et al., 1991).

3.2.6. Summary of hypotheses

The goal of this chapter is threefold. First, hypotheses on the effects of material, social, and psychological incentives for prosocial behavior will be tested. It is expected that:

H1. The higher the material costs of contributing, the less likely a contribution will be offered.

H2. The smaller the social distance to the intermediary, the more likely a contribution will be offered.

H3. The larger the psychological distance to the beneficiary, the less likely a contribution will be offered.

H4. The less effective the act of contributing to increase the well being of the beneficiary, the less likely that a contribution will be offered.

The second goal is to give an answer to the question which personality characteristics are important predictors of behavior by testing the following hypothesis:

H5. The higher the level of empathic concern, perspective taking, agreeableness and prosocial value orientation of a person, the more likely that this person offers a contribution.

The third goal is to give an answer to the question which psychological rewards and personality characteristics are important predictors of behavior by testing hypotheses on interactions between psychological rewards on the one hand and material costs and social rewards on the other hand. The effect of material costs may override the weak force of prosocial dispositions, as predicted by the 'low cost'-hypothesis:

H6. Psychological rewards and personality characteristics will be less predictive of helping when material costs for helping are higher.

In a similar vein, the 'weak situation'-hypothesis argues:

H7. Psychological rewards and personality characteristics will be less predictive of helping when social rewards for helping are higher.

The fourth goal is to investigate whether the responsiveness to material, social, and psychological incentives differs systematically between persons as a function of socio-demographic and personality characteristics. More specifically, it is expected that

H8. Increasing material costs of a contribution will be more strongly decreasing the willingness to give and volunteer for persons with a high value of time or money.

H9. Increasing psychological rewards of a contribution will be more strongly increasing the willingness to give and volunteer for persons with more prosocial value orientations, and higher levels of empathy and agreeableness.

The effects of social incentives are expected to be constant.

3.3. DATA AND METHODS

3.3.1. Data

The third edition of the Family Survey of the Dutch Population, 2000 (FSDP2000; De Graaf, De Graaf, Kraaykamp and Ultee, 2000) is used to test the hypotheses formulated above. Chapter two and Appendix A provide details on the sampling procedure, questionnaire design and measures of psychological characteristics and prosocial motives.

3.3.2. Construction of scenarios

In the real world, material, social and psychological incentives for prosocial behavior in social dilemmas are often correlated. Laboratory experiments would be best suited to disentangle the effects of these dimensions, but they impose limitations on the number of independent variables that can be manipulated at once. The factorial survey approach (Rossi and Anderson 1982) offers the possibility to manipulate all four aspects of the helping situation in one design. Factorial surveys are often used to measure norms by asking respondents about the social appropriateness of specific responses in the scenarios (Horne, 2003). In the present study, however, the respondents are asked what they would do in the scenarios to obtain a measure of the intention to contribute. Below I will present evidence that these intentions are positively related to actual contributions to collective goods. The scenarios (or 'vignettes', as they are called in Buskens and Raub 2002) used in this study were constructed to cover a wide range of situations in which an individual is asked to perform a specific type of activity for a specific 'common good'. These are all social dilemma situations because the individual is asked to give time or money to an organization, for which no compensation is given. The questionnaire contained eight short scenarios describing possible helping situations. Respondents were asked to imagine that they were in the situation described in the scenario. An example of a scenario is: "Your neighbour asks you for one evening of door to door fundraising for the local soccer club. Would you do this?" Table 3.1 shows how material costs, social rewards and psychological rewards were manipulated in the scenarios.

Table 3.1. Values of dimensions in scenarios

Material incentives
Material costs for donations: money
1. f. 2,50 (=€1.13)[1]
2. f. 5,- (=€2.27)
3. f. 10,- (=€4.54)
4. f. 25,- (=€11.34)
Material costs for activities: time
1. one hour
2. one evening
3. several evenings
Social incentives
Repeated interaction with intermediary
1. Letter
2. Stranger
3. Distant neighbour
4. Neighbour
5. Family
6. Friend
7. Sibling
8. Partner
Psychological incentives
Efficacy of activity
1. Distributing flyers/clothes bags
2. Door to door fundraising
3. Building/collecting clothes
4. Giving Money
Distance to beneficiary
1. Third world people
2. Political prisoners
3. Red Cross
4. Local soccer club

Material costs were manipulated in terms of amounts of time requested in case an activity was asked, and in terms of money in case a donation was asked. Social rewards were manipulated by describing the identity of the intermediary person asking for a contribution: the value of future interaction with a person will increase as the social distance to this person decreases. Requests by intermediaries who are closer to the respondent are more difficult to deny. Psychological rewards were manipulated by describing more or less efficient activities to contribute and more or less psychologically distant beneficiaries. With regard to efficacy, it was assumed that some activities are more efficiently contributing to the well-being of the beneficiaries than others, and that more efficient activities are psychologically more rewarding. For instance, while distributing flyers is not very efficient because it is likely that many people will disregard them, a direct monetary gift is a more efficient contribution. People will feel themselves better when they have performed an activity that benefits a group of persons with a higher degree of certainty, than when they are not so sure whether their contribution was useful. With regard to psychological distance, it was assumed that people feel better about contributing to more local and less distant goals.

Space constraints in the survey allowed for a maximum of eight scenarios per respondent. For methodological reasons that are irrelevant in the present discussion, one specific scenario was placed first in all sets of scenarios ('Your neighbour asks you for one evening of door to door fundraising for the local soccer club').[2] After the fixed scenario, the random part started, consisting of seven scenarios. First, three or four scenarios followed in which an amount of time was requested. In the last three or four scenarios, a monetary contribution was requested. The respondents were asked whether they would say yes or no to a request for a specific effort (e.g., giving f. 5,- or spending one evening).

Because one scenario was the same for all respondents, and the organization of the data collection allowed for, 20 different sets of scenarios, a sample of 140 (7x20) scenarios was drawn randomly from the 338 possible scenarios identified as realistic situations in a pre-test.[3] The procedure resulted in 55 scenarios with a request for a monetary donation, and 85 scenarios with a helping request.

Because the scenarios were not selected from a population of real helping situations, the relative effects of the three types of incentives represent the effects of these dimensions in the artificial population of possible helping situations, determined

by the values chosen on these dimensions. It should be kept in mind that the magnitude of these effects is determined partly by the operationalization and scaling of the dimensions in the scenarios. One has to be careful putting too much weight on these differences as their values are somewhat arbitrary – with a range of, say, fl 1,-- to fl 50,- for material costs, the effect of material costs would probably have been larger. However, these values would be rather absurd in combination with the values on other dimensions. One hardly ever gets a request for a very small contribution by mail or a request for a very large contribution by a completely unknown person. To the extent that the combinations of values in the scenarios are realistic, the estimated effects of the three types of incentives are also realistic.

3.3.3. Socio-demographic and personality characteristics

The respondents in the FSDP2000 completed a computer assisted personal interview as well as a write-in questionnaire. In the personal interview, data were obtained on the highest completed educational level (7 categories, ranging from primary school to post-academic degree), yearly household income (sum of all sources of income of both partners in 1000 €), working hours per week, the frequency of church attendance (number of visits per year), and level of urbanization (from 0: rural to 4: very urban). These characteristics were included because they are indicators of human and social capital, which facilitate prosocial behavior (Wilson & Musick, 1997). Measures of empathic concern and perspective taking as subdimensions of empathy and the 'Big Five' personality characteristics are discussed in appendix A.

3.3.4. Analytical strategy

The data in the present study differ from ordinary survey data because there are multiple observations per respondent. The respondents indicated in 8 different scenarios whether they would or would not be willing to offer help. These observations are not independent of each other: the residual variance in scenario responses is clustered within respondents. In order to avoid biased standard errors for the effects of individual characteristics, a multiple observation time series regression model is used, applying the Huber/White sandwich estimator of variance (Huber, 1967).[5] A comparison of model 3 and 4 shows the reduction of the individual level variance in scenario responses explained by psychological characteristics (such as individual

differences in personality) versus social conditions such as the level of education and the frequency of church attendance.[6]

The results are analyzed separately for scenarios in which time or money is requested, because the scenario characteristic of efficacy is constant across all requests for monetary donations. To facilitate the interpretation of the logit coefficients, all socio-demographic and personality characteristics were standardized into z-scores (except the dummy variable for gender, of course). This enables a comparison of the effects of socio-demographic and personality characteristics. To avoid an overestimation of the effects of scenario characteristics due to peculiar selections of extreme scenario characteristics within specific sets of scenarios, two variables were created for all four scenario characteristics: the mean of the scenario characteristic in the set of scenarios that the respondent received, and the difference from the mean in the set. With this procedure, the disturbing effects of extreme values of scenario characteristics in specific sets are controlled. After all, what we are really interested in are the effects of the differences from the mean values of scenario characteristics in a given set of scenarios, not in the effect of sampling errors in the selection of scenarios.[7] The results were obtained with the xtlogit-command in Stata6, correcting for within-respondent clustering.[8]

The analyses were conducted in several steps, introducing blocks of variables in each step. First, an 'empty model' with an intercept only was run to obtain a baseline estimate of the residual individual level variance (ρ). In model 1, the main effects of scenario characteristics were entered, allowing for a test of hypotheses 1 to 4. In model 2, sociological characteristics indicating the availability of material and social resources were entered. In model 3, individual differences in personality characteristics and prosocial motives are added, testing hypothesis 5. A comparison of the results of model 3 and 2 gives insight in the relative strength of the effects of personality and socio-demographic characteristics. Because one could argue that introducing socio-demographic characteristics before personality characteristics favors the chances for personality characteristics, the same test was also conducted reversing the order of introduction of the two blocks of variables. In model 4, interactions between material costs and these individual differences in personality were added to test the low cost-hypothesis (H6). In model 5, interactions between repeated interaction and individual differences in personality were added to test the weak situation-hypothesis (H7). In

separate analyses, the hypotheses on the sensitivity to material, social and psychological incentives were tested. Model 3 served as a baseline for these analyses. By adding interactions between indicators of material resources from the survey and material costs from the scenarios hypothesis 8 was tested. Hypothesis 9 was tested by adding interactions between personality characteristics and the two psychological incentives manipulated in the scenarios.

3.4. RESULTS

3.4.1. Giving time: intentions to volunteer

In table 3.2, the results are presented of a random effects logistic multi-level analysis of the likelihood of making a contribution of time. The effects of the manipulated scenario characteristics (see model 1) are in the expected direction for all four dimensions.[9] As expected, help is more likely to be offered when it takes less time to help and when a person from a smaller social distance makes the request. The effects of efficacy and distance are in line with the hypothesis that psychological incentives for contributions to collective goods increase the likelihood of such contributions. The more efficient the type of activity requested, the more likely that a person offers to help. The effect of psychological distance also seems to be in line with expectations: as the beneficiary is a more distant organization, the tendency to offer help decreases. However, this effect is probably not linear (see table 1 in appendix C). Contributions to soccer clubs and political prisoners were less likely to be offered than contributions to the Red Cross and the poor in developing countries.[10] In sum, the results support hypotheses 1, 2 and 4, but support hypothesis 3 only partially.

Next to scenario characteristics, a number of individual characteristics increase the likelihood of offering assistance. Model 2 shows that women, younger people, the higher educated, and those living in less urban environments are more likely to offer help. Except for the age effect, these relations are consistent with research on actual volunteering. The non-significant effect of church attendance seems surprising given that the literature on volunteering using ordinary survey data consistently shows a positive relation between church attendance and volunteering (Bekkers, 2000, 2003a; Lam, 2002). However, the present analysis shows that frequent church attendees are not more likely to offer help if they are asked than persons who never attend church.

This result is in line with previous research showing that church attendees are more likely to volunteer because they are more likely to be asked (Bekkers, 2000, 2003a).

Model 3 shows that only two personality characteristics are related to volunteering intentions: agreeableness and empathic concern. The effects of these two personality characteristics are equally strong.[11] None of the other personality characteristics predict helping. The positive effects of agreeableness and empathic concern are consistent with research on actual volunteering, but the absence of an effect of extraversion is not. As in the case of church attendance, it could be that the relation of extraversion with actual volunteering originates in the selection process of volunteers. It is not unlikely that extraverted behavior signals volunteering abilities to recruiters who are prospecting for participants.

An interesting finding is that the gender difference found in the first model disappears almost completely when personality characteristics are introduced. This indicates that the greater willingness of women to help others is due to their higher levels of agreeableness and empathic concern. Chi-square tests for the blocks of variables added in model 2 (χ^2 =73.1, df=6, p<.000) and 3 (χ^2=54.94, df=8, p<.000) indicated that the socio-demographic variables are stronger predictors of helping intentions than the personality characteristics. However, if the same test is conducted within model 3, comparing the improvement of the model fit due to socio-demographic characteristics and personality characteristics, the Chi-square for socio-demographic characteristics declines (χ^2=44.09, df=6, p<.000) because gender and age differences are mediated by personality characteristics. Comparing the decline in the residual individual level variance in model 2 and 3 also gives an indication of the relative effect of personality and socio-demographic characteristics.[12] Although the residual individual level variance remains high, even in model 3, it appears that the residual variance on the individual level declines more strongly when personality characteristics are introduced (from .598 to .572, a decline of 4.3%) than when socio-demographic characteristics are introduced (a decline from .620 to .598, a decline of 3.5%). In sum, intentions to volunteer are not much more strongly related to socio-demographic characteristics than to personality characteristics.

Table 3.2. Results of logistic random-effects model of intentions to give time (n_{ij}=6411, n_j=1262)

	0. Empty model		1. Scenario characteristics		2. Socio-demographic characteristics		3. Personality characteristics		4. Low cost-hypothesis		5. Weak situation-hypothesis	
Scenario characteristics	Coeff.	SE	Coeff.	SE	Coeff.	SE	Coeff.	SE	Coeff.	SE	Coeff.	SE
Material costs (m)			*-.298	.149	-.279	.146	-.270	.143	-.227	.143	-.181	.146
Material costs (d)			***-.222	.041	***-.223	.041	***-.219	.041	***-.228	.041	***-.225	.042
Social rewards: repeated interaction (m)			***.378	.086	***.365	.084	***.377	.082	***.393	.083	***.418	.084
Social rewards: repeated interaction (d)			***.475	.020	***.476	.020	***.475	.020	***.466	.020	***.491	.022
Psychological rewards: distance (m)			-.010	.180	-.015	.176	-.010	.172	-.142	.176	-.137	.178
Psychological rewards: distance (d)			***-.117	.035	***-.118	.035	***-.121	.035	***-.124	.035	***-.103	.036
Psychological rewards: efficacy (m)			-.058	.303	-.120	.296	-.185	.250	-.318	.292	-.222	.299
Psychological rewards: efficacy (d)			***.137	.051	***.136	.051	*.132	.051	*.129	.052	*.136	.053
Respondent characteristics												
Female					***.370	.094	.158	.099	.157	.100	.150	.101
Age					***-.267	.049	***-.226	.050	***-.228	.050	***-.230	.050
Education					***.164	.049	***.136	.048	***.137	.049	***.137	.049
Hourly wages					-.107	.059	-.098	.057	-.097	.057	.099	.057
Church attendance					.010	.047	.002	.047	-.000	.047	-.001	.047
Urbanization					*-.114	.047	*-.113	.046	*-.113	.046	*-.116	.047
Agreeableness							***.191	.054	***.192	.054	***.199	.055
Extraversion							.066	.050	.065	.050	.065	.052
Openness							-.017	.050	-.019	.050	-.018	.051
Conscientiousness							-.074	.049	-.071	.049	-.072	.050

Neuroticism							.021	.050	.020	.050	.021	.051
Perspective taking							.061	.050	.061	.050	.061	.051
Empathy							***.192	.051	***.196	.052	***.201	.052
Social Value Orientation							.067	.046	.068	.046	.060	.047
Low cost-hypothesis												
Costs*distance									***-.211	.048	***-.168	.049
Costs*efficacy									-.076	.070	.025	.071
Costs*Agreeableness									-.040	.042	-.037	.042
Costs*Empathy									*.087	.042	.068	.042
Costs*Perspective Taking									-.034	.041	-.040	.029
Costs*social value orientation									.041	.038	.064	.039
Weak situation-hypothesis												
Repeated interaction*costs											-.040	.029
Repeated interaction*distance											***-.099	.023
Repeated interaction*efficacy											-.037	.033
Repeated interaction*Agreeableness											-.005	.021
Repeated interaction*Empathy											***.077	.021
Repeated interaction*perspective taking											-.000	.021
Repeated interaction*social orientation											***-.087	.020
Constant	.127	.038	.452	1.302	.225	1.273	.409	1.249	.738	1.256	.145	1.277
Sigma U	1.094	.046	1.277	.058	1.220	.057	1.155	.056	1.161	.056	1.181	.057
Residual individual level variance (ρ)	.545	.021	.620	.021	.598	.022	.572	.024	.574	.024	.582	.023
Log Likelihood		-5143		-3886		-3849		-3786		-3772		-3747
Wald-statistic		0		600		638		662		677		688

*** p<.001; ** p<.01; * p<.05

Table 3.3. Results of logistic random-effects model of intentions to give money (n_{ij}=3474, n_j=1292)

	0. Empty model		1. Scenario characteristics		2. Socio-demographic characteristics		3. Personality characteristics		4. Low cost-hypothesis		5. Weak situation-hypothesis	
Scenario characteristics	Coeff.	SE	Coeff.	SE	Coeff.	SE	Coeff.	SE	Coeff.	SE	Coeff.	SE
Material costs (m)			-.072	.129	-.073	.125	-.071	.125	.064	.128	.083	.134
Material costs (d)			***-.480	.040	***-.476	.040	***-.483	.040	***-.436	.042	***-.429	.043
Social rewards: repeated interaction (m)			***.588	.080	***.581	.078	***.591	.078	***.553	.078	***.542	.086
Social rewards: repeated interaction (d)			***.322	.028	***.321	.028	***.327	.028	***.342	.029	***.347	.030
Psychological rewards: distance (m)			***-.609	.121	***-.617	.117	***-.638	.116	***-.682	.118	***-.644	.120
Psychological rewards: distance (d)			***-.367	.061	***-.369	.061	***-.360	.062	***-.364	.063	***-.361	.064
Respondent characteristics												
Socio-demographic characteristics:												
Female					***.424	.141	*.316	.151	*.327	.152	*.328	.154
Age					***-.243	.072	**-.213	.075	**-.228	.075	***-.227	.076
Education					***.412	.076	***.367	.076	***.378	.077	***.380	.077
Yearly household income					***.233	.081	***.237	.090	**.230	.090	***.236	.082
Church attendance					*.178	.071	*.157	.072	*.157	.072	*.163	.073
Urbanization					-.060	.070	-.076	.070	-.079	.071	-.079	.071
Personality characteristics												
Agreeableness							-.095	.081	-.105	.082	-.090	.083
Extraversion							-.087	.078	-.107	.078	-.099	.079
Openness							.026	.075	.031	.076	.030	.076
Conscientiousness							-.092	.075	-.095	.075	-.095	.076

Neuroticism							-.109	.076	-.107	.076	-.109	.077
Perspective taking							-.005	.075	-.010	.076	-.022	.077
Empathy							***.323	.078	***.331	.078	***.336	.079
Social Value Orientation							.058	.070	.051	.071	.048	.072
Low cost-hypothesis												
Costs*distance									***-.300	.050	***-.318	.051
Costs*Agreeableness									.018	.038	.022	.039
Costs*Empathy									-.027	.039	-.021	.039
Costs*Perspective Taking									.012	.039	.009	.039
Costs*social value orientation									.021	.036	.017	.036
Weak situation-hypothesis												
Repeated interaction*costs											**.063	.023
Repeated interaction*distance											.061	.045
Repeated interaction*Agreeableness											.043	.027
Repeated interaction*Empathy											.024	.029
Repeated interaction*perspective taking											-.004	.028
Repeated interaction*social orientation											-.014	.026
Constant	1.222	.059	-2.692	.490	-2.879	.486	-2.940	.486	-3.137	.495	-2.989	.511
Sigma U	1.264	.084	1.751	.119	1.628	.117	1.600	.118	1.595	.118	1.620	.120
Residual individual level variance (ρ)	.615	.031	.754	.025	.726	.028	.717	.030	.718	.030	.724	.029
Log Likelihood		-2433		-1746		-1710		-1674		-1655		-1646
Wald-statistic		0		347		366		370		377		378

*** p<.001; ** p<.01; * p<.05

3.4.2. Giving money: intentions to donate

In the analysis of intentions to contribute money (see table 3.3), the effects of the scenario characteristics were all in the expected direction: the lower the material costs, the higher the social rewards, and the less distant the beneficiary, the more likely people will give money. These results support hypotheses 1 to 3.[13]

Model 2 shows that females, younger persons, the higher educated, those with higher household incomes, and frequent church attendees are more likely to respond positively to a request for money. In contrast to the analysis of giving time, the degree of urbanization is not related to giving money. These results are in line with survey research on philanthropy in the Netherlands (Bekkers, 2003a), except for the negative age effect and the absence of an urbanization effect. Once again, these differences may be interpreted as the result of differences in fundraising exposure. Model 3 shows that neither agreeableness, nor social value orientation has a significant main effect on donation of money. Empathic concern, however, shows a positive relation. Next to the potential effect of empathy on the sensitivity to psychological rewards associated with helping which will be examined later, it also increases the likelihood to help at all. A comparison of the fit statistics shows that the improvement of the fit in model 2 (χ^2=72.3, df=6, p<.000) is much larger than in model 3 (χ^2=23.7, df=8, p<.003). Even when the contribution of socio-demographic characteristics in model 3 is compared controlling for personality characteristics, the improvement is larger (χ^2=56.3, df=6, p<.000). These results are consistent with a similar analysis of actual contributions to charitable causes reported in chapter four, showing that charitable giving is more strongly related to the availability of resources than to personality characteristics and social values. However, this conclusion in itself does not support the low cost-hypothesis. Charitable giving is often regarded as 'easier' than volunteering (Maloney, 1999). Intentions to volunteer, however, were not much more strongly related to the availability of resources than to personality characteristics and social values (see above).

3.4.3. Interactions: when do psychological rewards have an effect?

In models 4 and 5 of tables 3.2 and 3.3, a number of interactions among scenario characteristics and interactions of scenario characteristics with personality characteristics are added to test the low cost-hypothesis and the weak situation-hypothesis.

In the analysis of giving time in table 3.2, the effect of distance turned out to decline at higher levels of material costs, in line with the low cost-hypothesis. The same interaction was found in the analysis of giving money in table 3.3. Requests for donations by more distant organizations are less likely to be honored when the amount of time or money requested is higher. Efficacy did not interact with costs. In contrast to the low cost-hypothesis, empathic concern interacts positively with costs in the analysis of intentions to volunteer, indicating that more empathic individuals express a greater willingness to volunteer when a greater investment of time is being requested. None of the other effects of personality characteristics declined at higher costs.

The weak situation-hypothesis also received limited support in the analyses. In line with the weak situation-hypothesis, requests for contributions of time on behalf of more distant organizations were more likely to be honored when they were made by persons from a smaller social distance. The negative interaction of social value orientation with social distance in table 3.2 is also in the expected direction. Prosocial values are less strongly predictive of helping behavior when persons at a smaller social distance make a request. In contrast to the weak situation-hypothesis, the positive effect of empathic concern, increased with the value of future interaction. More empathic respondents were even more likely to honor requests by persons at a smaller social distance than requests by strangers. In the analysis of giving money, there are no significant interaction effects observed supporting the weak situation-hypothesis, although there is one interesting result: the positive interaction of repeated interaction and material costs. Requests by people who are close to us are even more likely to be honored when the costs are high rather than low. In sum, both the low cost-hypothesis as well as the weak situation-hypothesis received only partial support. In both cases, empathic concern is involved in the exceptions.

Table 3.4. Results of logistic random-effects model of intentions to give time and money with interactions

	1. Giving time		2. Giving money	
	Coeff.	SE	Coeff.	SE
Scenario characteristics				
Material costs (m)	-.269	.144	-.066	.127
Material costs (d)	***-.228	.041	***-.481	.041
Social rewards: repeated interaction (m)	***.379	.083	***.597	.079
Social rewards: repeated interaction (d)	***.480	.020	***.331	.029
Psychological rewards: distance (m)	-.001	.174	***-.645	.118
Psychological rewards: distance (d)	***-.117	.036	***-.368	.063
Psychological rewards: efficacy (m)	-.187	.292		
Psychological rewards: efficacy (d)	*.128	.052		
Respondent characteristics				
Socio-demographic characteristics				
Female	.159	.100	*.334	.153
Age	***-.229	.050	***-.211	.076
Education	***.136	.049	***.380	.078
Hourly wages	-.109	.058		
Yearly household income			**.235	.082
Church attendance	.000	.047	*.142	.072
Urbanization	*-.116	.046	-.068	.072
Personality characteristics				
Agreeableness	***.189	.055	-.100	.082
Extraversion	.069	.050	-.097	.079
Openness	-.017	.051	.025	.076
Conscientiousness	-.074	.050	-.105	.076
Neuroticism	.022	.051	-.114	.077
Perspective taking	.061	.051	-.019	.076
Empathy	***.195	.052	***.327	.079
Social Value Orientation	.067	.046	.050	.071

(continued on next page)

Table 3.4 (continued)

	1. Giving time		2. Giving money	
	Coeff.	SE	Coeff.	SE
Sensitivity to material costs				
Costs*wages	*-.118	.050		
Costs*income			.019	.044
Costs*education	.058	.040	-.042	.040
Costs*working hours	-.039	.041	.060	.039
Sensitivity to social rewards				
Repeated interaction*church attendance	-.033	.019	.066	.036
Repeated interaction*urbanization	-.009	.019	-.032	.037
Sensitivity to psychological rewards				
Distance*Agreeableness	*-.074	.036	.116	.064
Distance*Empathy	*.082	.037	-.039	.063
Distance*Perspective taking	.013	.035	.087	.064
Distance*Social value orientation	.039	.033	.018	.060
Efficacy*Agreeableness	-.012	.056		
Efficacy*Empathy	-.061	.057		
Efficacy*Perspective taking	.104	.055		
Efficacy*Social value orientation	-.047	.050		
Constant	.368	1.262	-2.996	.492
Sigma U	1.169	.056	1.617	.119
Residual individual level variance (ρ)	.577	.024	.723	.030
Log Likelihood		-3764		-1663
Wald-statistic		673		367
n_{ij}		*6411*		*3434*
n_j		*1262*		*1277*

*** p<.001; ** p<.01; * p<.05

Finally, hypotheses 8 and 9, on the sensitivity to material, social, and psychological rewards, are tested in table 3.4. As expected in hypothesis 8, the sensitivity to material costs for giving time depends upon the actual costs of one time unit, as indicated by the negative interaction effect of costs with hourly wages. Contributions of higher amounts of time are less likely to be offered by those with higher wages. Surprisingly, the sensitivity to material costs for giving money is not dependent upon the available income, at least not in a linear form.[14] These results only partially support hypothesis 8. As expected, the sensitivity to social incentives for giving time does not depend on the frequency of church attendance and urbanization. Church attendance and rural residence increase the willingness to give money and time directly, and not through the sensitivity to social incentives. This result fits nicely with previous research on the effect of church involvement on giving and volunteering (Bekkers, 2000, 2003a). The sensitivity to psychological incentives for volunteering depends on personality characteristics, but not in the manner expected in hypothesis 9. In line with the prediction, a higher level of agreeableness was associated with a greater willingness to give time, the smaller the distance to the beneficiary. Empathic concern, however, led to a greater willingness to give time, the larger the distance to the beneficiary. These results do not give very much support for hypothesis 9. It seems that the effects of prosocial motives on intentions to give and volunteer are mostly direct, and not through the sensitivity to psychological rewards.

3.5. Discussion and conclusion

3.5.1. Discussion

The validity of the results can be challenged on several grounds. First, it is unknown to what extent the different scenarios effectively manipulated the value of future interaction, the psychological distance to the beneficiary and the efficacy of a contribution because it was impossible to include manipulation checks in the factorial survey. Although a pretest of the experiment supported the internal validity, it is possible to explain the differences between types of activities and types

of organizations on other grounds. For instance, the effect of social distance may also represent material self-interest when the respondents expect to be repaid by the intermediary person in exchange for their donation. In addition, it can be argued that distance and efficacy are not exclusively psychological dimensions, but also activated concerns for social approval or internalized social norms. Less effective contributions to collective goods are often viewed as less appropriate (Horne, 2003), and the same can be argued for contributions to more distant goals.

Second, it is unknown to what extent the combinations of values on the dimensions manipulated in the scenarios correspond to the distribution these combinations in actual requests for contributions. This makes it impossible to make claims on the relative effects of material, social and psychological incentives in the 'real world'. The effects reported in the analyses can only be generalized to the artificial population of scenarios. Future research could improve upon the present study by measuring the prevalence of mobilization strategies by nonprofit organizations, and having respondents complete scenarios with probabilities matching the actual distribution.

Third, it can be questioned whether the results reported here can be generalized to actual prosocial behavior. From a skeptical point of view, the analyses merely show how people think about hypothetical contributions, not how they make choices in real life. This objection is legitimate to some extent. Probably, the proportion of respondents saying they are willing to give time or money (see table 1 in appendix C) is too high in an absolute sense. It is hard to believe that half of all people would actually help out collecting money for a charitable cause for several evenings, or that 45% would donate money in response to a letter. Response rates to direct-mail fundraising campaigns are usually much lower. Intentions are usually more positive than actual behavior. An obvious possibility is that the scenarios elicited socially desirable responses. However, the problem of a tendency to give socially desirable responses in surveys is serious only when some types of respondents are more likely to give socially desirable responses than others, which is often argued in social psychology (Crowne and Marlowe, 1964). In the present study, responses to the scenarios were not related to scales measuring individual differences in 'social desirability', and including these scales did not

affect the correlations with the independent variables.[15] In addition, there are two types of evidence supporting the external validity of the results. First, an analysis comparing responses in the scenario experiment with answers to questions about actual volunteering and charitable giving in the past year showed that actual volunteers offered help in the scenarios more often (on average, 1.96 times) and offered to help for longer periods of time (on average, (11.55 hours) than non-volunteers (1.81 times and 10.08 hours, F-values (df=1) of 4.68 and 7.72, $p<.05$ and $p<01$, respectively). Donors offered help more often (1.93 times), they offered money more often (1.99 times), and offered to help for longer periods of time (10.89 hours) than non-donors (1.58 times, 1.69 times, and 9.08 hours, with F-values (df=1) of 16.68 ($p<.001$), 15.63 ($p<.001$) and 8.38 ($p<.01$), respectively. The amount of money offered did not differ between volunteers and non-volunteers or between donors and non-donors (F-value (df=1): 2.85). Second, the effects of independent variables in the analyses presented above are largely consistent with their effects in analyses of actual giving and volunteering. The exceptions to this rule (e.g., non-significant effects of extraversion and church attendance on volunteering intentions) can be explained by differences in exposure to requests for contributions. In sum, the responses in the scenario experiment are consistent with reports on actual giving and volunteering, and both types of data have similar backgrounds. This makes it more likely that the responses in the scenarios are not merely socially desirable answers but reflect how actual decisions in social dilemma situations are being made.

3.5.2. Conclusion

This chapter investigated the effects of material, social, and psychological incentives on prosocial behavior in social dilemma situations with a scenario study incorporated in a household survey in the Netherlands. Social incentives for giving turn out to be very important for both giving money as well as time: if asked by a person from a smaller social distance, it is more likely that people give time and money. The effect of material incentives was tested by having respondents evaluate requests for contributions of varying amounts of money and time. The higher the costs, the less likely that a request for a contribution will be honored. Psychological

incentives were manipulated by having respondents evaluate requests for contributions to local versus more distant causes – assuming that contributions to organizations at a smaller distance yield more satisfaction – and having the respondents evaluate more or less efficient contributions to the public good. In line with the predictions, requests for more efficient ways of contributing time to a nonprofit organization are more likely to be honored, as well as requests for contributions of time to local as opposed to (inter)national organizations.

In addition to scenario characteristics, the effects of available financial and social capital were investigated, and contrasted with the effects of personality characteristics. It was expected that resource indicators would be more strongly related to prosocial intentions than personality characteristics. For giving time, it turns out that personality characteristics such as agreeableness and empathy add more to the proportion of explained variance than the available financial and social capital through income, education, and religious involvement. With regard to giving money, personality characteristics are of minor relevance compared to the effects of financial and social capital. The differential pattern of results for giving time and money was not of primary interest here. However, this pattern is in line with the weak situation-hypothesis because charitable giving is a more anonymous form of prosocial behavior than volunteering.

Finally, it was investigated how the effects of the incentives manipulated in the scenarios are dependent on economic and sociological conditions and personality characteristics, and whether the influence of personality characteristics is larger when the material costs of helping are lower ('low cost-hypothesis'), and social rewards are smaller ('weak situation-hypothesis'). Both the low cost-hypothesis as well as the weak situation-hypothesis receive only partial support. One of the manipulated psychological incentives for giving – the distance to the beneficiary – interacted with material and social incentives in the predicted negative direction, but the other – the efficacy of a donation for relieving the needs of the beneficiary – did not, and neither did empathic concern. Apparently, empathic concern generates a willingness to sacrifice personal welfare for distant, collective goals, which is even larger when the situational incentives more strongly lead to self-interested choices. This result supports the claim that empathy can motivate

altruistic behavior (Batson, 1991, 1998). In sum, the results give only limited support to the weak situation-hypothesis and the low cost-hypothesis. Effects of psychological incentives and individual differences in personality traits and prosocial motives on prosocial behavior do not simply decline as a function of the material and social incentives. This conclusion is in line with evidence from experiments with ultimatum games, showing that the effects of fairness concerns do not decline as a function of stakes (Cameron, 1999).

As expected, the sensitivity to material costs for giving time depended on hourly wages. However, the sensitivity to material costs for giving money did not depend on the available income. The sensitivity to social rewards was largely independent of indicators of social capital. The sensitivity to psychological incentives for volunteering increased with agreeableness and decreased with empathic concern.

Which implications do the results suggest for rational choice models of contributions to collective goods? These models have focused on the effects of material incentives and various types of psychic income, such as the enjoyment of an improvement of the utility of others (Becker, 1974) or the enjoyment of the act of contributing itself (Andreoni, 1989, 1990). Recently, economists have started to pay attention to the social incentives for giving (Harbaugh, 1998; Freeman, 1997; Soetevent, 2003; Van de Ven, 2003). A first implication of the results reported above is that models including monetary and altruistic concerns only lack a very important set of determinants of giving and volunteering: the social incentives for a contribution. If asked by a person from a smaller social distance, people are very willing to give money or time to nonprofit organizations. Moreover, the effect of social rewards was even more pronounced when substantial amounts of money or time are being asked. Rational choice models of altruistic behavior should pay more attention to how requests for contributions of time and money are embedded in social networks. Future research should focus not only on the value of future interaction (as in Buskens, 1999 and Snijders, 1996), but also on other social incentives, such as past interaction (Buskens and Raub, 2002; Gautschi, 2000), network closure (Coleman, 1990), and prestige (Harbaugh, 1998; Van de Ven, 2003).

Secondly, the results shed some light on the complex role of altruistic concerns for the collective good. The effect of efficacy indicates that people do have a distinctive preference for more effective contributions. This result violates the assumption made by 'warm glow' models of altruism that it is the act of contributing rather than the collective benefit that motivates giving (Goeree, Holt and Laury, 2002). The implication of the negative effect of distance to the beneficiary is unclear, because this result could indicate that uncertainty on the quality of the public good reduces contributions – a pattern that is more likely to occur in combination with altruistic concerns – but also that people imitate others to obtain social approval – when they expect that others are more likely to contribute to local organizations.

Thirdly, the results show that the decision to contribute or not to contribute is not simply the outcome of subtracting all types of costs from all types of benefits. The weights of material, social, and psychological costs and benefits in this decision depend on each other. Increasing material costs for a contribution weaken the effect of psychological rewards, but not of social rewards. Increasing social rewards also tend to weaken the effects of internalized prosocial values.

Fourthly, the weights of material, social, and psychological incentives vary systematically between individuals with specific characteristics. The most striking result was that more empathic individuals are willing to make larger sacrifices, especially when they are asked by persons from a smaller social distance. This result is in line with a 'selfish gene' argument (Dawkins, 1976). If there is anything in the argument that humans developed empathic emotions as a result of evolutionary pressures, it seems logical that their activation declines with social distance.

Notes

1. Exchange rate: 1$ ≈ € 0.85 (January, 2004).

2. The results reported below were very similar when responses to this scenario were excluded.

3. First, all 416 (for money: 4 x 8 x 1 x 4 = 128; for time: 3 x 8 x 3 x 4 = 288) possible combinations of text-elements were generated with a simple computer program. In the pre-test, random selections of scenarios were presented to five subjects, who identified unrealistic combinations of scenario characteristics (e.g., building a clubhouse for political prisoners in China) and made suggestions to improve the internal validity of the manipulations. As suggested by Faia (1980), the unrealistic combinations were removed, leaving 338 useful scenarios. This set of scenarios formed the population from which a random sample was drawn. Chi square tests indicated that the actual distribution of values on the four dimensions in the sample of scenarios did not differ from the expected values based on a random selection.

4. Details are available from the author.

5. Statistically, the data have a cross-classified structure, because scenarios are not only nested within respondents, but respondents are also nested within scenarios. However, a cross-classified model only makes sense when the clustering of residuals within sets of scenarios can be expected to be systematic, and not random. This is often the case when there is a 'natural selection' of respondents in higher-level units such as pupils in parental homes and schools (for an example, see Nagel & Ganzeboom, 2002). In our case, where respondents were unable to choose a specific set of scenarios but were given a set, it is unlikely that clustering of residuals within sets of scenarios is systematic.

6. Unfortunately, logistic regression models assume that the variance explained at the scenario level is completely determined (Hox, 2002, p. 116).

7. With a random sampling of scenarios in sets I tried to avoid this problem (see note 1 above). However, this attempt was not completely successful. An ordinary OLS regression analyses indicated that the variance in scenario responses explained by the selection of scenarios in sets was only .022. Still, respondents for two sets offered help a significant lower number of times than the average (which was 4.62 out of 8 scenarios) and respondents in one set offered help a significant higher number of times than the average. Subsequent analyses introducing differences in mean values for scenario characteristics in the sets explained two of these significant differences. Responses in only one set remained significantly less often prosocial. In the meantime, the mean values of two scenario characteristics for the sets were significant predictors of the number of times the respondents offered to give time or money. Therefore, the inclusion of the means of scenario characteristics in the random-effects logit is useful.

8. A random-coefficient model is appropriate because cluster sizes are sufficiently large and observations within clusters are not highly correlated (Guo & Zhao, 2000).

9. The discussion of the results is focused on the variables representing differences in scenario characteristics from the mean in the specific set completed by the respondent, denoted with (d). The significant effects of two variables representing mean values for scenario characteristics shows that some clustering of scenario characteristics within sets in fact occurred (see note 6 above).

10. However, including dummy variables for all categories was not an option because this resulted in a multitude of effects that were hard to interpret, and because it was not possible to disentangle the effects of clustering of scenario characteristics in the set and the 'true' effects of the scenario characteristics (see note 8). Including dummy variables 'SOCCER' and 'POLPRIS' for intended contributions of time to soccer clubs and political prisoners, the effect of distance diminished to near zero, and showed large negative effects of SOCCER and POLPRIS (results available from author).

11. In an additional analysis without empathy, the effect of agreeableness was larger, indicating that that empathy mediated the effect of agreeableness (details available from author).

12. Unfortunately, the residual individual level variance increased in model 1. This is due to the fact that there is less between-group variability in scenario characteristics because they were approximately randomly distributed over respondents (Hox, 2002, p. 67-68). When ordinary computations of explained variance are used, this would result in negative explained variances. Snijders & Bosker (1999) give a solution for this problem, but this solution can not be used with logistic regression models because they assume that the scenario level variance is completely determined (see note 5 above). Therefore, the residual individual level variance of model 1 is taken as a baseline.

