Psychological predictors for prosocial behavior. A large-scale survey in Flanders

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Vincent Weymans

onder leiding van

Prof. Dr. D. Van Den Poel
G. Verhaert
The undersigned, Vincent Weymans, hereby certifies that the content of this thesis is allowed to be consulted and reproduced, on condition of acknowledgement.

Signature:

Date:
PREFACE

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1 THEORETICAL BACKGROUND

In general, people tend to exhibit prosocial behavior from time to time. Giving 20€ to a sibling or helping a lost child find his parents are just two examples to illustrate to what extent people try to help others (Schaller & Cialdini, 1990). This prosocial behavior is also expressed in monetary donations for charitable organizations, volunteer work, and so on (Develtere & Pollet, 2002). In most of the Western countries, the support for development aid is very strong. Opinion polls indicate that the civilian population really wants to do something to fight poverty all over the world (Develtere & Pollet). A recent large-scale research, conducted in Flanders, showed that 84% of the Flemish people give evidence of prosocial behavior in one or another way (Van Ootegem, 1993a).

On the other hand, some worrying trends are becoming more and more expressly present in our society: habituation to the world’s misery, a lack of commitment to others, and so on (Mortelmans, Damen & Sinardet, 2008). Although these indications might lead us to think that charity does not stand a chance in this world, there are elements that provide evidence to the contrary. Therefore, it should be pointed out that this tendency to prosocial behavior, such as volunteer work and donating to charity, does not have to be the opposite of these worrying trends although, in theory, it stands at right angles to it (Mortelmans et al.).

A possible explanation can be found in the expanding charity sector. Campaigns are more and more organized on a large scale, mostly in cooperation with television or radio channels (e.g., “Music For Life” by Studio Brussel). Another explanation relates to a determinative evolution like individualization, which forces an individual to make a maximum of personal choices (Mortelmans et al., 2008). As a consequence, it becomes increasingly important to understand people’s motives for charity and any choices in that respect.

There is an extensive list of variables that might play a significant role in predicting prosocial behavior. For example, past behavior is believed to be the best predictor for future behavior (Ajzen, 2002), whereas socio-demographic variables play a very important role as well. The relation between various socio-demographic variables and prosocial behavior has also been widely demonstrated (Damen et al., 2000; Jencks, 1987). For instance, women are more inclined to give to charity than men (Jas, 1999). Besides gender, age as well is found to play an important role in prosocial behavior. More specifically, Banks observed that older people, in particular older than 65, tend to donate more (Banks, Tanner, 1997).
Although past behavior and socio-demographics can be considered as the most important predictors for prosocial behavior, a variety of psychological concepts, like empathy (Davis, 1983) and altruism (Rushton, 1981), were shown to be predictors for prosocial behavior. In this dissertation we will examine the predictive surplus value of certain psychological concepts in order to determine the benefit for charitable organizations to collect any additional information besides socio-demographic and past behavior data.

First, we will attempt to map the prosocial behavior of the Flemish people. Then, we investigate diverse psychological predictors, as well as past behavior and socio-demographics, in direct relation to various forms of prosocial behavior. At last we investigate whether a model with psychological predictors provides significantly more predictive value than a model without psychological predictors.

### 1.1 Prosocial behavior

*Prosocial behavior* refers to "voluntary actions that are intended to help or benefit another individual or group of individuals" (Eisenberg and Mussen, 1989, p.3). In fact, this definition makes a reference to the consequences of a doer's actions rather than the motivations behind those actions. These prosocial behaviors comprise a broad spectrum of activities, like sharing, comforting, rescuing, and helping. Although prosocial behavior can be mistaken with *altruism*, these are two different concepts. “Whereas prosocial behavior has to do with a pattern of activity, altruism is considered as the motivation to help others out of pure regard for their needs rather than how the action will benefit oneself” (Knickerbocker, 2004). This description of altruism, only concerning actions driven by other-oriented motivations, has been questioned by several researchers. Batson, Ahmad and Tsang (2002) pointed out a distinction between other-oriented and self-oriented motivations, as other researchers inferred from their investigations in real-life helping behaviors, that people have both self-oriented and other-oriented motivations (Clary et al., 1998). These findings may be a reason why we use the term ‘prosocial behavior’ and not ‘altruistic behavior’ to describe actions like donating blood/money, volunteering,.... For these actions, the decision to help is made in advance. However, there are plenty of decisions to help that are made spontaneously like lending money to a friend, helping a relative with homework or giving money to a homeless person. It may be obvious that these examples are of a different type. Smith (2003)
developed the General Social Survey (GSS), where he classifies these voluntary actions that come under prosocial behavior in three categories:

- **Formal helping**: volunteer work, charity and blood donation come under this category.
- **Informal helping to close others**: talking to a depressed person, helping someone with homework or to find a job are some examples.
- **Informal helping to distant others**: e.g. give someone directions, give money to a homeless person or give up one’s seat, ... 

In the current study, we focus on the first category. In our questionnaire, we enlarge this category up to eight more specific choice alternatives, including donation of food (1) or clothing (2), donation of money in favor of religion (3), education (4), art (5), environment/animals (6), health (7), and volunteer work (8). In this dissertation we will more specifically use the term *donating behavior* to describe (1) to (7), and for (8) we will use *volunteer work*. It may be obvious that we will use the term *prosocial behavior* to enclose (1) to (8). We will elaborate on these categories in the method section.