13. Including the dummy variable SOCCER, the effect of distance increased and showed a large negative effect of SOCCER.

14. Additional analyses (available from author) show that the income effect declines at higher income levels, and that the marginal effect of costs also tends to decline.

15. This result is not surprising because psychometric reviews of instruments intended to measure individual differences in the tendency to give socially desirable responses have concluded that they are both invalid and unreliable (Costa & McCrae, 1983; Barger, 2002). Socially desirable responses about eating habits hardly correlate with socially desirable responses about cheating and jealousy, for instance. Individual differences in the tendency to give socially desirable responses in the scenarios are not rooted in a general tendency to give socially desirable responses in any kind of situation (if such a general tendency exists at all).

Chapter 4

Anonymous gifts: personal decisions, social backgrounds*

This chapter investigates charitable giving, blood donation and post mortem organ donation. These examples of prosocial behavior are anonymous in the sense that the recipients cannot reciprocate because the identity of the donor is unknown. In addition, they are less observable by others, inhibiting social rewards. Therefore, it can be expected that individual differences in prosocial motives are more strongly related to giving money, blood and organs than to membership and unpaid work in voluntary associations. However, the results of this chapter show that giving is most strongly related to social and economic conditions, and especially the level of education and religiosity. Prosocial motives and personality characteristics are less strongly related to giving.

4.1. INTRODUCTION

Why do people display prosocial behavior? Sociologists and psychologists differ widely in their answers to this question. Sociologists stress the importance of reciprocity in social networks and individual resources such as income and education, arguing that material and social constraints are important forces in prosocial behavior. Social psychologists, on the other hand, stress the importance of enduring individual differences in role identities (Lee, Piliavin & Call, 1999) and prosocial personality characteristics such as empathy (Penner , 2002). They argue that over time and across different social contexts, some people are more helpful than others because they tend to feel more concerned for other people's welfare and because they have merged their donor role with their sense of self (Callero, Howard & Piliavin, 1987; Lee, Piliavin & Call, 1999). Because the latter argument has been studied empirically and the former has not, this study focuses on the effects of individual differences in prosocial motives on anonymous gifts to unknown others. It has often been argued that one should look at individual differences in prosocial motives to account for examples of sustained helping behaviors and purely altruistic behaviors (Oliner & Oliner, 1988; Kohn, 1990; Batson, 1991; Carlo et

* An abridged version of this chapter is currently under review.

al., 1991; Penner et al., 1995; Penner , 2002). Three examples of this category are studied: blood donation, post mortem organ donation, and monetary contributions to charitable causes. The different types of donations involve a material cost to the donor, while social rewards can hardly be gained. Donations to charity obviously require money. Blood donation takes time, while blood donors in the Netherlands do not receive a monetary compensation. Donations of money, blood and organs are anonymous in the sense that there is no direct contact between donors and recipients. Usually, the recipients are completely unknown to donors. Furthermore, donation of money and organs do not even involve any personal contact at all. The bulk of monetary donations to charities in the Netherlands is received in response to direct mail (Bekkers, 2003c). Post mortem organ donation is solicited by a letter from the Department of Health as soon as people become 18 years of age. Although blood donation may involve some personal contact with medical staff at the regional blood banks who may encourage continuation of donorship, initial registration as a blood donor is voluntary.

Because material or social incentives are largely absent for these behaviors, there must be some intrinsic reward in giving. This article investigates the strength of the relationship between three examples of altruistic behavior and a set of validated psychological measurements of prosocial motives, compared to social conditions.

4.2. THEORY AND HYPOTHESES

4.2.1. The effects of prosocial motives on anonymous giving

Psychologists have argued that prosocial behavior is unlikely to be related to immediate situational factors when examples of sustained helping are considered (Penner, 2002; Lee, Piliavin & Call, 1999). When there are no external incentives, such as a future profit, a monetary compensation or a social reward, some intrinsic or psychic motive must be responsible for giving (Graziano & Eisenberg, 1997, p. 815). Three prosocial motives that may be related to anonymous giving are

discussed: agreeableness (Graziano & Eisenberg, 1997), empathy (Davis, 1994) and prosocial value orientations (Van Lange, 2000).

Agreeableness - Recently, the so-called Five Factor Model (McCrae & John, 1992) has become a general framework in personality psychology. According to this model, one of the five basic dimensions of human personality is agreeableness. Agreeable persons are described as more friendly, helpful, sympathetic and cooperative across a variety of contexts. Such trait evaluations are fairly stable over time (Ardelt, 2000). While prosocial behaviors may be the result of a variety of motives, including self-centered reasons, anonymous gifts are more purely altruistic. Therefore, agreeableness is believed to be particularly predictive of altruistic behaviors (Graziano & Eisenberg, 1997, p. 808). However, there is very little research available showing an empirical link between agreeableness as a personality trait to prosocial behavior. A study that compared self-reported personality characteristics of volunteers with those of paid workers engaged in similar occupations found that volunteers were more agreeable (Elshaug & Metzer, 2001). In another study that focused on behavioral intentions, agreeableness and all of its facets also correlated with the willingness to share money (Paunonen & Ashton, 2001). Research on blood donation shows that long term blood donors more often have an altruistic self-image than 'rookies' (Piliavin & Callero, 1991). Research on attitudes towards post mortem organ donation in the Netherlands has shown that donation is regarded as an altruistic act (Hessing, 1983). Given these results, it is assumed that more agreeable persons are more likely to give money, blood and organs.

Because agreeableness is simply a trait description of persons who engage in all kinds of prosocial and altruistic behaviors more often than others, it does not give a theoretical explanation of acts of giving. Showing an empirical relationship between self-reported agreeableness and altruistic behaviors does not really give us an informative idea of why people engage in altruistic behavior. Empathy and prosocial value orientations are measures of two more specific motives that may give an explanation of individual differences in prosocial behavior.

Prosocial value orientation - Social value orientations have been widely used in experimental studies of cooperation in social dilemmas to capture pre-existing

differences in cooperative intentions and altruistic tendencies (Van Lange, 2000). In this research tradition, social value orientations are measured prior to the actual experiment with a hypothetical social dilemma involving an 'unknown other'. The respondents are asked to make a choice between several combinations of pay-offs for themselves and the unknown other. Respondents keeping more points to themselves than they give away to the unknown other are labeled 'proself individuals', and are assumed to be motivated primarily by their own outcomes. Respondents who choose an equal distribution are labeled 'prosocial respondents' and are assumed to be more concerned for equality and joint outcomes. The relation of social value orientations to agreeableness has not been investigated in previous studies, but theoretically they should be positively related. Social value orientations can be viewed as a measure of the altruism facet of agreeableness. Previous research has indicated that social value orientations are related to cooperation in experimental social dilemma games (e.g., Kuhlman & Marshello, 1975; McClintock & Liebrand, 1988) and to helping behavior (McClintock & Allison, 1989), and charitable giving (Van Lange, 1997; Van Lange, Van Vugt, Bekkers & Schuyt, 2003) in the real world outside the laboratory.

Empathy - Another answer to the question why some people are more likely to give anonymously to strangers than others is empathy. Empathy refers to the cognitive capacity to take the perspective of others as well as the emotional responsiveness for the well being of others. The cognitive aspect of empathy is often called perspective taking; the emotional aspect is called empathic concern. Social and developmental psychologists have noticed that there are strong individual differences in empathy (Davis, 1994; Eisenberg & Miller, 1987). Seeing that people are in need, more empathically concerned persons will be more willing to share their possessions with the less fortunate than others (Eisenberg et al., 1989). Previous research has reported positive relations of empathy with agreeableness (Ashton & Lee, 2001) as well as several forms of prosocial behavior, such as helping behavior (Penner et al, 1995) volunteering behaviors (Penner & Finkelstein, 1998; Penner, 2002) and an index of prosocial behavior (Smith, 2003). There is very little research available on the relationship between empathy and donations of money, blood and organs. One experimental study of intentions to sign an organ

donor card showed that empathy arousal was positively related to willingness to donate (Skumanich & Kinsfather, 1997). In the present article, the relation of empathic concern as well as perspective taking with anonymous giving is investigated, assuming that both of these relations will be positive.

Usually, more specific measures of attitudes, values and other psychological characteristics do a better job in explaining specific behaviors than more general measures (Ajzen & Fishbein, 1977; Paunonen & Ashton, 2001). Therefore, the relationship of the general measure of agreeableness with anonymous giving - if there is any - should be mediated by the more specific measures of perspective taking, empathic concern, and social value orientation.

4.2.2. Sociological accounts of anonymous giving

In contrast to psychologists, sociologists usually assume that 'the desire to do good is more or less evenly distributed, but that the resources to fulfill that desire are not' (Wilson & Musick, 1999, p. 244). They argue that differences in prosocial behavior are the result of the differential availability of three types of resources: financial, human and social capital (Wilson & Musick, 1997). The underlying assumption is that prosocial behavior involves material costs that may be compensated by social rewards. If the social rewards for prosocial behavior are high enough, people may be willing to incur a material cost to themselves. The actual value of the material costs required for prosocial behavior will depend on the available time and financial budget: for those with higher incomes, a $25 donation is less costly than for persons with lower incomes. Likewise, spending an hour to donate blood has higher opportunity costs for people with higher wages (Freeman, 1997). Consequently, the availability of financial resources through income will increase the likelihood of charitable giving, while the availability of leisure time may facilitate blood donation because it takes time to give blood. Because registration as a postmortem organ donor hardly costs time or money, income or working hours are not expected to be related to organ donation.

Social rewards for anonymous gifts depend on the norms and the degree of social control in the social network. In most groups, charitable giving, postmortem organ donation and blood donation are positively evaluated. However, in some

groups the norm on giving is more positive than in others. Higher educated people commonly regard donations to charitable causes as laudable, more so than the lower educated. Recent data from the 'Giving in the Netherlands'-survey (Schuyt, 2003) show that of those with a university degree, almost nine in ten (87.5%) agreed with the statement that 'The world needs responsible citizens' compared to two thirds (66.7%) of those who completed primary education (own computation). With regard to the statement 'No matter what the government does, I give to charitable causes' 56% of the higher educated agreed, versus 45% of those with primary education. Furthermore, the enforcement of social norms may differ between social groups. For instance, in rural environments non-compliance would be noticed more easily than in urban settings (Steblay, 1987). Consistent with this idea, a study in the US showed that blood donation was more common on smaller college campuses (Foss, 1983). The most prominent differences in social norms on giving are with respect to religion. The small group of Calvinists, the most orthodox religious denomination in the Netherlands, gives six times as much to charitable causes than the non-religious. This difference is not only rooted in the higher degree of cohesion in religious networks, but also in more strict norms on charitable giving (Bekkers, 2002a, 2003a). Religious teachings clearly advocate donations to the poor, and churches have built an infrastructure of charitable causes and nonprofit organizations in which this ideology is institutionalized. Church members are more likely to be asked for a donation to a charitable cause (Bekkers, 2004a). Healy (2000) found that religious persons are also more likely to give blood. While religious norms will strongly prescribe donation of money and to a smaller extent also the donation of blood, post mortem organ donation is an exception. Although none of the major religions explicitly disapproves of post mortem organ donation, religious beliefs in the after life and concerns for next of kin empirically inhibit post mortem organ and tissue donation (Pranger, 1998; Sanders, 2003).

4.2.3. When does personality make a difference?

Ever since its early beginnings (Hartshorne & May, 1929), personality psychologists have been facing low correlations of personality characteristics with behavioral measures. In the debate that followed the powerful critique of personality psychology by Mischel (1968), a consensus emerged on at least two conclusions: (1) personality interacts with situational conditions, and the interactive effects are usually stronger than the main effects of personality characteristics; (2) personality characteristics are more strongly related to aggregate indices of behaviors than to single act criteria (Epstein & O'Brien, 1985).

The low cost-hypothesis

Identifying the conditions in which personality characteristics are more predictive of behavior is an important task for social psychology (Snyder & Ickes, 1985; Carlo et al., 1991; Krahé, 1992). One of the ideas is that values, attitudes, and personality characteristics are more strongly predictive of behaviors that have low material costs. When the costs are low, people will act upon their individual attitudes and idiosyncrasies, but not when substantial costs are involved. In the polarized debate on the altruistic nature of empathy, one article asked the rhetorical question: 'Does empathy lead to anything more than superficial helping?' (Neuberg et al., 1997). The authors concluded their review and reanalysis of previous research as follows: "The ability of empathic concern to predict helping is limited to deciding between providing either relatively costless help or no help at all"..."under conditions of substantial cost to the helper, empathic concern does not facilitate helping" (Neuberg et al., 1997: 514-5). In rational choice sociology, this hypothesis is called the 'low cost-hypothesis': values, attitudes, and personality characteristics have smaller effects, when more material resources are required (Diekmann, 1996; Mensch, 2000). Research on pro-environmental behavior has provided evidence for the low-cost hypothesis: when pro-environmental behavior is 'easy', such as paper recycling in neighborhoods where it is collected frequently, it is correlated with 'environmental awareness', but not when it takes a personal sacrifice - such as using less water (Diekmann & Preisendörfer, 1998).

The low cost-hypothesis can be tested in two ways: (1) by comparing the effects of prosocial motives on behaviors with varying material costs; (2) by comparing the effects of prosocial motives for groups of respondents with varying material resources. Using the first strategy, personality characteristics should be most strongly related to the type of giving that involves the lowest material costs – which is post mortem organ donation – if the low cost-hypothesis is correct. A signature on a donor registration form takes hardly any time or money. Blood donation should also be related rather strongly to personality characteristics, because it takes just a small amount of time – due to medical regulations, blood donors in the Netherlands can only donate once or twice a year. Charitable giving obviously involves giving own money for the benefit of another. Requests for charitable donations in door-to-door collections usually involve small amounts, but they occur at least once a month, up to several times per week. Furthermore, many charitable causes have direct mail strategies asking for more sizeable contributions. The low cost-hypothesis would predict that prosocial motives will be most strongly related to organ donation, less strongly to blood donation, and least strongly to charitable donations of money. Another way to test the low cost-hypothesis is to compare the effects of individual differences in prosocial motives on the decision to give (yes or no) with the effects on the amount of time or money invested. The low cost-hypothesis assumes that prosocial motives motivate only small gifts. In an analysis of the amount donated to charitable causes, the effects of prosocial motives will be negligible and the availability of financial capital should dominate.

Using the second strategy, prosocial personality characteristics should be most strongly related to anonymous giving for those who have a lower opportunity cost for blood donation, and for respondents with higher incomes, if the low cost-hypothesis is correct. For instance, for respondents with high hourly wages, blood donation is a high-cost activity, while for respondents with lower wages, blood donation is low-cost. In other words, the low cost-hypothesis would predict that psychological characteristics matter more for those with lower wages.

The weak situation-hypothesis

Another hypothesis specifying conditions in which personality characteristics have stronger effects on social behavior is called the weak situation-hypothesis (Mischel, 1977, 1996; Snyder & Ickes, 1985). The weak situation-hypothesis states that psychological characteristics are only relevant in 'weak situations': social contexts that do not involve clear cut expectations on how to behave (Snyder & Ickes, 1985, p. 904-906). In contrast, when strong social norms or salient cues guide behavior, there is little room for the expression of individuality. The classical example of a strong situation is a funeral. In this situation, clear and strong expectations are present on how to behave, and individual differences in personality will not have observable effects on behavior.

The weak situation-hypothesis can be tested in two ways: (1) by comparing the effects of prosocial motives on behaviors with varying social rewards; (2) by comparing the effects of prosocial motives for respondents in groups with varying social norms on prosocial behavior. Using the first strategy, personality characteristics should be most strongly related to the type of giving that is least strongly surrounded by social norms – which is blood donation – if the low cost-hypothesis is correct. Blood donation is not often discussed in everyday conversation, and there are no strong statements in current religious teachings for or against blood donation. Charitable giving and post mortem organ donation, on the other hand, are surrounded by strong moral connotations. Post mortem organ donation, on the other hand, is surrounded with negative social norms. In sum, the weak situation -hypothesis would predict that prosocial motives will be more strongly related to blood donation than to organ donation and charitable donations of money. Using the second strategy, prosocial personality characteristics should be most strongly related to anonymous giving for those respondents who face weaker sanctions for failures to display prosocial behavior because they are members of social groups that hold less strict norms on prosocial behavior. For instance, for those who attend church more often, charitable giving and organ donation are more strongly surrounded by social norms than for the non-religious. In other words, the low cost-hypothesis would predict that psychological characteristics matter more for the non-religious.

4.3. Data and Methods

4.3.1. Data

To test the hypotheses of this chapter, the Family Survey of the Dutch Population (FSDP2000; De Graaf, De Graaf, Kraaykamp & Ultee, 2000) is used. Details on sampling procedure and measures of personality characteristics and prosocial motives can be found in appendix A. Details on measures of donations can be found in chapter two.

4.3.2. Measures

The following socio-demographic variables were measured: highest completed educational level (in 8 categories, ranging from primary school to post-academic degree), yearly household income (sum of all sources of income of both partners; for 80 households in which both respondents did not report any source of income at all were given the median value (€23,000), incomes above €300,000 were truncated), working hours per week, the frequency of church attendance (number of visits per year), and level of urbanization (from 0: rural to 4: very urban). For a description of the measures for personality characteristics (the 'Big Five') and individual differences in prosocial motives (social value orientation, empathic concern and perspective taking), see chapter two and appendix A.

4.3.3. Analytical strategy

The choice of an appropriate statistical model to analyze monetary contributions to charitable causes is not straightforward. Because charitable contributions cannot be negative, the distribution of contributions is left-censored and ordinary least squares analysis produces biased estimates. Therefore, charitable contributions have often been analyzed using tobit regression models, which provide better estimates than OLS regression models. However, an additional problem in the analysis of charitable contributions is the large number of zero-observations, which may have a different meaning than positive observations. The decision to engage in philanthropy or not may be governed by different mechanisms than the decision how much to contribute (Smith, Kehoe and Cremer,

1995). This possibility is ignored in the tobit-model. A statistical model analyzing the decision to engage in philanthropy separately from the decision how much to contribute is Heckman's two-stage regression model (Heckman, 1979). This model is more appropriate than either Tobit or OLS. This model is a specific form of the general censored selection model (Chay & Powell, 2001), which can be represented as:

$$y = d \cdot (x'\beta + \varepsilon) \qquad (1)$$

where y is the amount donated, d is a dummy variable indicating whether a donation is observed or not, x is a vector of explanatory variables, and β is a vector of regression coefficients. In our case, a Heckman two-stage regression model of donations first models the decision to give:

$$d^* = d(Z, v) \qquad (2)$$

where $d = 1$ if $d^* > 0$ and $d = 0$ if $d^* < 0$, and then

$$D = D(X, u) \qquad (3)$$

where D is the amount donated, observed only when d=1, Z and X are vectors of explanatory variables, and v and u are error terms in the first and second stage, respectively (Smith, Kehoe and Cremer, 1995). The results of the first stage indicate which characteristics of respondents increase the likelihood to be engaged in philanthropy; the results of the second stage indicate which characteristics of respondents increase the amount donated to charitable causes.

The two-stage regression model is also suitable for the analysis of the number of years served as a blood donor. The results of the first stage indicate which characteristics of respondents increase the likelihood of ever having served as a blood donor; the results of the second stage indicate which characteristics increase the number of years served as a blood donor.

The regression analyses proceed in five steps, each introducing an additional set of explanatory variables. A first model includes the control variables gender and

age only and serves as a base line. A second model introduces the 'Big Five'-personality dimensions. In the third model, individual differences in perspective taking, empathic concern and social value orientation are introduced. The fourth model adds indicators of material resources (household income and working hours) and indicators of social rewards for donations are introduced (educational level, church attendance and urbanization level). In the fifth model interactions between prosocial motives and household income, church attendance and the level of urbanization are added to test the low cost-hypothesis and the weak situation-hypothesis. By introducing personality characteristics before the sociological characteristics, the claim of personality psychologists that individual differences in personality are rather stable across the life cycle is given full credit. By entering empathic concern, perspective taking and social value orientations after the 'Big Five', it can be investigated whether the hypothesized relation of agreeableness with giving is mediated by more specific measures of prosocial motives.

4.4. RESULTS AND DISCUSSION

4.4.1. Charitable giving

Table 4.1a shows the results of the first stage of the two stage regression analysis of donations to charitable causes, modelling the likelihood of having made any donations to charitable causes in the previous year. In contrast to the prediction, Model II does not show a significantly positive relation between agreeableness and donations to charitable causes. The sign for agreeableness is even negative, indicating that non-donors consider themselves to be somewhat more agreeable than those who did contribute to charities. More extraverted persons are more likely to have made charitable donations. The other 'Big Five' personality characteristics are not related to charitable giving. Taken together, the 'Big Five' increase the explained variance only slightly. This result stands in contrast to the 14.1% increase in explained variance in the willingness to share money (Paunonen & Ashton, 2001: 532) and the weakly positive relationship of agreeableness with intentions to give that was reported in chapter three.

Table 4.1.a. Results of Heckman two-stage regression analysis of giving to charity (first stage; N=1471, 1108 uncensored)

Female	.14	*	.15	*	.09		.20	*	.20	*
Age	-.16	***	-.13	**	-.12	**	-.03		-.05	
Agreeableness			-.05		-.06		-.03		-.08	
Conscientiousness			-.01		-.01		-.01		-.00	
Extraversion			.08	*	.07	(*)	.07	(*)	.07	(*)
Neuroticism			-.02		-.03		.00		-.00	
Openness			.00		-.01		-.05		-.04	
Social value orientation (svo)					-.01		-.01		-.01	
Perspective taking (pt)					-.04		-.07		-.11	*
Empathic concern (ec)					.15	***	.13	**	.14	**
Education							.24	***	.24	***
Working hours							.09	(*)	.08	(*)
Income (ln)							.12	**	.12	*
Church attendance							.07		.08	(*)
Urbanization							.09	*	.09	*
Income * agreeableness									.00	
Income * svo									-.01	
Income * pt									.00	
Income * ec									.00	
Attendance * agreeableness									.05	
Attendance * svo									.07	
Attendance * pt									.05	
Attendance * ec									-.12	**
Urbanization * agreeableness									-.03	
Urbanization * svo									-.03	
Urbanization * pt									-.10	
Urbanization * ec									-.01	

Entries represent coefficients for z-standardized independent variables.

*** p<.001; ** p<.01; * p<.05; (*) p<.10

Clearly, personality self-reports are more strongly related to the willingness to share money than to actual behavior. Model III shows that those with a more prosocial value orientation are not more likely to give to charitable causes than 'proselfs'. This result seems to stand in contrast with previous research (Van Lange, 1997; Van Lange, Van Vugt, Bekkers & Schuyt, 2003), but these studies did not contain any personality characteristics. In the present analysis, empathic concern is positively correlated with charitable giving and weakens the relation with social value orientation. The relation of perspective taking with charitable giving is weakly negative, which is not in the expected direction, but this relation is not significant. A comparison of models II and III learns that the more specific measures of prosocial motives were more successful in the explanation of charitable giving than the more general Big Five characteristics. However, the two empathy scales and the measure of prosocial value orientation did not mediate the relationship of agreeableness with charitable giving because the relationship of agreeableness with charitable giving was negative in model II to start with. As in chapter three, gender differences in the likelihood of making donations disappear controlling for personality characteristics. This results suggests that greater exposure to fundraising attempts is not the reason why females are more likely to make donations. However, females may be targeted more often by fundraisers because they have more prosocial personality characteristics. Model IV shows that education has a very strong positive relation with charitable giving. The other sociodemographic characteristics of the respondents were all correlated with charitable giving in the expected direction, except for the frequency of church attendance. People with higher incomes, those working more hours, the higher educated, and those living in more rural places are more likely to give to charitable causes. In contrast with the low cost-hypothesis, model V shows that none of the prosocial motives interacts positively with household income. In line with the weak situation-hypothesis, empathic concern is less strongly related to charitable giving among frequent church attendees. The effects of the other prosocial motives did not vary with the level of urbanization or church attendance.

Table 4.1.b. Results of Heckman two-stage regression analysis of giving to charity (second stage; N=1471, 1108 uncensored)

Female	-.17 **	-.14 *	-.27 ***	-.03	-.14 (*)
Age	.39 ***	.41 ***	.38 ***	.44 ***	.48 ***
Agreeableness		.01	-.04	-.05	.01
Conscientiousness		-.05	-.04	-.04	-.04
Extraversion		.05 *	.04	.05	.02
Neuroticism		-.05	-.06	.00	.01
Openness		.05	.03	-.02	.01
Social value orientation (svo)			.10 *	.07 (*)	.08 (*)
Perspective taking (pt)			.04	.01	.05 *
Empathic concern (ec)			.21 ***	.24 ***	.14 *
Education				.45 ***	.33 ***
Working hours				.16 **	.12 *
Income (ln)				.19 ***	.12 *
Church attendance				.35 ***	.30 ***
Urbanization				.08 (*)	.03
Income * agreeableness					.00
Income * svo					-.01
Income * pt					.00
Income * ec					.00
Attendance * agreeableness					.03
Attendance * svo					.01
Attendance * pt					-.06
Attendance * ec					.01
Urbanization * agreeableness					.01
Urbanization * svo					-.03
Urbanization * pt					.08 *
Urbanization * ec					-.02
Chi-Square	68	77	72	264	278
Rho	-.10(*)	-.02	-.06	.53*	-.43

Entries represent coefficients for z-standardized independent variables.

*** p<.001; ** p<.01; * p<.05; (*) p<.10

In sum, the results give rise to three conclusions: (1) charitable giving is strongly related to socio-demographic characteristics, with those having access to more human and social capital being more likely to donate; (2) charitable giving is positively related to empathic concern, but not very strongly, and none of the other personality characteristics are related to charitable giving; (3) the effect of empathic concern is less pronounced as church attendance is higher, but does not vary with income or the level of urbanization.

4.4.2. Amount donated

Table 4.1b shows the results of a regression analysis of the natural logarithm of the amount given to charities. Because these results are somewhat hard to interpret, table 4.2 in appendix C contains the results of a similar regression of the untransformed amount donated on unstandardized independent variables. Although these results are to be interpreted with caution, they are illustrative for the size of the effects reported in table 4.1b. Model I shows that donations increase with age and are lower among females. These results fit with other research showing that women give to a higher number of charitable causes but donate lower amounts (Andreoni, Brown & Rischall, 2003). Model II shows that agreeableness is not related to the amount donated. Extraversion shows a weakly positive relation with the amount donated. Model III shows positive effects of both social value orientation as well as empathic concern. The fact that social value orientation is related to the amount donated controlling for empathic concern suggests that a concern for equality is a motive for donations besides altruistic concern for the well being of others. The standardized beta-coefficients reveal that the effect of empathic concern is about twice as large as the effect of social value orientation. The effect of age decreases slightly in this model, indicating that to a small extent older people give more because they have more prosocial value orientations (Bekkers, 2003b).

The results of the regression analysis of the untransformed amount donated, reported in table 2 of appendix C, illustrate the size of the effects. For instance, the difference in annual donations between those giving away less than the average proportion of the points in the social value orientation task and those giving away more than the average is €40. The difference between persons with an average

empathy score below 3 (on a scale of 5) and those with a score of 4.5 or higher is €85. A comparison of the results in models II and III from table 4.1a with the results of these models in table 4.1b does not support the low cost-hypothesis. Empathic concern does not only affect the decision whether or not to give at all, but also the decision how much to give; and this effect is not smaller.

Model IV shows significantly positive effects of all the socio-demographic characteristics except the level of urbanization. The level of education and church attendance are most strongly related to the amount donated. The results of the untransformed amount donated (see table 2 of appendix C) are illustrative: annual donations by those who never attend church are on average €95, while those who attend church more than once a month are €315. The difference between respondents with primary education only and those holding a college or university degree is €120 (net of all other variables, including household income). The income elasticity of charitable giving is .19, indicating that a 10% increase in household income increases donations with about 2%. This estimate is much lower than in the United States, where the income elasticity varies between .4 and .8 (Clotfelter, 1997; Wolff, 1999), and also lower than in the UK, where it is almost .4 (Banks & Tanner, 1999). It should be noted, however, that these studies did not control for the effects of education and working hours, which are positively correlated with income. The effect of income is substantially smaller than the effect of church attendance. Those with household incomes below €11,500 (the bottom 10% of the income distribution in the sample) donate an average of €100, while the average annual donation among household incomes exceeding €100,000 (the top 10%) is €170 (controlling for other variables). The effect of social value orientation declines to non-significance in this model, probably because social value orientation is a proxy for religious involvement (Bekkers, 2003b). Model V shows that none of the individual differences in prosocial motives interact positively with household income. These results contradict the low cost-hypothesis. Model V also shows a negative interaction of urbanization with perspective taking, indicating that the effect of perspective taking on the amount donated is more strongly negative in urbanized areas than in rural areas. The fact that the effect of perspective taking is more pronounced in urbanized areas is in line with the weak situation-hypothesis

because norms on giving to charity will be less strict and less strongly enforced in cities than in rural areas. Including the interaction of urbanization with perspective taking the expected positive main effect of perspective taking on the amount donated emerges.

4.4.3. Post mortem organ donation

Table 4.2 shows the results of a logistic regression analysis of post mortem organ donation. Model II shows that the five major personality characteristics are not strongly linked to post mortem organ donation decisions. Only extraversion has a weakly positive significant effect. Extraverted people appear to be registered as a post mortem organ donor somewhat more often than introverted persons. The weakly negative relation with agreeableness is in contrast to the expectation and previous research focusing on attitudes with regard to organ donation (Hessing, 1983). Apparently, attitudes with regard to organ donation are much more strongly related to an altruistic self-image than actual organ donation decisions. Together, the Big Five personality characteristics increase the proportion of explained variance only slightly. This is in striking contrast with the low cost-hypothesis, because post mortem organ donation involves lower material costs than blood donation and charitable giving. Model III shows a very weakly positive relation of social value orientation to post mortem organ donation: prosocial persons are more likely to consent with post mortem organ donation than 'proselfs'. However, this relationship is only marginally significant. In contrast to the expectation, individual differences in perspective taking and empathic concern are not related to post mortem organ donation decisions. Model IV shows that social and economic conditions are much more strongly related to post mortem organ donation than personality characteristics. The higher the level of education of a person, the higher the likelihood that this person consents with post mortem organ donation. This result is in line with studies in the US (Gallup Organization, 1993). Frequent church attendance lowers the likelihood of post mortem organ donation. Working hours, income and the level of urbanization are not related to post mortem organ donation. Model V shows that the relation of social value orientation is more strongly positive as income increases, in line with the low cost-hypothesis.

Table 4.2. Logistic regression analysis of post mortem organ donation (N=1495)

Female	1.04		1.05		1.01		1.09		1.05	
Age	.78	***	.78	***	.76	***	.80	**	.81	**
Agreeableness			.93		.93		.94		.93	
Conscientiousness			1.00		1.01		1.03		1.04	
Extraversion			1.14	*	1.14	*	1.12	(*)	1.14	*
Neuroticism			.92		.92		.92		.92	
Openness			.99		.99		.96		.97	
Social Value Orientation (svo)					1.09		1.10		1.11	(*)
Perspective taking (pt)					.97		.94		.93	
Empathic concern (ec)					1.07		1.09		1.09	
Education							1.20	**	1.20	**
Working hours							1.02		1.00	
Income (ln)							1.07		1.00	
Church attendance							.79	***	.76	**
Urbanization							1.08		1.08	
Income * agreeableness									.92	
Income * svo									1.22	*
Income * pt									.92	
Income * ec									1.05	
Attendance * agreeableness									.94	
Attendance * svo									1.12	
Attendance * pt									1.00	
Attendance * ec									.95	
Urbanization * agreeableness									.91	
Urbanization * svo									.98	
Urbanization * pt									1.09	
Urbanization * ec									.92	
Chi-Square	13		23		28		43		58	
Nagelkerke R^2	.010		.016		.018		.034		.044	

Entries represent odds ratios for z-standardized independent variables.

All Chi Square tests are significant at the p<.001 level.

*** p<.001; ** p<.01; * p<.05; (*) p<.10

Model V shows no other interactions of individual differences in prosocial motives with income, church attendance or urbanization level.

4.4.4. Blood donation

Table 4.3a shows the results of the first stage of a two stage regression analysis of blood donation. The results of the first stage indicate which characteristics of respondents increase the likelihood of ever having served as a blood donor. As expected, agreeableness is positively related to blood donation. Model II also shows significantly negative relationships of conscientiousness and neuroticism with blood donation. Apparently, blood donors are not only more friendly people, but also less orderly and systematic and more emotionally stable persons. In contrast to the expectation, model III reveals no effects of social value orientation and perspective taking. Empathic concern shows a very weak positive relationship with blood donation. The weak relations of prosocial motives with blood donation are striking, because blood donation is often considered to be an example of pure altruism (Heath, 1976; Elster, 1989). Although blood donation may be a form of altruistic behavior, this does not mean that it has strong roots in specifically prosocial motives. Model IV shows that the level of education is a key factor for blood donation: a higher education increases the likelihood of giving blood. Blood donation is not related to working hours, household income, community size or frequency of church attendance. Most of the relations with social conditions are in contrast to previous research (Healy, 2000). However, the present research uses a much larger sample (n=1,560 vs n=347), was conducted six years later (in, 2000 instead of, 1994), and used a more advanced statistical model. In an ordinary logistic regression analysis, some of the relations found in previous research emerge (see table 3 in appendix C). Model V shows marginally positive interactions of hourly wages with both social value orientation and empathic concern. These results are in line with the low cost-hypothesis, because the opportunity costs of spending time to donate blood are lower for respondents with lower wages. Model V also shows a positive interaction of church attendance with empathic concern and a negative interaction with perspective taking.

Table 4.3.a. Heckman two-stage regression analysis of years served as a blood donor (first stage; N=1497, 351 uncensored)

Female	-.20	***	-.27	***	-.32	***	-.24	**	-.22	*
Age	.14	***	.15	***	.15	***	.21	***	.21	***
Agreeableness			.07	(*)	.05		.07		.08	(*)
Conscientiousness			-.09	*	-.10	**	-.09	*	-.10	*
Extraversion			.01		.01		-.00		.00	
Neuroticism			-.07	(*)	-.07	(*)	-.06		-.06	
Openness			-.02		-.05		-.06		-.06	
Social value orientation (svo)					.00		.00		.01	
Perspective taking (pt)					.05		.04		.03	
Empathic concern (ec)					.07	(*)	.07	(*)	.08	*
Education							.12	**	.12	**
Working hours							.07		.07	
Income (ln)							-.02		-.02	
Church attendance							-.01		-.05	
Urbanization							.02		.02	
Income * agreeableness									.06	(*)
Income * svo									.03	
Income * pt									-.07	(*)
Income * ec									.15	**
Attendance * agreeableness									-.00	
Attendance * svo									.01	
Attendance * pt									-.09	*
Attendance * ec									.08	*
Urbanization * agreeableness									.00	
Urbanization * svo									.01	
Urbanization * pt									.04	
Urbanization * ec									.02	

Entries represent coefficients for z-standardized independent variables.

*** p<.001; ** p<.01; * p<.05; (*) p<.10

The former stands in contrast to the weak situation-hypothesis. The latter is in line with the weak situation-hypothesis, but, as in the analysis of the amount donated to charity, the non-significant negative main effect of perspective taking contradicts our expectations.

4.4.5. Donor years

Table 4.3b shows the results of a regression analysis of the number of years that present and former blood donors served as a blood donor. Model I shows a negative effect of gender, indicating that females serve as blood donors for shorter periods of time than males. Obviously, older persons reported having served for longer periods. Model II shows a weakly positive effect of neuroticism and a weakly negative effect of openness to experience. The former result stands in contrast to the hypothesis. Also, the positive effect of neuroticism in the second stage is in contrast with the negative effect in the first stage, indicating that neurotic persons are less likely to engage in blood donation, but once engaged, they tend to remain donors for a longer period. The positive relation with openness was not expected. It could be that persons who are more open to new experiences try out blood donation because it is exciting, and then discontinue their donations when it is no longer a new experience. Model III shows that none of the prosocial motives are related to the number of years served as a blood donor. The absence of a relation with agreeableness stands in contrast to previous research (Piliavin & Callero, 1991). Again, differences may be due to the more complete coverage of personality effects as well as the more advanced statistical model used in the present analysis. Model IV shows that socio-demographic characteristics are not strongly related to the number of years that blood donors serve. Persons from households with higher incomes tend to discontinue the donation career at an earlier stage than persons from lower income households.

Table 4.3.b. Heckman two-stage regression analysis of years served as a blood donor (second stage; N=1497, 351 uncensored)

Female	-32.68	-1.39		-1.02		-.83		-.57	
Age	25.89	5.29	***	5.25	***	5.33	***	5.39	**
Agreeableness		.59		.68		.49		.43	
Conscientiousness		.24		.21		.08		.06	
Extraversion		.06		.17		.20		.31	
Neuroticism		1.10	(*)	1.22	(*)	1.23	*	1.29	*
Openness		-1.26	*	-1.08	(*)	-1.14	(*)	-.91	
Social value orientation (svo)				.11		.35		.40	
Perspective taking (pt)				.37		.40		-.02	
Empathic concern (ec)				-1.09		-.92		-.66	
Education						-.03		-.10	
Working hours						.69		.67	
Income (ln)						-1.41	*	-1.53	**
Church attendance						-.16		-.65	
Urbanization						-.73		-.81	
Income * agreeableness								.33	
Income * svo								.65	(*)
Income * pt								-3.03	***
Income * ec								1.13	(*)
Attendance * agreeableness								.02	
Attendance * svo								.10	
Attendance * pt								-.42	
Attendance * ec								.98	
Urbanization * agreeableness								.12	
Urbanization * svo								-.90	(*)
Urbanization * pt								.19	
Urbanization * ec								.21	
Chi-Square	?	85	***	87	***	102	***	160	***
Rho	?	-.32	**	-.35	**	-.36	**	-.39	**

Entries represent coefficients for z-standardized independent variables.

*** p<.001; ** p<.01; * p<.05; (*) p<.10. ? indicates value could not be computed.

In contrast to the low cost-hypothesis, model V shows weakly positive but nonsignificant interactions of social value orientation and empathic concern with hourly wages. The negative interaction with perspective taking is in line with the low cost-hypothesis. The weak situation-hypothesis is not supported because none of the prosocial motives interact with church attendance or the level of urbanization. A comparison of the results of the two stages in tables 2a and 2b suggests that personality characteristics are less strongly related to the likelihood of ever having served as a blood donor than to the number of years served as a donor, in contrast to the low cost-hypothesis.

4.5. Conclusion

All in all, the results of the analyses are reminiscent of a review of the debate about bystander intervention by Latané & Darley (1970: 119-20): "Individual difference variables account for remarkably little variance in helping behavior". Latané & Darley have been criticized because they generalized findings from experimental studies of helping in an emergency to all kinds of prosocial behavior and because they did not investigate an exhaustive number of individual differences in personality (Kohn, 1990: 82-3). It is often argued that research on helping behavior has underestimated the role of personality because of the experimental design and because it investigated mainly helping in emergencies. Non-spontaneous sustained helping behaviors should be more strongly related to personality (Kohn, 1990: 298; Penner et al., 1995), especially when respondents are not in controlled conditions (Amelang & Borkenau, 1986; Block, 1977; Krahé, 1992). It has been argued that prosocial motives are especially influential for more altruistic behaviors (Graziano & Eisenberg, 1997). Therefore, the present study focused on three forms of non-spontaneous sustained helping behaviors instead of helping in emergencies. Personality self-reports were obtained in a representative survey; respondents were not forced into experimental conditions. The three examples of prosocial behavior that were investigated (charitable giving, blood donation and post mortem organ donation) are altruistic behaviors in the sense that they do not generate material benefits and are anonymous in the sense that donors do not know the recipients personally, inhibiting reciprocity. Furthermore, a broad range of personality

characteristics was investigated in this study: the Big Five (McCrae & John, 1992), and, in addition, three specifically prosocial motives: prosocial value orientations (Van Lange, 2000), perspective taking, and empathic concern (Davis, 1994). However, none of the psychological characteristics had a consistently positive relationship with all examples of altruistic behavior. Empathic concern was most strongly related to charitable giving, and to a smaller extent also to blood donation. Extraversion increased the likelihood of post mortem organ donation and charitable giving. The effects of prosocial motives and personality characteristics were rather small compared to the effect of the level of education, for instance. The effect of the level of education on the amount donated to charitable causes was twice as large as the effect of empathic concern. The analyses provided little support for the idea that individual differences in prosocial motives have stronger effects on prosocial behaviors that entail lower costs (the low cost-hypothesis) and are surrounded by less strong social norms (the weak situation-hypothesis).