1.1.1 **Prosocial behavior in Flanders**

The latest Flemish large-scale research showed that 84% of the sample showed prosocial behavior in several ways (Van Ootegem, 1993a). These statistics are similar for other Western countries like the U.S.A. (75%) and the U.K. (80%) (Van Ootegem, 1993b). The average inhabitant of Flanders gives about 68€ per year to charity (Van Ootegem, 1993c). According to a survey of the Higher Institute for Labor (HIVA: [Dutch: Hoger Instituut Voor Arbeid]) (Pollet & Huybrechts, 2007), 58% of the Flemish people donated money personally (in cash or bank transfer). A comparison between the HIVA survey of 2004 en 2007 indicated that Flemish people gave significantly more in 2007. Flemish people rather tend to donate money by bank transfer or direct debit than cash, because the former increase the perceived trustworthiness (Pollet & Huybrechts, 2007). When comparing the charity purposes, Lloyd observed a sharp increase in the number of donations to international help organizations in the U.K. (Lloyd, 1993). For Holland, Van Bergen found that health is the most popular charity purpose (42%) (Van Bergen, 1991). Plemper (1997), on the other hand, found that health landed on the third place, after churches and organizations with regard to philosophy of life.
In Flanders, there is an apparent sharp rise of donations with regard to environment since 1988. However, donations for the Third World account for the lion’s share of donations: about 50% of the total charity amount (Van Ootegem, 1993a). The general profile of the Flemish donor is to a large extent identical to the profiles of donors from other countries. When ‘doing prosocial behavior’ is regarded to as ‘doing volunteer work’, we notice that there is only a relative small group of the Flemish population who devotes to volunteer work from time to time (HIVA, 2007). Students are considered to be the most active group in doing volunteer work.

1.2 Predictors

1.2.1 Past Behavior

People are often told that past behavior is the best predictor of future behavior. “Human beings are said to be creatures of habit; they tend to persist in doing what they have become accustomed to” (Ajzen, 2002, p. 107). According to the meta-analytic review of Ouellette and Wood (1998), past behavior is typically found to meaningfully improve the prediction of later behavior, over and above the effects of intentions and perceptions of behavioral control. Ouellette and Wood considered the frequency of past behavior more specifically as an indicator of habit strength, and it can be used as an independent predictor of later action.

For several decades already, past behavior has been an important concept in marketing, and more specifically in market segmentation, (Marcus, 1998). Customer purchase information like past behavior, as well as demographic information, has made it possible for marketers to develop richer, more sophisticated customer segmentation schemes. For decades, a variety of direct marketers, like catalog companies, have used RFM (Recency, Frequency and Monetary value) analysis as a conceptualization for past behavior to segment their customer base and optimize the purchase response rates of their marketing efforts (Hughes, 1994).

Three basic questions are at the core of RFM:

- **Recency** - How recently has a customer purchased?
- **Frequency** - How often does he purchase?
- **Monetary Value** - How much does he spend?
RFM has been challenged by innovative conceptual approaches made possible by new technologies such as neural networks (Marcus, 1998). Nevertheless, marketers continue to rely on RFM because the added value experienced by using alternative methods does not necessarily warrant the costs of implementing those methods. In the current dissertation, we also use the RFM conceptualization in order to measure past behavior because RFM analysis can be considered the most encompassing way to measure past behavior. This brings us to our first hypothesis:

**H1: Past donating behavior is positively associated with future donating behavior.**

### 1.2.2 Socio-demographic variables

In general, socio-demographic variables play an important role in the prediction of prosocial behavior. Bekkers (2006) investigated the predictive power of several personality variables and socio-economic variables for prosocial behavior and established a significantly greater influence of the socio-economic variables, which were mainly resources like money, knowledge, social network and so on. “Donations of money, blood, and organs may seem to be governed by preferences, but the strongest predictors of traditional and health-related philanthropy are indicators of resources” (Bekkers, 2006, p. 362). From this “resource perspective” Bekkers considers three types of resources.

*Human capital* refers to personal characteristics which make people productive in the labor market and in which they may invest (Brady, Verba & Schlozman, 1995). Reading and writing skills besides organizational and management skills are types of human capital. Wilson and Musick (1997) consider volunteering, donations of money and body parts as transfers of individual citizens’ resources, which can be seen as forms of human capital. Donation of money can be more specifically considered as a form of financial capital which is inevitably connected to human capital.

Income and education level, which are indicators of human capital, are important predictors of prosocial behavior. These indicators are investigated together in diverse studies because of their mutual coherence (Bekkers, 2006; Jones & Posnett, 1991). In general, higher educated people and people with higher incomes donate most (Van Ootegem, 1993c). However, Jenks (1987) found a U-formed relationship between income and donating to
charity, which points out that the rich as well as the poor people donate more. Jenks (1987, p.324) concluded from this fact that there are two forms of donating to charity: “paying your dues” for the poor people and “giving away your surplus” for the rich people. Schlegelmilch (1997) focused on the perception of a person’s financial situation. He found that people who think that they are in a positive financial situation will donate more.

However, the availability of resources in the form of human capital lowers the cost of giving and increases the benefits (Bekkers, 2006). Therefore, it may be obvious that financial resources (like financial capital) reduce the costs of charitable giving. For instance, for people with higher incomes, a € 150 donation to a nonprofit organization is less pricy than for people with lower incomes. On the other hand, it does not matter if you earn a lot of money or not when it comes to doing volunteer work, because of the fact that everyone has the same amount of time. Therefore we posit:

**H2:** Greater availability of financial resources promotes donating behavior but not volunteer work.

_Social capital_ refers to resources of others that people may access through social networks (Lin, 2001). Brady, Schlozman and Verba (1999) claimed that social networks not only make individuals more accessible for attempts of mobilization by voluntary associations, but also more valuable.

It makes prosocial behavior easier not only by lowering costs or increasing benefits of giving, but also by increasing the likelihood of being asked for contributions. “Networks facilitate prosocial behavior because they enforce social norms that prescribe such behavior, and individuals want to avoid disapproval for a failure to give” (Bekkers, 2006, p. 350). Compliance and noncompliance can be more easily perceived in rural settings than in urban environments (Steblay, 1987). Putnam (2000) investigated traditional philanthropy and concluded that it is more common in smaller communities than in large urban areas. Following these findings we formulate the hypothesis:

**H3:** Individuals who perceive their social environment as big are less likely to initiate in prosocial behavior than those who perceive their social environment as small.
Cultural capital refers among other things to morality and civic-mindedness (Wilson & Musick, 1997). However, these examples of cultural capital are not forms of capital in the common sense. For example, money can be considered as capital for three reasons: 1) it can be earned by individuals, 2) people may exchange it with others in a market, and 3) money can be exchanged for other things. So, in contrast to money, civic values (e.g. helping people who are in need), cannot be earned or exchanged.