Although donations of money, blood and organs may seem to be anonymous, personal decisions, they have social backgrounds. The most consistent predictor of anonymous giving was the level of education. The higher educated are more likely to be engaged in any type of anonymous giving. With the present data, however, it was impossible to investigate why education increases the likelihood of anonymous giving. Theoretically, there are numerous possibilities: the higher educated may have a greater awareness of future consequences, more trust in the organizations involved in charity and blood donation, a greater sense of personal responsibility for public welfare, a greater sense of self-efficacy, more postmaterialistic value orientations, a larger social network increasing the likelihood of being asked for a donation and knowing somebody who may profit from blood and organ donation, to name just a few. Recent research has shown that the effect of the level of education on charitable giving remains when differences in exposure to fundraising attempts, generalized social trust, and network structure are taken into account (Bekkers, 2003c, 2004a; Bekkers, Völker, Van der Gaag & Flap, fortchoming), leaving time preferences, postmaterialistic values and feelings of self-efficacy and personal responsibility as likely candidates.

Chapter 5

Participation in voluntary associations: resources, personality, or both?[*]

This chapter investigates participation in voluntary associations. Because membership and volunteering are more observable examples of prosocial behavior and may generate generalized reciprocity, it is expected that the availability of resources through social capital and human capital are the main conditions increasing participation, and that individual differences in personality and prosocial motives are less strongly related to participation. The results indicate that all types of participation in voluntary associations are strongly related to social conditions, especially the level of education and religiosity. In contrast to the expectation, personality characteristics are more strongly related to membership and volunteering than to giving money, blood and organs.

5.1. INTRODUCTION

Volunteer work, membership of voluntary associations and giving to charity are attractive topics of attention for both sociologists and social psychologists. In sociology, association membership and volunteering are studied as indicators of social capital and cohesion in society. In personality and social psychology, volunteering and giving to charity are studied as forms of prosocial behavior with a more or less altruistic character. Unfortunately, these shared interests have not led to common endeavors. The aim of this paper is to increase our knowledge of civic engagement and to foster the mutual understanding between sociology and personality and social psychology. Hypotheses are derived from both sociological and psychological literature to predict when individual differences are related to participation in voluntary associations. Specific attention is paid to individual differences in personality, as an alternative or addition to more common

[*] A quite different version, focusing more strongly on the difference between political and non-political participation, is scheduled for publication in the August 2005 issue of *Political Psychology*. The accepted manuscript can be downloaded at http://www.fss.uu.nl/soc/homes/bekkers/polpsy.pdf

sociological concepts like individual resources and social capital. The main argument of the present paper is that studies from either one of these disciplinary perspectives are incomplete because they disregard the role of the variables that are part of the other discipline. This conclusion is based on two arguments that are supported by the data presented below: the relation of participation with social conditions such as education or church attendance is partly due to personality characteristics; and purely sociological studies of participation can lead to biased estimates of the effects of social conditions such as age and education.

5.2. THEORY AND HYPOTHESES

5.2.1. Sociological and psychological perspectives on civic engagement

Sociologists generally assume that good intentions are universal, but that some people have a stock of human and social capital that allows them to fulfill these intentions while others lack the resources to do so (Brady, Verba & Schlozman, 1995; Wilson & Musick, 1999). "The desire to do good is more or less evenly distributed, but the resources to fulfill that desire are not" (Wilson & Musick, 1999, p. 244). The advantage of this approach is that the measurement and causality problems that inhere in preferences and values are avoided. It is also a useful perspective for sociologists who seek to investigate the effects of individual resources and social capital. However, it does not provide a complete picture of the determinants of civic engagement. Measurement problems with values are not a good reason to pretend they do not exist and are not related to prosocial behavior.

Personality and social psychologists, on the other hand, are interested in civic engagement, and especially volunteering behaviors, as an expression of prosocial dispositions such as extraversion, agreeableness, and empathy (Smith, 1966; Penner & Finkelstein, 1998; Carlo, Allen & Buhman, 1999; Elshaug & Metzer, 2001). However, the social psychology of volunteering has devoted little attention to the way these dispositions are intertwined with social conditions. Using small sizes of student samples, some correlates of volunteering such as age and education are kept constant, but other important factors, such as religious involvement and gender are

not controlled. However, there are a few exceptions to this generalization. With an internet-survey for readers of an article on altruism in *USA Weekend*, Penner (2002) showed that empathy is related to volunteering when key determinants such as age, education and religion are kept constant. However, this internet-survey obviously created a self-selection bias. Furthermore, the results do not show how the effects of sociodemographic variables change when prosocial dispositions are entered. As a result, it is unknown how important individual differences in personality are, compared to financial and social resources; and little is known about how personality interacts with individual resources and social capital. To get a better view of the backgrounds of participation in voluntary associations, it makes sense to take a multi-disciplinary perspective, investigating the explanatory power of both sociological as well as psychological determinants, and the relationship between them.

The research question of this paper is: What is the relative explanatory power of 'sociological' characteristics such as education, income, and social capital, as opposed to 'psychological' characteristics such as individual differences in prosocial dispositions? If a sociologist and a psychologist would engage in a discussion about the superiority of their explanations, who would be supported by the empirical facts? Or would a collaborative effort be more productive? After all, it is also possible that organizing a competition between 'psychological' and 'sociological' explanations of civic engagement is unjustified, because individual differences interact with individual resources and social capital to jointly produce civic engagement. It is unlikely that individual differences are always equally important. Both sociologists as well as psychologists have made suggestions about when to expect larger or smaller effects of individual differences. Do these hypotheses hold up in an empirical test?

5.2.2. Individual resources as determinants of civic engagement

Focusing on the resources that are required for or that facilitate volunteering, sociologists have documented the positive relations of individual resources, such as education and income, and social resources, such as social capital, with voluntary

association membership, activity and unpaid work for associations (for an overview, see Wilson, 2000).

Education is believed to be an important resource for volunteers because it increases civic skills, political efficacy, self-esteem, and empathy (Cohen, Vigoda & Samorly, 2001; Wilson, 2000, p. 219-220). As a result, educated people are more likely to be asked to volunteer (Brady, Schlozman & Verba, 1999). In the Netherlands, the relation of educational level with membership of voluntary associations is stronger than with volunteering (Kraaykamp, 1996).

Working hours should be related negatively to volunteering and active membership since time spent working cannot be spent on volunteering. People working fewer hours should be more likely to volunteer because they have more time at their hands. The unavailability of leisure time should be a restriction inhibiting volunteer work. The empirical evidence, however, indicates more complex patterns, that are sometimes in sharp contrast to the restrictions-perspective. Among full time workers in the USA, for instance, the relation is positive (Wilson, 2000, p. 220-221). In the Netherlands, working hours are related negatively to volunteering (Lindeman, 1995, p. 111, 141; Bekkers, 2001a).

Income should be related negatively to volunteering when it is assumed that higher incomes mean higher opportunity costs; on the other hand, for an organization seeking new volunteers, people with higher incomes may be more attractive because they have more resources to support the organization. Indeed, volunteering is more common among higher incomes (Menchik & Weisbrod, 1987), but among volunteers, wage income is negatively related to hours of volunteer work (Freeman, 1997). In the Netherlands, volunteers have slightly higher incomes than non-volunteers (Lindeman, 1995 p. 82), but this univariate relation did not hold up in a multivariate model (Bekkers, 2001a).

5.2.3. Social capital and civic engagement

Next to individual resources, resources embedded in social networks, denoted as social capital (Coleman, 1990; Putnam, 2000), may also promote civil membership and activity. Social networks may increase membership and volunteering because they are used for the mobilization of new members and

volunteers (Knoke, 1990). Most prominently, the number of volunteers in the social network is an important predictor of volunteering activity (Snow, Zurcher & Ekland-Olson, 1980; Bekkers, 2000). Furthermore, social networks may motivate civic engagement and charitable giving when a social norm to give time or money is present in the network. Unfortunately, measures of social networks require a lot of questionnaire space, which is usually not available (for an exception, see Bekkers, Völker, Van der Gaag & Flap, forthcoming). Therefore the focus in this paper is on indirect measures of social capital.

Religious affiliation - In the Netherlands, as in the USA, the most important predictor of volunteering is the frequency of church attendance (Bekkers, 2002a; Putnam, 2000). It is often argued that church attendance is an indicator of social capital (Putnam, 2000, p. 67). Previous research shows that the relation of religious involvement with volunteering is indeed a social capital effect. Religious participation increases the chance to be asked to volunteer for non-religious organizations, because the social networks of religious people contain more volunteers (Becker & Dinghra, 2001; Bekkers, 2000, 2003a; Dekker & De Hart, 2002; Jackson, Bachmeier, Wood & Craft, 1995; Lam, 2002; Wilson & Janoski, 1995).

Community size may also be important for membership and volunteering (Jackson et al., 1995). In small groups, collective action is easier to achieve than in large groups (Olson, 1965). In smaller communities, 'word gets around' more quickly. Citizens face stronger sanctions for non-participation. In the USA, volunteering is not related to community size according to some (Wilson, 2000, p. 230), while others (Putnam, 2000; Verba, Nie & Kim, 1978) do report a negative relationship. In the Netherlands, volunteering is unequivocally more common in smaller communities than in urban areas, also after controlling for religious participation, which is more common in smaller communities.

5.2.4. Individual differences as determinants of civic engagement

What kind of personality characteristics may be conducive to civic engagement? Personality research on the 'Big 5' (John, 1990; McCrae & John, 1992) suggests that extraversion and agreeableness may be important for voluntary

association membership and activity (Watson & Clark, 1994; Graziano & Eisenberg, 1994). Research on prosocial behavior in social psychology (Davis, 1994; Batson, 1998) has pointed to the relevance of cognitive and emotional aspects of empathy for various kinds of helping behaviors, including volunteering. More specifically, empathy has also been found to be a distinctive characteristic of social activists (Hoffman, 1986). We will discuss these measures in more detail now.

The 'Big Five'

The 'Big Five' are the much appraised result of several decades of factor analysis in personality psychology. Numerous factor analyses on tens of thousands of adjectives from the dictionary describing personal characteristics showed that most of the adjectives were related to five dimensions (John, 1990). The dimensions can be remembered easily with the acronym OCEAN: 'openness to experience' (O), 'conscientiousness' (C), 'extraversion' (E), 'agreeableness' (A), and 'neuroticism' (N). Neurotic persons are described as anxious, nervous, and touchy. Agreeableness is described by adjectives such as sympathetic, helpful, and kind. Introverts - who have a low score on extraversion - are described as quiet, reserved, and withdrawn. Conscientious persons are described as systematic, organized, and neat. Openness is described with adjectives like artistic, imaginative, and innovative.

Psychometric research has shown that the 'Big 5' are highly reliable: the dimensions have reliability coefficients of more than .90 over a period of six years (Costa & McCrae, 1988), declining only a little to about .80 over a period of 25 years (Costa & McCrae, 1992). These strikingly high coefficients over considerable periods of time indicate that the basic dimensions of human personality are very stable, and resistant to changes across the life course. Many studies have shown that the same five dimensions are present in personality descriptions used in everyday language not only in the USA, but also in very different nations, such as Spain, Portugal, Italy, the Netherlands, Germany, France, Croatia, Russia, Finland, Estonia, China, Korea and the Philippines (see Kallasmaa, Allik, Realo & McCrae (2000) for references). The cross-national validity of the measurement instrument has contributed to its popularity among personality psychologists.

Because of the attractive psychometric properties of the 'Big 5', many psychologists have started to measure the 'Big 5' instead of or next to existing measures. For instance, Graziano & Eisenberg (1994) describe agreeableness as a basic dimension of personality, encompassing many other more specific personality characteristics that are known to be related to prosocial behavior. One of these specific measures is empathy, which will be discussed below. Extraversion has been described in the personality literature as 'positive emotionality', comprising a cluster of qualities like energetic, ambitious, socially intelligent and warm (Watson & Clark, 1994). In fact, these qualities can be divided into two aspects: activity and sociability. These two qualities are useful in any kind of voluntary association. We may expect, therefore, that extraversion is related to participation in all kinds of voluntary associations, especially to active membership and voluntary work. Extraverted people may be engaged in civil associations because they 'like to do and organize things with other people', it doesn't matter for what kind of collective action. Because extraversion reflects a preference for active stimulation, it should be less strongly associated with simply being a member.

Because this is the first study of the relation between general 'Big 5'-dimensions and civic engagement, we must rely on previous empirical research that made use of more specific personality measures and other dispositions that are known to be related to the Big Five. Lindeman (1995, p. 156) has shown in a study of participation in voluntary work that a preference for active stimulation (the activity aspect of extraversion) is related positively to the extent of voluntary activity in societal and recreative associations. This result confirmed older research (Smith, 1966), which also showed that extraversion is more strongly related to volunteering than to membership. Research by Knoke (1988), showing that sociable goals of members are conducive to organizational participation also supports the hypothesis on the effect of extraversion, since extraverted people have a stronger preference for social interaction. Finally, previous research supports the hypothesis that volunteering is positively related to emotional stability (Allen & Rushton, 1983). Members of voluntary associations and volunteers appear to be less neurotic and less often depressed than non-members (Lin, 2000). Although previous research does not suggest clear hypotheses on the relations of the other

two personality dimensions of the Big Five to participation in voluntary associations (openness and conscientiousness), they will be included in the analysis for exploratory purposes.

Empathy

Empathy refers to the capacity and tendency to experience the emotions of other persons. Empathy has a cognitive as well as an emotional aspect. The cognitive aspect of empathy, commonly denoted as perspective taking, is the capacity to take the perspective of someone else. The emotional aspect of empathy, referred to as sympathy or empathic concern, is the tendency to identify spontaneously with the emotions of someone else. The cognitive and emotional aspects of empathy are positively related, but form relatively independent dimensions (Eisenberg, Miller, Schaller, Fabes, Fultz, Shell, & Shea, 1989; Davis, 1994). The most recent questionnaire measure of empathy consists of four self-report scales, each consisting of seven items (Davis, 1994). The scales cover the two dimensions of empathy: perspective taking and fantasy for the cognitive dimension, and empathic concern and personal distress for the emotional dimension. Perspective taking and empathic concern are most likely to be related to volunteering and giving to charity. Test-retest associations for these scales vary from .50 to .62, uncorrected for measurement error (Davis, 1994). In terms of the Five Factor Model, empathy is considered to be an aspect of agreeableness (Graziano & Eisenberg, 1997). Empirically, empathy is not only correlated positively with agreeableness, but also shows a positive correlation with neuroticism (Ashton & Lee, 2001).

Empathy is one of the most frequently studied individual differences in research on prosocial behavior in social psychology and child development studies. However, this research is mostly confined to controlled experimental settings. There is very little multivariate research on the relation of empathy with volunteering, and civic engagement. The potential relevance of empathy for volunteering is clear: associations that seek to relieve the needs of specific social groups should be more attractive to those who easily empathize with these groups

and identify with their needs. In fact, many nonprofit organizations base their appeals for volunteers on the identification with the needs of the less fortunate.

The available empirical studies documenting the relation of empathy with prosocial behavior have shown that volunteers (e.g., Penner et al., 1995) and social activists (Hoffman, 1986) have higher levels of empathy than non-participants. Within a group of AIDS service organization volunteers, a positive correlation between empathy and length of service was found (Penner & Finkelstein, 1998). However, relevant control variables are missing in these studies. Empirical studies show that empathy is correlated positively with sex - females scoring higher (Eisenberg et al., 1989), and sometimes it is assumed that the positive relation between educational level and civic engagement is partly explained by higher levels of empathy among the higher educated (Wilson, 2000, p. 219). There is clearly a need for more multivariate research on the link between individual differences in empathy and civic engagement.

In addition to the 'Big Five' and the two empathy dimensions, this chapter also studies potential effects of social value orientation on civic engagement. There is some preliminary evidence that people with more prosocial value orientations are more likely to volunteer (McClintock & Allison, 1989; Bekkers, 2004b), but these studies did not control for confounding variables such as religious affiliation and empathy.

5.2.5. Interaction effects: when do individual differences have an influence?

To investigate the relation between individual differences in values or personality and prosocial behaviors such as volunteering may be of interest in itself. Simply organizing a competition, however, obscures more interesting questions. If there is something like an 'altruistic personality', it is unlikely that it is equally apparent in all situations (Carlo et al., 1991). It is unlikely that the effect of individual differences and resources are not contingent upon each other. This paper tests two hypotheses on *when* individual differences have an influence. The 'low cost-hypothesis' states that values, attitudes, and other 'soft incentives' are more strongly related to behaviors that entail smaller costs. The 'weak situation-hypothesis' states that values, attitudes, and other 'soft incentives' are more

strongly related to behaviors that entail smaller costs. These hypotheses were discussed extensively in previous chapters. The low cost-hypothesis predicts that individual differences will be related more strongly to the less demanding forms of participation like nominal membership, and less strongly with the more demanding forms of participation such as active membership and volunteering. Another prediction based on the low cost-hypothesis is that the impact of individual differences will be stronger for groups of respondents who value the costs of time and money more highly. For instance, for respondents with high hourly wages, volunteering is a high-cost activity, while for respondents with lower wages, volunteering is low-cost. In other words, the low cost-hypothesis would predict that individual differences matter more for those with lower wages. The weak situation-hypothesis predicts that individual differences will be related more strongly to behaviors that are surrounded by more strict social norms. Probably, social norms on membership of voluntary associations and volunteering are about the same. Therefore, the weak situation-hypothesis will be tested by comparing groups of respondents who are embedded in social contexts with varying norms on civic engagement and with varying opportunities for enforcement. If the weak situation-hypothesis is correct, the effects of individual differences in prosocial motives should be stronger for the non-religious and for persons living in urbanized areas, because norms on civic engagement are less strict and the likelihood of sanctioning is lower in these groups.

5.3. DATA AND MEASURES

To test the hypotheses of this article, the third edition of the family survey of the Dutch population (De Graaf, De Graaf, Kraaykamp & Ultee, 2000) is used. The design of this household survey has been discussed in chapter two, as well as the measures of participation in voluntary associations and personality characteristics.

The respondents completed a computer assisted personal interview as well as a written questionnaire. In the personal interview, data were obtained on the *highest completed educational level* (7 categories, ranging from primary school to post-academic degree), *yearly household income* (sum of all sources of income of

both partners), *working hours per week*, the *frequency of church attendance* (number of visits per year), and *urbanization level* (ranging from 1 - very urban - to 5 - rural area).

In the following section, the results are reported of four different logistic regression models of civic engagement. In the first model, individual differences in empathy and the 'Big 5'-personality dimensions are included. In the second model, individual resources such as education, social capital indicators such as church attendance, and political values and attitudes are added. Because personality characteristics are stable individual differences, they are causally prior to acquired levels of training, income and religious participation. Therefore, they are entered before the resource indicators. The third model shows the interaction effects of individual differences with hourly wages, church attendance and urbanization, testing the low cost-hypothesis and the weak situation-hypothesis. The fourth model shows the effects of resources when the personality characteristics are left out of the analysis. Comparing the fourth with the second and third model shows in which direction and to what extent the effects of sociological characteristics are over- or underestimated when personality characteristics are not taken into account.

The regression analyses were based on unweighted data, taking clustering of multiple observations within households into account. All non-dichotomous independent variables were z-standardized to facilitate the comparison of effect sizes in logistic regressions.

5.4. RESULTS

5.4.1. Associational membership

The results of the logistic regression analysis of membership of voluntary associations in table 5.1 show that individual differences in personality increase the amount of explained variance.

Table 5.1. Logistic regression of membership of voluntary associations (n=1496)

	Model I	Model II	Model III	Model IV
Female	0.45 ***	0.50 ***	0.50 ***	0.52 ***
Age	1.17 *	1.31 ***	1.32 ***	1.23 **
Agreeableness (a)	0.92	0.96	0.91	
Conscientiousness	0.82 **	0.83 *	0.82 **	
Extraversion	1.11	1.10	1.10	
Neuroticism	0.91	0.97	0.97	
Openness	1.16 *	1.11	1.10	
Perspective taking (pt)	0.98	0.96	0.99	
Empathic concern (ec)	1.27 ***	1.24 **	1.25 ***	
Social value orientation (svo)	0.98	0.98	0.97	
Working hours		1.07	1.08	1.10
Household income		1.09	1.11	1.08
Education		1.67 ***	1.68 ***	1.70 ***
Church attendance		1.18 *	1.21 *	1.21 *
Urbanization (reverse coded)		1.06	1.05	1.05
Wages*a			0.70 *	
Wages*pt			1.20 *	
Wages*ec			1.01	
Wages*svo			1.03	
Church attendance*a			0.89	
Church attendance*pt			1.02	
Church attendance*ec			1.08	
Church attendance*svo			0.98	
Urbanization*a			1.08	
Urbanization*pt			1.00	
Urbanization*ec			1.00	
Urbanization*svo			0.99	
Pseudo R^2	.0484	.0870	.0934	.0712
Relative increase in R^2	32.2	58.1	9.6	-23.8
Chi Square	82	120	128	102

Entries are odds ratios for z-standardized variables. All Chi Square tests are significant at the p<.001 level. *** p<.001; ** p<.01; * p<.05; (*) p<.10. Pseudo R^2 of baseline model: .0270

Model I shows that agreeableness and social value orientation are not significantly related to membership, but empathic concern does show the expected positive relation. In addition, members of voluntary associations are less conscientious and slightly more open to experience than non-members. Model II shows a strongly positive relation of the level of education with membership. The higher educated are much more likely to be members of voluntary associations. Controlling for education, no relationships of household income or working hours with associational membership are found. Of the social capital indicators, only the frequency of church attendance was important. No relation of urbanization level with associational membership was found.

In model II, the relationship of openness disappears and the relationship of empathic concern with membership becomes weaker. Model III shows a negative interaction of hourly wages with agreeableness, which is in line with the low cost-hypothesis. The positive interaction of perspective taking with hourly wages, however, runs counter to the prediction. The other measures of individual differences in prosocial motives did not interact with hourly wages. Neither did any of the personality measures interact with church attendance or the level of urbanization. Therefore, the weak situation-hypothesis is not supported in this analysis. Comparing the results of Model IV with those of Model II reveals that a purely sociological regression model overestimates the effect of education, and underestimates the age effect. Other signs of a complex interrelation of personality and individual and social resources are that the introduction of the level of education reduced the relation of openness to experience with participation, and the introduction of church attendance reduced the effect of empathic concern. In terms of relative effects, the results of table 5.1 show that 58% of the increase in explained variance over the basic model is accounted for by sociological factors and a little more than 30% is accounted for by individual differences in personality. About 10% of the increase is accounted for by the interactions.

Table 5.2. Ordered logistic regression of membership of voluntary associations (n=1496)

Female	0.58 ***	0.62 ***	0.62 ***	0.67 ***
Age	1.30 ***	1.44 ***	1.45 ***	1.40 ***
Agreeableness (a)	0.96	1.00	0.99	
Conscientiousness	0.86 **	0.88 *	0.88 *	
Extraversion	1.06	1.07	1.08	
Neuroticism	0.87 **	0.93	0.94	
Openness	1.10 *	1.05	1.05	
Perspective taking (pt)	0.99	0.97	0.97	
Empathic concern (ec)	1.24 ***	1.21 ***	1.21 ***	
Social value orientation (svo)	1.08	1.02	1.02	
Working hours		1.04	1.03	1.06
Household income		1.04	1.04	1.07
Education		1.65 ***	1.66 ***	1.68 ***
Church attendance		1.18 **	1.15 *	1.19 ***
Urbanization (reverse coded)		1.14 *	1.13 *	1.14 *
Wages*a			0.95	
Wages*pt			1.01	
Wages*ec			0.91 *	
Wages*svo			1.08 **	
Church attendance*a			0.96	
Church attendance*pt			0.97	
Church attendance*ec			1.01	
Church attendance*svo			1.09 (*)	
Urbanization*a			1.04	
Urbanization*pt			1.01	
Urbanization*ec			0.98	
Urbanization*svo			0.96	
Pseudo R^2	.0204	.0448	.0472	.0387
Relative increase in R^2	26.0	67.4	6.6	-18.0
Chi Square	99	196	218	177

Entries are odds ratios for z-standardized variables. All Chi Square tests are significant at the p<.001 level. *** p<.001; ** p<.01; * p<.05; (*) p<.10. **Pseudo R^2 of baseline model: .0110**

5.4.2. Memberships of multiple organizations

The results in table 5.2 are similar to those of the previous analysis. Model I shows that agreeableness and social value orientation are not related to the number of memberships, but empathic concern and to a smaller extent also emotional stability increase the number of memberships. There is also an unexpected negative relation of conscientiousness with the number of memberships in voluntary associations. The results of model II show that the number of memberships increase with the level of education, the frequency of church attendance, and decrease with the level of urbanization. Table 5.1 did not show significant effects of church attendance and the level of urbanization, indicating that respondents living in urban environments and the non-religious are just as likely to involved in voluntary associations, but hold lower numbers of memberships. Working hours and income are not related to the number of memberships. Model III shows two positive interactions of social value orientation, one with hourly wages and one with the frequency of church attendance. Both are not in the predicted direction. The negative interaction of empathic concern with hourly wages is in line with the low cost-hypothesis, however. The results of model IV indicate that omitting personality characteristics from a regression analysis of the number of memberships in voluntary associations slightly overestimates the relationships of age and church attendance. In addition, the level of education and the frequency of church attendance mediate the effects of neuroticism and empathic concern, which were stronger in model I than in model II. The relative increase of the proportion of explained variance accounted for by sociological characteristics is about 67%. The psychological characteristics account for 26% of the increase; the remaining 7% is accounted for by the interactions.

5.4.3. Volunteering

Table 5.3 shows the results of a logistic regression analysis of volunteering. The addition of individual differences in model I increases the proportion of explained variance over the baseline model, because of the positive effects of extraversion, empathic concern and openness. In contrast to expectations, agreeableness and social value orientation are not related to volunteering.

Table 5.3. Logistic regression of volunteering (n=1497)

	Model I	Model II	Model III	Model IV
Female	0.65 ***	0.63 ***	0.62 ***	0.65 ***
Age	1.20 **	1.19 *	1.19 *	1.15 *
Agreeableness (a)	0.97	0.99	0.99	
Conscientiousness	0.94	0.95	0.94	
Extraversion	1.18 **	1.18 **	1.19 **	
Neuroticism	0.91	0.93	0.93	
Openness	1.14 *	1.13 *	1.13 (*)	
Perspective taking (pt)	0.95	0.94	0.95	
Empathic concern (ec)	1.14 *	1.10	1.09	
Social value orientation (svo)	0.93	0.91 (*)	0.91 (*)	
Working hours		0.92	0.91	0.96
Household income		0.91	0.89	0.95
Education		1.32 ***	1.32 ***	1.34 ***
Church attendance		1.19 **	1.18 *	1.18 **
Urbanization (reverse coded)		1.21 **	1.20 **	1.18 **
Wages*a			0.92	
Wages*pt			1.09	
Wages*ec			0.87 (*)	
Wages*svo			1.04	
Church attendance*a			0.99	
Church attendance*pt			0.95	
Church attendance*ec			1.00	
Church attendance*svo			1.03	
Urbanization*a			0.98	
Urbanization*pt			1.00	
Urbanization*ec			1.02	
Urbanization*svo			1.01	
Pseudo R^2	.0262	.0486	.0521	.0326
Relative increase in R^2	36.8	54.6	8.5	-37.4
Chi Square	52	86	94	57

Entries are odds ratios for z-standardized variables. All Chi Square tests are significant at the p<.001 level. *** p<.001; ** p<.01; * p<.05; (*) p<.10. Pseudo R^2 of baseline model: .0111

Model II shows that volunteering is more common among the higher educated, among persons living in less urban areas, and among frequent church attendees. Unexpectedly, working hours are not significantly related to volunteering, although the relationship is negative. Model III shows a weak, marginally significant negative interaction of empathic concern with hourly wages, which is in line with the low cost-hypothesis.

The weak situation-hypothesis is not supported because church attendance and the level of urbanization interacted with none of the individual differences in prosocial motives. Model IV shows that a purely sociological analysis of volunteering, without taking individual differences in personality into account, would underestimate the relationship of volunteering with age, but not with the other social conditions. Furthermore, comparing model II with model I shows that the relationship of empathic concern with volunteering disappears when resource indicators are introduced. Additional analyses show that the frequency of church attendence mediates the effect of empathic concern. The relative effect of personality on volunteering is larger than in previous analyses: 37% of the increase in explained variance is due to individual differences in empathic concern, extraversion, neuroticism and openness. Resources account for just over 55%. The interactions accounted for the remaining 9%.

5.5. Evaluation of hypotheses

Social and personality characteristics of active citizens

The results of the analyses shed light on the social and personality characteristics of active citizens in the Netherlands (see table 5.4). The most distinctive characteristic of citizens who actively participate in voluntary associations is that they have more human and social capital available to them, and face lower opportunity costs for participation. A higher level of education is the most important resource promoting active citizenship: the level of education is positively related to both membership and volunteering. The old observation that civic engagement is unequally distributed (Almond & Verba, 1963) still holds.

Those with more human capital are more likely to participate in voluntary associations. A lack of human capital is a barrier for civic engagement. Hourly wages were not related to membership and participation in the activities organized by voluntary associations. Higher wages do not increase the opportunity costs of membership because this form of civic engagement requires less time - sometimes even no time at all. Church attendance also increased voluntary association membership and volunteering. In the past, church attendance used to be strongly correlated with membership and volunteering (Verba, Nie & Kim, 1978, p. 182-192). Although the effects of church attendance may have declined in the process of secularization, religious involvement is still one of the key factors for civic engagement (Bekkers, 2003a). Another indicator of social capital, the level of urbanization, was also related to civic engagement, with persons living in more rural areas being members of a higher number of voluntary associations, and volunteering more often. This result shows that the difference between rural and urban environments in the Netherlands that was present twenty-five years ago (Verba, Nie & Kim, 1978) has persisted.

The personality characteristics of active citizens are less clear than their resources and political values. Personality characteristics often have different effects for different forms of civic engagement. Members of voluntary associations are more empathic than non-members, less conscientious, and somewhat more open to experience. Emotional stability increases the number of memberships and the likelihood that people volunteer. Volunteers have a more extraverted personality and are more open to experience. In contrast to expectations, members and volunteers in the Netherlands are not more agreeable, do not have greater perspective taking abilities, and do not have a more prosocial value orientation than non-members or non-volunteers.

Table 5.4. Overview of hypotheses on effects of resources and personality characteristics and results

	Expected	Found		
Material and social resources:		A	B	C
- Education	+	+	+	+
- Income	+	0	0	0
- Working hours	-	0	0	0
- Church attendance	+	+	+	+
- Urbanization	-	0	-	-
Individual differences in personality:				
- Agreeableness	+	0	0	0
- Extraversion	+	0	0	+
- Neuroticism	-	0	-	0
- Conscientiousness	0	-	-	0
- Openness	0	+	+	+
- Empathic concern	+	+	+	+
- Perspective taking	+	0	0	0
- Social value orientation	+	0	0	0

A: Membership; B: Number of memberships; C: Volunteering

Resources are usually more important than personality

To summarize, table 5.5 contains the increase in explained variance after the introduction of individual differences in empathy, social value orientation and the 'Big 5', resources and interactions between individual differences and hourly wages, church attendance and the level of urbanization.

This table shows that resources are more strongly related to participation in voluntary associations than personality characteristics and prosocial motives. The increase in explained variance due to the introduction of social characteristics is more than 2 times the increase in explained variance due to the introduction of personality characteristics. It can be argued, of course, that not all relevant personality characteristics have been measured. Self-esteem and locus of control for instance, are positively related to civic engagement (Cohen, Vigoda & Samorly,

2001). However, the 'Big 5' represent the most general traits in human personality, and the effects of self-esteem and locus of control are covered by the effects of neuroticism and extraversion (Robins, Tracy, Trzesniewski, Potter, & Gosling, 2001). In contrast, for 'sociological' characteristics the same argument can be made with considerably more success: the analyses did not include home ownership, watching television, religious denomination, and religious socialization, which are all related to civic engagement (Bekkers, 2001a; 2003a; Bekkers & Hooghe, 2004, see also chapter six).

Table 5.5. Relative increase in explained variance due to introduction of indicators for individual resources, social capital, individual differences (empathy, social value orientation and the 'Big Five') and interactions in regression analyses

	Personality and prosocial motives	Resources	Interactions
Membership	32.2	58.1	9.6
Number of memberships	26.0	67.4	6.6
Volunteering	37.0	54.6	8.5
Mean	31.7	60.0	8.2

Personality characteristics are not more strongly related to civic engagement when costs are lower

The low cost-hypothesis predicted that personality indicators would be less important for more costly forms of civic engagement. This hypothesis was tested in two ways: comparing the effects of personality characteristics for more and less demanding forms of civic engagement, and comparing the effects of personality characteristics for groups of respondents with varying opportunity costs for participation.

The first type of test provided results that are largely inconsistent with the low cost-hypothesis. It was expected that personality characteristics would be more strongly related to membership than to volunteering. However, the results do not

show large differences in the effects of personality characteristics and prosocial motives on membership and volunteering. If anything, personality characteristics and prosocial motives accounted for a larger increase in explained variance in the analysis of volunteering (37%) than in the analysis of membership (32%). The number of memberships, in contrast, was related more strongly to social conditions (accounting for 67% of the increase in explained variance in table 5.2) than the decision to be a member or not (accounting for 58% of the increase in table 5.1).

The second type of test provided only a few scattered pieces of support for the low cost-hypothesis. As hourly wages increased, and the relationship of agreeableness with membership was less strongly positive, and the positive relation of empathic concern with the number of memberships also declined at higher wage levels. On the other hand, however, perspective taking tended to increase the likelihood of membership as hourly wages increased, the positive relation of social value orientation with the number of memberships was increasing with hourly wages. In sum, the low cost-hypothesis is not supported by the results of the analyses in this chapter.

Personality characteristics are not more strongly related to civic engagement when social pressure to participate is lower

The weak situation-hypothesis argued that personality characteristics would matter less for religious people and persons living in urban areas because they are embedded in networks of volunteers and other civil participants, which brings them more often in 'strong' situations that provide social pressure and opportunities to become engaged in voluntary associations. The analyses did not support this hypothesis at all. Individual differences in prosocial motives such as agreeableness, social value orientation or empathic concern did not have less positive relations with participation in voluntary associations as church attendance decreased or the level of urbanization increased.

5.6. CONCLUSION AND DISCUSSION

In this paper, the explanatory force of 'sociological' versus 'psychological' characteristics related to civic engagement was examined. The answer to the research question "Which explains most?" is: resources, not personality. On average, 60% of the of the increase in explained variance that is covered by the regression analyses reported in this paper is accounted for by 'sociological' characteristics such as time and money restrictions, resources acquired through education, and the opportunities to become engaged in voluntary associations that are produced by the social networks of people. 'Psychological' characteristics such as individual differences in empathic concern, social value orientation, agreeableness, and the other 'Big Five' explain 32%, while the remaining 8% is accounted for by interactions between individual differences and hourly wages. This conclusion implies that a strictly psychological perspective on prosocial behaviors such as volunteering is far from complete because it lacks the most important predictors. This is not to say that personality can be ignored because it is irrelevant. Taking account of individual differences in personality enables the researcher to understand civic engagement more fully. In spite of this result, the sceptic sociologist may still doubt the relevance of personality for sociologists with the argument that personalities may increase the explained variance, but that they are orthogonal to sociological factors, and do not affect the validity of a purely sociological analysis. The analyses provide three arguments in response to this criticism. The first is that the effects of so-called 'sociological' factors like educational attainment and church attendance are partly the effects of individual differences in personality, such as empathic concern, emotional stability and openness to experience. Education and church attendance partly mediated the effects of personality characteristics such as emotional stability and openness to experience. The second is that a purely sociological analysis ignoring individual differences in personality sometimes overestimates the effects of 'social conditions'. In statistical terms, the error terms in a sociological analysis contain pieces of personality that are correlated with the independent variables. A third argument is theoretical: it is likely that the effects of personality have become stronger since

World War II. Societal developments such as rationalization and, more specifically, individualization, may have increased the 'space' for personality effects, such as the effect of extraversion on volunteering. This theme will be explored in the next chapter.

A closer cooperation between sociology and psychology is needed to discover when and how individual differences in personality are related to prosocial behavior. As became clear in this paper, the low cost-hypothesis and the weak situation-hypothesis are not suitable for this purpose. Future work should develop alternative hypotheses. Perhaps more attention should be paid to the fact that different social contexts may activate different personality characteristics, and/or that individual differences in personality lead to the selection of situations that match these personality characteristics (Buss, 1987). For instance, the finding that church attendance intermediated the effect of empathy in several analyses may indicate that religious meetings are more attractive to empathic persons. The effect of personality characteristics may be more specific to the kind of behavior and the kind of personality characteristic in question. Perhaps 'middle range' theorizing is more suitable here.

In conclusion, three implications stand out. (1) Sociological characteristics are more important for prosocial behaviors in the area of civic engagement than personality characteristics. A purely psychological analysis of civic engagement lacks the most important predictors and ignores a part of the process through which personality has an impact on prosocial behavior. (2) Still, personality characteristics have important effects on 'sociological' phenomena such as civic engagement: they account for one third of the total increase in explained variance. (3) The effects of personality and social conditions are by and large additive. However, the effects of personality are partly mediated by social conditions such as the level of education and the religious networks that people access through church attendance. We are only at the start of understanding this complex pattern of interrelations between social structure, personality, and social outcomes.

Chapter 6
Shifting backgrounds of participation in voluntary associations in the Netherlands[*]

Why has the massive decline of religious involvement in the Netherlands since World War II not led to a decline of participation in voluntary associations? Religious involvement has always been the most important predictor of participation in voluntary associations. In the past four decades, secular associations (environmental and human rights organizations, sports clubs and cultural expression groups) compensated for the decline in membership in traditional, pillarized associations (labor unions, political parties). This chapter investigates how the nature of participation in voluntary associations has changed by comparing characteristics of members of pillarized and secular voluntary associations. The analyses in this chapter show that some secular organizations have grown because they offer more selective incentives to members, while others have grown because of the increase in postmaterialistic values among the Dutch population. Furthermore, the rise of the average level of education and extraversion has ensured a stable supply of members and volunteers.

6.1. INTRODUCTION

Not only among the Dutch population and in the media, but also among social scientists the concern has grown about a decline in social cohesion (Fukuyama, 1999; Putnam, 2000). For the Netherlands such a concern is not warranted: Dutch citizens still have the same level of contact with family members, neighbors, friends and acquantances as in 1975 (Scheepers & Janssen, 2001), the proportion of volunteers has not declined (SCP, 1998, 2001), donations to

[*] A slightly different version of this chapter appeared in Dutch in the 2002 December issue of Mens & Maatschappij, with Nan Dirk de Graaf as a coauthor (Bekkers & De Graaf, 2002). We thank Wout Ultee and Harry Ganzeboom for comments on previous versions of the paper. We also thank Harry Ganzeboom for suggesting a conditional logistic regression-analysis.

nonprofit organizations and charitable causes have grown enormously (Schuyt, 2003), and membership rates of voluntary associations have increased (SCP, 1998). The Netherlands still have a high rate of participation in voluntary associations. This is a remarkable conclusion. Religious involvement has always ba an important factor for participation in voluntary associations (De Hart, 1999a; De Hart & Dekker, 2000; Dekker & De Hart, 2002; Kraaykamp, 1996). This regularity still holds, even though Dutch society witnessed a massive secularisation in the past decades (Becker, De Hart & Mens, 1996).

Why did the decline of religious involvement in the Netherlands not decrease the level of participation in voluntary associations? Our answer to this question is that the *basis* of participation in voluntary associations in the Netherlands has shifted with increasing secularisation. At the peaks of the era of pillarization, voluntary associations showed strong religious cleavages (Lijphart, 1975). Those who were born in a specific pillar automatically joined voluntary associations from that pillar. This norm has lost much of its force in the past decades. Dutch 'civil society' has changed substantially in the past decades. Traditional voluntary associations such as churches, unions and political parties, who were part and parcel of the pillarized civil society in the Netherlands, have lost substantial numbers of members. The decline in participation in pillarized associations has ba compensated by the emergence of new, secular organizations (De Hart, 1999b; SCP, 1998). The level of participation in voluntary associations in the past decades has not declined with the decline in religious involvement: participation in voluntary associations has even increased. Studies by the Social and Cultural Planning Office (SCP, 1994; 1998) show that the increase in memberships is due to the growth in environmental organizations, organizations focusing on specific ethical issues, cultural expression, sports clubs, and interest groups for specific categories such as consumers and car drivers. The vast majority of associations that have grown in the past decades do not have a religious background. The SCP describes the development in participation in voluntary associations as a movement in the direction of individualistic participation in clubs defending specific interests or satisfying private concerns with specific issues (SCP, 1994).

Many new voluntary associations, such as consumer interest groups and sports clubs, are attractive because of the services they provide or the sociability aspect of participation. According to public goods theory (Olson, 1965) services and sociability are selective incentives: the individual material and social benefits of membership. However, there is an important category of voluntary associations that do serve the general public, and that do not offer many selective incentives to recruit new members, such as environmental and human rights watch organizations. Members of these voluntary associations do not meet each other regularly in the association, and do not profit from services offered by the organization. These new organizations emerged without using selective incentives, and without the availability of a natural group of supporters. Voluntary associations such as Amnesty International and Grapeace do not have a religious background and were founded relatively recently (in 1968 and 1978, respectively). These secular voluntary associations could not use existing networks to recruit members. Maloney (1999) has shown that members of organizations defending human and animal rights in the United Kingdom became members more often at their own initiative than members of 'traditional' voluntary associations. It should be noted that what appears as 'own intiative' is often triggered by exposure to media attention for the cause or the organization. A historical account of the growth of Amnesty International suggests that the mass media were actively used to call the attention of potential members (Bronkhorst, 1998). The case of Amnesty International suggests that membership in secular voluntary associations is more strongly rooted in personal preferences and attitudes than membership in pillarized voluntary associations. A brief summary of the distinctive characteristics of pillarized and secular voluntary associations appears in table 6.1.

This chapter investigates whether participation in secular voluntary associations is more often based on selective incentives and personal preferences and attitudes than on religious involvement, compared with participation in pillarized voluntary associations. Do we observe a trend towards individualization in voluntary associations, such that people choose voluntary associations on the basis of their personal preferences and attitudes more often than they used to do? We try to answer this question by comparing members of pillarized voluntary

associations with members of secular voluntary associations. To what extent do secular voluntary associations offer more selective incentives and to what to what extent are postmaterialistic value orientations and other personal preferences related to participation in secular voluntary associations?

Table 6.1. Distinctive characteristics of pillarized and secular voluntary associations

	Pillarized voluntary associations	Secular voluntary associations
Foundation of membership	Pillarized group identity	Selective incentives or personal preferences and attitudes
Purpose voluntary association	Collective welfare, emancipation of the own pillar	Individual interests, specific issues
Examples	Churches and other religious organizations, political parties, unions	Environmental and human rights watch organizations, sports clubs, consumer interest groups

6.2. THEORY AND HYPOTHESES

To answer our research questions, we briefly discuss four theories. Our starting point is the theory of social integration of Durkheim (1897), generating the prediction that participation in voluntary associations has declined because of secularization. However, this decline did not occur. We argue that the theory of Durkheim applies only to participation in pillarized voluntary associations. The secularization of Dutch society did decrease the level of participation, but only in pillarized voluntary associations. After World War II, new voluntary associations emerged, which have little or nothing to do with religious involvement. The emergence of these secular voluntary associations can not be explained with the theory of Durkheim. To explain the emergence of secular voluntary associations we offer three other theories. First we discuss public goods theory (Olson, 1965), which predicts that voluntary associations will try to recruit new members by offering selective incentives. In our view, this theory cannot explain the emergence

of all secular associations. First of all, a number of voluntary associations emerged (environmental and human rights watch organizations for instance) that do not offer many selective incentives. Inglehart's (1977, 1997) theory of the rise of postmaterialistic values can offer an explanation for the emergence of these associations. Secondly, a number of voluntary associations emerged that reflect private preferences, such as sports clubs and cultural expression groups. Research in personality psychology (McCrae & John, 1992) suggests that these voluntary associations are attractive for persons with specific personality characteristics, such as extraversion and openness to experience. These personality characteristics have become more widespread in recent decades (Twenge, 2001) – perhaps because of secularisation.

6.2.1. Participation in voluntary associations and Durkheim

Participation in voluntary associations is often regarded as an indicator of social cohesion (Putnam, 2000). Membership rates indicate peoples involvement with society at large. Membership of voluntary associations is also promoted by social norms, which are transmitted from parents to children. Participation in voluntary associations, especially in organizations that pursue group interests, is encouraged in many social groups. This implies that the theory of social integration of Durkheim, reconstructed by Ultee, Arts & Flap (2003), is applicable. According to this theory, persons are more likely to conform to norms when their level of integration in the group is higher. An important indicator for social integration in general and in religious groups in particular is the frequency of church attendance. Those who attend religious services more often reveal a higher level of involvement in religion. Previous research (Bekkers, 2000; De Hart, 1999a; Dekker & De Hart, 2002) has shown that the frequency of church attendance is responsible for the relationship between religious affiliation and participation in voluntary work. There are three explanations for the effect of religious involvement on volunteering. First, attending religious services decreases the distance to 'mobilization networks' (Klandermans, 1984). This is the 'mobilisation-effect' of church attendance. Before and after religious services people are given opportunities to volunteer for voluntary associations that are directly linked to or supported by the church. As a

consequence, church attendancees are more likely to be asked to volunteer (Bekkers, 2000, 2004a). The second explanation for the effect of church attendance is the 'motivation-effect': in religious environments, volunteering is evaluated positively, creating social pressure to honor requests to become a volunteer and to continue volunteering (Bekkers, 2004a). A third explanation for the effect of religious involvement argues that religious involvement promotes the internalisation of prosocial values. This explanation is called the 'socialization-effect' of church attendance. In this explanation, not just the present religious involvement of a person, but also the involvement of his parents in youth is an important factor. This explanation is based on the critique of Parsons (1960) on Durkheim's theory of integration (Ultee, 1976; Ultee, Arts & Flap, 2003).

However, an application of the theory of social integration would lead to the incorrect prediction that participation in voluntary associations has declined linearly with increasing secularization. If participation in voluntary associations is mainly a question of being participation of a religious network or having been raised in religieus environment, then the decline of church attendance and religious socialization practices would lead to a similar decline in participation in voluntary associations. As noted before, this decline did not occur, because secular voluntary associations have emerged. In line with integration theory, membership rates in pillarized voluntary associations have declined substantially. Therefore, we argue that predictions from integration theory are only applicable to participation in pillarized voluntary associations:

H1. The higher the frequency of church attendance and the stronger the religious socialization, the higher the likelihood of participation in pillarized voluntary associations.

To explain participation in secular voluntary associations, however, a different explanation is required. It is likely that new social conditions have emerged after World War II, which form the background of the emergence of secular voluntary associations. One potential new condition is the rise of postmaterialism (Inglehart, 1977, 1996). Other potential conditions are the

selective incentives offered by voluntary associations, and the personal preferences of persons, which are based on what are commonly viewed in psychology as personality characteristics. These different conditions do not exclude one another: they may be at work simultaneously. First we discuss public goods theory, then the rise of postmaterialism, and, finally, research in personality psychology.

6.2.2. Selective incentives

Selective incentives are the individual material and social benefits of the membership of a voluntary association (Olson, 1965). Many voluntary associations that emerged after World War II provide services and sociability to members. The emergence and growth of these voluntary associations can be explained by public goods theory (Olson, 1965). This theory argues that rational individual citizens contribute more often to the production of collective goods when they profit directly from. Voluntary associations that aim to produce collective goods will have to attract new members by offering selective incentives, such as providing services to members. In line with this theory, many voluntary associations that provide such selective incentives, such as consumers interest groups, sports clubs and cultural expressive groups have grown substantially in the past decades (De Hart, 1999b). Membership of these voluntary associations is attractive for all kinds of social categories: no specific social values or religious involvement is required to derive benefits from participation in such associations. Therefore, our second hypothesis reads:

H2. The more selective incentives voluntary associations are offering, the weaker the relation of membership with the frequency of church attendance and religious socialization.

Voluntary associations that offer selective incentives are often directed at young adults. Sports clubs and cultural expressive groups (musical and theatre clubs) mainly attract younger people. On the one hand, the negative relationship of age with membership in associations offering more selective incentives may be a life cycle phenomenon: participation in adult life may take on different shapes. On the

other hand, one could argue that there is also a generation gap, because voluntary associations offering selective incentives have recruited members mainly from the generations born after World War II. The cross-sectional design of the Family Survey 2000 does not offer an opportunity to test both explanations. Whatever the explanation may be, we expect:

H3. Membership of voluntary associations offering more selective incentives declines with age.

6.2.3. Postmaterialistic value orientations

Not all of the voluntary associations that have grown in the past decades are service providing associations or associations with a strong sociability aspect. Environmental and human rights watch organizations have also grown in the past thirty years (De Hart, 1999b). Membership of these voluntary associations does not offer many selective incentives, while they are aimed at the production (or protection) of collective goods, and do not have a specific religious background. The emergence of these secular voluntary associations has often been related to the rise of postmaterialistic value orientations (De Graaf, 1988; Inglehart, 1977, 1997). The generations that grew up after World War II did not experience material shortages, which would lead them to value material goals in politics less strongly – such as social order, a growing economy and a strong army. Freedom of speech, the environment and human rights are more important for these generations. These secular values can promote membership of voluntary associations and participation in voluntary work, also when these actions do not provide personal benefits. According to Inglehart (1997) the emergence of secular voluntary associations shows a 'culture shift' of materialism to postmaterialism. More recent cohorts are more postmaterialistic. Because postmaterialistic value orientations are stable over time (De Graaf, Hagenaars & Luijkx, 1989), it is possible that the negative effects of secularization on participation in voluntary associations has been compensated by the rise of postmaterialism. Traditional voluntary associations are based on the pillarized system of social order, which is declined by postmaterialists. According to Inglehart (1977) postmaterialists have an aversion against autoritarian

organizations based on religious ideologies and prefer secular voluntary associations, which advocate global collective interests such as the environment and human rights. Therefore, we expect that:

H4. Postmaterialists participate more often in secular voluntary associations and in voluntary associations offering fewer selective incentives than materialists.

H5. Postmaterialists participate less often in pillarized voluntary associations than materialists.

6.2.4. Personality characteristics

According to Inglehart's theory on postmaterialism the emergence of environmental and human rights watch organizations should be explained as the result of the rise of postmaterialistic values. Olson's theory explains the growth of interest groups, sports clubs and cultural expression groups by their use of selective incentives. However, one could also argue that participation in all these secular voluntary associations expresses a certain identity or personality. Perhaps it appears unusual to argue that personality characteristics are a new basis of participation in voluntary associations. Personality characteristics are assumed to be stable over time. Panel studies show that the rank order of personality characteristics of individuals is highly stable (Costa & McCrae, 1988). However, these results do not exclude the possibility that more recent cohorts score differently on specific characteristics than older cohorts. Studies in the US have shown that a number of personality characteristics such as Extraversion, intelligence and 'self-esteem' are highly stable at the individual level, but that recent cohorts score higher on these characteristics than older cohorts (Twenge, 2001; Twenge & Campbell, 2001). This implies that the proportion of extraverted persons in the population is growing. Because extraverted persons are more often active as volunteers (Lindeman, 1995; Smith, 1966) it is possible that voluntary associations in the Netherlands contain fewer and fewer religious persons, but more and more persons with an extraverted personality.

In the past decade, personality psychologists have reached a consensus on the existence of five basic dimensions in human personality, also called the 'Big Five'

(John, 1990; McCrae & John, 1992): openness, conscientiousness, extraversion, agreeableness, and neuroticism (easily remembered by the acronym OCEAN). It can be expected that agreeableness, extraversion and openness will be most strongly related to participation in voluntary associations. Openness is relevant mainly for participation in cultural expressive associations: creative persons will be attracted to theatre and musical groups. Agreeableness is assumed to be characteristic of persons engaging in altruistic behavior (Graziano & Eisenberg, 1994), and should therefore be positively related to participation in voluntary associations that do not offer many selective incentives. Extraversion is characteristic of persons with ambition and social skills (Watson & Clark, 1994). In these qualities, two aspects can be distinguished: activity and sociability. These traits are useful in all kinds of voluntary association. Extraversion can therefore be expected to show positive relations to participation in all types of voluntary associations.

A historical meta-analysis of extraversion among American first year psychology students (Twenge, 2001) shows that the mean extraversion-score has increased in the period 1966-1993. If this increase has also occurred in the Netherlands, and extraversion is indeed positively related to participation in voluntary work, the increase in extraversion may have compensated partly for the negative consequences of secularization. If young adults today are more extraverted than those who were young before World War II, it is likely that the relation of extraversion with participation in secular voluntary associations is stronger than with pillarized voluntary associations, because the former attract more young adults.

There are only a handful empirical studies available on the relationship of general 'Big Five'-dimensions and participation in voluntary associations, which were reviewed in the previous chapter. In the present chapter we test the following three hypotheses on personality characteristics explicitly:

H6. Agreeableness is positively related to participation in voluntary associations offering fewer selective benefits.

H7. Extraversion is positively related to participation in all types of voluntary associations; this relation will be stronger to participation in secular voluntary associations than in pillarized voluntary associations.

H8. Openness to experience is positively related to participation in secular voluntary associations.

The hypothesis on agreeableness is based on the conceptualisation of Graziano & Eisenberg (1997), which has been discussed in chapters three, four and five. The first part of the hypothesis on extraversion is based on Smith (1966), Lindeman (1995) and Watson & Clark (1997). The second part of the hypothesis is based on the macro-version of the weak situation-hypothesis, arguing that secularisation has given more room for expression of individual preferences. The hypothesis on openness is based on the observation that a specific group of secular associations, which has grown substantially in the past decades, focuses on cultural expression (e.g., theatre and musical groups).

In addition, three specific measures of prosocial motives (social value orientation, empathic concern and perspective taking) are also taken into account in the analyses. It can be expected that these measures are positively related to participation in voluntary associations offering fewer selective incentives (as in hypothesis 6).

6.3. DATA AND METHODS

6.3.1. Data

As in previous chapters, the Family Survey of the Dutch Population 2000 (FSDP2000) is used to test the hypotheses. Details on the sampling procedure and measures of personality characteristics are given in appendix A. In line with Twenge (2001), the correlation of extraversion with age is negative. However, it is not very strong (r = -.08). Openness is more strongly correlated with age (r = -.19).

6.3.2. Measures

Measures of participation in voluntary associations and religious involvement have been discussed in chapter two and chapter five. Among members we distinguished two types: members of pillarized voluntary associations and secular voluntary associations. The following types of associations were considered as pillarized associations because they were part of the pillarized civil society (Lijphart, 1975): religious associations, political parties, unions, professional associations, and women's organizations. The following types of associations were considered as secular: environmental and human rights watch organizations, sportclubs, and cultural and expressive associations (theatre, music, dance), and consumers and other interest groups. One could argue that sports clubs are misclassified because they also used to belong to specific pillars. However, this reasoning ignores that very few sports clubs today are pillarized. In addition, the enormous growth in sports clubs took place in 'new' sports such as badminton, squash and tennis (De Hart, 1999b), which have never belonged to specific pillars.

The dichotomy of pillarized and secular associations does not cover Dutch civil society completely. Engagement in other types of voluntary associations (such as social causes, schools, neighborhood associations, hobbyclubs) is not considered in this chapter because these organizations have not grown or declined substantially in the past decades. By comparing the determinants of participation in pillarized and secular voluntary associations we obtain a picture of the shifting backgrounds of participation in voluntary associations.

To test the hypotheses on selective incentives, we scored voluntary associations on a range from 1 to 4, reflecting both the extent to which membership is directly beneficial to the individual by providing services or sociability and the extent to which these voluntary associations contribute to the production of collective goods (see table 6.2). The scores are the means for evaluations by eleven scholars at the Department of Sociology of Utrecht University. The correlation of the scores for 'individual benefits' and 'collective benefits' is strongly negative (r = -.60). In other words, the 'experts' assume that membership of voluntary associations that serve collective interests provides fewer selective incentives and vice versa. It should be noted that the negative relation does

not mean that individual and collective benefits exclude one another: also the associations that are assumed to be most useful for society do provide some individual benefits, as shown in table 6.2.

Table 6.2. Individual and collective benefits of 14 types of voluntary associations ('expert'-evaluation)

	Individual benefits	Collective benefits	Difference
Environment and wildlife organizations	2,27	3,73	-1,46
Unions and professional organizations	2,55	3,73	-1,18
Political parties	2,73	3,90	-1,17
Public and social benefit organizations	2,45	3,27	-0,82
Health organizations	2,64	3,18	-0,54
Religious organizations	2,45	2,91	-0,46
Interest groups	3,09	3,55	-0,46
School committees	2,55	2,91	-0,36
Neighborhood associations	2,91	3,27	-0,36
Women's organizations	2,64	2,55	0,09
Youth clubs	3,09	2,45	0,64
Sports clubs	3,54	2,73	0,81
Cultural-expressive groups	3,27	1,90	1,37
Hobbyclubs	3,38	1,82	1,54
Mean for all voluntary associations	2,82	2,99	-0,17
Mean for pillarized voluntary associations	*2,64*	*3,34*	*-0,70*
Mean for secular voluntary associations	*3,04*	*2,98*	*0,07*

In addition, it appears that the 'experts' assumed that secular voluntary associations offer more individual benefits than pillarized associations, and fewer collective benefits. By subtracting the score for collective benefits from the score for individual benefits, we obtained a score indicating the extent to which membership of a specific voluntary association generates more individual than collective benefits. The difference score represents the amount of selective incentives that a voluntary association offers. A negative difference score indicates that a voluntary

association is more beneficial for collective than for individual well being. We computed a selective incentives score by taking the means of all difference scores for the voluntary associations of which the respondent was a member. Non-members received a score of 0 on this variable. Non-participants neither serve collective well being, nor profit from membership individually.

Table 6.2 shows that the experts gave environmental and human rights watch organizations the lowest selective incentives score, while hobby clubs and cultural-expressive groups received the highest selective incentives score. A reliability analysis of the difference scores obtained by expert evaluations indicates that there was a high degree of inter-rater reliability (Cronbach's Alpha of .83).

Religious socialization

To measure religious socialization, a factorscore was used based on questions about religious affiliation of both parents ('did your [mother/father] belong to a specific church or religious community when you grew up?'), the frequency of church attendance of the parents ('how often did your [mother/father] attend religious services when you were 15 years of age?'), reading the bible ('When you grew up, did your parents read from the bible?' with no, sometimes, regularly, every day as response categories), prayer at meals ('Was there a prayer in your family at meals when you were 15 years of age?'), and religious volunteerism of both parents ('Was your [mother/father] involved in religious activities beyond attending church (in providing care or organizing social activities)?' with no, yes, sometimes, and yes, regularly as response categories). The factoranalysis showed one clear factor with eigenvalue 4.38, explaining 54.8% of the variance. Factor loadings were: 0.759 for religious affiliation of the father, 0.748 for the mother, 0.891 for church attendance of the father and 0.889 of the mother, 0.818 for prayer at meals; 0.586 for reading the bible, and 0.586 and 0.555 for religious activities of the father and the mother, respectively.

Political value orientation: materialism - postmaterialism

The political value orientation is a classification in five categories, based on the tank order provided in two lists of four goals in politics (De Graaf, 1988).

Respondents who chose two 'materialistic' goals from these lists (maintain order in the nation, reduce inflation, increasing economic growth, a strong army) as their first and second choice were classified as 'materialists'. Respondents who chose to 'postmaterialistic' goals (give citizens more say in politics, protect the freedom of speech, give citizens more say in decisions at work and in their community, embellish cities and the countryside) were classified as postmaterialists. Persons providing other combinations were classified as 'mixed'. With this procedure, 18.7% of the respondents endorsed materialistic political values, 58% had mixed preferences, and 23.4% had postmaterialistic values.

Other variables

The following variables were included in the analyses because they were frelated to age, church attendance, religious affiliation, postmaterialism, and the 'Big Five':

- Gender: male 0, female 1.
- Level of education, ranging from primary school school (1) to college/university degree (7).
- Marital status: single, married or divorced, with widowhood as the reference category.
- Household income: the sum of net personal incomes of both partners in the household.

6.3.3. Analytical strategy

Below we present several multivariate logistic regression analyses to test the hypotheses formulated above. First we report two analyses of membership: one analysis of pillarized membership and one of secular membership. This analysis allows for a comparison of the characteristics of participants in both types of voluntary associations. Secondly, an analysis is reported of the selective incentives score. This analysis shows how characteristics of participants vary with the amount of selective incentives that voluntary associations are offering. The third analysis combines the first two in a conditional logistic regression analysis (McFadden, 1974). This technique is similar to multinomial logistic regression analysis, but allows for testing hypotheses on interactions between independent variables and

characteristics of the dependent variables. In our case the relevant characteristics are the type of voluntary association (pillarized or secular) and the amount of selective incentives the association offers to members (the selective incentives score). Conditional logistic regression analysisis requires a specific structure of the data: a pooled file with multiple observations per respondent, one for each type of voluntary association. The data file was created in two steps. In a first step, a separate file was created for each type of voluntary association, including the original values of the independent variables; the new variable dummy 'member', indicating whether the respondents were a member of that particular association or not; and two new variables: a dummy-variable indicating whether the particular association was secular or pillarized, and the selective incentives score. In the second step, the separate files for all types of voluntary associations were merged in one file. The resulting data file contained eight observations per respondent (one observation for each type of secular or pillarized voluntary association). Because the observations are not independent of each other, a cluster-correction was applied.

The conditional logistic regression analysis estimates the likelihood of membership in voluntary associations, based on characteristics of the respondent, characteristics of the voluntary association, and interactions between characteristics of the respondents (church attendance, religious socialization, postmaterialism, social value orientation, and personality characteristics) and characteristics of voluntary associations (whether they are secular or pillarized, and the amount of selective incentives offered).

6.4. RESULTS

First we present results of two separate series of logistic regression analyses of membership of pillarized and secular voluntary associations (see table 6.3). In line with hypotheses 1 and 2, religious involvement is positively related to membership of pillarized voluntary associations, but not to membership of secular voluntary associations. However, there is no effect of religious socialization when current

religious involvement is taken into account. This result is in line with the integration theory as formulated by Durkheim, but not with the revision by Parsons. In line with hypothesis 4, postmaterialists are more often members of secular voluntary associations than materialists. There is no relation between postmaterialism and membership of pillarized voluntary associations. Extraversion is positively related to pillarized membership, but not to secular membership. This result is partly in contrast with hypothesis 7, which predicted a positive relation with both types of participation, with the relation to secular participation being the stronger one. Hypothesis 8 is not suppported: openness is not positively related to membership of secular voluntary associations, while the relation with pillarized participation is weakly negative.

Table 6.3 also shows some interesting results for which no explicit hypotheses were formulated. First, the level of education is positively related to both types of memberships, with the relation to secular participation being much stronger than the relation to pillarized participation. A small part of the relation with the level of education is mediated by postmaterialism. Second, members of pillarized associations have more prosocial value orientations than members of secular associations. The effect of social value orientation mediates the weakly positive relation of empathic concern. This was not the case for secular participation: the relation of empathic concern with membership in secular voluntary associations did not weaken due to the introduction of social value orientation. Third, there are some weak relations with personality characteristics that were not anticipated. Members of both types of voluntary associations are less conscientious than non-members and members of pillarized associations are somewhat more neurotic, while members of secular associations are somewhat less neurotic than non-members.

Table 6.3. Logistic regression analysis of membership of pillarized and secular voluntary associations

	Pillarized voluntary associations			Secular voluntary associations		
Female	0.59 ***	0.52 ***	0.48 ***	0.71 **	0.73 *	0.71 **
Age	1.56 ***	1.60 ***	1.61 ***	0.89	0.91	0.90
Level of education	1.27 ***	1.28 ***	1.28 ***	1.82 ***	1.77 ***	1.72 ***
Income (x €1000)	1.00	1.01	1.00	1.16 *	1.15 *	1.14 *
Working hours	1.45 ***	1.46 ***	1.46 ***	0.92	0.92	0.91
Single	0.80	0.80	0.82	1.56	1.69	1.56
Married	0.89	0.88	0.90	1.23	1.33	1.24
Divorced	0.78	0.70	0.68	1.21	1.50	1.49
Number of years married	1.00	1.00	1.00	1.34 (*)	1.34 (*)	1.36 *
Religious socialization	1.09	1.09	1.08	0.97	0.98	0.98
Church attendance	1.43 ***	1.43 ***	1.42 ***	1.04	1.02	1.02
Level of urbanization	1.11 (*)	1.12 (*)	1.12 (*)	1.07	1.08	1.08
Agreeableness		0.94	0.93		1.02	1.04
Conscientiousness		0.89 (*)	0.89 (*)		0.86 *	0.87 *
Extraversion		1.16 *	1.17 *		1.02	1.02
Neuroticism		1.13 (*)	1.13 (*)		0.89 (*)	0.89 (*)
Openness		0.89 (*)	0.88 (*)		1.08	1.07
Perspective taking		1.05	1.05		0.93	0.92
Empathic concern		1.15 (*)	1.10		1.18 *	1.16 *

Social value orientation			1.23 **			0.98
Postmaterialism			1.02			1.18 **
Chi Square	174	183	185	113	127	135
Nagelkerke R Square	.0939	.1068	.1131	.0655	.0753	.0794

*** p<.001; ** p<.01; * p<.05; (*) p<.10. Entries represent odds ratios for z-standardized independent variables.

All Chi Square-tests are significant at the p<.001 level.

Table 6.4. Regression analysis of the direct individual benefits of membership of voluntary associations ('selective incentives score')

Female	-2.54		-0.05		2.30	
Age	-15.79	***	-15.71	***	-15.27	***
Level of education	-17.64	***	-16.67	***	-15.62	***
Income (x €1000)	-2.41		-2.44		-2.13	
Working hours	-5.12	(*)	-5.20	(*)	-4.83	(*)
Single	21.04		17.44		20.46	
Married	-6.39		-9.87		-7.35	
Divorced	7.90		6.08		7.71	
Number of years married	1.33		1.12		1.44	
Religious socialization	-0.69		-0.27		-0.20	
Church attendance	-2.42		-1.80		-1.41	
Level of urbanization	1.59		1.38		1.36	
Agreeableness			4.05		3.35	
Conscientiousness			4.23	(*)	3.85	
Extraversion			0.62		0.57	
Neuroticism			1.73		1.47	
Openness			2.10		2.58	
Perspective taking			-4.27	(*)	-4.00	
Empathic concern			-8.83	***	-7.08	**
Social value orientation					-5.10	*
Postmaterialism					-6.95	**
Constant	-25.02		-23.04		-26.66	(*)
F-value	10.4	***	7.6	***	7.5	***
Adj. R Square	.0893		.1061		.1166	

*** p<.001; ** p<.01; * p<.05; (*) p<.10.

Coefficients are multiplied by 1,000 to facilitate the interpretation.

Table 6.4 shows the results of a regression analysis of selective incentives obtained by membership of voluntary associations (the 'selective incentives score') to test the hypotheses based on the *Logic of collective action* (Olson, 1965). In line with the expectation in hypothesis 3, age is negatively related to membership in voluntary associations offering more selective incentives. In line with hypothesis 2, church attendance and religious socialization are not related to the selective incentives score. The negative relation of postmaterialism with selective incentives is in line with hypothesis 4. Postmaterialists are more likely to join voluntary associations that offer fewer selective incentives. The 'Big Five' personality characteristics are not related to the selective incentives score. In contrast to hypothesis 6, agreeableness does not increase the likelihood of membership in voluntary associations offering fewer selective incentives.

The strongest predictor of the selective incentives score is the level of education: the higher the level of education of a person, the more likely that this person will be a member of voluntary associations offering fewer selective incentives. Interestingly, this relation has nothing to do with the better financial position of the higher educated. A small part of the relation with the level of education is due to perspective taking and postmaterialism. Finally, table 6.4 shows negative relations of empathic concern and social value orientation with the selective incentives score, indicating that more empathically concerned persons and persons with more prosocial value orientations are more likely to be members of voluntary associations offering fewer selective incentives.

In table 6.5 we present a more strict test of the hypotheses about differences in the effects of religious involvement, postmaterialism and personality characteristics on secular and pillarized voluntary associations using conditional logistic regression analysis. To reduce the number of variables in the analysis, several personality characteristics that were not of primary interest in this chapter were excluded.

Table 6.5. Conditional logistic regression analysis of membership of voluntary associations

Female	0.73 ***	0.73 ***	0.69 ***
Age	1.12 (*)	1.12 *	1.13 (*)
Level of education	1.40 ***	1.39 ***	1.36 ***
Income (x €1000)	0.98	0.98	1.00
Single	1.11	1.10	1.01
Married	1.06	1.04	0.91
Divorced	0.91	0.89	0.75
Number of years married	1.08	1.07	1.09
Religious socialization	1.09	1.10	1.14 (*)
Church attendance	1.15 *	1.15 *	1.14 (*)
Agreeableness		0.92	0.92
Extraversion		1.09	1.10
Openness		1.00	1.05
Social value orientation			1.04
Postmaterialism			0.93
Secular voluntary association	2.16 ***	2.17 ***	2.14 ***
Secular*church attendance	0.88 (*)	0.88 (*)	0.89
Secular*religious socialization	0.90	0.91	0.87
Secular*agreeableness		1.07	1.10
Secular*Extraversion		0.98	0.97
Secular*Openness		1.04	0.97
Secular*Postmaterialism			1.24 **
Secular*social value orientation			0.99
Incentives*church attendance	1.11 **	1.11 **	1.11 **
Incentives*socialization	0.93 *	0.93 *	0.96
Incentives*agreeableness		1.04	1.07 (*)
Incentives*Extraversion		0.99	0.99
Incentives*Openness		1.03	1.10 *
Incentives*social value orientation			0.92 *
Incentives*Postmaterialism			0.91 *
Selective incentives	0.84 ***	0.84 ***	0.86 ***
Chi Square	332	340	290

*** p<.001; ** p<.01; * p<.05; (*) p<.10. Entries represent odds ratios for z-standardized independent variables. All Chi Square-tests are significant at the p<.001 level.

Because all types of voluntary associations are collapsed in one single analysis, the coefficients of the independent variables in the table represent a 'mean effect' of these variables for all voluntary associations. The interactions with the dummy-variabele 'secular' and the selective incentives score indicate how the effects of the independent variables differ for participation in secular and pillarized voluntary associations and how their effects vary with the selective incentives offered by voluntary associations. Because secular voluntary associations offer more individual and fewer collective benefits than pillarized associations, we obtain a better estimate of the differences between secular and pillarized voluntary associations by taking into account interactions with the selective incentives score.

The analysis in table 6.5 shows that males, older persons, the higher educated, and frequent church attendees are more likely to be members of voluntary associations (than females, younger persons, the lower educated and non-religious persons). The positive effect of 'secular voluntary association' indicates that secular associations are more popular than pillarized associations. The negative effect of the selective incentives indicates that associations offering more selective incentives are less popular than associations offering fewer selective incentives (controlling for the pillarized identity of the association). This result runs counter to the prediction that selective incentives increase membership.

Hypotheses 1 and 2 receive mixed support in this analysis. In line with hypothesis 1, the effect of church attendance on participation in secular associations is smaller than on participation in pillarized associations. In contrast to hypothesis 1, however, the effect of religious socialization is not significant and does not vary between participation in secular and pillarized associations. In line with hypothesis 2, the effect of religious socialization decreases with increasing selective incentives, but in contrast to hypothesis 2, the effect of church attendance increases with the selective incentives score. In line with hypothesis 4, the effect of postmaterialism on membership of secular voluntary associations is more strongly positive than the effect on pillarized participation. In addition, the results confirm hypothesis 4 that postmaterialists are more likely to join voluntary associations offering fewer selective incentives, also when the overrepresentation of postmaterialists among members of secular associations is taken into account.

Once again, hypothesis 6 on agreeableness is rejected. If anything, more agreeable persons are more likely to participate in voluntary associations offering more selective incentives. In contrast to hypothesis 7, more extraverted persons are not more strongly attracted to secular voluntary associations than to pillarized associations. In contrast to hypothesis 8, openness is positively related to membership of voluntary associations offering more selective incentives, and not with specifically secular participation. Apparently, persons who describe themselves as innovative and creative are more strongly attracted by voluntary associations offering more selective incentives. This result is driven by the high selective incentives score for participation in cultural expressive groups.

Finally, table 6.5 confirms the finding from table 6.4 that persons with a more prosocial value orientation are more likely to participate in associations offering fewer selective incentives. Apparently, the finding in table 6.3 that the effect of social value orientation on pillarized participation was more strongly positive than the effect on secular participation is due to the fact that pillarized associations offer fewer selective incentives.

6.5. Conclusion

Why did participation in the voluntary associations not decline in the Netherlands, despite the massive secularisation in the twentiest century? The results of the analyses in this chapter support predictions from the theory of Olson on the *Logic of collective action* and Inglehart's theory on postmaterialism. In sum, the apparent stability of participation in voluntary associations in the Netherlands in the past decades masks profound changes. Pillarized associations have lost substantial numbers of members, while a group of secular associations has emerged that attracted members by offering more selective incentives and by advocating postmaterialistic objectives. Olson's theory explains the emergence of a specific type of secular voluntary associations: those associations offering selective incentives for participation, such as sports clubs, interest groups, and cultural expressive groups. Inglehart's theory explains the emergence of those associations

that do not offer such selective incentives. Postmaterialists are more strongly attracted to voluntary associations advocating human rights and defending the environment. These voluntary associations do not have religious backgrounds, and do not offer many selective incentives for participation. Predictions based on research in personality psychology received mixed support. Personality characteristics are not very strongly related to membership of secular organizations, but do show weak relations with pillarized participation. Based on the 'weak situation-hypothesis', we had expected the converse: secular associations should give more room for the expression of individual differences in personality. In addition, studies in the US showed that the level of extraversion is higher in more recent cohorts (Twenge, 2001). It appears that there is a slight increase in extraversion in the Netherlands. Without this increase, membership rates of pillarized voluntary associations would have declined even more strongly than they have done.

The analysis also showed that the level of education is an important factor for the stability of participation in voluntary associations in the Netherlands. The secular voluntary associations that have compensated for the decline in pillarized associations have attracted persons with a higher level of education. A higher level of education also promotes membership of voluntary associations offering fewer selective incentives. These results suggest that without the increase in the mean level of education among the Dutch population participation in voluntary associations might have declined.

Altogether, the results of this chapter indicate that participation in voluntary associations in the Netherlands has become less strongly based on religious involvement, and has become more strongly related to the level of education. While the remnants of the pillarized structure of civil society disappear, voluntary associations in the Netherlands are not only characterized by increasing social inequality and individualization, but also by an increasing postmaterialistic concern with global collective goods.

Chapter 7
The intergenerational transmission of volunteerism[*]

This chapter investigates the influence of parents on volunteering activities of their children. The analyses provide evidence that there is an intergenerational transmission of volunteerism, as predicted by social learning theory. Data from the Family Survey of the Dutch Population 2000 show that the transmission of volunteerism for religious and quasi-religious ('pillarized') associations was due largely to the transmission of religion and resources. However, parental volunteering for both religious as well as quasi-religious ('pillarized') associations increased the likelihood of children's volunteering for secular associations, even controlling for parental and children's religion, education, wealth, and children's personality characteristics. Consistent with a value internalization explanation, this effect was not due to direct social pressure of parents.

7.1. Introduction

Volunteerism runs in the family: parents who volunteer often have children who also volunteer (for evidence on the USA, see Hodgkinson & Weitzman 1996; for the Netherlands, see Van Daal & Plemper 2003). However, as other researchers (Rosenthal, Feiring & Lewis 1998: 478) noted as well, it is unclear how this intergenerational transmission works. How can the intergenerational transmission of volunteerism be explained? Experimental research on the influence of parents on children's prosocial behavior in developmental psychology (Eisenberg & Fabes 1994; Grusec & Lytton 1988; Maccoby & Martin 1983), based on social learning theory (Bandura 1977), suggests that parents can enhance their children's prosocial behavior by modeling prosocial behavior themselves. The modeling effect may be explained in two ways: (1) parents reward their children's prosocial behavior with approval; (2) parents instill a set of general prosocial values. Successful internalization of prosocial values will lead children to volunteering, also later in life, when their parents are not around. Furthermore, internalized prosocial values should lead children to volunteering for any type of association, not just the type of

[*] This chapter is currently under review in a slightly different version.

association that the parents were volunteering for. According to the approval explanation, people will be less likely to follow their parent's example when their parents are not around (anymore).

However, before questions about the explanation of the relation between parental and children's volunteerism can be answered, one has to ascertain that the correlation is not spurious. The correlation between parental and children's volunteerism in cross-sectional surveys such as 'Giving USA' (Hodgkinson & Weitzman 1996) and 'Giving in the Netherlands' (Van Daal & Plemper 2003) may be due to confounding variables. This paper investigates three different versions of this idea. They are all *byproduct theories*. According to these byproduct theories, volunteering by parents does not make their children volunteer. Parents pass on conditions that produce volunteering by their children, and that is why parental volunteering is correlated with children's volunteering. Two of the byproduct theories involve the transmission of social contexts: religious and higher educated environments. The third byproduct theory involves the transmission of personality characteristics. Religious involvement as well as the level of education are strongly related to volunteering, both in the USA (Hodgkinson & Weitzman 1998; Independent Sector 2002; Wilson 2000) and in the Netherlands (Bekkers 2000; Dekker & De Hart 2002; Kraaykamp 1996). Finally, individual differences in personality characteristics such as empathy and extraversion may also act as confounding variables. Previous research has shown that these personality characteristics are related to volunteering in the USA (Penner 2002) as well as in the Netherlands (Bekkers 2002; Lindeman 1995). Because parents pass on their religion, educational level, and personality characteristics to their children, it is no wonder that volunteering activities of parents and children are similar. However, this paper shows that the correlation between parental and children's volunteerism is not always due to confounding variables such as parental resources, religion and personality characteristics. Instead, parental volunteering has an additional effect on children's volunteering for secular associations, even controlling for confounding variables. Such an additional effect could indicate a modeling effect, because the effect is equally strong for those who are living within and beyond the reach of parental influence.

Parent-child similarity in volunteerism

An important portion of all volunteering in the Netherlands is being done in religious denominations or nonprofit organizations with a specific religious identity (De Hart 1999). Table 7.1 shows the degree of similarity between parents and children in religious volunteering in the Netherlands in the year 2000 (the survey data on which this table is based will be discussed in more detail later). Among the adult respondents who reported that their parents did not volunteer when they [the respondents] were 15 years of age, only 2.2% volunteered for religious associations. Among those who reported volunteering activities for religious organizations by their parents when they were 15 years of age, 9.5% reported currently being active as a volunteer for a religious organization. This difference is highly significant (χ^2=36.0, df=1, p<.000). The odds ratio for table 7.1 is 4.57. This ratio is quite high, indicating that there is indeed a strong transmission of volunteering for religious associations from parents to children.