Other important socio – demographics are gender and age. The evidence concerning gender is mixed. Several studies (Jones & Posnett, 1991; Jas, 1999) have demonstrated that women tend to give more to charity donations than men, although this difference has not been confirmed in Flanders (Mortelmans et al., 2008). Eisenberg (2006) has shown that women score higher on some measures of empathy. Because prosocial behavior is linked to empathy (see below), we presume the next hypothesis:

**H4**: Women show more prosocial behavior than men.

Age as well is a predictor for prosocial behavior. Banks, and Tanner (1997) observed significantly larger donations from elder people, in particular people older than 65. In a study conducted by Pollet and Huybrechts (2007), a comparison between age categories shows that adults younger than 40 years donate significantly less than older people. Mathur (1996) considered older people as such an important group of donors that he specifically studied older adults’ donating behavior. Therefore we formulate the next hypothesis:

**H5**: Older people show more donating behavior than younger people.

It is striking that not only giving to charity is related to socio-economical capacity but also the way how people donate and which motives people formulate for their giving behavior (Mortelmans et al., 2008). For example, the higher the income and the education, the more frequent charity donations will be made on a structural way. The amounts of money given to charity will not only be higher, they will also be given in a more reasoned way. It may be obvious that the initiatives they wish to sponsor will be more rigorously chosen, just as the amount of money they wish to subdivide between these organizations (Mortelmans et al., 2008).
Even though socio-economical capacity and the other mentioned socio-demographic variables have the most important role in predicting prosocial behavior, they cannot completely explain the prosocial behavior patterns of certain people which makes it necessary to search after other variables predicting prosocial behavior. This will be amplified in the next section, where we specifically elaborate on psychological predictors.

1.2.3 Psychological predictors

1.2.3.1 Personality traits

**Altruism:** As already mentioned, the relevance of this concept, with regard to prosocial behavior can be found in its similarities. Both concepts concern actions from someone in order to benefit others. Although there is some resemblance they are two distinct concepts. Altruism is the motivation to help others out of pure regard for their needs rather than how the action will benefit oneself, whereas, prosocial behavior refers to a pattern of activity (Knickerbocker, 2004). We will succinctly elaborate about the characteristics of altruism as a motivation under ‘motivations’.

The first research on the concept of altruism created a pessimistic view on ever finding a trait of altruism (e.g. Krebs, 1978; Latané & Darley, 1970). Rushton (1981) was the first to successfully construct a scale to measure altruism, the Self-Report Altruism (SRA) scale, which gave evidence for a broad-based trait of altruism. The SRA scale had a positive correlation with peer-ratings of altruism, and a variety of paper-and-pencil measures of moral reasoning, nurturance, sensitive-attitude, social responsibility, empathy and prosocial values (Rushton, 1981). Based on the previous results, we formulate the next hypothesis:

**H6:** Altruism is positively correlated with prosocial behavior.

**Empathy:** There has been a lot of research concerning empathy (e.g. Davis, 1983, 1994; Eisenberg & Fabes, 1998). Consequently there have been diverse conceptualizations of this construct (e.g. Davis, 1983; Eisenberg & Fabes, 1998). Today the multidimensional nature of empathy is broadly recognized, whatever particular terminology is used (e.g., Davis, 1983, 1994; Eisenberg & Fabes, 1998). Research concerning empathy has had diverse definitional disagreements but there is a rather broad agreement on two points: (1) that the domain of empathy includes both cognitive and affective dimensions, and (2) that the
affective dimensions encompass a variety of important emotional responses to a distressed target (e.g. Davis, 1994; Eisenberg & Fabes, 1998).

In this research we use the IRI scale (Davis, 1983), which is a multidimensional scale that measures two cognitive facets and two affective facets of empathy. This scale has been used for more than two decades because of its considerable validity measures (see Davis, 1994). The affective facets, which we will use, have also been successfully conceptualized as personality traits (Davis, 1994). We will focus on the affective facets because according to Davis et al. (1999) it are particularly these constructs that seem important in the context of helping situations or prosocial behavior. The first construct, Empathic Concern (EC), stands for other-oriented feelings of sympathy and concern for unfortunate others. Thus, EC refers to an affective response to a target that is clearly other-oriented (Davis, 1994), for example feelings of sympathy and compassion for that target. Consistent with this view, Davis et al. (1999) established that college students who scored on EC were more likely to express interest in participating in volunteer work that brought them into direct contact with the person to be helped. The second construct, Personal Distress (PD), measures “self–oriented” feelings of personal anxiety and unease in tense interpersonal settings. Feelings of personal distress refer to the unpleasant feelings of personal anxiety and discomfort that the observer experiences; these feelings are therefore clearly self-oriented (Davis, 1994). Feelings of personal distress are, in contrast to empathic concern, normally not associated with helping a needy other when escape is easy (Batson, 1991).

Davis (1999) constructed a model with EC and PD, in which he explains how EC and PD are related to prosocial behavior. In this model he specifies the effects of dispositional empathy, which is composed of EC and PD, on expected emotional reactions. Davis (1999) claims that the facets of dispositional empathy in this model are considered to influence anticipated emotional reactions in different ways. Individuals high in empathic concern, will anticipate experiencing more situational sympathy, while those high in personal distress will anticipate experiencing more situational distress (Davis, 1999). Consequently those anticipated emotional responses influence an overall judgment concerning the satisfaction likely to be derived from an activity, which in turn affects one’s desire to participate in helping someone for example. Given the empirical evidence and model we hypothesize:

**H7a:** People who score high on Empathic Concern will show more prosocial behavior.
H7b: People who score high on Personal Distress will show more prosocial behavior.

1.2.3.2 Attitudes

In the marketing literature attitudes are generally described as “global and relatively enduring evaluations of objects, issues or persons” (Petty, Unnava, and Strathman 1991, p. 242). Research by marketers exhibits the point of attitudes for developing effective promotional strategies, which is a more and more important topic for charitable organizations but even though there has been plenty of consumer research that supports the relationship between attitudes and behavior, very little is known about the impact of attitudes on charitable giving (Webb, Green & Brashear, 2000).

Fishbein & Ajzen (1975) subdivide the concept ‘attitude’ in their research as attitude toward the act and attitude toward the object and consider this two distinct concepts as important predictors of behavior. In this research they emphasize the need for conceptual and empirical differentiation between attitudes toward helping others and toward charitable organizations, which are obviously both relevant in this dissertation.