Table 7.1. Intergenerational transmission of volunteering for religious associations in the Netherlands

	Children's current volunteering		N
Parental religious volunteering	No volunteer	Volunteer for religious association	
No	1092	25	1117
	97.8%	2.2%	76.8%
Yes	306	32	338
	90.5%	9.5%	23.2%
All	1398	57	1455
	96.1%	3.9%	100.0%

Before the 1960s, most of the voluntary work in the Netherlands outside the Christian churches still had some direct or indirect relation to organized religion: Catholics and protestants had their own soccer clubs, worker's unions, women's organizations, and so on. This religious cleavage was so strong, that even those who did not belong to a church were forced to join associations that explicitly rejected a religious identity. The associations that took a specifically religious or anti-religious position are often called 'pillarized' associations (Lijphart 1975; Verba, Nie & Kim 1978) because the

social and political structure of Dutch society resembled a temple, with the roof based on separate pillars. Social interaction for the majority of the population took place almost exclusively within the own religious group. Consequently, there were strong cleavages along religious lines: Catholics hardly knew any protestants, and avoided the company of the non-religious socialists. However, at the top, the political elites of different groups did have contacts with each other and settled political disputes. Before WWII, hardly any voluntary associations were able to avoid the forces of pillarization. Table 7.2 shows that there is also a transmission of volunteering for pillarized associations (χ^2=9.9, df=1, p<.002). The odds ratio for this table is weaker (1.96), but still positive and significant.

Table 7.2. Intergenerational transmission of volunteering for pillarized associations

	Children's current volunteering		N
Parental pillarized volunteering	No volunteer	Volunteering for pillarized association	
No	727	38	765
	95.0%	5.0%	56.0%
Yes	546	56	602
	90.7%	9.3%	44.0%
All	1273	94	1367
	93.1%	6.9%	100.0%

In the second half of the twentieth century, pillarized associations in Dutch civil society have suffered large membership losses. The emergence of many secular associations, such as environmental organizations and associations defending animal or human rights, compensated for the decline among religious and pillarized associations (Bekkers & De Graaf 2002; De Hart, 1999). Table 7.3 shows that there is even a transmission of volunteering for these secular associations. Parents of volunteers for secular associations were more often volunteering for religious (χ^2=7.8, df=1, p<.005; odds ratio: 1.35) and pillarized associations (χ^2=7.8, df=1, p<.005; odds ratio: 1.30). While the results in table 7.1 and 7.2 could be explained as a byproduct of the transmission of other things than volunteering, this is more difficult for the results in table 7.3 because the respondents are active for different types of organizations than their parents.

Table 7.3. Children's volunteering for secular associations by parental volunteering for religious and pillarized associations

Parental volunteering	Children's current volunteering: No volunteer		Volunteering for secular association		N	
No volunteering	560	84.3%	108	15.7%	668	48.4%
Religious volunteering	268	79.3%	70	20.7%	338	24.5%
Pillarized volunteering	284	80.0%	71	20.0%	355	25.7%
All	1132	82.0%	249	18.0%	1381	100.0%

7.2. THEORY AND HYPOTHESES

7.2.1. The modeling effect

Social learning theory (Bandura 1977) implies that parents do have an influence on their children's propensity to volunteer beyond the transmission of religion, resources, or personality. Social learning theory is an influential paradigm in developmental psychology, where the transmission of prosocial behavior from parents to children is investigated with experiments as an example of *modeling*. These experiments (for a review, see Eisenberg & Fabes 1994:715-17) have focused on the effect of the prosocial behavior of parents or other models on their children's imitation of this behavior. In the typical experiment, children in the experimental group observed a person (a parent or other confederate) instructed to model generosity towards others. After observing the model, children are given the opportunity to display generosity in the absence of the model. Most studies have shown that children display more prosocial behavior after observing a prosocial model than children in a control group in which modeling did not occur. Some studies have shown "lasting effects on helping and donating (…) some weeks after the experimental modelling" (Grusec & Lytton 1988: 183). Another striking result of these experiments is that modeling one specific type of prosocial behavior (e.g., helping

a stranger) can spill over into another type of prosocial behavior (e.g., giving to the poor) (Eisenberg & Fabes 1994).

Several mechanisms may give an explanation for modeling effects. The two most important explanations are social approval and value internalization.

Social approval. Parents often reward their children for prosocial or other socially desirable behavior with expressions of approval and may react with disapproval of failures to show prosocial behavior. As a consequence, children may imitate the model's prosocial behavior in order to receive approval from the model or from other persons. When the dominant motive to conform to social norms remains the need for social approval and does not 'evolve' to some internalized value, children will not display prosocial behavior when the parents are not around and there are no other persons who may reward it with approval.

Value internalization is defined as "the development of children of the ability to regulate their own behavior, with little external monitoring or sanctioning, with respect to a set of self-accepted prosocial values" (Maccoby & Martin 1983: 51). Parents who volunteer teach their children with deeds that volunteerism is doing good for society. Volunteering requires giving up some leisure time in order to help an association reach its goals. Children who see their parents volunteer become accustomed to the idea that a personal sacrifice for some greater good has intrinsic value. To the extent that children internalize prosocial values, they will be more likely to engage in volunteering behavior when they have grown up. The more general this internalized value, the higher the chance that they are active as a volunteer for an association that is different from the specific type of association in which their parents participated. For instance, children of parents who were active in a political party or the church choir may volunteer for a homeless shelter or for an environmental lobby group. When modeling effectively resulted in a general willingness to volunteer, there will be a *spillover* from one type of volunteering to another. A successful internalization of prosocial values will not only lead to volunteering for the type of associations that parents were active for, but also to volunteering for other associations.

The evidence from experimental developmental psychology that modeling one type of prosocial behavior has 'lasting' effects on children's prosocial behavior is limited, because the periods investigated cover only a few weeks. Another shortcoming of these studies is that the examples of prosocial behavior used as dependent variables typically

involve small sacrifices in particular situations (Clary & Miller 1986:1359; Radke-Yarrow, Zahn-Waxler & Chapman 1983: 47) such as giving some change to a particular orphan's fund. There are very few studies concerning sustained altruism covering a longer timespan. A recent study of the transmission of generosity to charitable causes in the USA (Wilhelm, Brown, Rooney & Steinberg 2002) provided evidence that concurrent parental and children's generosity are moderately correlated, but in this study no data were available on parental behavior in the past. The transmission of generosity observed may be due to social pressure, and not to internalized values. In another study, volunteering behaviors of individuals who recalled their parents as generous and warm were compared to those who recalled their parents as less warm and who modeled to a lesser degree (Clary & Miller 1986). The study showed that people who have internalized prosocial values are more strongly engaged in volunteering, also when they can get little approval. However, this study focused on volunteers only, and did not show whether or to what extent value internalization actually contributes to the likelihood of volunteering. Finally, the only available prospective study of volunteerism (Rosenthal, Feiring & Lewis 1998) does not give information about parental volunteering in the past.

This paper is an attempt to test the predictions from social learning theory about modeling effects over a long time span: it investigates the relationship between recalled parental volunteering behaviors in childhood and current volunteering. Furthermore, the paper focuses on an example of prosocial behavior requiring a substantial investment of own resources: volunteering for an association on a regular basis.

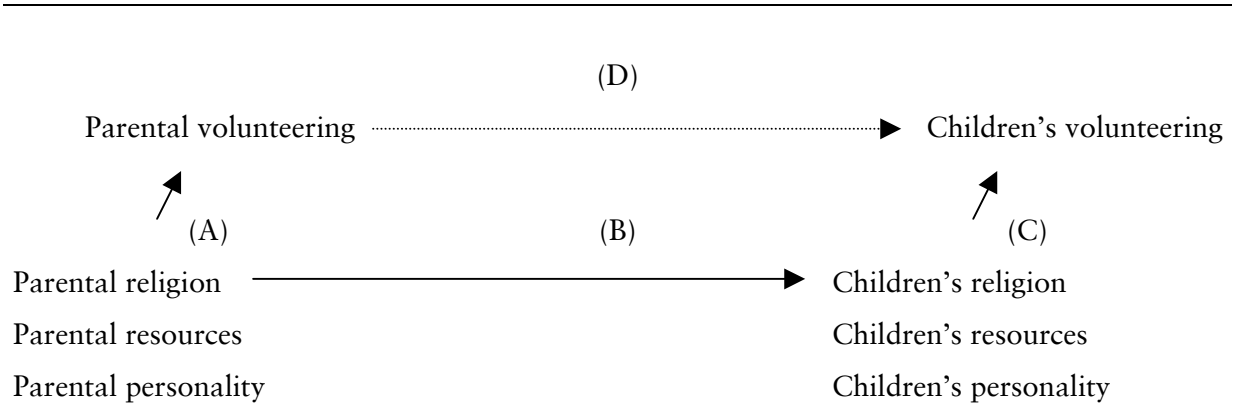
7.2.2. Byproduct theories: religion, education and personality as confounding variables

Because key determinants of volunteering such as religion (Need & De Graaf 1996; Myers 1996), education and social status (Blau & Duncan 1967; Ganzeboom, Treiman & Ultee 1991) and personality characteristics (Plomin, DeFries, McClearn & Rutter 1997) are also transmitted from one generation to the next, it is very well possible that the intergenerational transmission of prosocial behavior is a side-effect of these transmission processes. In other words: there may be confounding variables explaining the correlation between parental and children's volunteerism. If the correlation between parental volunteering and children's volunteering is a modeling effect, as social learning theory predicts, it should hold when these confounding variables are taken into account.

Religion. In the Netherlands, church attendance is one of the key factors affecting volunteering (Bekkers 2000, 2003; Dekker & De Hart 2002; Kraaykamp 1996). Volunteering is more common in religious groups, the more highly cohesive, the smaller and more orthodox they are. Consequently, the non-religious show the lowest rates of volunteering; somewhat higher levels are found among Catholics; Reformed Christians have even higher rates of volunteering, while the highest rates of volunteering are found among the Calvinists and the very small categories of other denominations. Figure 1 shows how parental religion could be the underlying variable in parent-child similarity in volunteering. Parental volunteering is bound up with their level of religious involvement (arrow A). Parents transfer their religion to their children through religious socialization (arrow B). Among children, volunteering is also related to religious involvement (arrow C). As a result, there is no direct or indirect influence of parental volunteering on children's volunteering. The bivariate correlation between parental volunteering and children's volunteering is spurious. This is indicated with a dotted line for arrow D in figure 1. According to this line of reasoning, the relation between parental and children's volunteering should weaken when parental religion is controlled.

Resources. Another category of confounding variables that may lie behind the correlation between parental and children's volunteering is found in parental resources. It is well known that the level of education and social status are important correlates of volunteering (Kraaijkamp 1996; Wilson 2000). One can imagine how parental resources may act as confounding variables in parent-child similarity in volunteering, by replacing 'religion' with 'education' in figure 1.

Figure 7.1. Confounding variables in the intergenerational transmission of volunteering



Personality. A different version of the byproduct theory follows from personality psychology. Parents do not only pass on their religion and resources to their children, but also their personality characteristics. Research on volunteering has shown that volunteering behavior is indeed dependent on personality characteristics, most notably extraversion (Bekkers & De Graaf 2002; Lindeman 1995) and empathy (Penner 2002). Because personality characteristics of parents and children are similar - behavioral genetic studies report heritability estimates of .30 to .70 for empathy (Davis, Luce & Kraus 1994; Zahn-Waxler, Robinson & Emde 1992; Zuckerman 1991:99-100) and .40 to .60 for extraversion (Borkenau, Riemann, Angleitner & Spinath 2001; Plomin, DeFries, McClearn & Rutter 1997; Zuckerman, 1991) - personality characteristics may also be acting as confounding variables.

Relations among byproduct theories. The two sociological byproduct theories do not exclude one another; neither does the psychological byproduct theory rule out the two sociological byproduct theories or vice versa. It is possible that the 'effect' of parental volunteering is partly due to the intergenerational transmission of religion, and partly to the transmission of resources or personality characteristics. However, there are good reasons to suppose that religion and resources are confounding variables for the transfer of volunteering in different types of organizations. Because the availability of resources is more strongly related to participation in secular associations, while religious involvement is obviously more strongly related to participation in religious and pillarized associations, it can be expected that introducing parental education weakens mainly the relation between parental and children's secular volunteering, while introducing parental religion weakens the relation between parental and children's religious and pillarized volunteering (Bekkers & De Graaf 2002). It can also be argued that some personality characteristics are more strongly related to one type of volunteering than the other. Empathy, for instance, should be more strongly related to volunteering for pillarized associations, because it is a more desirable characteristic in religious environments. Extraversion, on the other hand, is an undesirable characteristic in religious environments. In sum, it can be argued that empathy is a confounding variable for religious volunteering, while extraversion is a confounding variable for secular volunteering.

7.3. Data & Methods

7.3.1. Data

As in the previous chapters, the third edition of the Family Survey of the Dutch Population (De Graaf, De Graaf, Kraaykamp & Ultee 2000) is used to test the hypotheses. Details on sampling procedures and the measures of volunteering are given in chapter two. Details on measures of financial, human and social capital are given in previous chapters. Measures of personality characteristics and social value orientation are discussed in appendix A.

7.3.2. Measures

A composite measure of *parental resources* was obtained from a factor analysis of *father's occupational status*, the mean *level of education* of both parents, and the number of *luxury articles* in the parental home, all at age fifteen. Father's and mother's level of education were measured in five categories, ranging from lower education to a university degree. Because father's and mother's level of education were strongly correlated (r = .58) the mean level of education of both parents was used as a measure of parental education. Father's occupational status was measured with the SEI-procedure (Ganzeboom, De Graaf & Treiman 1992). Parental wealth was measured with a list of seven luxury articles (such as a car, dishwasher, VCR, etc.), of which the respondents recalled whether they were present in the parental home when they were fifteen years of age. The simple sum of the number of articles present in the parental home proved to be a sufficiently reliable scale (Cronbach's alpha=0.76) and served as an indicator of parental wealth. To reduce the number of variables in the analyses, an exploratory factor analysis was conducted to investigate whether the correlations among parental wealth, the mean level of education of parents and father's occupational status were strong enough to combine them into a composite score of parental resources. Indeed, the factor analysis revealed one factor (eigen value 1.80, explaining 60% of the variance). Factor scores were saved as a new variable, labeled *parental resources*.

In a series of questions on religious socialization, respondents recalled whether their parents were church members at the time they grew up, and if so, to which denomination they belonged, how often they attended church (five categories, ranging from 'never' to at least once a week), and whether praying at dinner and reading the bible

was customary when they were fifteen years of age. A factor analysis on the responses to these questions revealed one strong factor (eigen value 3.90, explaining 65% of the variance), which was saved as a '*religious socialization*' composite score. This score can be interpreted as an indicator of the intensity of parental religion. In addition, children recalled their *parents' religious denomination*. Most respondents had two Catholic parents (n=656, 41.3%). This category served as the reference category in the analyses. Parents who did not have a religious affiliation or who belonged to different denominations were lumped together in one category (n=556, 35.0%). Other categories were Reformed parents (n=182, 11.5%), Orthodox Calvinist parents (n=144, 9.1%) and parents belonging to other religions (n=49, 3.1%).

A measure of *parental volunteering* was constructed from several different questions. In the series of questions on their parent's religion, the respondents recalled whether their parents were involved as a volunteer in church activities when the respondents were 15 years of age. In a series of questions on parental political involvement, respondents recalled whether their parents were involved as a volunteer for a political party. Finally, the respondents recalled whether their father and/or mother were active as a volunteer for any other association (school, youth organization, etc.). First, all volunteering activities reported for mothers and fathers were summed into measures of parental volunteering because there were no hypotheses on differences in effects of fathers and mothers. Volunteering for the church by either the mother or the father was labeled as *religious volunteering*. All other volunteering activities by parents (for a political party, a worker's union, in school or other organization) were coded as parental pillarized volunteering. Almost half of the respondents (n=688, 49.8%) indicated that their parents were not engaged in volunteering activities; 24.5% volunteering activities by their parents for church (n=338); 25.7% recalled volunteering activities by their parents for pillarized associations only (n=355). When parents volunteered for both church as well as other organizations, they were considered as religious volunteers.

The dependent variable of the analysis is the volunteering behavior of the respondents. This variable is coded in four nominal categories: no volunteering, volunteering for church, volunteering for pillarized associations and volunteering for secular associations. As pillarized associations were considered: political parties, women's organizations, worker's unions, and schools. The other types of associations - hobby clubs, sports clubs, environmental organizations, associations defending consumer's

interests, neighborhood community associations, musical and theatre groups, and other social groups - were considered as secular associations because these types of associations are usually not based on a specific religious identity. When respondents were volunteering for both religious and another type of association, they were considered as religious volunteers. Respondents volunteering for both pillarized and secular associations were considered as pillarized volunteers.

According to the hypothesis that the effect of parental volunteering is conditional upon the possibility that parents give approval, the effect of parental on children's volunteering will be limited to those children who are still in contact with their parents or who still reside in a social network with the same social norms as in their childhood. If the effect of parental volunteering on children's volunteering is equally strong for those who have limited contact with their parents, who became non-religious, or moved away, it is unlikely that social approval is the responsible mechanism. To test this hypothesis an index was constructed to measure the *distance to parents*. Respondents who had lost at least one of their parents, who had moved more than once in their lives, and who had left the church in which they were raised received the highest score on this index (3; n=156, 10.0%), while respondents whose parents were both still alive, who did not move more than once and still belonged to the same religion as their parents received the lowest score (0; n=237, 15.2%). The other respondents differed from their parents in one (n=577, 37.0%) or two respects (n=590, 37.8%). To facilitate the interpretation of the interactions with parental volunteering, the respondents were placed in a low-distance group when the distance index was 0 or 1, and in a high-distance group when the index had a value of 2 or 3. In order to compare the effects of the independent variables with different measurement scales, all variables in the analysis (except dummy variables) were z-standardized.

7.3.3. Validity of recall data

Because so many data in the Family Survey about parents are gathered from their children, a word on the reliability and validity of this retrospective information is in place. In general, prospective research designs using longitudinal data from different informants are to be preferred above retrospective data from one informant. However, there is considerable evidence that the retrospective data about parental behavior obtained from their children in the Family Survey is quite valid. A study comparing children's responses

about their parents' occupations and levels of education and the responses of the parents themselves reveals that these responses are very highly correlated, leading to reliability coefficients above .90 (De Vries & De Graaf 2003). There are no reasons to suspect that questions on parental religion are subject to larger biases. Furthermore, the specific responses about parental volunteering behaviors reveal that the respondents carefully consulted their memories. All the retrospective questions had a response category 'I don't remember'. An analysis of these missing values shows that respondents who recalled one category of parental behaviors sometimes did not remember another category. For instance, of all 176 respondents who reported they did not remember whether their parents volunteered for a pillarized association, 64 (almost 40%) did report a 'yes' or 'no' on their parents' volunteering activities for church. Ideally, one should have information about volunteering behaviors, resources, religious involvement and personality of both parents as well as children to test the hypotheses in this article. The Family Survey of the Dutch Population contains most of these pieces of information, except measures of parental personality characteristics: personality measures are only available for children. Because behavioral genetic studies show that the personality characteristics that are most likely to be related to volunteering are strongly heritable (Plomin, DeFries, McClearn & Rutter 1997; Zuckerman 1991), the lack of parental personality ratings is probably not very problematic. This issue will be discussed more elaborately below.

7.3.4. Analytical strategy

First, results of a multinomial logistic regression of volunteering activities are reported. This statistical analysis technique is suited to model choices between several categories of mutually exclusive alternatives when the alternatives are qualitatively different (Cramer 1991). In our case, the decision is to volunteer or not, and if so, for what kind of association(s). Individuals may choose to volunteer for church, for pillarized associations, or for secular associations, or may not volunteer at all. The multinomial logistic analysis produces results that closely resemble those of an ordinary logistic regression analysis. In fact, the analysis can be understood as a series of three simultaneous logistic analyses, comparing the three types of volunteering activity with no volunteering (which is the reference category). For each independent variable, three odds ratios are given: one for the decision to volunteer for a pillarized association (versus no volunteering), one for the decision to volunteer for a secular association, and one for the

decision to volunteer for both types of associations. The analysis proceeds in seven steps. In a first model, age, gender and parental volunteering status are included. This model gives a better estimate than tables 1, 2 and 3 of the relationship of parental volunteering with children's volunteering because all types of volunteering activities are included simultaneously. Age is included in this model because older persons are more likely to participate in religious and pillarized associations and because personality characteristics, religious socialization and religious participation are also correlated to age. Gender is included because females usually report higher scores for empathy and extraversion but lower levels of education and occupational status. In a second model, children's personality characteristics are introduced to test the 'psychological' byproduct theory. In a third model, parental religion is controlled, introducing parental religious denomination and the level of religious involvement, represented by the religious socialization factor score. In a fourth model, own religion is controlled (own denomination and church attendance). If the religious byproduct theory is correct, the effects of parental volunteering should disappear in model 3, while in model 4 the effect of parental religion should be mediated by own religious involvement. The same logic underlies the introduction of parental resources in model 5 and own resources in model 6. In the final model, interactions of parental volunteering with the distance to parents-index are included to test the idea that the effects of parental volunteering are modeling effects instead of approval effects.

Introducing personality first may underestimate the effects of parental religiosity and parental resources, because common variance will be picked up by the set of variables that is introduced first. With this procedure, the model is generous to the psychological byproduct theory and provides a more stringent test of the two other byproduct theories.

7.4. RESULTS

In table 7.4.1, the results of the comparison of religious volunteering versus no volunteering are shown. The results of the other two comparisons are shown later in separate tables (see tables 4.2 and 4.3 below). Model 1 shows a strong effect of parental religious volunteering, controlling for age and gender. There is no spill over from parental pillarized volunteering to religious volunteering activities by their children. The results in model 2 through 6 can be used to evaluate the byproduct theories, which predicted that

parental religion and the two empathy scales act as confounding variables in the relationship between parental volunteering and own volunteering.

Model 2 shows that compared to non-volunteers, religious volunteers have quite distinctive personality characteristics: they are less open to experience, less able to take the perspective of others, but more empathic and more extraverted. The negative relationship with perspective taking stands in contrast to the expectation. Other counterintuitive relationships of perspective taking with other examples of prosocial behavior were found in previous chapters. The positive relationship with empathy is in line with the prediction. However, controlling for personality characteristics does not decrease the effects of parental religious volunteering. Model 3 supports the religious byproduct theory, showing that the effect of parental volunteering largely disappears controlling for parental religious involvement. Those who were raised in a more intensely religious family are more likely to volunteer for church.

Controlling for parental religious involvement, there are no significant effects of parental denomination on religious volunteering. Model 4 shows that the effect of parental religious involvement is completely mediated by own religious involvement and affiliation. Interestingly, the effects of three out of four personality characteristics that were significant predictors in model 2 were also mediated by religious affiliation and involvement. This indicates that religion attracts persons with specific personality characteristics (i.e., those who are less open to experience, less able to take the perspective of others, and more empathically concerned). Model 5 shows that religious volunteering is not related to parental resources. Model 6 shows the expected positive effect of education, but an opposite effect of occupational status: religious volunteers tend to have a lower occupational status but a higher level of education than non-volunteers.

Table 7.4.1. Multinomial logistic regression analysis of volunteering for religious association vs no volunteering (n=1245)

	Modeling	Child personality	Religion parents	Own religion	Resources parents	Own resources
Age respondent	1.29	1.20	1.04	0.98	1.01	1.02
Female respondent	0.94	0.73	0.72	0.73	0.70	0.67
Parental religious volunteering	***4.26	***4.31	1.58	1.60	1.64	1.67
Parental pillarized volunteering	1.27	1.21	1.10	1.17	1.10	1.09
Agreeableness		0.88	0.84	0.90	0.90	0.88
Conscientiousness		1.21	1.11	1.10	1.15	1.13
Extraversion		*1.42	*1.47	**1.57	**1.63	**1.68
Neuroticism		1.00	1.10	1.22	1.20	1.13
Openness		**0.68	*0.74	0.80	0.77	0.79
Perspective taking		*0.72	*0.73	0.78	0.73	(*)0.72
Empathy		*1.53	*1.57	1.30	1.31	1.29
Social value orientation		1.09	1.02	0.94	0.89	0.93
Denomination (ref.: Catholic)			1.00	1.00	1.00	1.00
No affiliation/mixed marriage			0.66	0.28	0.23	0.24
Reformed			1.04	1.58	1.34	1.67
Orthodox Calvinist			1.53	0.83	0.42	0.50
Other			2.57	0.49	0.39	0.62
Religious socialization			***2.93	1.10	1.02	0.95
Denomination (ref.: Catholic)				1.00	1.00	1.00
No affiliation				*8.78	*8.64	*9.50
Reformed				0.54	0.60	0.49
Orthodox Calvinist				3.01	3.27	2.94
Other				2.20	2.64	2.06
Church attendance				***1.84	***1.94	***1.95
Resources parents					1.11	1.19
Education						1.30
Household income						0.64
Occupational status						(*)0.65
Chi Square	***88.3	***159.8	***179.5	***236.4	***263.4	***253.16
Pseudo R Square	.0355	.0571	.0796	.1129	.1270	.1348

Entries are odds ratios for z-standardized variables; *** p<.001; ** p<.01; * p<.05; (*) p<.10

Table 7.4.2. Volunteering for pillarized association vs no volunteering

	Model 1 Modeling	Model 2 Child personality	Model 3 Religion parents	Model 4 Own religion	Model 5 Resources parents	Model 6 Own resources
Age respondent	0.94	1.00	1.02	1.04	1.24	1.14
Female respondent	1.17	1.09	1.07	1.06	1.00	1.05
Parental religious volunteering	1.12	1.02	0.85	0.82	1.07	0.95
Parental pillarized volunteering	**1.94	*1.84	**1.93	**1.99	(*)1.70	1.52
Agreeableness		1.04	1.03	1.06	1.04	1.13
Conscientiousness		1.01	1.02	1.02	1.09	1.13
Extraversion		1.10	1.15	1.15	1.20	1.18
Neuroticism		(*)0.77	0.81	0.81	0.85	0.90
Openness		(*)1.27	(*)1.29	(*)1.28	1.18	1.14
Perspective taking		0.92	0.93	0.93	0.92	0.85
Empathy		*1.40	*1.38	*1.34	(*)1.27	(*)1.34
Social value orientation		1.03	1.01	1.01	1.01	1.04
Denomination (ref.: Catholic)			1.00	1.00	1.00	1.00
No affiliation/mixed marriage			0.93	0.90	0.64	0.54
Reformed			0.60	0.50	0.51	0.44
Orthodox Calvinist			*2.12	(*)2.38	(*)2.34	(*)2.37
Other			1.35	0.81	0.68	0.89
Religious socialization			0.98	1.00	0.87	0.80
Denomination (ref.: Catholic)				1.00	1.00	1.00
No affiliation				0.93	1.37	1.38
Reformed				1.71	2.23	2.42
Orthodox Calvinist				0.58	0.80	0.84
Other				2.45	*3.78	3.28
Church attendance				0.95	0.96	0.99
Resources parents					**1.44	1.20
Education						*1.37
Household income						0.93
Occupational status						(*)1.31

Notes: entries are odds ratios for z-standardized variables; *** p<.001; ** p<.01; * p<.05; (*) p<.10

The analysis of pillarized volunteering in table 7.4.2 shows a positive effect of pillarized parental volunteering in model 1. The byproduct theories predicted that not only parental religion and empathy but also parental resources and extraversion act as confounding variables in the relationship between parental volunteering and own volunteering. In contrast to these explanations, controlling for personality characteristics in model 2, the effect of pillarized volunteering hardly changes, and remains significant. Compared to non-volunteers, volunteers for pillarized associations are somewhat less neurotic and considerably more empathically concerned. In model 3, where parental religion is controlled, the effect of pillarized volunteering does not decline. Volunteers for pillarized associations are more likely to be born in an Orthodox Calvinist than in a Catholic family. Religious socialization is not related to pillarized volunteering. Model 4 shows that own religious involvement is not related to pillarized volunteering. The effect of parental volunteering for pillarized associations remains significantly positive. In sum, model 3 and 4 give some support for the religious byproduct theory. In model 5, parental resources show a highly significant and positive effect on pillarized volunteering. In this model, the effect of parental pillarized volunteering declines. In model 6, the effect of parental pillarized volunteering declines further, due to the introduction of occupational status and the level of education. Both of these variables show the expected positive relationship with pillarized volunteering. In sum, model 5 and 6 clearly support the byproduct theory focusing on resources.

The analysis of secular volunteering in table 7.4.3 shows a positive effect of pillarized volunteering in model 1, controlling for the positive relationship with age. Women are less often volunteering for secular associations than men. For this analysis, the byproduct theories give rise to the expectation that parental resources and extraversion act as confounding variables. However, model 2 shows that the effects of parental volunteering cannot be explained as a byproduct of the transmission of personality characteristics. Despite the fact that openness and extraversion are related to secular volunteering, the effect of parental pillarized volunteering remains unchanged. Model 3 shows that volunteers for secular associations more often come from a Catholic than a Reformed or Orthodox Calvinist family. The intensity of parental religious involvement is not related to secular volunteering. Model 4 shows that own religious involvement and affiliation are not related to secular volunteering. In sum, the results in model 3 and 4 do not support the religious byproduct theory.

Table 7.4.3. Volunteering for secular associations vs no volunteering

Age respondent	**1.24	**1.29	**1.30	**1.30	**1.29	*1.29
Female respondent	***0.48	***0.50	***0.51	***0.50	***0.47	***0.49
Parental religious volunteering	1.14	1.13	1.20	1.24	**1.93	**1.88
Parental pillarized volunteering	*1.53	*1.51	*1.52	*1.54	**1.70	**1.69
Agreeableness		0.95	0.97	0.96	1.00	1.02
Conscientiousness		1.03	1.02	1.02	1.00	1.01
Extraversion		(*)1.15	(*)1.14	1.13	1.14	1.10
Neuroticism		0.91	0.93	0.92	0.93	0.94
Openness		(*)1.15	1.14	(*)1.15	1.12	1.09
Perspective taking		1.02	0.99	1.00	1.01	1.00
Empathy		0.99	1.00	1.01	1.00	1.02
Social value orientation		0.93	0.95	0.95	0.93	0.93
Denomination (ref.: Catholic)			1.00	1.00	1.00	1.00
No affiliation/mixed marriage			0.90	0.94	0.68	0.64
Reformed			**0.43	*0.51	*0.44	**0.42
Orthodox Calvinist			*0.49	0.57	*0.40	*0.40
Other			0.60	0.98	0.59	0.68
Religious socialization			1.14	1.08	0.93	0.92
Denomination (ref.: Catholic)				1.00	1.00	1.00
No affiliation				1.27	0.86	0.85
Reformed				0.68	0.96	0.98
Orthodox Calvinist				0.97	1.43	1.41
Other				0.42	0.59	0.57
Church attendance				0.91	0.93	1.00
Resources parents					0.97	0.90
Education						1.05
Household income						0.93
Occupational status						1.16

Notes: entries are odds ratios for z-standardized variables; *** p<.001; ** p<.01; * p<.05; (*) p<.10

Model 5 shows that parental resources are not related to secular volunteering, and model 6 shows that own resources are not related to secular volunteering either. Controlling for parental resources even increases the effect of parental pillarized volunteering. In model 6, the effects of parental religious and pillarized volunteering are still significant. In sum, both parental religious as well as pillarized volunteering spill over into secular volunteering in the next generation. These effects of parental volunteering cannot be explained as a byproduct of the transmission of religion, resources, or personality characteristics.

Together the analysis in tables 4.1, 4.2 and 4.3 showed that the effect of parental volunteering on religious volunteering is almost exclusively due to the transmission of religion; that the effect on pillarized volunteering is mainly due to the transmission of resources (and to a smaller extent also to the transmission of religion); but that the effect on secular volunteering cannot be explained as the result of confounding variables. It seems that parental volunteering, whether for religious or pillarized associations, does have an additional effect on secular volunteering. Therefore, the question is justified whether the effect of parental volunteering is a true modeling effect, or whether it is due to the immediate social influence of parents.

Table 7.5. Multinomial logistic regression analysis of volunteering including an interaction of parental volunteering with distance to parents (n=1219)

	Religious	Pillarized	Secular
Parental religious volunteering	1.23	0.61	1.16
Parental pillarized volunteering	1.38	(*)1.55	*1.55
Distance	1.71	1.14	1.16
Parental religious volunteering * distance	*0.33	1.37	1.00
Parental pillarized volunteering * distance	(*)2.70	1.02	0.89
Chi Square		***316.8	
Pseudo R Square		.1416	

Entries represent odds ratios for z-standardized variables; *** p<.001; ** p<.01; * p<.05; (*) p<.10

All variables included in the analyses reported in table 7.4 were also included in this analysis, but their effects are omitted in this table. The complete table is shown in table 4 in appendix D.

In table 7.5, the two competing explanations are tested as explanations for the effects of parental volunteering by including an interaction of parental volunteering with an index measuring the distance between parents and children. Respondents who moved away, relinquished the religion in which they were raised, or whose parents have died are no longer directly affected by parental social influence. If the effect of parental volunteering also holds for this group of respondents, it can hardly be accounted for by a social approval explanation.

The results in table 7.5 give some support for the social approval explanation for religious volunteering; however, the results for secular volunteering are consistent with a value internalization explanation. In the analysis of religious volunteering, a significantly negative interaction of distance appears with parental religious volunteering, and a positive interaction with parental pillarized volunteering. These results indicate that the transmission of religious volunteering weakens when the distance between parents and children increases, but that parental pillarized volunteering increases the likelihood of religious volunteering when the distance to parents increases. For pillarized volunteering, table 7.5 does not give additional information, but this is not surprising since there was no effect of parental volunteering left in the final model of table 7.4.2. For secular volunteering, there are no substantial interaction effects with distance to parents. Although the spillover-effect of parental religious volunteering into pillarized volunteering weakens somewhat, neither the main effect of the distance-index, nor the interactions of parental volunteering with distance are significant. These results indicate that parental volunteering for either religious or pillarized associations both increase the likelihood of volunteering, even among those respondents who live beyond the direct social influence of their parents. For secular volunteering, the influence of parental volunteering seems to be an enduring modeling effect.

7.5. Conclusion and discussion

This paper provides evidence that there is an intergenerational transmission of volunteering, and that the effects of parental volunteering can still be found when confounding variables such as religion, resources, and personality are controlled, as predicted by social learning theory. First, it was shown that there actually is an

intergenerational transmission of volunteering. Children of parents who volunteered are more likely to volunteer than children of parents who do not volunteer. More specifically, it was shown that the intergenerational transmission was strongest for religious volunteering. Volunteering for associations that are not directly linked to church but do have a specific religious identity ('pillarized associations' as they are called in the Netherlands) is also transmitted from one generation to the next. Moreover, pillarized volunteering is not only related to parental volunteering for such associations, but also to parental religious volunteering. This is called a spill-over effect: parental volunteering for one type of association spills over into volunteering for a different type in the next generation. Such spill over effects are predicted by social learning theory. Spill-over effects of both religious as well as pillarized volunteering by parents were also found for secular associations. When parents were active for religious or pillarized associations, their children were more likely to volunteer for secular associations. Finally, it was investigated to what extent the transmission of volunteering may be due to the transmission of religion, resources and personality. In table 7.6, a summary of the results is given.

Table 7.6. Summary of consequences of results for hypotheses

Byproduct theories	
- Religion	Supported for religious volunteering and pillarized volunteering
- Resources	Supported for pillarized volunteering only
- Personality	Not supported
Social learning theory	
- Modeling	Supported for secular volunteering
- Social approval	Supported for religious volunteering

The results clearly support the byproduct theory focusing on religion for volunteering in church. Children of parents who volunteered for church are more likely to become engaged as a volunteer in church as well, because they adopt the religious involvement of their parents, not because volunteering has an additional modeling-effect as predicted by social learning theory. Religion also confounds the relationship of parental religious volunteering with pillarized volunteering, but to a smaller extent. The byproduct theory on resources holds only for pillarized volunteering. The effect of parental volunteering for pillarized associations is due to the transmission of resources

inherent in a higher level of education and a higher occupational status. Personality characteristics such as empathy and extraversion did not act as confounding variables for the transmission of volunteering. The prediction from social learning theory that parental volunteering in one specific type of association spills over into volunteering for different types of associations was supported for secular volunteering. Controlling for parental religion, resources, and children's personality, an additional effect remains of parental volunteering on the volunteering activities of their children for secular associations.

Two different explanations that could be responsible for this modeling effect were specified: social approval and value internalization. The approval explanation claims that children imitate their parents to earn their approval. The value internalization explanation claims that upon observing their parents' behavior, children learn the value of volunteering for society, and internalize this value. Later on in their lives, they will be more likely to volunteer, also when their parents are not around anymore. A comparison of the effects of parental volunteering for respondents who remained close to their parents with respondents who moved into a very different life, relinquishing the religion in which they were raised and moving to another place of residence did not support the social approval explanation for secular volunteering. The effects of parental volunteering on secular volunteering persist beyond the direct social pressure of parents. Evidence for the conditioning of the influence of parental volunteering by social approval was found for religious volunteering, however. The influence of parental volunteering was significantly stronger for respondents whose lives closely resembled those of their parents than for respondents who moved away to a different place of residence, relinquished the religion in which they were raised and whose parents had died.

The similarity of the results reported here with experimental research in developmental psychology is striking, for several reasons. Firstly, the experimental results were obtained with children, while this paper shows that the influence of parental modeling persists into adulthood, even when children have a life on their own, in a very different social context than the one in which they were raised. Secondly, this paper showed that parental modeling does not only affect the type of superficial helping behaviors that are usually studied in psychological experiments, but has also ramifications for examples of prosocial behavior that require substantial investments of time.

Of course, this study also has its limitations. A prospective research design would be better suited to test the hypotheses from social learning theory. However, there is

strong evidence suggesting that the retrospective reports of children about their parent's behaviors are highly reliable (De Vries & De Graaf 2003). Given the high costs and other practical difficulties of longitudinal studies, relying on retrospective information is a good alternative. Another limitation is that measures of parental personality were not available in the present data. This may be problematic first and foremost to the extent that children's personality is not a good proxy of parental personality. In other words, when arrow B in figure 1 is in fact only a weak relationship, the strength of the observed relationship represented by arrow D says little about the strength of the relationship represented by arrow A. However, if we are to believe the results of behavioral geneticists, this danger is not very large, because personality characteristics are to a large extent heritable. Extraversion, which is most strongly related to volunteering behavior, is one of the traits that have shown the highest heritability estimates (Plomin, DeFries, McClearn, & Rutter 1997: 198). A recent study relying on observational instead of self-report assessments produced an estimate of .62 (Borkenau, Riemann, Angleitner & Spinath 2001). If only for genetic reasons, the extraversion level of children will be strongly related to the level of extraversion of their parents. A second possible bias could arise when parental personality would have a direct effect on children's volunteering, independent of the indirect effect through children's personality. This would be the case for instance if strongly extraverted or sympathetic parents would force their not so extraverted and sympathetic children to volunteer. Because the personality characteristics of parents and children are strongly correlated this is an unlikely situation. However, if such a situation occurs it is not unlikely that parents will try to get their children into volunteering, because parents usually want their children to be like themselves. A third possible bias could arise when parental volunteering has a direct effect on children's personality, beyond the effect of parental personality. This is unlikely to occur because the bulk of the variance in extraversion and empathy explained by non-genetic factors is accounted for by non-shared environmental factors (Plomin, DeFries, McClearn & Rutter 1997), while parental volunteering is an environmental factor that siblings share with each other.

Other limitations of this study concern the measurement of social approval and the internalized values on which volunteering activities are supposed to be based. The data provide indicators of the distance to parents, but parents may not be the only significant others in the networks of respondents who approve of volunteering. Furthermore, the

allegedly internalized values were not measured directly. Future research on the intergenerational transmission of volunteering should include measurements of the 'volunteering ethic' that is passed on from one generation to the next. This 'volunteering ethic' should mediate the effects of parental volunteering. The failure of the psychological byproduct theory shows that this 'volunteering ethic' is a truly social phenomenon, a social value that is orthogonal to personality characteristics. Further research could investigate the value internalization hypothesis more thoroughly by looking at spillover-effects. Experimental studies in developmental psychology suggest that the effects of parental modeling of one type of prosocial behavior may generalize to other types of prosocial behavior when children internalize prosocial values (Eisenberg et al. 1994). For instance, parental volunteering should also promote children's generosity towards charitable causes. Future research should also study differential effects of fathers and mothers. It could be that fathers have a more dominant effect on the volunteering activities of their children because volunteering used to be a predominantly male social activity. One could also imagine that father's volunteering mainly influences sons while mother's volunteering affects daughters. These possibilities can be evaluated comparing a model as in the analyses above with constrained linear regression models (CLR) as in research on stratification (Korupp, Ganzeboom & Van der Lippe, 2002).

A recent study based on the first wave of the 'Giving in the Netherlands' Panel Survey gives some answers to some of the limitations identified above (Bekkers, Hooghe & Stolle, forthcoming). The study shows that parental volunteerism increases the amount of money donated to charitable causes. It appears that some of the effects of parental volunteering are mediated by participation in youth. Altruistic values, generalized social trust, feelings of social responsibility and interest in politics are examples of social values that are higher among children of volunteers. These social values mediate the influence of parental volunteering on their children's generosity to charity, but not the influence of parental volunteering on children's volunteering.

Chapter 8
Conclusions and discussion

This chapter describes the characteristics of citizens who give and volunteer in the Netherlands. The results of chapters three to seven indicate that giving and volunteering are clearly related to social conditions, but show limited relations to individual differences in psychological characteristics and prosocial motives. In contrast to the low cost-hypothesis and the weak situation-hypothesis, the effects of personality characteristics were not stronger when prosocial behavior required lower material costs or when social norms were less clear. Implications of these findings for researchers and practitioners are discussed.

8.1. INTRODUCTION

This chapter gives answers to the research questions of this dissertation (8.1), discusses limitations of the present research (8.2), possible explanations for anomalies to the hypotheses (8.3) and implications for rational choice models of prosocial behavior (8.4). Then, a number of relevant results for practitioners and policy makers are discussed (8.5). Finally, some directions for future research are recommended (8.6).

Answers to research questions

What do the results of chapters three to seven teach us about the main research questions put forward in the introduction? The first research question of this dissertation was:

P1. To what extent can giving and volunteering behavior be explained by prosocial motives and other psychological characteristics of people and the social conditions in which they live?

In chapter one I argued that social conditions can motivate people to engage in prosocial behavior. Classical theories of social exchange and social cohesion predict that people observe social norms when their behavior is monitored by others and future

interaction with these others is likely. From a sociological perspective, it was expected in hypothesis 1:

H1. The likelihood of prosocial behavior increases with the frequency of church attendance, religious socialization, the level of education, and decreases with community size.

However, in many cases there is no prospect of future interaction, and there hardly seem to be any social incentives. In these cases, internalised prosocial values or prosocial personality characteristics could be the reason why there is still prosocial behavior in the absence of material or social incentives. Previous research in social and personality psychology suggests that agreeableness, empathic concern and prosocial value orientations are characteristic of persons who engage in prosocial behavior. From the perspective of personality and social psychology, it was expected in hypothesis 2:

H2. The likelihood of prosocial behavior increases with the level of agreeableness, extraversion, emotional stability, prosocial value orientation, empathic concern and perspective taking.

Looking at the results of chapter three to seven summarized in table 8.1, we find strong support for hypothesis 1, but only limited support for hypothesis 2. Contributions of time, money and body parts for the public good are more often found among the higher educated, frequent church attendees, among persons living in more rural communities, among persons working more hours for pay, earning higher incomes, and among persons who show a higher level of empathic concern. The most distinctive characteristics of Dutch citizens who are actively giving and volunteering are not psychological characteristics, but social conditions. Psychological characteristics are related to prosocial behavior, and explain a significant part of the variance, but this part is not very large, and usually smaller than the participation explained by social conditions.

Table 8.1. Effects of psychological characteristics and social conditions in chapters three to seven

	Chapter 3		Chapter 4					Chapter 5			Chapter 6		Chapter 7	
	Time	Money	Money		Organs	Blood		Membership		Volunteering	Membership		Volunteering	
Psychological characteristics:			Yes/no	Amount		Yes/no	Years	Yes/no	#		Pillarized	Secular	Religious	Secular
Agreeableness	+	0	0	0	0	+	(+)	0	0	0	+	0	0	0
Extraversion	0	0	(+)	(+)	(+)	0	0	0	0	+	0	0	+	(+)
Neuroticism	0	0	0	0	0	(-)	(+)	0	-	0	(+)	(-)	0	0
Empathic concern	+	+	+	+	0	0	0	+	+	(+)	(+)	+	+	0
Perspective taking	-	-	0	0	0	0	0	0	0	0	0	0	-	0
Social value orientation	0	0	0	(+)	(+)	0	0	0	0	0	+	0	0	0
Relative increase in R^2	NA		25%	16%	35%	18%	67%	37%	25%	36%	29%	14%	NA	

Social conditions:														
Income/Hourly wages	0	+	+	+	0	0	-	0	0	0	0	+	NA	NA
Working hours	NA	NA	(+)	+	0	0	0	0	0	0	+	0	NA	NA
Community size	-	0	-	(-)	0	0	0	0	-	-	-	0	NA	NA
Church attendance	0	+	(+)	+	-	0	0	+	+	+	+	0	+	0
Level of education	+	+	+	+	+	+	0	+	+	+	+	+	0	0
Relative increase in R^2	NA		75%	84%	65%	82%	33%	63%	75%	64%	71%	86%	NA	

+ positive relationship; - negative relationship; 0 non significant; (+) marginally significant positive relation; (-) marginally significant negative relation; NA not applicable. Relative increase is computed as: (increase in R^2 in model to be evaluated) / (R^2 in final model – R^2 in baseline model including constant, gender and age)

The upper part of table 8.1 shows that agreeableness, neuroticism, perspective taking, and social value orientation are often not related to examples of prosocial behavior in the predicted positive direction. In some cases, there were even counterintuitive effects. For instance, perspective taking was negatively related to intentions to give time and money. Explanations for null-findings and counterintuitive effects will be discussed below (see 8.2).[*] The evidence for effects of individual differences in prosocial motives on prosocial behavior is strongest for empathic concern. People with a greater tendency to feel empathic emotions show a greater willingness to give money as well as time, they are more likely to report monetary donations to charitable causes in the past year, report a higher amount donated, are more likely to be a member of a voluntary association, especially secular associations, are more likely to volunteer, especially for religious and pillarized associations. In addition, people with more empathic concern for others respond differently to material, social and psychological incentives for giving and volunteering than a rational choice theory would predict (see the discussion below). However, empathic concern was not related to post mortem organ donation and blood donation.

In contrast to the results for the hypothesis on prosocial motives and other psychological characteristics, social conditions are clearly related to prosocial behavior, and usually in the expected direction. With the exception of the number of years served as a blood donor, prosocial behavior is more strongly related to the social conditions that come along with living in a smaller community, more frequent church attendance, and having attained a higher level of education. This conclusion even holds for examples of prosocial behavior that are unlikely to generate some form of delayed or generalized exchange because there is little or no contact between giver and receiver, such as charitable giving, blood donation, and organ donation. The availability of a larger budget of money or leisure time, which lowers the price of giving and volunteering, was not always facilitating prosocial behavior, or had counterintuitive effects. For instance, hourly wages were not related to volunteering, and the number of working hours was positively related to blood donation.

[*] Because effects of religious socialization were not included in all chapters they are not shown in table 8.1. In chapter 6, religious socialization did not have significant effects on membership of voluntary associations when present religious involvement was included. In chapter 7, Protestant parental denomination decreased volunteering for secular associations, even controlling for present religious denomination and church attendance.

To illustrate the magnitude of the effects of social conditions and psychological characteristics, I repeat some of the findings on charitable giving from chapter four. While the difference in annual donations between the lowest and the highest percentile on the empathy concern-scale was €85, the difference between those who never attend religious services (55% of the respondents) and those who attend church more than once a month is €220. The difference between respondents with primary education only and those holding a college or university degree is €120 (net of all other variables, including household income). The difference in annual donations between the bottom and top percentiles of the income distribution in the sample was only €70 (net of all other variables).

In sum: anomalies to rational choice models assuming 'utility is own money' can mainly be understood as the effects of social conditions, and, to a limited extent, as the effects of personality characteristics and prosocial motives.

An evaluation of the low cost-hypothesis and the weak situation-hypothesis

The second research question of this dissertation was:

P2. In which conditions are individual differences in prosocial motives more strongly related to giving and volunteering?

This research question was based on the desire to arrive at conditional explanations. Two specific conditions were investigated that are often thought to moderate the effects of personal attributes. When a specific behavior requires a smaller sacrifice of resources, and in 'weak', ambiguous situations, psychological characteristics are assumed to be more predictive of behavior as in hypothesis 3 and 4:

H3. Low cost-hypothesis: The stronger the material incentives for prosocial behavior, the smaller the effects of psychological characteristics on prosocial behavior.

H4. Weak situation-hypothesis: The stronger the social incentives for prosocial behavior, the weaker the effects of psychological characteristics.

Little support for the low cost-hypothesis

The *low cost-hypothesis* argues that when the material costs for a specific behavior are lower, this behavior is more likely to be related to personal attributes. This hypothesis

has been offered as a reason why rational choice models often fail to account for a variety of non-self interested behaviors, such as voting (Mensch, 2000) or environmental behavior (Diekmann, 1996; Diekmann & Preisendörfer, 1998, 2003). Applying the low cost-hypothesis to prosocial behavior, it reads: the smaller the material incentives for prosocial behavior, the stronger the effects of specific prosocial motives and other psychological characteristics on prosocial behavior.

In this dissertation, the low cost-hypothesis was tested in four ways: (1) by comparing effects of prosocial motives among groups that can be assumed to have varying opportunity costs for prosocial behavior, (2) by comparing effects of prosocial motives on examples of prosocial behavior with material costs that are manipulated to vary, (3) by comparing effects of prosocial motives on examples of prosocial behavior with material costs that can be assumed to vary, and (4) by comparing effects of prosocial motives on the decision to contribute versus the decision how much to contribute.

The first strategy is based on the argument that persons with higher hourly wages face higher opportunity costs for donations of time, and persons with a lower income face higher opportunity costs for donations of money. The greater availability of resources makes the donation of a unit of time or money a smaller sacrifice for these groups. However, very few tests of the low cost-hypothesis using this strategy supported the low cost-hypothesis. In the analysis of charitable giving (chapter four), household income did not interact at all with empathy, agreeableness or social value orientation. The analyses of organ and blood donation produced some positive interaction effects of prosocial motives with income (e.g., the effect of social value orientation on post mortem organ donation was more strongly positive among higher incomes, and the effects of agreeableness and empathic concern on blood donation were more positive among higher incomes), but these were not expected because medical donations do not cost money. In the analyses of volunteering and membership of voluntary associations in chapter five, the effects of prosocial motives and other psychological characteristics did vary with hourly wages, but equally often in unexpected and expected directions.

The second strategy was used explicitly in the analysis of intentions to give money or time in the scenario experiment reported in chapter three. Effects of psychological incentives, psychological characteristics and prosocial motives were compared in hypothetical situations where requests were made for contributions with varying material costs. In this study, support for the low cost-hypothesis was limited to the observation that contributions of time to collective goods were less likely when they were global

instead of local collective goods, and that this difference became even more pronounced when the amount of time requested increased. The efficacy of a contribution did not interact with costs, and most of the psychological characteristics did not lose predictive power for high cost contributions. In fact, empathic concern was even more predictive of intentions to volunteer in high cost- situations than in low cost-situations.

The third strategy to test the low cost-hypothesis requires a comparison of the effects of prosocial motives and other psychological characteristics in chapter four with the effects in chapters five, six and seven. Chapter four focused on examples of prosocial behavior that are very unlikely to be motivated by self-interest through the expectation of some form of delayed or generalized exchange. Donations to charity, blood donation, and post mortem organ donation are unilateral gifts, for which no compensation is given. Blood donation and post mortem organ donation are anonymous in the sense that the recipients cannot be identified. Chapters five, six and seven focused on membership and volunteering in nonprofit organizations. These examples of prosocial behavior are not anonymous, and may more easily generate some form of delayed or generalized exchange. In contrast to the low cost-hypothesis, however, table 8.1 shows that the effects of prosocial motives on unilateral, anonymous gifts are not stronger than on civic engagement.

The fourth strategy to test the low cost-hypothesis involves a comparison of proportions of variance explained by psychological characteristics (see table 8.1). The low cost-hypothesis predicts that decisions whether or not to contribute are more strongly related to prosocial motives and other psychological characteristics than decisions on how much to contribute. However, only charitable donations and membership of voluntary associations show the expected pattern, but not blood donation. The number of years served as a blood donor is more strongly related to personality characteristics than to indicators of material costs and social conditions.

In sum, the results with regard to the low cost-hypothesis do not support the notion that altruistic behavior is a luxury good (Bekkers & Weesie, 2003; Jencks, 1987; Mansbridge, 1990). If altruism were a luxury good, effects of prosocial motives on contributions to collective goods should increase as household income rises or hourly wages decrease. This was not the case. These results are consistent with results obtained in experimental economics, showing that stakes do not affect prosocial behavior in ultimatum and dictator games (Camerer, 2003; Cameron, 1999; Bekkers, 2004c).

Little support for the weak situation-hypothesis

The *weak situation-hypothesis* argues that a specific behavior is less likely to be related to psychological characteristics when the social context for this behavior provides stronger cues on how to behave. Applied to prosocial behavior, the hypothesis reads: the smaller the social incentives for prosocial behavior, the stronger the effects of specific prosocial motives and other psychological characteristics on prosocial behavior.

The weak situation-hypothesis was tested in three ways: (1) by comparing effects of prosocial motives among different social groups that can be assumed to have varying social incentives for prosocial behavior, (2) by comparing effects of prosocial motives on examples of prosocial behavior with social incentives that are manipulated to vary, and (3) by comparing effects of prosocial motives on examples of prosocial behavior for which the social incentives can be assumed to vary.

The first strategy involved a comparison of effects of prosocial motives and other psychological characteristics among groups with varying degrees of church attendance and living in areas varying in degree of urbanization. It is assumed that more frequent church attendees and persons living in smaller communities have stronger social incentives to contribute to collective goods. Monitoring social behavior is easier in these groups, people are more likely to be disapproved of for failures to contribute, and people share a longer future together in which a prosocial reputation may pay off in the long run. The weak situation-hypothesis predicts that prosocial motives and psychological characteristics are less predictive of prosocial behavior among frequent church attendees and among persons living in more rural areas. However, the effects of prosocial motives and personality characteristics on charitable giving, blood donation, post mortem organ donation, membership of voluntary associations and volunteering were not smaller among frequent church attendees or persons living in rural environments. These results contradict the weak situation-hypothesis.

A second strategy was used in the scenario experiment that varied the likelihood of future interaction with an intermediary person asking for a contribution on behalf of a nonprofit organization. However, the analyses mainly produced non-significant interactions of social distance with psychological characteristics, one interaction supporting the weak situation-hypothesis, and several rejections. In line with the weak situation-hypothesis, the positive effect of the likelihood of future interaction with an intermediary person asking for a contribution was smaller for persons with a more prosocial value orientation. In contrast to the weak situation-hypothesis, however, the

satisfaction of a contribution to a local organization increased the willingness to give time more strongly when the request was made by a person with whom future interaction was more likely. The weak situation-hypothesis predicted that the social rewards obtained by fulfilling a request by a more familiar person would make the effect of psychological rewards obsolete. Another anomaly was that empathic concern was more predictive of intentions to volunteer when requests were made by more familiar persons.

The third strategy involves a comparison of the effects of prosocial motives on examples of prosocial behavior with varying degrees of social incentives. Although none of the examples studied in this dissertation is entirely anonymous in the sense that they cannot be observed by others at all, it can be assumed that some examples of prosocial behavior are harder to observe than others. Likewise, some examples of prosocial behavior are less strongly guided by social norms, and are decisions in 'weak situations'. Such situations should give way for the expression of personality characteristics and prosocial motives. The weak situation-hypothesis predicts that less observable and less normative behaviors should be more strongly related to personality characteristics. Charitable giving, blood donation and membership of voluntary associations are examples of prosocial behavior that are harder to observe than volunteering. The social pressure to engage in charitable giving, blood donation, and membership of voluntary associations can be assumed to be less strong than choices with regard to post mortem organ donation and volunteering. Once again, table 8.1 provides the data to test the predictions. In contrast to the weak situation-hypothesis, the relative increase in the proportion of variance explained due to personality characteristics is not lower for volunteering and post mortem organ donation than for charitable giving, blood donation and membership of voluntary associations. Quite the contrary: the relative increase due to personality characteristics is similar for volunteering, membership and post mortem organ donation (about 35%), but substantially lower for charitable giving (25%) and blood donation (18%).

8.2. LIMITATIONS

The conclusions drawn above can be challenged on several grounds.

First, it can be argued that the effects of personality characteristics are underestimated because the analyses focused on 'single act criteria'. Trait descriptions of persons are intended as descriptions of general tendencies in behavior across a variety of situations (Krahé, 1992; Mischel, 1968). In single instances, however, the correlation of trait descriptions with behavior is low because every single criterion for a given trait measures the underlying dimension with some degree of unreliability (Epstein 1979; Ajzen & Fishbein 1980, 86-7; Amelang & Borkenau 1986). Trait descriptions are probably more strongly related to aggregate indices of behavior than to single act criteria (Epstein, 1979; Epstein & O'Brien, 1985). To address this criticism, table 8.2 shows the results of an analysis of an index of prosocial behavior. The index combines the number of prosocial responses to the scenarios analyzed in chapter five, the number of memberships in voluntary associations, the number of volunteer jobs, the amount given to charitable causes, blood donation, and organ donation. For each of these behaviors, the respondents received a score of 1 if they displayed the behavior (in case of dichotomous variables) or scored above average, and a score of 0 if they scored below average (in case of ordinal variables). Then, the number of times that the respondents belonged to the more prosocial group was counted. Scores on the altruism index ranged from 0 to 6. About one in ten respondents did not display any of the six prosocial behaviors and received an altruism score of 0 (n=201, 12.9%). About a quarter of the respondents displayed one behavior (27.6%), and about the same proportion displayed two (26.5%). The proportions for the other altruism scores are 19.1% (3 behaviors), 10.3% (4), 2.90% (5) and 0.6% (6). Because this distribution is not normal, an ordinal logistic regression analysis was conducted. In addition, clustering of multiple observations within households were taken into account, the Huber/White sandwich estimator was used to obtain robust standard errors. Respondents with missing values (n=30) were excluded from the analysis. The mean altruism score was 2.00. The altruism score was analyzed with the same regression models that were used in chapters six and seven (see table 8.2).

The results give further support to the conclusions drawn above. We see that people with higher levels of empathic concern engage in a greater number of prosocial behaviors. In addition, social value orientation has a small positive relation with the number of prosocial behaviors. However, we see no effects of agreeableness and

perspective taking. Neuroticism decreases the number of prosocial behaviors. The level of education is the strongest predictor of the altruism index: the higher educated engage in a higher number of prosocial behaviors. A lower level of urbanization is also associated with a higher number of prosocial behaviors. Income and working hours are not substantially related to the altruism index. A comparison of model III and IV shows that social conditions sometimes mediate effects of psychological characteristics. Additional analyses showed that the level of education mediates parts of the relationships of empathic concern and neuroticism with the altruism index, while church attendance and the level of urbanization mediated a part of the relationship of social value orientation with the altruism index. Model V shows a positive interaction of hourly wages with social value orientation, which is in contrast to the low cost-hypothesis. The interactions of personality characteristics with wages are not substantial. The weak situation-hypothesis also did not receive support in this analysis. Church attendance did not interact substantially with personality characteristics and prosocial motives, while the level of urbanization interacted with agreeableness and perspective taking in opposite directions.

The relative increase of the proportion of explained variance in table 8.2 strengthens the conclusion drawn above that individual differences in personality characteristics and prosocial motives are not very predictive of prosocial behavior; not even when 'a multiple act criterion' is used. Individual differences in prosocial motives are of minor importance for many types of prosocial behavior. More than two thirds of the increase in explained variance is due to social characteristics. In contrast to the weak and inconsistent effects of prosocial motives, a positive effect of the level of education on prosocial behavior was found in almost all of the analyses. These relationships indicate that social incentives are crucial for all types of giving and volunteering, even for more anonymous examples of prosocial behavior.

Table 8.2. Ordered logistic regression analysis of altruism index (n=1494)

Female	-.09 (.10)	-.04 (.11)	-.16 (.11)	-.11 (.13)	-.12 (.13)
Age	.07 (.06)	.10 (.06)	.11 (.06)	.19 (.07) **	.19 (.07) **
Agreeableness		-.03 (.07)	-.08 (.07)	-.06 (.07)	-.07 (.07)
Conscientiousness		-.07 (.06)	-.08 (.06)	-.07 (.06)	-.07 (.05)
Extraversion		.11 (.06) (*)	.12 (.06) (*)	.12 (.06) (*)	.12 (.06) *
Neuroticism		-.15 (.06) *	-.16 (.06) **	-.12 (.06) (*)	-.12 (.06) (*)
Openness		.02 (.06)	.01 (06)	-.02 (06)	-.02 (06)
Perspective taking			.01 (.06)	-.05 (.06)	-.05 (.06)
Empathic concern			.18 (.07) *	.16 (.07) *	.16 (.07) *
Prosocial value orientation (0-1)			.31 (.12) *	.25 (.12) *	.24 (.12) (*)
Working hours				.07 (.08)	.07 (.08)
Household income				-.13 (.07) (*)	-.10 (.07) (*)
Education				.50 (.07) ***	.50 (.07) ***
Church attendance				.13 (.08) (*)	.11 (.08) (*)
Urbanization				-.15 (.06) *	-.15 (.06) *

Wages*agreeableness					-.08 (.04)
Wages*perspective taking					.08 (.08)
Wages*empathic concern					-.04 (.08)
Wages*social value orientation					.16 (.05) ***
Attendance*agreeableness					.03 (.08)
Attendance*perspective taking					.08 (.07)
Attendance*empathic concern					-.06 (.07)
Attendance*social value orientation					.08 (.07)
Urbanization*agreeableness					-.12 (.07) (*)
Urbanization*perspective taking					.12 (.07) (*)
Urbanization*empathic concern					-.05 (.08)
Urbanization*social value orientation					-.01 (.06)
Wald Chi Square (df)	2.51 (2)	19.6 (7)	40.72 (10)	124.12 (15)	151.39 (27)
Pseudo R^2	.0007	.0059	.0121	.0362	.0429
Relative increase R^2	----	14.6%	17.5%	67.9%	-----
Relative increase R^2	----	12.3%	14.7%	57.1%	15.9%

*** p<.001; ** p<.01; * p<.05; (*) p<.10.

Second, it can be argued that not all relevant psychological characteristics potentially related to prosocial behavior have been measured in the FSDP2000. For instance, previous research suggests that self-esteem (Cohen, Vigoda & Samorly, 2000; Janoski, Musick & Wilson, 1998), locus of control (Allen & Rushton, 1983; Lefcourt, 1976), and other indicators of personality strength (Dekker, 2003; Scheufele & Shah, 2000) are positively related to volunteering. Given the effect of generalized social trust on charitable giving (Bekkers, 2003c) the same probably holds for donors. However, these characteristics have not been measured in the FSDP2000, which may have led to an underestimation of the effects of psychological characteristics on prosocial behavior. To some extent this argument is valid. However, to some extent the potential effects of indicators of personality strength have been accounted for by including all dimensions of the Big Five in the analyses, even those that were not expected to be related to prosocial behavior. Personality strength is negatively related to neuroticism (Robins, Tracy, Trzesniewski, Potter & Gosling, 2001). In the absence of indicators for personality strength, neuroticism picks up the unmeasured effects of these indicators. Similar lines of reasoning can be made for other personality characteristics that were not measured. To the extent that the Five Factor Model is a truly comprehensive description of the general dimensions of personality, unmeasured personality characteristics can be considered as subfacets of these dimensions. Although the effects of these specific subfacets of the 'Big Five' on behavioural criteria may be underestimated using global scores (Paunonen & Ashton, 2001), a substantial part of their effects will be represented by global 'Big Five'-scores. In addition, it is unlikely that this argument has much force for an aggregate altruism index. Finally, the argument that some independent variables have not been measured can be made much more forcefully for social conditions. For instance, the analyses reported in chapter three to five did not contain measures of occupational prestige and marital status, only chapter six contained measures of religious denomination, and none of the chapters contained measures of length of residence, house ownership, civic engagement in youth, or the number of children in the household. All of these characteristics are known to be related to charitable giving and volunteering (Gouwenberg et al., 2003; Bekkers, 2003a).

Third, it is unknown which mechanisms are responsible for the effects of socio-demographic characteristics on prosocial behavior. Church attendance, the level of urbanization, and especially the level of education are 'bags of all sorts': variables that may indicate a variety of mechanisms, not only of a social nature. Because the FSDP2000

did not contain measures of social networks, expected sanctions for violation of social norms, and so on, I have no direct evidence showing that the effects of what I have called 'social conditions' are actually due to social incentives, as I have argued in the introduction. However, other research has shown that the effect of church attendance on giving and volunteering is mainly due to the size and composition of social networks, and the greater exposure to mobilization attempts through these networks (Bekkers, 2000, 2003a; Jackson et al., 1995; Lam, 2002; Park & Smith, 2000; Regnerus, Smith & Sikkink, 1989; Smidt, 1999; Wilson & Janoski, 1995). The argument for the level of urbanization is that people in smaller communities probably have more dense networks, in which prosocial behavior pays off in the long run and is enforced by social obligations (Coleman, 1990). Although other mechanisms may be at work in the effects of religion (Bekkers, 2003a) and community size (Oliver, 2001), social incentives are probably the most active ingredient. The effect of the level of education, however, could be due to a variety of mechanisms. For this variable, I would agree with the criticism that there may be non-social mechanisms at work, although I still think that social incentives are the major factor (see 8.3 below).

Fourth, it can be argued that the measures of psychological characteristics were not valid and reliable enough. Previous research has shown that assessments of social value orientation are very sensitive to priming effects (Bekkers, 2004b) threatening the validity of the measure. In addition, the adjective checklist used to measure the 'Big Five' contained only 30 items, while more comprehensive personality inventories are available which probably provide more reliable measures. To some extent, I would agree with the first point about the validity of the measure of social value orientation, but I disagree with the argument about the reliability of the 'Big Five'. The validity of the assessment of social value orientation is probably decreased because the respondents completed other questions of the write-in questionnaire first. However, the questions on prosocial behavior were placed *after* the assessment of social value orientation. If the responses in the social value orientation measure were distorted, they cannot be affected by the criterion variables. The reliability coefficients of the 'Big Five' measures are all in the .80s. Increasing the number of items would not substantially increase the reliabilities (Gosling, Rentfrow & Swann, 2003). In addition, the socio-demographic variables are also measured with a degree of unreliability.

8.3. EXPLANATIONS FOR ANOMALIES

Why were the hypotheses on the effects of psychological characteristics such as agreeableness, perspective taking and social value orientation not supported? Research on agreeableness has focused largely on prosocial behavior in interpersonal contexts (Jensen-Campbell & Graziano, 2001; Branje, Van Lieshout & Van Aken, 2004). It is not unlikely that people who are more strongly engaged in informal helping behavior view themselves as more helpful and sympathetic. Helping a neighbor is not the same as volunteering for an association with some collective goal, although both are examples of prosocial behavior. The scenario experiment in chapter three showed that the predictive power of agreeableness for intended prosocial behavior is limited to cases where the request is made on behalf of local nonprofit organizations. The negative effect of perspective taking in some analyses also calls for an explanation. Why would people who are more able to take the perspective of others be less likely to give money to charitable causes? Looking again at the items that were used to measure perspective taking, the possibility rises that they reflect the world view of the actor as conceived in a rational choice perspective on collective action: fully conscious of the negligible effects of his contributions for the provision of public goods. The lack of significant or substantial effects of social value orientation is probably due to the fact that the measurement instrument is very sensitive, and has a low degree of longitudinal stability (Bekkers, 2004b).

The null findings and the anomalies to the low cost-hypothesis discussed above raise the question what is wrong with the low cost-hypothesis. It not very likely that the low cost-hypothesis was rejected because of a faulty test, because the test was conducted in four different ways. I think that the arguments on which the low cost-hypothesis was based were too general and simplistic. The argument that psychological rewards must be the reason why people still display prosocial behavior even in very unfavorable circumstances is probably valid. When prosocial behavior conflicts with self-interest, those who are motivated by empathic concern or an altruistic self-identity display prosocial behavior (see chapter four). However, there is no evidence that the effect of psychological rewards is larger when material incentives also guide people towards prosocial behavior. It seems that material and psychological rewards simply add up. When prosocial behavior coincides with self-interest, or deviates less from self-interest, it is 'overdetermined'. Altruism in general is not a luxury good. Empathic concern is a basic phenomenon in our lives: we observe altruistic behavior in good times and in bad times,

among the wealthy as well as the poor. The wealthy give more to charity than the poor simply because they have more money to give, not because they have more 'noble' motives or because it is cheaper to translate these motives in prosocial behavior. In sum, the low cost-hypothesis must be rejected in its general form. The low cost-hypothesis may be true for a limited set of behaviors, such as environmental behavior (Diekmann, 1996) and specific types of donations such as monetary gifts to health related charities (Bekkers & Weesie, 2003), but as a general rule it does not hold.

The question is not why the low cost-hypothesis was not supported, but rather why the idea is so appealing - although it is not true. Perhaps it has something to do with the 'norm of self-interest'. People generally believe that self-interest is the rule, and altruistic behavior the exception (Bekkers, 2002c; Miller & Ratner, 1998; Smith, 2003), even when their own behavior is not in their self-interest (Bekkers, 2002c). The dominant theories on prosocial behavior in the social sciences (e.g., Lenski, 1966, p. 30) reinforce this belief (Kohn, 1990). This belief undermines prosocial behavior: those who hold more cynical beliefs about their fellow citizens are less likely to engage in prosocial behavior (Smith, 2003; Bekkers, 2003c). In many situations, it is more legitimate to engage in prosocial behavior when there is some aspect of self-interest involved. Altruistic behavior raises suspicion. People do not want to be known as a 'do-gooder' ("Ik ben gekke Henkie niet"). When people engage in prosocial behavior, the argument that it did not take much effort is a socially acceptable excuse (Holmes, Miller & Lerner, 2002; Miller, 1999). This 'self-interest' motive talk, however, does not reflect a truly declining effect of prosocial motives on prosocial behavior as the costs get higher.

The mixed findings with regard to the weak situation-hypothesis also call attention to the need for a more specific perspective. I still think that the strength of social norms in specific contexts can influence the effects of personality characteristics. However, social norms need not always suppress the effects of personality characteristics, as suggested in the example of the suppressed effect of extraversion at a funeral. For instance, consider the example of condolences after the funeral. In this situation, social norms prescribe empathy, and those with a disposition to feel empathic concern are more likely conform to this norm than those without this disposition. This issue will be discussed more elaborately in the recommendations for future research below.

8.4. IMPLICATIONS FOR RATIONAL CHOICE MODELS OF PROSOCIAL BEHAVIOR

Economists have tried to deal with the puzzle of prosocial behavior in two ways: with models of pure altruism - also called the public goods models - and impure altruism - also called the 'joy of giving' or 'warm glow'-models (Halfpenny, 1999; Ribar & Wilhelm, 2002). Both models assume some type of psychic income. In the pure altruism or public goods model (Becker 1974), people are interested in the fortune of others: they try to maximize the welfare of others with a donation of own resources. According to this model, contributions to charitable causes increase as the receiving organizations are more efficient in improving the welfare of the needy. In contrast, the impure altruism or warm glow model (Andreoni 1989, 1990) relies on the intuition that people are often more strongly interested in the act of giving itself than in the exact consequences of their gift for the welfare of others. In the warm glow model, the act of giving is valued in itself, because it makes the giver feel good about him- or herself. The warm glow of giving can be seen as a selective incentive that makes it worthwhile for an individual to contribute private resources to the benefit of others. To date, most of the evidence gathered in economics cannot be reconciled with the public goods model and supports the warm glow model (Ribar & Wilhelm, 2002).

The results of this dissertation show that conventional models of altruistic behavior lack a very important – if not the most important – factor: the social incentives for a contribution. Prosocial behavior is more consistently and more strongly related to the social conditions in which people live than to measures of prosocial motives or other preferences. Being a part of a network in which prosocial behavior is prescribed, applauded and monitored increases the likelihood that people will engage in prosocial behavior. Even intentions to give and volunteer and prosocial behaviors that are hard to observe are related to church attendance, the level of urbanization, and the level of education. Recently, economists have started to pay attention to the social incentives for giving (Harbaugh, 1998; Soetevent, 2003; Van de Ven, 2003). These models are based on the desire for prestige, as in the classic idea of *noblesse oblige* (Homans, 1974). In the Netherlands, however, charitable giving is not a common strategy to signal wealth. In addition, the prestige motive cannot explain the effects of social conditions on gifts of time. Social incentives for prosocial behavior are probably better understood as effects of integration in cohesive social groups (Akerlof, 1997, p. 1007; Coleman, 1990; Durkheim, 1897).

Furthermore, the effects of empathic concern also point to the role of altruistic motivations in giving and volunteering. The items in this scale do not refer to the positive effects of giving on relieving a negative mood, but to the emotional responsiveness to other people's misfortune. Chapter three showed that the greater willingness of more empathic persons to give and volunteer is even more pronounced when the costs increase. This is not to say that there is no joy of giving; experiments in social psychology have convincingly shown that people may engage in helping behavior to relieve a negative mood state (Schroeder et al., 1995). Future research should try to identify what constitutes the 'joy of giving', and its relation to social incentives and psychological motives for altruistic behavior such as empathic concern and altruistic social values (Smith, 2003).

Finally, the results of this dissertation show that decisions to contribute to collective goods are not simply the outcome of subtracting all types of costs from all types of benefits (cf. Stroebe & Frey, 1982). The weights of material, social, and psychological costs and benefits in this decision depend on each other, but in a complex manner that is not captured by the low cost-hypothesis or the weak situation-hypothesis. In addition, the weights of material, social, and psychological incentives vary systematically between individuals with specific characteristics. A striking result was that more empathic individuals are less strongly discouraged by increasing costs of volunteering. This finding supports the argument that empathic emotions are an important ingredient of altruistic motivation for prosocial behavior (Batson, 1991, 1998).

8.5. IMPLICATIONS FOR PRACTITIONERS

What do the results of chapters four to nine imply for practitioners, who are seeking new members, volunteers or donors for their nonprofit organization? Many organizations relying on volunteers have recently expressed their concern about a general decline in the number of volunteers, and especially about the declining willingness among younger people and new or potential volunteers to commit themselves for a longer period of time. The results of chapters three to seven shed some light upon these issues.

A declining willingness to volunteer?

Chapter three shows that the willingness to volunteer is fairly high: about 50% of the Dutch population says to be willing to help out someone asking for volunteers for a nonprofit organization. Although this figure may be overestimated, it suggests that there is still a reservoir of potential volunteers, that can be called upon for specific tasks. Even when these people are episodic volunteers, who do not wish to be involved deeply in an organization, they can be very useful. Although the volunteer labor force in the Netherlands is becoming older (Bekkers, 2002b; Knulst & Van Eijck, 2003), and practitioners say it is harder to find young volunteers, the willingness to volunteer was not lower among younger people. Older persons even expressed a lower willingness to volunteer. The result in chapter seven that volunteerism is passed from one generation to the next implies that volunteers do not disappear from one moment to the next. About half of the Dutch population remembers their parents as volunteers. These people will probably volunteer some time during their life. Nevertheless, results of chapter six and seven show that there is a kernel of truth in the complaints about a declining willingness to volunteer. The complaints mainly come from pillarized associations, who have to rely upon a generation of volunteers that is becoming older and older (Knulst & Van Eijck, 2003). Younger people are less likely to be socialized in a religious environment and to go to church, and therefore, pillarized associations are less attractive to them. These organizations will probably have even more problems finding young volunteers in the future (Bekkers, 2002b).

Effective recruitment strategies

The results of the empirical chapters give some insights in how organizations can attract new members, donors, and volunteers. Which recruitment strategies are more likely to work? The finding in the scenario experiment chapter three that the efficacy of the requested activity for promoting collective welfare increases the willingness to volunteer implies that organizations seeking volunteers should think about how they can make the work more efficient and give their volunteers the idea that the work they are doing is useful. The main finding in chapter three was that the relationship of the person asking for volunteers to the potential volunteer is crucial: requests for volunteers are more effective when they are made by a person who is more likely to be encountered in the future and who is important for the 'target'. This means that organizations seeking volunteers should try to recruit volunteers with a large and dense network of friends and

relatives, and have them recruit new volunteers. A recent study (Bekkers, 2004a) based on the 'Giving in the Netherlands'-Panel Survey draws similar conclusions, and shows that persons recruited through strong ties also tend to stay longer. Chapter six showed that younger people can be attracted by offering selective incentives. Organizations that do not wish to offer selective incentives but are seeking new members should advertise their activities as a part of a postmaterialistic lifestyle, focusing on the intrinsic rewards of participation.

The role of education

The results of this dissertation also have broader implications for policy makers. The repeated observation that the level of education is positively related to prosocial behavior suggests that an investment in a higher level of education of the population will produce a stronger civil society. Higher educated people are more likely to give blood, to donate their organs after death, they are more often members of voluntary associations, volunteer more often, and give more money to charitable causes. Chapter six showed that the negative effects of secularization on voluntary association membership have been compensated (among other things) by the increase in the level of education that took place in the previous decades. Because the process of secularization is expected to continue, a further increase in the level of education is needed to keep our civil society in good shape. When the religious factor in civil society gradually diminishes, and the level of education becomes the main factor, a new problem arises: a growing inequality in participation. Because religion was so important for civic engagement in the pillarized social system, and religious participation was hardly correlated with social status, participation in voluntary associations in the Netherlands used to be distributed fairly equally over the population, compared to other countries (Verba, Nie & Kim, 1978; Ellemers, 1968). To make participation in voluntary associations more attractive for the lower educated, and to make the lower educated more valuable as volunteers, opportunities can be provided to gain knowledge and skills through training programs within voluntary organizations. Recent cutbacks in government subsidies for nonprofit organizations will make it harder to offer such programs, and will increase membership fees. These developments will probably increase social inequality in civic engagement and reduce the potential for social integration of civil society (Bekkers, 2003d).

8.6. RECOMMENDATIONS FOR FUTURE RESEARCH

8.6.1. Substantial issues

The altruistic personality - "In which contexts does the altruistic personality become apparent?" one article asked more than a decade ago (Carlo et al., 1991). This dissertation shows there is no easy answer to this question. The effects of prosocial personality characteristics on prosocial behavior are subtle. They differ strongly between types of prosocial behavior. However, the logic behind these differential effects is not specified correctly by the low cost-hypothesis or the weak situation-hypothesis. To understand this complexity, we need a more specific perspective on the effects of personality characteristics on prosocial behavior. Buss (1986) argues that people with specific personality characteristics may select themselves or are selected by others in specific types of situations. The principle of selection can be used to gain insight in how personality characteristics are related to prosocial behavior and in some of the findings in this dissertation. For example, consider the differential effects of personality characteristics on the incidence of blood donation and volunteering versus the intensity of these behaviors in table 8.1. Whether or not people donate blood or volunteer for a nonprofit organization is not very strongly related to personality characteristics. In contrast, how many years people serve as a blood donor, or how many hours they volunteer, is more strongly related to personality characteristics than to social conditions. Previous research has shown that the selection of volunteers is essentially a social process. Greater proximity to volunteers in a social network enhances the likelihood of being asked, and the likelihood of compliance with the request to give time. However, when people have become active as a volunteer or blood donor, the decision how much time to spend volunteering or how long to continue serving as a blood donor is affected by prosocial motives. Another example of selection processes is that church attendance mediated effects of empathic concern on volunteering in chapter five. Probably, more empathic individuals are more strongly attracted to religion and church meetings. A final example of selection could be the finding that extraversion was found to be very characteristic of volunteers in chapters five and seven, but not of intentions to volunteer in chapter three. It is quite possible that extraverted behavior signals capacities that are useful for voluntary associations, and attract the attention of people who are prospecting for volunteers, although extraversion itself is not related to a greater willingness to give

time. To map these selection processes, future research should take the degree of exposure to requests for contributions into account, using longitudinal data collections.