Attitude toward Helping Others (AHO): AHO is defined as: “global and relatively enduring evaluations with regard to helping or assisting other people (Webb, Green & Brashear, 2008, p.300 )”. So a high score on the AHO scale (Webb et al., 2008) stands for a positive attitude in regard to helping others. In general, there is a consensus among researchers about the proposition that how people feel about helping others is affected by their personal norms (e.g. Piliavin and Charng, 1990; Schwartz and Howard; 1984). Schwartz et al. (1984) stated that these personal norms are: ”situated, self – based standards for specific behavior generated from internalized values during the process of behavioral decision making” (p.234). These personalized norms, as well as internalized values, function as the source for motivations, motivations to help in this case. This is consistent with the idea that attitudes are embedded in cognitive structures including beliefs, values, and other attitudes (Scott, 1968). As diverse attitude behavior models describe (e.g. Fishbein et al., 1975; Janz & Becker, 1984) it may be obvious that all these different concepts have their impact on the actual behavior, prosocial behavior in this case. Therefore it may be reasonable to expect donors to differ from non-donors in their AHO across other forms of donation behavior. We hypothesize:

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1 We interpret the word ‘donor’ as someone who gives to charity or does volunteer work.
**H8:** *People with a positive attitude toward helping others show more prosocial behavior than people with a negative attitude toward helping others.*

**Attitude toward Charitable Organizations (ACO):** ACO is defined as: “global and relatively enduring evaluations with regard to the NPOs that help individuals (Webb et al., 2008, p.300)”. In other terms, the higher your score on the ACO scale (Webb et al., 2008), the more positive your attitude is in regard to charitable organizations. In general, the public trust in Non-Profit Organizations (NPOs) and Non-Governmental Organizations (NGOs) has been undermined in the last two decades because of the scandals involving high-profile NPOs and NGOs and their limited transparency with regard to the investments they make. For example, Herzlinger (1996) mentions the scandal with the National Association for the Advance of Colored People (NAACP) in America. Herzlinger (1996) puts these difficulties manifested in NPOs and NGOs down to four primary problems:

1) *Ineffective organizations* that do not achieve their social missions
2) *Inefficient organizations* that get too little achievements out of the money they spend
3) *Private inurement*
4) Organizations that take on excessive risks

It may be obvious that the attitude of someone toward charitable organizations is closely related to the image of “charity” (or charitable organizations). Bendapudi et al. (1996) state that the image of “charity” may be the “single most critical element of its promotional program, because it may determine whether the first step of the helping decision process – perception of need – is initiated” (p.37). So, if “charity” (or charitable organizations) has the image of being unreliable or not efficient, people will not have a positive attitude towards it, and consequently will not be willing to support it financially. Therefore we posit the next hypothesis:

---

2 Inurement happens when a transaction or exchange occurs whereby an individual with a personal interest-an insider-in the exempt organization activities acquires economic gain through the use of funds or assets of that exempt organization (Herzlinger, 1996).
H9: People with a positive attitude toward charitable organizations show more donating behavior than people with a negative attitude toward charitable organizations.

1.2.3.3 Motivations

There has been many research concerning behavioral models in the past 20 years where motivation is assumed to be an important predictor for behavior. For example, the Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975) claims that if people evaluate the suggested behavior as positive, this results in a higher intention or motivation to do so, which consequently increases the likeliness to do the suggested behavior at the end dramatically. According to Mortelmans et al. (2008) motivations for prosocial behavior can be subdivided in two main categories, namely; the altruistic motivation and the hedonistic motivation.

The altruistic motivation is in fact derivable from the concept altruism which stands for concern about other’s well-being (Mortelmans et al., 2008), as already noted under ‘personality traits’. Haggberg (1992) states that men give to charity from the belief that it is good. There exist diverse definitions of altruism. For example, Batson (1991) describes it as “a motivational state with the ultimate goal of increasing another’s welfare”.

Besides altruistic motivations we can recognize hedonistic motivations that are primarily oriented to the donor and the potential advantage he or she might get (Mortelmans et al., 2008). Mathur (1996) subdivides these motivations in three categories and in order to clarify them he reverts to the exchange theory. In fact, the exchange theory is especially suitable for this because diverse studies have demonstrated that charitable contributions may be motivated by donors’ self-interest (Mathur, 1996). First, we amplify on these three types of motivations according to Mathur (1996):

Social interaction motivations: Theories from gerontology suggest that a resource allocation strategy of older people might include consideration of the expected social interaction resulting from the activity. Thoits (1982), for example, suggests that social networks may provide socio-emotional aid in the form of social interaction and activity. Social interaction during old age provides role supports that are essential for a positive self-
concept which, in turn, is associated with greater life satisfaction (Lemon et al., 1972). Caplow’s (1984) investigation demonstrates that for many people, especially older people, diverse new social activities like volunteer work or social interaction experienced through social activities dignifying donors.

In short, social contacts with nonprofit solicitors, social interaction experienced through social activities honoring donors, or volunteer work may substitute for previous relationships of a more intimate nature (Mathur, 1996) or may just fill in the need for social contact. This applies especially for older people even though it is difficult to draw a line here. In contrast to Mathur (1996) we believe that not only (almost) retired adults are seeking for social interaction because of the lost social contact on the work floor. In these times, where loneliness even can turn up in the most densely populated areas of the society, it is a matter of course that not only people older than 50 year can feel a need for more social interaction in their lives. The reasons for this social need can be evoked in very different contexts, for example: people who are working from home, people who do not work (in one income-households), people who work without having other people around, and so on. We believe that the younger people are the less vulnerable they are for loneliness or a need for more social interaction because when people are young they have less time-absorbing obligations like raising children, full-time work, and so on. We formulate the next hypotheses:

**H10a:** Social interaction motivations for charity are positively related to prosocial behavior.

**H10b:** The older people are, the more impact social interaction motivations will have on their prosocial behavior.

**Esteem enhancement motivations:** The exchange theory states that older adults suffer a loss of esteem as they attempt to maintain their positions in the workplace and in the family despite lower levels of productivity and achievement (Mathur, 1996). Nevertheless, the value of this source to others will not likely be sustained, which leads to a further lowering of older adults’ self-esteem. So, the potential for esteem enhancement may motivate older people to give to charitable organizations (Mathur, 1996). Haggberg (1992) suggests that, by giving (to charity), people can feel themselves more appreciated or recognized, what makes the intended objective esteem enhancement. Karylowski (1984, p.144) describes this as endocentric altruism: “Endocentric altruism refers to helping that derives from considerations concerning
one’s own self-image. That is, we help someone in order to feel better about ourselves or to avoid guilty feelings and other kinds of self-concept distress.”

In the United States generous contributions have always been a source of prestige (Schwartz & Howard, 1984). Volunteering time and skills may serve a similar function (Mathur, 1996). Because of the fact that people perceive charity – in the sense of donating gifts, spend time as a volunteer worker, share knowledge – as a source of status, or originate self-esteem from their ability to give gifts, they will be more open to prosocial behavior (Mathur, 1996). We posit the next hypothesis:

**H11:** Esteem enhancement motivations for charity are positively related to prosocial behavior.

In accordance with the previous type of motivations, we believe that there is a certain age on which people become extra vulnerable to the debasement of self-esteem. However, the explorative character of this research combined with the shortage of empirical evidence does not allow us to formulate any hypothesis on the effect of age on esteem enhancement motivations for prosocial behavior.

*Control enhancement motivations:* The exchange theory describes that older adults, in their power struggle to maintain roles and social interaction, are eventually compelled to exchange their compliance for the social rewards they desire. So, decreased power and control in some roles that coincide with aging increases the salience of power and control in other roles (Mathur, 1996).

Mortelmans et al. (2008) describes this as the *political motive* in which people contribute to charity in order to increase their prestige or power in the community or to get a higher status in a company or in a bureaucracy. Quiet similar to the *political motive*, there is the so called *career motive* (Dawson, 1988) which implies that people donates with an eye to get promotion, to keep in touch with everybody, to arouse goodwill among others, and so on.

Thus, this third category of motivations assumes that people donate gifts because they believe that gift donating improves their control in a certain way (Mathur, 1996). Therefore we formulate the next hypothesis for donating behavior especially:

**H12:** Control enhancement motivations are positively related to donating behavior.
Besides these three types of motivations, there are still other motives to prosocial behavior which we amplify succinctly. In the fourth type of motivation to give to charity the economic logic plays a prominent role. The essential point is that donations of more than 30 € to recognized charitable organizations are tax-deductible and can be used to deduct from the taxable income (Van Ootegem, 1993a). It is clear that this does not come under altruistic motivations. After all, the donor expects something in return for his donation. This compensation does not have to be neither financial nor established in advance. Another possibility is that the donor anticipates on the possibility that he or she will ever have to make an appeal to such an organization where he or she donates to (Mortelmans et al., 2008). Because of the fact that this actually illustrates the principle of reciprocity, this is called the *reciprocity motivation*. A familiar example is 'Kom op tegen Kanker', because it is not unthinkable to ever suffer this disease yourself. Hammond (1975) describes this a "cooperative egoism".

1.2.3.4 **Beliefs**

It may be obvious that people’s beliefs and convictions have their influence on their behavior. For example, if you believe that exercise is good for your health, you may consider to make time for it. Beliefs are considered as a very important predictor in the theory of planned behavior (Fishbein & Ajzen, 1975). In this theory they claim that intentions are shaped from salient beliefs about the outcomes of an act. In this research we do not elaborate about all different kinds of beliefs and convictions. We focus especially on the Belief in a Just World (BJW), which comes down to the conviction that people get what they deserve and deserve what they get (Bègue et al., 2008). The relevance of the implementation of this belief in this research can be found in its relationship with prosocial behavior. Several studies demonstrated that BJW stimulates prosocial behavior in some cases and inhibits it in others. A study by Bierhoff, Klein and Kramp (1991) on the altruistic personality showed that first-aiders who intervened on behalf of injured traffic accident victims had a higher score on a just world scale. Zuckerman (1975) also showed that in a time of need, high just world believers behaved more altruistically than nonbelievers. Together, these results are consistent with core suppositions of just world theories, according to which people are threatened by the perception of innocent victims and consequently are motivated to change the situation accordingly (Bègue et al., 2008). This is similar to what Simmons and Lerner (1968, p. 224) stated: “Altruistic behavior will occur to the extent that the desire for justice is elicited and in
amounts which reflect the perceived discrepancy between a dependant person’s fate and the fate he deserved.”

In most of the just world literature, the experimental and correlational investigations are based on general measures of the construct, mostly the scale developed by Rubin and Peplau (1975). However, the growing acknowledgement of the limited reliability of the original scale ended in the construction of diverse multidimensional constructs (Furnham & Procter, 1992; Lipkus, Dalbert & Siegler, 1996). This multidimensional character of the BJW presented an attractive conceptual approach. The instrument of Lipkus et al (1996), which was chiefly validated, made the distinction between self and others, and was composed of two sets of items, one on the subject of Belief in a Just World for the Self (BJWS) and the other on the subject of Belief in a Just World for Others (BJWO). The scientific value of this subdivision was confirmed in diverse articles. BJWS was found to be more validly associated with measures of psychosocial adjustment than BJWO (Lipkus et al., 1996). Bègue and Bastounis (2003) found the following results: BJWO was meaningfully correlated with discrimination against older adults, stigmatization of poverty, and higher penal punitivity, whereas BJWS was weakly or not related to these variables. Lipkus et al. (1996) stated that BJWS was significantly associated with indexes of psychosocial adjustment than BJWO. Given the known results we formulate the next research questions:

**H13a:** Belief in a Just World for Others is negatively associated with prosocial behavior.

**H13b:** Belief in a Just World for Self is positively associated with prosocial behavior.

### 1.2.3.5 Role – identity

The role-identity concept can be defined in general terms as a particular social object that represents a dimension of the self (Mead, 1964). In fact, a role identity serves as a link between self and society. It must necessarily be shared, socially recognized, and defined by action, just as a social object (Callero, 1985). When a role-identity is salient it is more representative of the self and consequently one’s self-definition will more likely reflect salient role identities (Callero, 1985). Because of the fact that role-identities imply action it may be obvious that role-identity salience has an impact on behavior. In fact, role-identities are realized and validated through action. Variance in role-identity salience is thus expected to be contemplated in variance of behavior related to the role-identity, according to Callero (1985).
For example, when a religious role-identity is salient, specific religious actions (e.g., praying, attending services, reading religious material) should be more frequent.