The virtues of higher education - The largest puzzle that remains is why education promotes prosocial behavior. In almost every analysis a positive effect of education on prosocial behavior was found. However, we do not have a clear idea of why this should be the case. We have seen that greater perspective taking abilities and the availability of a greater financial budget cannot explain why the higher educated are more likely to give money, blood, organs, and time, because these variables were taken into account in the analyses. But there are numerous other possibilities: the higher educated have more cognitive capacities to understand the needs of others and the consequences of defection in social dilemma situations; these capacities make them more attractive as volunteers; they have larger networks, which makes them more likely to be asked for a contribution; they have higher levels of self-esteem and self-efficacy, which increase psychological rewards of prosocial behavior; they may have higher levels of moral reasoning, they may experience a greater personal and social responsibility for public welfare; a greater concern for fairness and social justice; a more internal locus of control; a higher level of trust in fellow citizens; and a longer time horizon, indicating a greater concern for the future and higher abilities to delay gratification, to name just a few. I consider this the major task for research on prosocial behavior in the future: explaining the effect of education.

Exposure - Requests for donations of time and money are not randomly distributed among the population. Fundraising campaigns target previous donors and the wealthy; voluntary associations are prospecting for participants among those categories that can easily be reached and who have more human capital because their labor is more valuable. However, it is largely unknown how the exposure to requests for contributions to collective goods intermediates and/or moderates the effects of social and psychological characteristics on prosocial behavior. There is some preliminary evidence that higher contributions to secular charities (Bekkers, 2003a, p. 161) and a higher likelihood of volunteering for both religious (Bekkers, 2003a, p. 163) as well as secular associations (Bekkers, 2003a, p. 164) are correlated to a more extensive exposure to fundraising attempts. Future research should tease out the exposure effect in the analysis of giving and volunteering.

The dynamics of volunteering - Civic engagement has been treated in the analyses as a static phenomenon. This is a strong simplification. A less simplified - but still

schematic - account of volunteering scheme version distinguishes between three stages (see table 8.3). Not all persons are equally likely to make a decision about volunteering or donations to charitable causes. Decisions about donations and volunteering occur only after people have become acquainted with an opportunity to donate or volunteer. Chapter two showed that two thirds of the volunteers have not taken this decision themselves, but were recruited by someone else. Comparable statistics for charitable donations are lacking, but it is likely that the proportion of spontaneous donations is even lower. In the first stage, therefore, the relevant decision maker is the voluntary associations seeking new volunteers or donors. Because voluntary associations will try to recruit donors and volunteers who are more valuable as a source of support and more willing to give, they will selectively target specific populations (Brady, Schlozman & Verba, 1999). Whether people are exposed to recruitment attempts depends not only on their attractiveness as a donor or volunteer (financial and human capital), but also on the size and composition of their social network (social capital).

In the second stage, people may or may not start volunteering. In this stage, whether people get involved as a volunteer depends on the costs and benefits of giving and volunteering. Costs and benefits may be of a material, social, and psychological nature. The costs of participation again depend on the stock of resources: for those with higher amounts of financial, human, and social capital, the costs of participation will be lower. The benefits of participation may depend on social values (e.g., social value orientation, postmaterialism) and personality characteristics (extraverted people may receive more intrinsic rewards for volunteering; empathically concerned persons derive utility from benefiting others).

In the third stage, volunteers decide about their level of engagement. Do they continue volunteering, and if so, how much time do they spend volunteering? Whether people continue participation probably depends on personality characteristics, specific aspects of the volunteer work, and the interaction between them. Do volunteers find their work interesting, are they supported by the organization, do they receive support from fellow volunteers? Does their work match their expectations, and their personality? The effect of organizational characteristics on attachment to volunteering is often ignored in ordinary survey research (for an exception, see Pearce, 1993). Volunteers think that extrinsic rewards can attract new volunteers, but that continuation of volunteering depends on intrinsic rewards (Clary & Snyder, 1991). When the costs of volunteering outweigh the benefits, people may end their volunteer work. The same probably holds for

the intensity of engagement. How many hours people volunteer depends more strongly on personality characteristics than on socio-demographic characteristics. Future research should investigate the dynamics of volunteering, taking organizational and personality characteristics into account.

Table 8.3. A three step model of the volunteering career

Stage 1: Being asked	Stage 2: Being able	Stage 3: Being motivated
Non-participation	Non-participation	Discontinue participation
↓	↑	↑
Considering participation	→ Start participation →	Continue participation
Exposure (social capital)	Social pressure	Motives and personality
Resources (financial and human capital)	Resources (financial, human and social capital)	Organizational characteristics

Social networks - The Family Survey of the Dutch Population did not contain a questionnaire on social networks. Elsewhere, I have investigated the role of social networks for membership of voluntary associations, volunteering, and charitable giving, together with colleagues from the ICS (Bekkers, Völker, Van der Gaag & Flap, forthcoming). We found that the characteristics of social networks are strongly related to civic engagement. Omitting social networks, the relative effects of personality characteristics - as opposed to social characteristics - are likely to be overestimated. In future research with my colleagues, I hope to uncover how social networks are promoting civic engagement over the life course.

Socialization - Chapter seven showed that parental volunteering increases the likelihood that their children volunteer, and that this transmission of volunteerism cannot easily be explained by a mechanism of direct social influence. It was assumed that internalized values are the explaining mechanism. Future research should try to establish which values parents promote when they volunteer, and how these values affect the volunteering career of their children. Research by Janoski, Musick & Wilson (1998) gives some ideas about which values could be important. They show that civic duty, tolerance, and feelings of self-efficacy are driving volunteerism throughout the life course. However, the other characteristics that were mentioned above in the discussion about the education-effect could also be important.

8.6.2. Methodological issues

Experimental methods - The majority of papers in this dissertation used survey data. Chapter three showed how the benefits of the experimental method can be combined with the advantages of a large random sampling survey in the study of intentions to give. Future research would benefit strongly from a combination of the survey method with experimental methods and observations of actual prosocial behavior. The scenario method is also an excellent way to measure social norms (e.g., Horne, 2003) and preferences for social situations based on personality characteristics (e.g., Bem & Lord, 1979). Observation of actual prosocial behavior in a survey context (Bekkers, 2004b) reduces concerns for a social desirability bias. Such data provide a unique opportunity to check the validity of self-reports on giving and volunteering. Future research would also benefit from field studies of charitable giving (e.g., List & Lucking-Riley, 2002). This requires a closer cooperation of scholars with practitioners. Together with economists and fundraisers, I hope to do some work in this area in the future.

Longitudinal studies of civic engagement - Finally, I would like to stress again the utility of conducting panel studies of civic engagement. The evidence on the 'effects' of personality characteristics, prosocial motives, and social conditions presented in the previous chapters relies on classical theories and cross-sectional data. Although the idea that persons with specific personality characteristics select themselves or are selected into specific types of voluntary associations is probably more true than the idea that people's personalities change due to participation in voluntary associations, cross-sectional data cannot show which is the stronger effect. This issue, and many others, can be addressed by panel studies of civic engagement. For instance, the claim from the literature on social capital that civic engagement breeds trust and a host of other social values and attitudes (Hooghe, 2001) can only be verified or rejected adequately with longitudinal data. As long as these data are not available, retrospective data on participation in youth are the best alternative (Bekkers, 2001b; Hooghe, 2003; Hooghe & Bekkers, 2004). The idea that specific types of social networks are conducive to civic engagement can only be tested adequately when the effects that civic engagement has on social networks can be eliminated (Bekkers, Völker, Van der Gaag & Flap, forthcoming). We know a lot about how volunteering changes over the life course, but hardly anything about how charitable giving changes in response to life-cycle experiences and economic hardship or prosperity. The 'Giving in the Netherlands Panel Survey' (Schuyt, 2003), with the second wave

planned for May 2004 and a third for 2006, provides an excellent opportunity to study these issues more adequately with longitudinal data. I am glad to be involved in this project - although, technically speaking, my current involvement would qualify as 'volunteer work' - and I hope to remain involved in this project in the future.

Appendix A
Family Survey of the Dutch Population 2000

Introduction

This appendix discusses the third edition of the Family Survey of the Dutch Population, the dataset that will be used in the chapters to follow ('Familie enquete Nederlandse Bevolking 2000', abbreviated as FSDP2000). Previous editions of the Family Survey of the Dutch Population took place in 1992-1993 and 1998. The survey was designed by collegues of the ICS-Nijmegen (De Graaf, De Graaf, Kraaykamp & Ultee, 2000), based on the previous editions. The actual field work was carried out by an external organization, the 'Institute for applied sociology', (ITS), Nijmegen. The data were collected from March to August 2000. The field work consisted of a written questionnaire and a computer assisted personal interview (CAPI). For reasons of efficiency, the CAPI-procedure contained as many questions as possible. These questions were about membership in voluntary organizations, participation in voluntary work, donation of blood and organs. Interviewers who were especially trained for this survey conducted the CAPI. Upon completion, the interviewer gave the write-in questionnaire to be completed later. The write-in questionnaire contained questions that were deemed to be more vulnerable to social desirability concerns: these were the questions about parenting, religious socialization, prosocial dispositions, monetary donations to charity, and the scenarios.

Sampling procedure and data collection

The Family Survey of the Dutch Population used a two stage stratified sample of individuals in households. In the first stage, a random sample of municipalities in the Netherlands, stratified according to urbanization level, was drawn. In the second stage, a sample of persons aged 18-70 years was drawn from the population registers of these municipalities. In total, 864 persons agreed to participate. Of these primary respondents, 723 partners also participated in the study. 164 primary respondents formed single person households. The net response rate was 40,6 percent, which is not unusual for personal interviews in the Netherlands. Later, additional data were collected among parents, siblings and children of the primary respondents. These questionnaires did not contain information about prosocial behavior, and were not used.

The use of multiple respondents from the same family implies that observations are dependent, which violates an assumption that is often made in statistical models. In general, clustering of individual characteristics in larger units affects the standard errors of parameter estimates, not the size of estimates (Snijders & Bosker, 1999). When clustered observations are treated as independent observations, the standard errors are minimized artificially. This will lead to a larger number of significant effects. To obtain correct estimates of the standard errors, the Huber/White Sandwich estimator of variance was used (Huber, 1967) in all multivariate analyses.

The dataset was representative of the Dutch population aged 18 - 70 on some demographic characteristics (e.g., urbanization and gender), but not on others (age and region). To correct for under- and overrepresentation in specific categories, a weight variable was created (De Graaf, De Graaf, Kraaykamp & Ultee, 2000). In this dissertation, sampling weights are used only when generalizations are being made about the Dutch population (e.g., in chapter two).

Measures

In this section, the background and the measurement instruments for prosocial motives are discussed because many readers will not be familiar with them. The measurements for socio-demographic characteristics are discussed briefly in the empirical papers.

The 'Big Five' adjective checklist

The 'Big 5' are the much appraised result of several decades of factor analysis in personality psychology. Numerous factor analyses on tens of thousands of adjectives from the dictionary describing personal characteristics showed that most of the adjectives were related to five dimensions (John, 1990; Digman, 1990). The dimensions can be remembered easily with the acronym OCEAN: 'openness to experience' (O), 'conscientiousness' (C), 'extraversion' (E), 'agreeableness' (A), and 'neuroticism' (N). Neurotic persons are described as anxious, nervous, and touchy. Agreeableness is described by adjectives such as sympathetic, helpful, and kind. Introverts - who have a low score on extraversion - are described as quiet, reserved, and withdrawn. Conscientious persons are described as systematic, organized, and neat. Openness is described with adjectives like artistic, imaginative, and innovative.

Psychometric research has shown that the 'Big 5' are highly reliable: the dimensions have stability coefficients of more than .90 over a period of six years (Costa & McCrae, 1988), declining only a little to about .80 over a period of 25 years (Costa & McCrae, 1992). These strikingly high coefficients over considerable periods of time seem to indicate that the basic dimensions of human personality are very stable, and resistant to changes across the life course.

However, the types of samples that are commonly used in these psychometric studies, such as the Baltimore Longitudinal Study of Aging (BLSA), are likely to lead to an overestimation of the stability coefficients (Ardelt, 2000). In these panel studies, people who are likely to move or experience other major changes in their life are less likely to be included in the sample. They may be difficult to reach in the future, and, as a consequence, be unattractive as participants. Therefore, the stability of the social environment for the participants of these panel studies is larger than for the population at large. Changes in the life course and the social environment are often associated with changes in personality (Branje, Van Lieshout & Van Aken, 2004). However, the relatively short history of the 'Big 5' and the composition of the groups of respondents that are used to estimate the reliability of the 'Big 5' make it impossible to estimate the precise influence of the effects of life course events.

Many studies have shown that the same five dimensions are present in personality descriptions used in everyday language not only in the USA, but also in very different nations, such as Spain, Portugal, Italy, the Netherlands, Germany, France, Croatia, Russia, Finland, Estonia, China, Korea and the Philippines (see Kallasmaa, Allik, Realo & McCrae (2000) for references). The cross-national validity of the measurement instrument has contributed to its popularity among personality psychologists.

Because of the attractive psychometric properties of the 'Big 5', many psychologists have started to measure the 'Big 5' instead of or next to existing measures. For instance, Graziano & Eisenberg (1994) describe agreeableness as a basic dimension of personality, encompassing many other more specific personality characteristics that are known to be related to prosocial behavior. One of these specific measures is empathy, which will be discussed below.

Table A.1. 'Big Five' Markers in English and in Dutch

I. Extraversion	
Spraakzaam	Talkative
*Gesloten	*Introverted
*Stil	*Quiet
*Terughoudend	*Reserved
*Teruggetrokken	*Withdrawn
*Schuchter	*Bashful
II. Agreeableness	
Vriendelijk	Kind
Behulpzaam	Cooperative
Sympathiek	Sympathetic
Aangenaam	Pleasant
Prettig	Agreeable
Hulpvaardig	Helpful
III. Neuroticism (emotional stability)	
Ongerust	Anxious
Prikkelbaar	Irritable
Snel geraakt	Touchy
Zenuwachtig	Nervous
Angstig	Fearful
Nerveus	High-strung
IV. Conscientiousness	
Ordelijk	Organized
Systematisch	Systematic
Nauwkeurig	Thorough
Netjes	Neat
Zorgvuldig	Careful
*Slordig	*Sloppy
V. Openness	
Creatief	Creative
Veelzijdig	Complex
Fantasierijk	Imaginative
Artistiek	Artistic
Onderzoekend	Deep
Vernieuwend	Innovative

* indicates reversed item

The set of items used in the Family Survey to measure the Big 5-traits of personality was an adjective checklist developed by Gerris et al. (1998), who translated the set of 100 markers developed by Goldberg (1992) into Dutch and selected 6 items for each factor (see table A.1) based on a factor analysis. Respondents were asked to what degree these adjectives apply to themselves on a scale of 1 ('Does not fit me at all') to 7 ('Fits me completely').

Factor analysis clearly showed a five-factor structure. For all dimensions, mean scores were computed, and a reliability analysis was conducted. Table A.2 shows the intercorrelations and reliability estimates of the 'Big Five'-scales. All scales have sufficiently high reliabilities, ranging from .77 for neuroticism to .87 for conscientiousness. The table clearly shows that the five dimensions are not orthogonal. Agreeableness is correlated positively with conscientiousness (.22), extraversion (.24) and openness (.31). Extraversion is negatively correlated with neuroticism (-.33). In the analyses reported in chapters two to seven, mean scores for all five dimensions are included. This procedure results in estimates of the 'true' effects of each of the dimensions controlled for each other.

Table A.2. Correlations among the 'Big Five'

	1	2	3	4	5
1. Extraversion	.82				
2. Agreeableness	***.240	.83			
3. Conscientiousness	*-.058	***.222	.87		
4. Neuroticism	***-.330	***-.088	**.076	.77	
5. Openness	***.167	***.306	.044	.029	.80

Cronbach alphas appear on the diagonals. *** p<.001; ** p<.01; * p<.05

Empathy

With the Interpersonal Reacitivity Index (IRI), Davis (1994) presents validated measurements of four dimensions of empathy: *empathic concern* (abbreviated as 'EC': the tendency to get emotionally involved with the fortunes and misfortunes of others); *perspective taking* (abbreviated as 'PT': the cognitive ability to take the perspective of others when in conflict with others); *fantasy* (abbreviated as 'FS': the tendency to put oneself in the shoes of a fictional character, e.g. in a movie picture or novel) and *personal*

distress (abbreviated as 'PD': the tendency to feel distressed when observing that others are in need). The four IRI-subscales are based on previous measurement instruments of empathy. Psychometric research has shown the scales have adequate test-retest reliability (Davis, 1994). Because previous research and theory on empathy suggested that the Fantasy-scale and the Personal Distress-scale were less valuable for predictions of the occurrence and intensity of prosocial behavior, only the items from the empathic concern and perspective taking subscales were considered in the present research. The original items appear in table A.3.

Table A.3. IRI: Interpersonal Reactivity Index (Davis, 1994, pp. 56-57)

Respondents are asked to indicate the degree to which the items describe them by choosing the appropriate point on a five-point scale running from 0 (does not describe me well) to 4 (describes me very well). Items indicated with an [r] are reversed (0=4, 1=3, 3=1, 4=0).

Empathic Concern

2. I often have tender, concerned feelings for people less fortunate than me.
4. [r] Sometimes I don't feel very sorry for other people when they are having problems.
9. When I see someone being taken advantage of, I feel kind of protective towards them.
14. [r] Other people's misfortunes do not usually disturb me a gread deal.
18. [r] When I see someone being treated unfairly, I sometimes don't feel very much pity for them.
20. I am often quite touched by things that I see happen.
22. I would describe myself as a pretty soft-hearted person.

Perspective Taking

3. [r] I sometimes find it difficult to see things from the "other guy's" point of view.
8. I try to look at everybody's side of a disagreement before I make a decision.
11. I Sometimes try to understand my friends better by imagining how things look from their perspective.
15. [r] If I'm sure I'm right about something, I don't waste much time listening to other people's arguments.
21. I believe that there are two sides to every question and try to look at them both.
25. When I'm upset at someone, I usually try to "put myself in his shoes" for a while.
28. Before criticizing somebody, I try to imagine how I would feel if I were in their place.

The reliability of the two scales was tested in a series of laboratory experiments at the University of Leiden.[*] A group of 140 students participated in a study of volunteer

[*] I thank Wim Bernasco for conducting this pilot study.

dilemmas (Diekmann, 1986). Before the dilemmas were played, the participants completed the Empathic Concern (EC) and Perspective Taking (PT) scales. An exploratory factor analysis revealed four factors with Eigenvalues >1. However, the third and fourth factor had Eigenvalues of 1,2 and 1,0, respectively, and the scree plot showed a clear bend after factor 2. These results supported a two-factor solution. A confirmatory factor analysis with a criterion of two factors showed two factors, clearly interpretable as the Empathic Concern (EC) and Perspective Taking (PT) dimensions (see table A.3). However, two items revealed low loadings: item 3 of the EC-scale (.266) and item 4 of the PT-scale (.332). Reliability analysis revealed that item 3 of the EC-scale and item 4 of the PT decreased the reliability of the total scale. Without these items, Cronbach's alphas were .70 for the perspective taking scale and .71 for the empathic concern scale. The findings from this pilot study supported the use of the two 6-item translations of the EC and PT-subscales in the Family Survey of the Dutch Population.

Table A.4. Dutch translation of IRI-subscales Empathic Concern (EC) and Perspective Taking (PT)

EC1. Ik voel vaak bezorgdheid voor mensen die het minder goed hebben dan ikzelf.
EC2. De problemen van anderen kunnen me meestal niets schelen.
EC3. Als ik zie dat iemand benadeeld wordt, krijg ik een vervelend gevoel.
EC4. Het ongeluk van andere mensen doet me meestal niet zoveel.
EC5. Als ik zie dat iemand oneerlijk behandeld wordt, heb ik weinig medelijden.
EC6. Ik wordt vaak geraakt door wat andere mensen meemaken.
EC7. Ik ben nogal een zachtaardig iemand.
PT1. Ik vind het moeilijk om de dingen vanuit andermans gezichtspunt te bekijken.
PT2. Ik probeer een probleem altijd van alle kanten te bekijken voor ik een beslissing neem.
PT3. Ik probeer mijn vrienden beter te begrijpen door me voor te stellen hoe zij er tegenaan kijken.
PT4. Als ik ergens zeker van ben, verspil ik niet veel tijd met het luisteren naar de argumenten van andere mensen.
PT5. Ik hou er rekening mee dat anderen op een andere manier tegen de dingen aankijken.
PT6. Als ik boos op iemand ben, probeer ik het meestal een tijdje van zijn kant te bekijken.
PT7. Voordat ik kritiek heb op anderen, probeer ik me voor te stellen hoe ik me zou voelen als ik in hun schoenen stond.

Table A.5. Factor Analysis and Reliability Analysis of EC and PT-items in pilot study

EC1. Ik voel vaak bezorgdheid voor mensen die het minder goed hebben dan ikzelf	**.688**	.076
EC2*. De problemen van anderen kunnen me meestal niets schelen	**.699**	.022
EC3*. Als ik zie dat iemand benadeeld wordt. krijg ik een vervelend gevoel	.266	.046
EC4*. Het ongeluk van andere mensen doet me meestal niet zoveel	**.731**	.136
EC5*. Als ik zie dat iemand oneerlijk behandeld wordt, heb ik weinig medelijden	**.560**	.100
EC6. Ik wordt vaak geraakt door wat andere mensen meemaken	**.670**	.064
EC7. Ik ben nogal een zachtaardig iemand	**.407**	.368
PT1*. Ik vind het moeilijk om dingen vanuit andermans gezichtspunt te bekijken	.165	**.661**
PT2. Ik probeer een probleem altijd van alle kanten te bekijken […]	-.144	**.663**
PT3. Ik probeer mijn vrienden beter te begrijpen […]	.157	**.646**
PT4. Als ik ergens zeker van ben, verspil ik niet veel tijd met luisteren […]	.175	**.332**
PT5. Ik hou er rekening mee dat anderen […]	.036	**.609**
PT6. Als ik boos op iemand ben, probeer ik het […] van zijn kant te bekijken.	.061	**.585**
PT7. Voordat ik kritiek heb op anderen, probeer ik me voor te stellen [...]	.130	**.559**
Cronbach's Alpha	.714	.698

Communalities >.300 in bold; * indicates reversed item

Table A.6. Factor Analysis and Reliability Analysis of EC and PT-items in FSDP2000

EC1. Ik voel bezorgdheid voor mensen die het minder goed hebben dan ikzelf	.243	**.513**
EC2*. De problemen van anderen kunnen me meestal niets schelen	.102	**.813**
EC3*. Als ik zie dat iemand benadeeld wordt. krijg ik een vervelend gevoel	.084	**.802**
EC4*. Het ongeluk van andere mensen doet me meestal niet zoveel	-.023	**.681**
PT2. Ik probeer een probleem altijd van alle kanten te bekijken […]	**.674**	.053
PT3. Ik probeer mijn vrienden beter te begrijpen […]	**.764**	.159
PT5. Ik hou er rekening mee dat anderen […]	**.745**	.150
PT6. Als ik boos op iemand ben, probeer ik het […] van zijn kant te bekijken.	**.705**	.067
PT7. Voordat ik kritiek heb op anderen, probeer ik me voor te stellen [...]	**.720**	.078
Cronbach's Alpha	.681	.777
Label	Empathic Concern	Perspective Taking

Communalities >.300 in bold; * indicates reversed item

The empathy scales in the FSDP2000 were part of a written questionnaire that the interviewers left at the respondents' home after the CAPI-survey was completed. The questionnaire was completed by 1508 of the 1568 respondents. A factor analysis of the responses revealed three items with low communalities (EC1, EC5, PT1) of which one

had with high loadings on both the PT as EC-dimension (EC5). Excluding these items, three factors were found with Eigenvalues >1. However, the third factor had an Eigenvalue of only 1,2 while the scree plot indicated a two factor solution. A confirmatory factor analysis with the criterion of two factors indicated two dimensions clearly interpretable as Empathic Concern (EC) and Perspective Taking (PT) (see table 4). The initial Cronbach's Alpha for EC of .676 increased to .681 after deletion of item 5 and 6 (with item 5 it was even higher, .690, but this item correlated substantially with the perspective taking scale). The initial Cronbach's Alpha for PT of .558 increased to .777 after deletion of item 1. Correlated .275 (p<.000) (with EC including item 5, this would be .321).

Measuring social value orientation

Social value orientations were not measured with a series of 'decomposed games' (e.g., Van Lange et al., 1997a) but in a somewhat different manner for two reasons. The first reason is practical. Questionnaire space did not allow for us to use the traditional measures of social value orientations consisting of nine decomposed games. To obtain a maximum amount of information with a more limited amount of questionnaire space, respondents were asked to provide a rank order to four self-other allocations of hypothetical points in two tables (see below). This measurement procedure is based on the instrument used in the Households in the Netherlands Survey from 1995 (Kalmijn, Bernasco & Weesie, 1996; for a discussion of the measurement procedure for social value orientation, see Snijders & Weesie, 1999). Although it would have been possible to create combinations of self-other allocations that closely resemble the original idea of three 'types' of social value orientations inherent in the decomposed games technique (cooperative, individualist, and competitive, see Van Lange et al., 1997a), the combinations offered to the respondents did not do so for a theoretical reason. Our theoretical interest was in the altruism-egoism dimension inherent in social value orientations, and not so much in the equality - competition dimension. Therefore, the numbers of points for self and other for the various alternatives in the new measure all summed to the same amounts (300 in task A, and 500 in task B, see table 7).[†] This means

[†] Unfortunately, a typing error was made in the construction of the final questionnaire. The second alternative in task A should read '255-45' instead of 225-45. As can be seen in the distribution of the altruism parameter, this error did not make a difference.

that the difference between competitors and individualists cannot be made with the ranking task.

Table A.7. Measure of social value orientation in FSDP2000

	Task A				Task B		
	Self	*Other*	*Own share*		*Self*	*Other*	*Own share*
1.	120	180	.40	1.	375	125	.75
2.	225	45	.83	2.	200	300	.40
3.	195	105	.65	3.	325	175	.65
4.	150	150	.50	4.	250	250	.50

Instead, the rank orders reflect the degree to which respondents have the tendency to give away points to the unknown other (or to keep them for themselves). Assume a continuum ranging from 0 (keeping nothing for oneself, completely altruistic) to 1 (keeping everything for oneself, completely egoistic). If respondents make consistent choices, they will rank order the alternatives as if they compute the difference between their 'true' degree of altruism and the alternatives in the table. The alternative that is closest to the true degree of altruism of the respondent should receive the highest preference (1). The alternative that is furthest from the degree of altruism receives the lowest preference (4). Then the other two alternatives are ranked. Here are two examples to clarify how the egoism parameters are computed from the rank orders:

(1) Suppose you are a completely selfish actor. The most attractive option for you is the 225-45 split, because 225 is the highest possible pay-off for you in the game. The least attractive option for the selfish actor is 120-180. The second most preferable option is 195-105, and 150-150 is third. From top to bottom, a completely selfish actor would have a rank order of 4123 in task A. (Likewise, in task B this would be 1423). Although in theory a completely selfish actor would have an egoism parameter of 1, all respondents with parameters >.74 would give the rank order that you as a completely selfish actor would give. For an actor with an egoism parameter of .73, the .65 share of option 3 (195-105) is more attractive than the .83 share.

(2) To give another example, suppose you want to keep half and give away the other half. In this case, you would choose 2431 in task A. The equal split of 150-150

exactly reflects your degree of altruism (.50). Then the 120-180 option (keeping a .40 share) is closer to .50 (difference of .10) than the 195-105 split (a share of .65 - difference of .15). Of course, the 224-45 division would be the least attractive option. Respondents with an egoism parameter of .50 fall into the .45-.52 category.

Table A.8. Altruism parameters of respondents based on preference orderings in measurements of social value orientation

Task A				Task B			
Range	Preference Order	n	%	Range	Preference Order	n	%
<.45	1432	13	1.0	<.45	4132, 2131	12	1.0
.45-.52	2431	404	33.8	.45-.52	4231	422	35.3
.52-.57	3421, 3431	256	21.4	.52-.57	4321, 4221, 4312, 4331, 4412	190	15.9
.57-.61	3412	43	3.6	.58-.60	3412	55	4.6
.61-.66	4312	61	5.1	.60-.70	2413	43	3.6
.66-.74	4213, 4112	45	3.7				
>.74	4123	188	15.7	>.70	1423, 1314	211	17.7
Indiff.	1111, 2222, 4444	4	0.3	Indiff.	1111, 4444	4	0.3
Apparently inconsistent		(277)	(21.5)	Apparently inconsistent		(350)	(27.2)
Eq, .66-.74	4321	146	12.2	Eq, .65-.69	3421	204	17.1
Eq, >.74	4231	36	3.0	Eq, >.69	2431	54	4.5
Consistent		1192	100	Consistent		1119	100
Inconsistent		95	(7.4)	Inconsistent		114	(8.9)
N		1291		N		1287	

Following this 'proximity'-logic, all consistent preference orderings fall into a range of possible degrees of egoism/altruism. Inconsistent rank orders (e.g., 1234) are considered as missing values. A first inspection of the preference orderings reveals that only about 15 to 20% of the respondents fall into the most selfish category. While the opposite is rare - only 1% prefers having less than the unknown other - the largest category is the second, centering around the equal split (.50). Furthermore, markedly high numbers of

inconsistent choices can be seen: 21,9% in task A, and an even higher 28,9% in task B. Upon closer examination, however, it turned out that a sizable portion of the apparently inconsistent preference orderings were actually consistent in a two-dimensional preference space, assuming that respondents do not only have preference for more or less points for self, but may also have a separate preference for equality. In task A, 65,5% of the apparently inconsistent rank orders expressed a first preference for the 50-50 division, and subsequently chose a consistent order. In task B, 69.4% of the apparently inconsistent respondents expressed such preferences.

Assuming the occurrence of equality preferences, we were able to classify 92.6% of the respondents in task A, and 91.1% in task B. This figure is much higher than obtained with the usual measures of social value orientations. The results from our new rank order measurement instrument of social value orientations shed a new light on what measurements of social value orientations are actually measuring. The rank orders are in line with the 'integrative model' of social value orientations proposed by Van Lange (1999). The integrative model argues that choices in measurements of social value orientations reflect positions on two dimensions: an equality dimension - how strongly the respondent is motivated by a concern for equality - and an altruism motive - how strongly the respondent is motivated by a concern for other's welfare. The integrative model of social value orientation simply argues that the two dimensions come together in the allocation choices that people make in decomposed games, but it does not hypothesize how the two motives are related. The ranking task that was used in the Family Survey shows that the equality motive is probably more powerful than the altruism motive. Almost one third of the respondents belong to the category covering the parameter of .50, while only 1% conformed to an altruistic pattern. The equality motive is not only more powerful than the altruism motive, the former may 'crowd out' the latter. The choices in the ranking task suggest that a sizeable minority of respondents prefer equality above inequality, but also prefer egoism to altruism (in task A, 15.2%, and in task B, 21.6%). It seems that these respondents reason 'I have already chosen the 'right' thing - the 50-50 split - so now I am allowed to be egoistic'. Even in the choices among combinations that were designed to exclude it, the equality motive rears its head. Social value orientations measure two motives, not one. Further research should investigate whether the altruism motive stands in a conditional relationship with the equality motive.

Dealing with social desirability

Self-reports about prosocial behavior may be biased by social desirability. The potential bias is probably larger for prosocial behavior than for other types of behavior, which are evaluated less positively. Respondents may be motivated by a need for social approval from the interviewer to exaggerate their donations to charitable causes or the number of hours they volunteer. Respondents may even lie to the interviewer, saying they volunteer when they are not or saying they donate when they are not. This danger is especially large when people are asked to rate the likelihood that they will engage in some form of prosocial behavior in the future. Intentions are usually more positive than actual behavior. We tried to deal with social desirability effects in three ways: (1) by questionnaire design; (2) by including a social desirability scale; (3) by comparing responses to hypothetical questions to self-reports on actual behavior.

Questionnaire design - By using a write-in questionnaire for those behaviors that are more likely to affected by social desirability, the potential effect of social desirability was minimized. The write-in questionnaires were left at the respondent's home after the personal interview to be completed later. Because there was no interviewer present when the write-in questionnaire was completed, respondents can hardly be motivated by a need for social approval from the interviewer. Questions on charitable giving, intentions to give and volunteer, personality characteristics, and social value orientation were part of the write-in questionnaire. The questions on membership of voluntary associations and volunteering, organ donation and blood donation were part of the CAPI. These questions were phrased in a very matter-of-fact manner (see section 3.3.4 and 3.3.5 below). Furthermore, we used the questions on membership as a filter for the questions on volunteering (see 3.3.2 below).

Social desirability scale - It is often assumed that socially desirable answers in surveys is the result of a general need for social approval (Crowne & Marlowe, 1964). It has become common practice in (social) psychological research to include a measure of social desirability to control for this response set. The crucial point here is not whether the respondents overestimate their prosocial behaviors when they are asked to indicate their intentions. When all respondents overestimate their prosocial behavior to the same degree, there is no problem: only the absolute proportions would be wrong, but the correlations with the independent variables are unaffected. The problem of a tendency to give socially desirable responses in surveys is serious only when some types of respondents are more likely to give socially desirable responses than others. To measure these

individual differences in the tendency to give socially desirable responses, the Crowne & Marlowe social desirability scale (1964) has been developed. The logic of this instrument is that respondents state their intentions in a large number of very different situations with a clearly socially desirable option. It is assumed that some respondents are more likely to state socially desirable intentions across different types of situations. Psychometric reviews of these instruments, however, have concluded that they are both invalid and unreliable (Costa & McCrae, 1983; Barger, 2002). Socially desirable responses about eating habits do not correlate with socially desirable responses about cheating and jealousy, for instance. A study in the Netherlands using data from 2,010 respondents who completed the 33 original items from the Crowne & Marlowe scale (Centerdata, 1997) confirms this conclusion: in a factor analysis, more than 10 factors emerged (own computation). In chapter four, intentions to give time and money in hypothetical situations were not significantly related to two subscales measuring the two strongest factors in 'social desirability', and including these scales did not affect the correlations with the independent variables. Therefore, they are left out of the analysis. Individual differences in the tendency to give socially desirable responses in the scenarios are not rooted in a general tendency to give socially desirable responses in any kind of situation (if such a general tendency exists at all).

Comparisons of intentions and behavior - Responses to hypothetical requests for donations of time and money will be compared to reports on actual donations. Discrepancies between intentions and behavior may reflect socially desirable responding, because it is easier to say that one would comply with a request in a hypothetical situation than to lie about actual volunteering behaviors and donations to charitable causes in the past year. It is rather unlikely that the reports on actual behavior are also exaggerated due to demand characteristics in the interview situation, because these reports (see the next section) are very modest compared to reports in other survey research. We find about 10% fewer volunteers and donations of money that are more than 50% lower than in other research, using more extensive questionnaires.

When individual differences in prosocial motives are strongly related to intentions to give, but not to reports on actual giving and volunteering, they probably reflect a social desirability effect. However, discrepancies between effects of independent variables on intentions and behavior may also have a substantive interpretation. In the hypothetical scenarios, all respondents are asked for contributions. In the real world, fundraisers target the wealthy for charitable donations, and voluntary associations try to recruit people with

specific qualities that are needed for the job, such as supervising skills (Brady, Schlozman & Verba, 1999).

Appendix B

Testing hypotheses on charitable giving in FSDP2000 and GINPS01

To investigate the possibility that hypotheses tests on charitable giving are biased by the underreporting of donations in the FSDP2000, data from the first wave of the Giving in the Netherlands Panel Survey, collected in May 2002 (GINPS01), were made comparable to the FSDP2000-data used in chapter four. All independent variables in both datasets were recoded in the same categories and z-standardized. Table 1 shows the results of the same regression analyses in both datasets. The dummy-variable for 'other religion' created estimation problems in the FSDP2000-regression, and was excluded.

Comparing the results of the first stage of the analyses indicates that females as well as higher educated persons were more likely to report having made donations in the FSDP2000, while this was not the case in GINPS01. In the GINPS01, on the other hand, stronger selection effects were observed for age, Roman Catholic denomination, and church attendance. These findings suggest that the incidence of donations was underreported in the FSDP2000 by males, the lower educated, elderly persons, frequent church attendees and Catholics. The differences with regard to education and age are in line with the idea that using more cues helps the lower educated and the elderly to remember their donations.

The results of the second stage indicate that the FSDP2000 revealed weaker effects of income and rereformed denomination on the amount donated than the GINPS01, but stronger effects of age, the level of education, home ownership, political interest, and postmaterialism. The differences with regard to age, education and home ownership are in line with the idea that the more extensive questionnaire used in the GINPS01 mainly uncovers more small donations. Large donations are more often made by older persons, higher educated persons and home owners. However, the differences with regard to income, rereformed denomination, political interest and postmaterialism cannot be explained in this way. The rereformed and persons with higher incomes are also more likely to give large amounts, while hyotheses on the influence of political interest and postmaterialism can be formulated in opposite directions.

Table B.1. Heckman Two stage-regression analysis of natural log of donations to charitable causes

	GINPS01			FSDP2000		
Selection (stage 1)						
Age	.390	.211	(*)	.119	.433	
Age2	-.469	.207	*	-.111	.462	
Female	-.029	.073		.371	.101	***
Roman Catholic	.345	.127	**	.041	.113	
Reformed	.272	.148	(*)	.090	.208	
Rereformed	.183	.177		.419	.229	(*)
Other religion	.158	.217		----	----	
Church attendance	.220	.068	***	.116	.058	*
Town size	-.082	.037	*	-.101	.050	*
Level of education	.022	.044		.212	.051	***
Income(ln)	.106	.070		.010	.006	
Wealth(ln)	.010	.012		.023	.009	*
Home owner	.230	.083	**	.402	.111	*
Household size	-.066	.050		.106	.065	
Shares household	.100	.119		-.229	.171	
Political interest	.070	.040		.082	.059	
Left-right self placement	.016	.038		-.097	.050	
Postmaterialism	.033	.038		-.018	.046	
Constant	.518	.232	*	.616	.182	*

(continued on next page…)

Table B.1. (continued)

Amount donated (stage 2)						
Age	.465	.265	(*)	1.193	.446	**
Age2	-.044	.272		-.855	.474	(*)
Female	.018	.068		.075	.092	
Roman Catholic	.087	.102		.095	.112	
Reformed	.094	.113	***	.316	.213	
Rereformed	1.271	.129	***	.608	.220	**
Other religion	1.364	.225	***	----	----	
Church attendance	.395	.050	***	.316	.060	***
Town size	-.032	.037		-.074	.054	
Level of education	.219	.039	***	.328	.058	***
Income(ln)	.316	.068	***	.001	.006	
Wealth(ln)	.022	.009	*	.023	.009	**
Home owner	.183	.081	*	.415	.126	***
Household size	.006	.049		.035	.063	
Shares household	.050	.126		-.093	.177	
Political interest	.074	.040	(*)	.167	.055	**
Left-right self placement	-.062	.036	(*)	-.033	.052	
Postmaterialism	.029	.036		.146	.048	**
Constant	3.314	.209	***	3.326	.202	***
Log likelihood	-2998.602			-2248.659		
Wald test for Chi Square (df)	***11358.80 (18)			***235.08 (17)		
Athrho	.026 (.047)			***.785 (.237)		
Lnsigma	***.215 (.022)			***.232 (.060)		
N (uncensored, censored)	(1608, 333)			(1019, 315)		
Wald test for ind. equations	0.31			***10.95		

Appendix C

Additional Analyses

Table C.1. Mean contribution rates in experimental conditions of the scenario study

Type of request	Time	Money
	51.9%	69.3%
N	6360	3315
Material costs		
Fl 2.50		79.7%
Fl 5.00		75.1%
Fl 10.00		62.1%
Fl 25.00		51.1%
One hour	53.2%	
One evening	52.2%	
Several evenings	49.3%	
Social incentives: *Repeated interaction*		
Letter		45.0%
Stranger	21.0%	48.5%
Vaguely familiar	38.7%	53.8%
Neighbor	45.9%	80.4%
Family member	60.0%	74.5%
Friend	64.4%	72.2%
Sibling	67.8%	83.3%
Partner	73.0%	80.9%
Psychological rewards: *Efficacy*		
Distributing flyers	52.1%	
Collecting money	49.1%	
Building	59.3%	
Donation of money		69.3%
Psychological rewards: *Distance*		
Local soccer club	41.8%	70.1%
Red Cross	65.6%	83.0%
Third world people	63.0%	74.2%
Political prisoners	38.9%	51.7%

Table C.2. Results of Heckman two-stage regression analysis of donations to charity (untransformed amounts, N=1471, 1098 uncensored)

Female	-.06	-.06	-.12	.23 **
Age	.04	.07 (*)	.02	-.04
Agreeableness		-.02	-.06	-.04
Conscientiousness		-.03	-.02	-.01
Extraversion		.04	.04	.05 (*)
Neuroticism		.01	-.01	.00
Openness		.02	-.01	-.04
Prosocial value orientation (svo)[a]			.08	-.21
Perspective taking (pt)			-.03	-.10
Empathic concern (ec)			.17 (*)	.19 **
Education				.13 ***
Working hours				.01 *
Income (x€1000)				.0014 *
Church attendance (times per year)				.00
Urbanization				.10 *
Female	-24.0	-25.8	-49.3 **	-18.9
Age	17.2	29.1	16.2	50.1 ***
Agreeableness		-9.5	-21.4	-14.9
Conscientiousness		-9.5	-7.8	-4.8
Extraversion		16.8 *	8.2	12.2
Neuroticism		4.1	-4.4	13.8
Openness		5.8	-2.0	-8.3
Prosocial value orientation (svo)			40.2 (*)	47.4 *
Perspective taking (pt)			-2.2	-5.6
Empathic concern (ec)			64.3 **	73.5 **
Education				49.3 ***
Working hours				1.5 (*)
Income (x€1000)				0.300 *
Church attendance (times per year)				3.7 ***
Urbanization				4.7

*** p<.001; ** p<.01; * p<.05.

[a] Social value orientation above average

Table C.3. Logistic regression analysis of current blood donation (N=1495)

Female	0.77 (*)	0.77	0.77	0.97	1.03
Age	1.01	1.04	1.07	1.22 *	1.22 *
Agreeableness		1.20 *	1.21 (*)	1.24 *	1.26 *
Conscientiousness		0.84 *	0.84 *	0.84 *	0.82 *
Extraversion		0.96	0.95	0.94	0.96
Neuroticism		0.88	0.87	0.90	0.92
Openness		0.90	0.90	0.87	0.87
Social value orientation (svo)			0.95	0.95	0.96
Perspective taking (pt)			0.96	0.94	0.90
Empathic concern (ec)			1.06	1.06	1.09
Education				1.24 **	1.25 **
Working hours				1.26 *	1.26 *
Income (ln)				0.87 *	0.86 *
Church attendance				0.97	0.80 (*)
Urbanization				1.06	1.07
Income * agreeableness					1.00
Income * svo					1.14 *
Income * pt					0.88 *
Income * ec					1.20 *
Attendance * agreeableness					1.03
Attendance * svo					0.97
Attendance * pt					0.81 *
Attendance * ec					1.33 **
Urbanization * agreeableness					0.93
Urbanization * svo					1.01
Urbanization * pt					1.02
Urbanization * ec					1.03
Chi-Square	3	14	16	28	45
Pseudo R^2	.0025	.0120	.0137	.0236	.0413

All Chi Square tests are significant at the p<.001 level. *** p<.001; ** p<.01; * p<.05; (*) p<.10

Table C.4. Multinomial logistic regression analysis of volunteering including an interaction of parental volunteering with distance to parents (n=1219)

	Religious	Pillarized	Secular
Age respondent	0.77	1.03	(*)1.23
Female respondent	0.66	1.01	***0.52
Parental religious volunteering	1.23	0.61	1.16
Parental pillarized volunteering	1.37	(*)1.55	*1.55
Agreeableness	0.90	1.12	1.00
Conscientiousness	1.14	1.11	1.00
Extraversion	**1.72	1.17	(*)1.16
Neuroticism	1.18	0.89	0.92
Openness	0.75	1.15	1.10
Perspective taking	0.73	0.87	1.00
Empathy	1.40	(*)1.32	1.01
Social value orientation	0.91	1.04	0.94
Parental denomination (ref.: Catholic)	1.00	1.00	1.00
No affiliation/mixed marriage	0.21	0.78	0.95
Reformed	1.98	0.43	*0.41
Orthodox Calvinist	0.44	(*)2.44	*0.43
Other	0.46	0.91	0.80
Religious socialization	0.98	0.97	1.08
Own denomination (ref.: Catholic)	1.00	1.00	1.00
No affiliation	***16.7	0.96	1.31
Reformed	0.431	2.44	0.88
Orthodox Calvinist	(*)3.34	0.75	1.18
Other	1.93	(*)3.56	0.53
Church attendance	***2.06	1.00	0.95
Resources parents	1.16	1.20	0.92
Education	1.31	(*)1.32	1.04
Household income	0.55	1.10	0.90
Occupational status	(*)0.65	1.30	(*)1.18
Distance	1.70	1.14	1.16
Distance*parental religious volunteering	*0.33	1.37	1.00
Distance*parental pillarized volunteering	(*)2.69	1.02	0.89
Chi Square (Pseudo R Square)		***316.8 (.1416)	

Summary

More than eighty percent of Dutch households donate money to charitable causes. About one in three Dutch citizens are engaged as unpaid volunteer workers in voluntary associations. One out of six has registered as a post mortem organ donor, and about one out of twenty-five donates blood at least once a year. Giving to charity, blood donation, post mortem organ donation and volunteering are examples of prosocial behavior and contributions to collective goods: they require a personal sacrifice, and benefit a group of individuals or society at large. Why do people give time, money, blood, and organs to the benefit of others? Who are the people who give time, money, blood, and organs anyway? In this dissertation, I investigate these questions from two different perspectives in the social sciences: from the perspective of sociology and the perspective of social and personality psychology.

In chapter one - '*Introduction*' - I present these two perspectives on prosocial behavior. The sociologist argues that the social conditions in which people live are the main determinants of giving and volunteering. People often receive requests for contributions to voluntary associations from friends, family members and others in their social networks. People tell each other that it is a good thing to contribute, putting social pressure on contributing. The psychologist, on the other hand, argues that across a variety of social conditions, some people are more likely to contribute because they have an 'altruistic personality': they are more helpful, empathic, or more able to take the perspective of people in need, while others are more likely to refuse, evade, or forget their duties. This psychological perspective is attractive because it suggests that people base their prosocial behavior on their personal preferences and values, giving them an individual responsibility for their actions, while the sociological perspective points to the role of the social environment. However, we know very little about the relative effects of personality characteristics and social conditions on prosocial behavior. Sociologists and psychologists have studied prosocial behavior in relative isolation. We know even less about the interactive effects of personality characteristics and social conditions. When do people base their prosocial behavior on their personal preferences and values? Throughout this dissertation, two hypothetical answers to this question are tested over and over again. The first hypothesis is the *low cost-hypothesis*, which predicts that people are more likely to act upon their good intentions when it is less costly to do so. The second hypothesis is the *weak situation-hypothesis*, which predicts that people are more likely to act upon their good intentions when the decision situation is 'weak' – when

social norms are not very clear, and when people do not explicitly influence each other because their contributions cannot be observed by others. In 'low cost' and 'weak' situations, people will rely on their personality characteristics and social values to decide about contributions.

To test these hypotheses, an integration of research methods used in sociology and psychology is proposed. Sociologists have mainly studied prosocial behavior with large random sample surveys, showing differences between social groups. Psychologists have mainly studied prosocial behavior in laboratory and field experiments, as a criterion variable for prosocial motives and personality characteristics. While the internal validity of these studies is often high, the external validity of these studies is often limited by the use of student samples and abstract decision making situations such as in the social dilemma research paradigm. In addition, sociological studies rarely include personality characteristics, and psychological studies rarely include social characteristics. In this dissertation, I combine the strength of sociological and psychological research methods. I report five studies investigating effects of social conditions and personality simultaneously on examples of prosocial behavior in the 'real life' among a large sample of the Dutch population.

In chapter two – '*Giving and volunteering in the Netherlands*' – I present the data that are used in chapters three to seven. The data are part of the *Family Survey of the Dutch Population 2000* (FSDP2000), a nationwide household survey conducted by colleagues of ICS Nijmegen (De Graaf, De Graaf, Kraaykamp & Ultee, 2000) among a sample of 1,587 Dutch citizens. Chapter two gives a description of the magnitude of charitable giving, blood donation, post mortem organ donation, voluntary association membership and volunteering among the respondents in this sample, and compares these estimates to other survey data sources such as the 'Giving in the Netherlands Panel Survey' (GINPS). These examples of prosocial behavior are the dependent variables in chapters four to seven. Appendix A gives more detailed information on the design and sampling procedure of the FSDP2000, as well as the measures of personality characteristics and social conditions – the independent variables. To study effects of personality, I used the 'Big Five' Model, which has become the standard in personality psychology in the past two decades. In addition, I studied effects of individual differences in cognitive and emotional empathy and social value orientation.

In chapter three – '*Who gives what and why? A quasi-experimental study of the power of social and psychological incentives in social dilemmas*' – I investigate how

aspects of the situation in which people decide about contributions to collective goods as well as social conditions and personality characteristics affect the willingness to volunteer and to donate money. This chapter is based on a scenario experiment incorporated in the FSDP2000. In the experiment, the respondents indicated their willingness to give money or time in eight situations with systematically varying combinations of four aspects of the situation in which people decide about contributions to collective goods: (1) material costs, (2) social distance to an intermediary person asking for a contribution, (3) efficacy of contributing, and (4) psychological distance to the recipients. The results of the scenario experiment show that the social distance to the intermediary person is the key factor determining the willingness to give time and money: people are more likely to honor requests by persons at a smaller social distance. This result indicates that social incentives have powerful effects on contributions to collective goods. Among the characteristics of the respondents, the level of education is the strongest predictor of giving and volunteering intentions, while personality characteristics typically had smaller effects. Among personality characteristics, empathic concern for others had the strongest effects on giving and volunteering intentions.

In chapter four – *'Anonymous gifts: personal decisions, social backgrounds'* – I investigate donations to unknown strangers. Charitable giving, blood donation and post mortem organ donation benefit unknown others who cannot reciprocate. The effects of personality characteristics should be largest for this category of prosocial behavior. However, the three examples of anonymous giving turned out to be most strongly related to social conditions. A higher level of education increases donations of money and body parts. Church attendance increases charitable donations, but decreases post mortem organ donation. Personality characteristics showed inconsistent and rather weak effects. Empathic concern only promoted charitable giving, but not blood and organ donation.

In chapters five, six, and seven, I investigated various forms of civic engagement in voluntary associations. The results of these chapters reinforce the conclusions drawn for anonymous giving: participation in voluntary associations is mainly a matter of being in the right social conditions (again: higher education and stronger religious involvement, but also living in a smaller community) rather than being a specific 'type' of person. In chapter five – *'Participation in voluntary associations: resources, personality, or both?'* – I investigate membership and volunteering in voluntary associations. Because membership and volunteering are more observable examples of prosocial behavior and may generate generalized reciprocity, I expected that the availability of resources through social capital

and human capital would be more strongly related to participation than to giving money, blood and organs. However, the results indicate that all types of participation in voluntary associations are strongly related to social conditions, especially the level of education and religiosity. The personality characteristics of active citizens are less clear than their resources. Personality characteristics often have different effects for different forms of civic engagement. Members of voluntary associations are more empathic than non-members, less conscientious, and somewhat more open to experience. Emotional stability increases the number of memberships and the likelihood that people volunteer. Volunteers have a more extraverted personality and are more open to experience.

In chapter six – *'Shifting backgrounds of participation in voluntary associations in the Netherlands'* – the question is raised why the massive decline of religious involvement in the Netherlands since World War II did not lead to a decline of participation in voluntary associations. Religious involvement has always been the most important predictor of participation in voluntary associations. In the past four decades, secular associations (environmental and human rights organizations, sports clubs and cultural expression groups) compensated for the decline in membership in traditional, pillarized associations (labor unions, political parties). This chapter investigates how the nature of participation in voluntary associations has changed by comparing characteristics of members of pillarized and secular voluntary associations. Three complementary theories are considered to answer the research problem: (1) collective action theory, (2) Inglehart's theory on postmaterialism, (3) the Five Factor Model in personality psychology. According to the 'Logic of collective action', secular associations have used selective incentives to attract members, especially younger people. However, many secular associations that grew in recent decades offered little incentives, but appealed to postmaterialistic values instead. The rise of postmaterialistic values may have compensated for the decline in pillarized participation. Finally, the argument is made that secular associations have grown because they are more attractive to persons who are more extraverted and open to experience, and that these personality characteristics have become more widespread among the Dutch population. The analyses in this chapter support the latter argument, but not the former. Little support is found for the argument that participation in secular voluntary associations is more strongly based on personality characteristics than participation in pillarized associations. Instead, some secular organizations have grown because they offer more selective incentives to members, while others have grown because of the increase in postmaterialistic values among the Dutch

population. Furthermore, the rise of the average level of education and extraversion has ensured a stable supply of members and volunteers.

In chapter seven – '*The intergenerational transmission of volunteerism*' – I investigate to what extent parents increase volunteering among their children by setting the right example. If parents volunteer when their children are young, do their children follow this example later on in their lives, when they have become adults? If so, how can this intergenerational transmission of volunteerism be explained? Is it really the result of modeling, or is it some byproduct of other types of intergenerational transmission, such as the transmission of religion, resources, or personality characteristics? I find evidence that there is an intergenerational transmission of volunteerism, but that the transmission of volunteerism for religious and quasi-religious ('pillarized') associations was due largely to the transmission of religion and resources. Parental volunteering for both religious as well as quasi-religious ('pillarized') associations increased the likelihood of children's volunteering for secular associations, even controlling for parental and children's religion, education, wealth, and children's personality characteristics. Consistent with a value internalization explanation, this effect was not due to direct social pressure of parents. In addition, I find evidence that personality characteristics of volunteers differ strongly between the three types of voluntary associations. Compared to non-volunteers, volunteers for religious organizations are more extraverted, less open to experience, less able to take the perspective of others and more empathically concerned; volunteers for pillarized associations are less neurotic, more open to experience, and also more empathic; and volunteers for secular associations tend to be more extraverted and open to experience. These specific patterns were obscured in chapter five because all types of associations were collapsed.

Chapter eight – *'Conclusion and discussion'* – summarizes the results of chapters three to seven, and provides answers to the research questions. The first research question was:

P1. To what extent can giving and volunteering behavior be explained by prosocial motives and other psychological characteristics of people and the social conditions in which they live?

The answer to this question is that giving and volunteering behaviors are primarily social behaviors, determined by social conditions. On average, about 30% of all the variance in the examples of prosocial behavior that was explained by the most extensive regression models was due to personality characteristics and social value orientations. The

hypotheses that prosocial behavior would be more likely among persons with higher levels of agreeableness, perspective taking and a more prosocial value orientation was rejected most of the time. Empathic concern emerged most often as a typical characteristic of people who contribute money to charities and time to religious and pillarized associations. In contrast, the hypotheses on the effects of social conditions were supported in most of the analyses. The most distinctive characteristic of people who give time, money, blood and organs is their higher than average level of education. In addition, people who are more religious, live in smaller communities, work more hours for pay and earn higher incomes also tend to contribute more.

The second research question of this dissertation was:

P2. *In which conditions are individual differences in prosocial motives more strongly related to giving and volunteering?*

In all chapters, the hypotheses on how effects of personality characteristics would vary with material costs and social rewards are rejected. The *low cost-hypothesis*, predicting that personality characteristics would be more strongly related to prosocial behavior when it is less costly, was usually not supported. Neither did the analyses support the *weak situation hypothesis* that personality characteristics would be more strongly related when social incentives were weaker. It is hard to reject these rejections for methodological reasons, because the low cost-hypothesis and the weak situation-hypothesis were tested in several different ways. It seems that both hypotheses are invalid as general rules for how the effects of personality characteristics vary with aspects of the situation in which people decide about contributions to collective goods.

However, I found evidence in several chapters that specific social conditions such as a higher level of education and religious involvement mediated effects of specific personality characteristics such as emotional stability and empathic concern. It appears that more emotionally stable persons achieve a higher level of education and more empathic persons are more strongly involved in religion and are therefore more likely to give and volunteer. These hypotheses should be considered in future research. A second issue for future research is the effect of the level of education. In the present dissertation, I was unable to explain why the higher educated are more likely to give time, money, blood and organs – although the Family Survey of the Dutch Population contains enough data to test several candidate hypotheses. In the future, I hope to take full advantage of these possibilities. A final issue for future research is that cross-sectional surveys offer only a limited view on the dynamic nature of participation in voluntary associations. It is likely

that the effects of social conditions and personality characteristics differ in magnitude in different stages of the participation career. Longitudinal datasets such as the 'Giving in the Netherlands Panel Survey' enable a detailed study the dynamics of participation in the future.

Samenvatting in het Nederlands

Meer dan tachtig procent van de Nederlandse huishoudens geeft geld aan 'goede doelen'. Ongeveer één derde van de Nederlanders is regelmatig actief als onbetaald vrijwilliger voor een vereniging. Eén op de zes Nederlanders heeft besloten zijn of haar organen voor transplantatie of de wetenschap ter beschikking te stellen na de dood. En ongeveer één op de twintig Nederlanders geeft minstens één keer per jaar bloed bij de bloedbank. Geefgedrag – het geven van geld aan goede doelen, het geven van bloed, van organen, en het geven van tijd door vrijwilligerswerk – heet ook wel prosociaal gedrag. Het gaat om bijdragen aan collectieve goederen: zij vragen een persoonlijk offer van de gever, waarvan de baten ten goede komen aan groepen burgers of de samenleving als geheel.

Wie geeft er eigenlijk tijd, geld, bloed en organen? En waarom geven deze mensen überhaupt tijd, geld, bloed en organen ten bate van anderen, als dat ten koste van henzelf gaat? Dit proefschrift bestudeert deze vragen vanuit twee verschillende disciplines in de sociale wetenschappen: vanuit de sociologie, en vanuit de sociale en persoonlijkheidspsychologie.

In hoofdstuk 1 van dit proefschrift – de inleiding – presenteer ik de twee verschillende benaderingen van geefgedrag. De socioloog beargumenteert dat in de sociale omstandigheden waarin mensen leven de belangrijkste factoren te vinden zijn die hun geefgedrag beïnvloeden. Mensen worden immers vaak gevraagd om een bijdrage te leveren aan een vereniging of aan de samenleving als geheel door hun vrienden, familieleden, of door anderen in hun omgeving. Mensen houden elkaar voor dat het een goede zaak is om bij te dragen, wat sociale druk oplevert. Wie in een omgeving leeft waarin die druk sterker is, zal vaker een bijdrage leveren. De psycholoog echter beargumenteert dat in allerlei soorten sociale situaties sommige mensen nu eenmaal sneller geneigd zijn om een bijdrage te leveren omdat zij meer sociaal zijn ingesteld of een 'altruïstische persoonlijkheid' hebben. Zij zijn meer hulpvaardig, meelevend, en beter in staat om zich te verplaatsen in mensen die het moeilijk hebben, terwijl anderen eerder hun plichten ontwijken, negeren, of vergeten. De psychologische verklaring is aantrekkelijk omdat zij suggereert dat mensen hun geefgedrag baseren op hun persoonlijke voorkeuren en waarden, wat hen een individuele verantwoordelijkheid geeft. De sociologische verklaring is minder populair omdat niemand een slaaf wil zijn van zijn of haar sociale omgeving. We weten echter heel weinig van de relatieve sterkte van de invloed van persoonlijkheidskenmerken en sociale omstandigheden op geefgedrag. En we weten nog

minder over de combinatie van persoonlijkheidskenmerken en sociale omstandigheden. Wanneer baseren mensen hun geefgedrag op hun persoonlijke voorkeuren en waarden? In dit proefschrift worden keer op keer twee mogelijke antwoorden getoetst op deze vraag. Het eerste antwoord is de *'lage kosten-hypothese'*, die voorspelt dat mensen hun geefgedrag sterker baseren op hun persoonlijke voorkeuren wanneer de kosten daarvan lager zijn. Het tweede antwoord is de *'zwakke situatie-hypothese'*, die voorspelt dat mensen hun geefgedrag sterker baseren op hun persoonlijke voorkeuren wanneer hun sociale omgeving daar meer ruimte voor geeft, bijvoorbeeld wanneer de sociale normen niet zo duidelijk zijn en wanneer het geefgedrag moeilijker waargenomen kan worden door anderen. Zulke situaties worden in de psychologie zwakke situaties genoemd. Om de lage kosten-hypothese en de zwakke situatie-hypothese te toetsen, heb ik een combinatie van verschillende onderzoeksmethoden gebruikt. Sociologen hebben geefgedrag voornamelijk bestudeerd met grootschalige enquêtes onder willekeurige bevolkingssteekproeven, en hebben laten zien dat er grote verschillen zijn in geefgedrag tussen sociale groepen. Psychologen hebben geefgedrag vooral in experimenten bestudeerd, in het laboratorium en op straat. Hoewel de interne validiteit van deze experimenten hoog is, wordt de externe validiteit ervan vaak beperkt door het gebruik van specifieke groepen als proefpersonen zoals studenten of voorbijgangers en door het gebruik van wereldvreemde, abstracte keuzesituaties, zoals in het onderzoek naar samenwerking in sociale dilemma's. Terwijl sociologische studies gewoonlijk geen vragen over persoonlijkheidskenmerken bevatten, wordt in psychologische studies gewoonlijk geen rekening gehouden met de sociale omstandigheden waarin proefpersonen leven en zijn opgegroeid. In dit proefschrift doe ik verslag van vijf studies waarin de voordelen van psychologische en sociologische onderzoeksmethoden worden gecombineerd. Ik onderzoek de invloed van persoonlijkheidskenmerken en sociale omstandigheden op voorbeelden van geefgedrag in het 'echte leven', onder een grote steekproef van de Nederlandse bevolking.

In hoofdstuk twee – Geven en vrijwilligerswerk in Nederland – presenteer ik de gegevens die gebruikt worden in de hoofdstukken drie tot en met zeven. Deze gegevens zijn afkomstig uit de *Familie-enquête van de Nederlandse Bevolking 2000 (FNB2000,* in het Engels *Family Survey of the Dutch Population 2000, FSDP2000)*. Dit is een landelijke huishoudenenquête die door collega's van het ICS Nijmegen (De Graaf, De Graaf, Kraaijkamp & Ultee, 2000) is gehouden onder een steekproef van 1587 Nederlanders. Hoofdstuk twee beschrijft de omvang van het geefgedrag: hoeveel geld de respondenten

geven aan 'goede doelen', hoeveel er vrijwilligerswerk doen, bloed geven, en organen ter beschikking stellen. De cijfers uit de Familie-enquête worden vergeleken met cijfers uit andere bronnen, zoals administraties en het 'Geven in Nederland'-onderzoek van de Vrije Universiteit (Schuyt, 2003). De beschreven vormen van geefgedrag zijn de afhankelijke variabelen in de hoofdstukken vier tot en met zeven. Appendix A geeft meer gedetailleerde informatie over de opzet van de enquête, de steekproeftrekking, en de vragenlijsten die gebruikt zijn om de onafhankelijke variabelen te meten – de sociale omstandigheden waarin mensen leven en zijn opgegroeid en hun persoonlijkheidskenmerken. Om de invloed van persoonlijkheidskenmerken te bestuderen heb ik een standaardvragenlijst gebruikt die bekendstaat als het 'Vijf Factoren Model'. Bovendien heb ik meer specifieke vragen gesteld over sociale waardenoriëntaties en empathie dat bestaat uit cognitief inlevingsvermogen en emotioneel medeleven met anderen.

In hoofdstuk drie – '*Wie geeft wat en waarom? Een quasi-experimenteel onderzoek naar sociale dilemma's* – bestudeer ik hoe kenmerken van de situatie waarin mensen beslissen over het bijdragen aan collectieve goederen de bereidheid beïnvloeden om tijd en geld te geven. Dit hoofdstuk is gebaseerd op een vignettenexperiment dat in de FNB2000 is opgenomen. In het experiment beoordeelden de respondenten acht hypothetische situaties waarin een bijdrage van tijd of geld werd gevraagd: zij gaven de kans aan dat ze in zo'n situatie geld of tijd zouden geven. In het experiment werden willekeurige combinaties van vier aspecten gemaakt: (1) de materiële kosten, (2) de sociale afstand tot degene die om een bijdrage vraagt, (3) de psychologische afstand tot degenen die uiteindelijk van de bijdrage profiteren, en (4) de effectiviteit van een bijdrage. De resultaten van het experiment laten zien dat de sociale afstand tot degene die het verzoek doet de belangrijkste factor is die de kans op een bijdrage beïnvloedt: mensen geven eerder geld of tijd naarmate het verzoek gedaan wordt door iemand die hen nader staat. Van de kenmerken van de respondenten die meegenomen werden bleek vooral een hoger opleidingsniveau de kans op een bijdrage te verhogen. Persoonlijkheidskenmerken bleken minder sterk samen te hangen met de kans op een bijdrage. Van de persoonlijkheidskenmerken bleek het emotionele aspect van empathie het sterkste samen te hangen met de kans op een bijdrage.

In hoofdstuk vier – '*Anonieme giften: persoonlijke beslissingen, sociale achtergronden*' – heb ik donaties aan onbekenden bestudeerd. Geldelijke giften aan goede doelen, donaties van bloed en organen komen ten goede aan onbekende anderen die niet in staat zijn om iets terug te geven. Volgens de zwakke situatie-hypothese zou de invloed

van persoonlijkheidskenmerken het grootste moeten zijn voor dit type geefgedrag. De resultaten van de statistische analyses laten echter zien dat anonieme giften het sterkste samenhangen met sociale omstandigheden. Een hoger opleidingsniveau verhoogt de kans op het geven van geld, bloed, en organen. Een hogere frequentie van kerkbezoek verhoogt giften aan goede doelen, maar verlaagt de kans op orgaandonatie. Persoonlijkheidskenmerken hadden grillige en relatief zwakke effecten. Opnieuw bleek het emotionele aspect van empathie het belangrijkst. Echter, de invloed daarvan bleef beperkt tot geldelijke giften.

De hoofdstukken vijf, zes en zeven gaan over verschillende vormen van activiteit in vrijwillige verenigingen. De resultaten van deze hoofdstukken geven aanleiding tot gelijkaardige conclusies als in hoofdstuk vier over anonieme giften. Vrijwillige verenigingen worden sterker gesteund en bevolkt door mensen uit specifieke sociale omgevingen (mensen met een hoger opleidingsniveau, een sterkere religieuze betrokkenheid, en inwoners van kleinere plaatsen) en niet zozeer door mensen met specifieke persoonlijkheidskenmerken. In hoofdstuk vijf – *'Deelname aan vrijwillige verenigingen: een kwestie van hulpbronnen, persoonlijkheid of allebei?'* – bestudeer ik lidmaatschap en vrijwilligerswerk in verenigingen. Omdat deze vormen van prosociaal gedrag gemakkelijker waarneembaar zijn en kunnen leiden tot gegeneraliseerde reciprociteit, werd verwacht dat de beschikbaarheid van hulpbronnen sterker met verenigingsactiviteit samen zou hangen dan met anonieme giften. Dit bleek echter niet het geval. Net als anonieme giften blijkt lidmaatschap en vrijwilligerswerk in verenigingen vooral samen te hangen met sociale omstandigheden, opnieuw met name het opleidingsniveau en de mate van religiositeit. De persoonlijkheidskenmerken van actieve burgers zijn minder duidelijk dan hun hulpbronnen. Persoonlijkheidskenmerken hebben vaak verschillende effecten op verschillende vormen van participatie. Leden van vrijwillige verenigingen zijn sterker emotioneel meelevend dan niet-leden, minder netjes, en iets meer open voor nieuwe ervaringen. Emotionele stabiliteit is vooral kenmerkend voor mensen die lid zijn van meerdere verenigingen tegelijkertijd en vrijwilligerswerk doen. Vrijwilligers zijn ook meer extravert en staan meer open voor nieuwe ervaringen.

In hoofdstuk zes – '*Verschuivende achtergronden van verenigingsparticipatie in Nederland*' – beantwoord ik (samen met co-auteur Nan Dirk de Graaf) hoe het kan dat deelname aan verenigingen in de afgelopen decennia niet is afgenomen, terwijl de kerkelijkheid wel sterk is teruggelopen. Kerkelijke betrokkenheid is in het verzuilde Nederland altijd de belangrijkste factor die deelname in verenigingen bepaalde. In de

afgelopen veertig jaar zijn er vele seculiere verenigingen (natuur- en milieuorganisaties, sport clubs, muziek- en theaterverenigingen) opgekomen, die de afname in lidmaatschappen van verzuilde verenigingen (vakbonden, politieke partijen) gecompenseerd hebben. In dit hoofdstuk onderzoeken we hoe de aard van de verenigingsparticipatie in Nederland veranderd is door de kenmerken van leden van verzuilde en seculiere organisaties met elkaar te vergelijken. We bespreken drie elkaar aanvullende theorieën: (1) collectieve actie-theorie, (2) Inglehart's theorie over postmaterialisme, (3) het 'Vijf factoren model' uit de persoonlijkheidspsychologie. Volgens de 'logica van collectieve actie' gaan mensen eerder over tot lidmaatschap als dat voor hen ook iets oplevert. De voorspelling op grond van deze theorie is dat seculiere verenigingen vaker gebruik maken van selectieve prikkels om leden te werven, vooral onder jongeren. Deze theorie gaat echter niet op voor alle seculiere verenigingen, zoals voor natuur- en milieuorganisaties. Deze verenigingen zijn aantrekkelijk voor mensen met postmaterialistische waardenoriëntaties. De opkomst van het postmaterialisme zou de afname in verzuilde participatie gecompenseerd kunnen hebben. Tenslotte bespreken we het argument dat seculiere verenigingen gegroeid zijn die aantrekkelijk zijn voor mensen die extravert zijn en open staan voor nieuwe ervaringen, en dat deze persoonlijkheidskenmerken sterker verspreid zijn geraakt onder de Nederlandse bevolking. De resultaten van de analyses geven steun aan deze laatste voorspelling, maar niet aan het argument dat seculiere participatie sterker gebaseerd is op persoonlijkheidskenmerken dan deelname aan verzuilde verenigingen. We vinden wel bevestiging voor de collectieve actie-theorie en de theorie over postmaterialisme. Sommige seculiere verenigingen zijn gegroeid omdat ze meer selectieve prikkels bieden aan hun leden. Andere seculiere verenigingen zijn ondanks een gebrek aan deze prikkels toch gegroeid omdat ze aantrekkelijk zijn voor postmaterialisten, en het aandeel postmaterialisten in Nederland de laatste decennia is gegroeid. Tenslotte bleek dat vooral de toename van het opleidingsniveau en in mindere mate ook de verspreiding van extraversie voor een stabiel aanbod van leden en vrijwilligers heeft gezorgd.

In hoofdstuk zeven – *'De intergenerationele overdracht van vrijwilligerswerk'* – bestudeer ik de invloed die ouders hebben op het vrijwilligerswerk van hun kinderen door hen het 'goede voorbeeld' te geven. Als ouders vrijwilligerswerk doen wanneer hun kinderen jong zijn, volgen die kinderen dat voorbeeld dan later als ze volwassen geworden zijn? En als dat zo is, hoe kan de invloed van ouders dan verklaard worden? Is het echt een gevolg van het goede voorbeeld, of is het een bijproduct van andere typen van

intergenerationele overdracht van ouders op kinderen, zoals de overdracht van religiositeit, hulpbronnen, of persoonlijkheidskenmerken? De resultaten van de statistische analyses leveren bewijs dat er een intergenerationele overdracht van vrijwilligerswerk is, maar laten ook zien dat deze overdracht vaak het bijproduct is van andere vormen van overdracht. De overdracht van vrijwilligerswerk voor religieuze organisaties blijkt een bijproduct te zijn van de overdracht van religiositeit, en de overdracht van verzuild vrijwilligerswerk blijkt een bijproduct van de overdracht van sociale status en religiositeit. Toch is de overdracht van vrijwilligerswerk van ouders op kinderen niet alleen maar een bijproduct van andere vormen van intergenerationele overdracht. Kinderen van ouders die vrijwilligerswerk deden voor religieuze of verzuilde verenigingen doen als volwassene later zelf ook vaker vrijwilligerswerk voor seculiere organisaties, ook als rekening gehouden wordt met de overdracht van religiositeit, opleidingsniveau, beroepsstatus, en persoonlijkheidskenmerken. De invloed van ouders bleek niet te verminderen als kinderen minder contact hebben met hun ouders. Dit resultaat laat zien dat de invloed van ouders waarschijnlijk niet door directe sociale druk verloopt. Het hoofdstuk laat ook zien dat de persoonlijkheidskenmerken van vrijwilligers in verschillende soorten verenigingen nogal verschillend zijn. Vergeleken met niet-vrijwilligers zijn vrijwilligers voor religieuze verenigingen meer extravert, minder open voor nieuwe ervaringen, minder in staat om zich te verplaatsen in anderen, maar meer medelevend; vrijwilligers voor verzuilde verenigingen zijn emotioneel stabieler, meer open voor nieuwe ervaringen en meer medelevend; en vrijwilligers voor seculiere verenigingen tenslotte zijn meer extravert en meer open voor nieuwe ervaringen. Deze patronen kwamen in hoofdstuk vijf niet boven water omdat daarin alle soorten vrijwilligers samengevoegd waren.

Hoofdstuk acht – *'Conclusie en discussie'* – vat de resultaten van de voorgaande empirische hoofdstukken samen en geeft antwoord op de probleemstellingen van dit proefschrift. De eerste probleemstelling was:

> *P1. In welke mate kan geefgedrag worden verklaard door prosociale motieven en andere persoonlijkheidskenmerken en door de sociale omstandigheden waarin mensen leven?*

Het antwoord op deze probleemstelling is dat geefgedrag voornamelijk een kwestie is van sociale omstandigheden, en niet zozeer van persoonlijkheidskenmerken. Gemiddeld wordt ongeveer 30% van de totale verklaarde variantie in de verschillende vormen van geefgedrag verklaard door persoonlijkheidskenmerken en sociale waardenoriëntaties. Het gaat dan met name om het emotionele aspect van empathie – medeleven. De hypothesen die voorspellen dat mensen

die zichzelf omschrijven als vriendelijker, beter in staat om zich te verplaatsen in anderen en die prosociale waarden hebben vaker overgaan tot giften aan goede doelen, bloed donatie, orgaandonatie of vrijwilligerswerk blijken meestal niet uit te komen. De hypothesen over sociale omstandigheden daarentegen blijken meestal wel op te gaan. De meest karakteristieke eigenschappen van mensen die geld, tijd, bloed en organen geven zijn – in aflopende volgorde – hun hoger opleidingsniveau, hun sterker religiositeit, het wonen in een kleinere gemeente, het hebben van een voltijds baan en een hoger inkomen.

De tweede probleemstelling van dit proefschrift was:

P2. In welke omstandigheden zijn persoonlijkheidskenmerken en sociale waardenoriëntaties sterker verbonden met geefgedrag?

De lage kosten-hypothese en de zwakke situatie-hypothese blijken onhoudbaar te zijn als antwoord op deze probleemstelling. De invloed van persoonlijkheidskenmerken is niet zo heel groot, maar wordt niet minder als de kosten van prosociaal gedrag hoger worden of de sociale druk groter wordt. Het is moeilijk om deze weerlegging te negeren door te wijzen op tekortkomingen in de toetsing van de hypothesen, omdat die in meerdere hoofdstukken op meerdere manieren is uitgevoerd. Het lijkt erop dat beide hypothesen simpelweg ongeldig zijn als algemene regels voor de omstandigheden waarin persoonlijkheidskenmerken een grotere invloed hebben. Dit betekent overigens niet dat de invloed van persoonlijkheidskenmerken volledig losstaat van die van sociale omstandigheden. Op diverse plaatsen in het proefschrift zijn onverwachte bevindingen gedaan die een nieuw licht werpen op de manier waarop persoonlijkheidskenmerken en sociale omstandigheden met elkaar verweven zijn. In hoofdstuk vijf en zeven blijkt bijvoorbeeld dat de invloeden van het emotionele aspect van empathie en emotionele stabiliteit vaak verdwijnen als rekening gehouden wordt met respectievelijk kerkgang en het opleidingsniveau. Deze resultaten suggereren dat een kerkelijke omgeving aantrekkelijker is voor empathische mensen, en dat emotionele stabiliteit een pré is voor het behalen van een hogere opleiding. Ook de invloed van andere persoonlijkheidskenmerken verloopt gedeeltelijk via sociale omstandigheden. In toekomstig onderzoek moet daarom ten eerste sterker rekening gehouden worden met de mogelijkheid dat mensen met specifieke persoonlijkheidskenmerken voorkeuren hebben voor specifieke sociale situaties. Ten tweede moet in toekomstig onderzoek uitgezocht worden waarom geefgedrag zo sterk toeneemt met het behaalde opleidingsniveau. In dit proefschrift was geen ruimte om dit uit te zoeken, hoewel de Familie-enquête van de Nederlandse Bevolking daar wel mooi materiaal voor biedt. In de toekomst hoop ik

daarmee aan de slag te gaan. Een derde punt dat in toekomstig onderzoek meer aandacht verdient is het dynamische karakter van participatie in verenigingen. Het is waarschijnlijk dat de invloed van persoonlijkheidskenmerken en sociale omstandigheden verschilt in diverse stadia van deelname. Cross-sectionele enquêtes bieden echter te weinig mogelijkheden om dit te analyseren en om oorzaken en gevolgen van participatie netjes uit elkaar te houden. Longitudinale studies zoals het 'Geven in Nederland Panel Survey' zijn daarvoor beter geschikt.

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Curriculum Vitae

René Bekkers (1974) graduated from Gymnasium Bernrode in Heeswijk-Dinther in 1992 and then studied sociology and philosophy at Nijmegen University. After his graduation in sociology in 1997 with a thesis on 'New Age'-religion, he started as a PhD-candidate at ICS/Department of Sociology of Utrecht University. In 1998, the Netherlands Organization for Scientific Research (NWO) awarded a research grant to write the present dissertation under supervision by Prof. dr. Harry B.G. Ganzeboom and Dr. Nan Dirk de Graaf. Later that year, he graduated in philosophy with a thesis on Max Weber's 'Intermediate Reflections'. In 2000, he became involved in the 'Giving in the Netherlands' Survey as a part–time researcher at the Department of Philanthropy of the Vrije Universiteit Amsterdam. Presently, he is employed as a postdoctoral researcher at ICS/Department of Sociology, Utrecht University.

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