This dissertation examines prosocial behavior in relation to diverse variables in order to get a picture of the “prosocial” profile. Because of the fact that this “prosocial” profile can be defined by diverse acts (e.g. donating money, clothes; doing volunteer work), we can speak of a “prosocial” role-identity. This role-identity can be considered as a particular social object according to Callero (1985), as noted earlier. As long as an actor mentions something concerning his or her prosocial behavior to describe he or she is, and this self-definition is shared and recognized by others, then prosocial behavior, in any form, can be considered a role-identity. Arnett, German & Hunt (2003) developed a model in which they focused on the importance of role-identity in relationship marketing success with non-profit organizations. They found empirical evidence for it, which is in accordance with the previous, namely that the more salient a prosocial identity of someone is, the more present his or her prosocial behavior will be. We posit the next hypothesis:

**H14**: **Prosocial self-identity is positively associated with prosocial behavior.**

### 1.3 Research model

In figure 1 we give a simplified illustration of the research model of this dissertation, by using 4 covering constructs. In the first part of our results section we will discuss the results of our formulated hypotheses. The first hypothesis is illustrated by arrow 1 ➔ 4. The hypotheses concerning socio-demographics (H2-5) are illustrated by arrow 2 ➔ 1, the research questions with regard to psychological predictors (H6-14) are shown with arrow 3 ➔ 1. It may be noticed that we used prosocial behavior (1) both as predictor and dependent variable. We preferred to use construct 1 as a dependent variable for hypotheses 2 to 14 because of the fact that we believe that construct 1 gives a more truthful picture of the actual prosocial behavior of Flemish people than construct 4. In fact, construct 1 is self-reporting of facts, contrary to construct 4, which is a self-reported measure of intentions. Therefore, we believe that using construct 1 as a dependent variable will offer a more factual image of the predictive value of our predictors. In the second section of our results we will compare the predictive plus value of our covering constructs (1, 2, 3) in relation to future prosocial behavior more generally. This is illustrated by arrows 1 ➔ 4, 2 ➔ 4 and 3 ➔ 4.
2. SOCIO DEMOGRAPHICS:
- Human Capital (e.g. health, full-time/part-time, household income)
- Social Capital (social environment & level of urbanization)

3. PSYCHOLOGICAL PREDICTORS:
- Personality traits (empathy & altruism)
- Attitudes (toward helping others & toward charitable organizations)
- Motivations (social interaction, esteem enhancement & control)
- Beliefs (in a just world for self/others)
- Role – identity

1. PROSOCIAL BEHAVIOR:
- Donating behavior (recency, frequency & monetary value)
- Volunteer work

4. FUTURE PROSOCIAL BEHAVIOR:
- Donating behavior (monetary value)
2 METHOD

2.1 Sample and procedure

For the current research design we made an online survey which took averagely 20 minutes to fill in. We attempted to obtain a sample which could represent the adult population of Flanders. In order to reach a sample big enough to give an representative image of the Flemish population we had to make several appeals with the help of diverse communication channels. We started by placing appeals on websites (e.g. www.seniorennet.be) and diverse newspapers (Het Laatste Nieuws, Nieuwsblad en De Standaard), by doing several appeals on a regional (Radio Limburg) and public radio station (Radio 2), and by distributing flyers with an appeal to fill in our online survey. After the first phase we noted a shortage of participants in diverse population groups, more specific older adults (>55 y.) and semi-skilled or unskilled adults. So we continued our research by diverse targeted appeals. In order to obtain more older adults (> 55 y.) we distributed paper versions of our online survey in several senior houses situated in Ghent. We reached unskilled and semi – skilled adults by getting in touch with companies with semi – skilled workers who were asked to fill in the survey.

In sum, a sample of 2530 participants was achieved, of which 40.50% male and 59.50% female. 16.50% of the sample was younger than 25 y., the biggest group was between 25 and 40 y., with 39.50% of the sample. 26.90% of the sample was between 40 and 54 y., 11.80% had the age of 55 – 65 y., 5.30% was 65 y. old or more. Regarding highest completed level of education we found the following segmentation in our sample: primary education (1.60%) ; lower secondary education (6.80%) ; higher secondary education (31.40%) ; higher education, not university (35.50%) ; university education (24.70%). In diagram 1 and 2 (see below) we compare our sample with the Flemish population for age and highest completed level of education by using the data of the National Institute of Statistics (NIS), which exposes some problems concerning representativeness. We decided not to weigh for age and highest completed level of education because it would lead to, for example, a weigh factor of 16 for people older than 65 years and with primary education as highest diploma. According to the rules of survey research the maximum permitted weigh factor is 3 (Pollet & Huybrechts, 2007), so it would be unacceptable to do so. In our regression analysis we used age and gender as a control variable. Because of the fact that highest completed level of
education is used as an indicator for financial resources, which is hypothesized in H2, we did not use it as control variable but we included this variable as a predictor.

**Diagram 1:** Age structure of the sample compared with the Flemish population

<table>
<thead>
<tr>
<th>Age Category</th>
<th>Male Population of Flanders (NIS, 2007)</th>
<th>Female Population of Flanders (NIS, 2007)</th>
<th>Male Sample</th>
<th>Female Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 65 y.</td>
<td>10%</td>
<td>5%</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>55 - 64 y.</td>
<td>20%</td>
<td>15%</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td>40 - 54 y.</td>
<td>30%</td>
<td>25%</td>
<td>15%</td>
<td>12%</td>
</tr>
<tr>
<td>25 - 40 y.</td>
<td>40%</td>
<td>35%</td>
<td>20%</td>
<td>18%</td>
</tr>
<tr>
<td>&lt; 25 y.</td>
<td>20%</td>
<td>15%</td>
<td>10%</td>
<td>8%</td>
</tr>
</tbody>
</table>

**Diagram 2:** Highest completed level of education of the sample compared with the Flemish population

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Flanders (NIS, 2007)</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>University education</td>
<td>30%</td>
<td>25%</td>
</tr>
<tr>
<td>Higher education, not university</td>
<td>20%</td>
<td>15%</td>
</tr>
<tr>
<td>Higher secondary education</td>
<td>40%</td>
<td>35%</td>
</tr>
<tr>
<td>Lower secondary education</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td>Primary education</td>
<td>5%</td>
<td>4%</td>
</tr>
</tbody>
</table>

If we take a closer look at the donation size per age category, we find that the older groups give significantly more, which confirms the findings of Pollet & Huybrechts (2007)
who did this research by order of HIVA, which is the research institute of labor and society in Flanders. In diagram 3 we illustrate these findings in comparison of the sample of Pollet & Huybrechts (2007). The difference between people younger than 40 y. and older than 40 y. is less pronounced as in the HIVA sample, but there is obviously an effect of age. If we compare the men to women, we notice that there is 55.63% of the male sample that gives money and 61.11% of the female sample. An illustration of the amount of money given to charity (see diagram 4) shows us that 33% of the sample donates 30 to 99.99€ per year, in comparison to the HIVA sample where it is 28.5%. Only 17% of the sample donates between 10-29.99€, whereas the latter amounts to 33% in the HIVA sample. Despite the large difference in this category we may conclude that our results are in line with the observed tendency of the past HIVA samples (2003, 2004, 2007), namely that Flemish people have been giving significantly more over the years.

**Diagram 3: Proportion of money donors per age category compared with HIVA (2007)**

[Diagram showing bar chart comparing money donors per age category with HIVA (2007)]

Diagram 5 illustrates which prosocial initiatives are supported. We notice that the lion’s share of our sample (64%) donates clothing. The second most popular category of prosocial behavior is doing volunteer work (31.70%), followed by donating money to health-related charity (31%). The least popular category is donating money to art related charity (1.30%). By and large, we state that 83.16% of our sample donated to charity, in terms of money, clothing or food, in 2008, and that 88.58% shows prosocial behavior, in terms of donating behavior, health-related prosocial behavior or volunteer work, in 2008. Because we
included diverse other socio-demographics in our research questions, we will further elaborate on these variables in our results section

**Diagram 4:** Amount of money given compared with HIVA (2007)

**Diagram 5:** Supported charity initiatives
2.2 Measures

2.2.1 Prosocial behavior

Prosocial behavior was measured with the following questions: “Have you supported the following initiatives\(^3\) or other charitable organizations for the last years?” (9-point scale), “Have you donated money in 2008?” In case the latter was positively answered, the respondent was asked: “How much have you donated to which organization(s) ?” (a log-transformation of the sum of given donations). The last question was “How often do you do volunteer work?” (13-point scale).

Future prosocial behavior was questioned by the following question: “Are you planning to donate money in 2009 ?”, and in case of a positive answer to the previous question “How much and to which organization(s) are you planning to donate in 2009 ?” (a log-transformation of the sum of planned donations).

2.2.2 Socio – demographic variables

Human capital was measured by using the conceptualization of Bekkers (2006): highest completed level of education (in eight categories, ranging from primary school to a Masters degree); subjective health (subjective evaluation of health on a 7-point scale, from “bad” to “good”, 2 questions); household income (16-point scale, ranging from “less than 300 €” to “more than 4500 €”); a dummy variable for 1 or 2 income - household; a dummy variable for most important wage earner; two dummy variables for working status: having paid work and working part-time; a dummy variable for homeownership. Because of the multitude of measures for human capital, we checked the inter – item correlations in order to check possible multicollinearity problems, which were found to be absent because we did not find considerable correlations between these measures.

We as well used the conceptualization of Bekkers (2006) to measure social capital: social environment (7-point scale, ranging from “very small” to “very big”), level of urbanization (7-point scale, ranging from “rural” to “urban”). Other socio-demographic

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\(^3\) the following initiatives were consisted of: donations of food (1) or clothing (2); donations of money in favor of religion (3), education (4), art (5), environment/animals (6), health (7); volunteer work (8)
variables we measured were: age (transformed to 5 categories as in HIVA (2007)) and a dummy variable for gender.

2.2.3 Psychological predictors

Empathy was measured with the Interpersonal Reactivity Index (IRI) by Davis (1983). As already mentioned, the IRI scale is consisted of 2 affective subscales and 2 cognitive subscales of which we used the 2 affective subscales. The Empathic Concern scale was measured with 6 items on a 7-point scale, ranging from “does not fit me at all” to “fits me completely”. An example item is: “I often have tender, concerned feelings for people less fortunate than me.” The Personal Distress scale as well is made up of 7 items, which are measured on a 7-point scale, ranging from “does not fit me at all” to “fits me completely”. An example of an item is: “In emergency situations, I feel apprehensive and ill-at-ease”. We found evidence for the two subscales with Factor Analysis (FA). The internal consistency of both scales was acceptable with a Cronbach’s $\alpha = .70$ for EC and Cronbach’s $\alpha = .75$ for PD. Therefore we used the mean scores for the analysis.

Altruism was measured with 16 items of the Self-Report Altruism Scale (Rushton, Chrisjohn & Fekken, 1981), which request participants to rate the frequency how often they have performed altruistic acts on a 7-point scale, ranging from “never” to “always”. An example of an item is: “I have offered to help a handicapped or elderly stranger across a street.” We found an high internal consistency ($\alpha = .82$) for the scale, so we used the the mean score in further analysis.

Attitudes toward Helping Others/Charitable Organizations are measured with the AHO and ACO scale developed by Webb, Green & Brashear (2000). The AHO scale counts 4 items, for example “People should help other people who are less happy.” The ACO scale consists of 5 items, for example “My idea of charity institutions is positive”. FA showed a clear pattern of 2 scales. The 2 scales are completely utilized in this research and are measured on a 7-point scale (“strongly disagree” to “strongly agree”). We used the mean scores in further analysis because we found a high internal consistency for both scales, $\alpha=.85$ for AHO and $\alpha=.87$ for ACO.

In order to measure people’s motivations for prosocial behavior we used a 10-item scale developed by Mathur (1996). These 10 items are classified in 3 categories: Social-Interaction motivations (3 items), Esteem-Enhancing motivations (3 items) & Control
motivations (4 items). The scales ask respondents whether they agree or disagree with a series of statements, starting with “I donate money to charity/do volunteer work in order to…”, such as “… get the opportunity to meet new people,” and “… insure my thoughts and opinions will be considered.” The items were measured on a 7-point scale (“strongly disagree” to “strongly agree”). We found three distinct scales with FA. We found a high internal consistency for the subscales; $\alpha = .89$ for SI, $\alpha = .85$ for EE and $\alpha = .85$ for C. We used the mean scores for further analysis.

Belief in a Just World for Self/for Others was measured with a scale developed by Lipkus, Dalbert & Siegler (1996). This 16-item scale is divided into 2 subscales (Belief in a Just World for Self and Belief in a Just World for Others) which are both consisted of 8 items. The items are statements of which the respondents have to say if they agree or disagree, such as: “I feel that I get what I deserve,” and “I feel the people treat each other fairly in life.” The items were measured on a 7-point scale (“strongly disagree” to “strongly agree”). FA showed two distinct factors. We will continue working with the mean scores of the subscales. We found high internal consistency rates of $\alpha = .84$ for BJWO and $\alpha = .91$ for BJWS.

We used the “blood-donor donation scale” developed by Callero (1985) in order to measure role-identity, which is consisted of 5 items. We selected 3 items and modified them by substituting “blood donation” for “Being a … -donor…”. The blank part had to be filled up with the charitable organization the participants donated the most for during the past year, and the actual items are statements, for example, “... is an important part of who I am.” The items were measured on a 7-point scale (“strongly disagree” to “strongly agree”). The internal consistency was acceptable ($\alpha = .71$). We used the sum score in further statistical analysis. The full scales of the psychological predictors are described in appendix 1.

2.3 Data analysis

In order to find support for our research questions we applied diverse statistical techniques with the help of SPSS 17. We applied Hierarchical Regression Analysis (HRA) to find evidence for hypothesis 1 to 14. It is necessary, when using HRA, to determine your dependent variable, which has to be of interval scale, and subsequently you can add sets of independent variables into your regression. According to Cohen & Cohen (1983), HRA allows you to determine the coherence between a dependent variable and independent variables, with the possibility to disable a set of confounding variables. In order to become the
most correct results with our HRA, without losing significance of the predictor concerned, we did a HRA per scale or group of subscales. Because we assumed an effect of gender or age we used both variables as control variables, which technically implies that we added them as our first block of predictors in our regression analysis. In order to find additional evidence for hypothesis 4 we used Independent – Samples T Test (ISTT). At last, we will execute an HRA with all our predictors in order to find the best predictors for donating behavior. In this exploratory analysis we will use the stepwise regression. In stepwise regression, the computer runs many regression analyses adding and subtracting predictors that are significant. It then prints a final equation with the predictors that were significant, which gives us an image of the most valuable predictors of donating behavior.
3 RESULTS

In order to find support for an effect of past donating behavior on future donation behavior we did a hierarchical regression analysis, which is shown in table 1. In step 1 we imported the control variables, which made a valuable contribution to the model (F(2, 958) = 66.342, p < .01) by explaining 12% of the variance. This can be attributed to the significant effect of age (β = .344), which provides evidence for hypothesis 5. In step 2, donations, number of donations and donated money were added, which made a valuable contribution to the model as well (F(5, 955) = 1059.249, p < .01), with an increase of 69.5% of variance explained. The effect of the three predictors was found to be significant (β = .114; β = .054; β = .867). The higher people score on RFM, the more they plan to give in the future, which implies that hypothesis 1 is fully supported.

Table 1: Hierarchic regression analysis of past donating behavior on future donating behavior

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>b</th>
<th>β</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1: Control variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-.085</td>
<td>-.031</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.432**</td>
<td>.344**</td>
<td>.120</td>
<td>.120**</td>
</tr>
<tr>
<td><strong>Step 2: Predictors</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donations past year (R)</td>
<td>.371**</td>
<td>.114**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of donations (F)</td>
<td>.004**</td>
<td>.054**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donated money 2008 (M)</td>
<td>.852**</td>
<td>.867**</td>
<td>.815</td>
<td>.695**</td>
</tr>
</tbody>
</table>

** p < .01
* p < .05

Note. The unstandardized coefficients (b) as well as the standardized coefficients (β) are included in the table.

The data analysis in order to find support for hypothesis 2, 3, 6, 7(a, b), 8, 9, 10a, 11, 12, 13(a, b) and 14 is illustrated in common tables because of the analogous phrasing of these research questions. Table 2 illustrates the HRA of the socio-demographic and psychological predictors on donating behavior. Table 3 shows the HRA of these predictors on volunteer work. The tested research questions are mentioned per regression analysis. Although step 1 is analogous in each HRA model, namely a significant R² because of the significant effect of age, the F-values will be reported because of different R² values.

H2: Step 1 (table 2) contributes significantly (F(2, 814) = 49.323, p < .01) by explaining 10.6% of the variance. Step 2 makes a valuable but relatively low contribution...
(F(9, 807) = 17.298, p < .01) by adding 3.8% of explained variance. Only three of the added predictors are found to be significant: education (β = .159, p < .01), household income (β = .119, p < .01) and 1/2 income-household (β = .084, p < .05). The higher the diploma and the higher the household income of a family is, the higher the tendency to donate to charity and the higher the amount they will give. Whether there are one or two wage–earners in a household will positively influence the amount of money given to charity. In table 3 we notice that step 1 is significant as well (F(2,1491) = 22.564, p < .01) by explaining 2.8% of the variance. Step 2, with human capital, makes a significant contribution by adding 3.7% of explained variance, with F(9, 1484) = 12.616, p < .01. This effect can be attributed to education (β = .154, p < .01), part-time work (β= -.127, p < .01) and to a marginal but significant effect of paid work (.067, p < .01). So, the higher your diploma is, the higher the probability you do volunteer work. The negative effect of part-time work illustrates that people who work part-time, and consequently have more time, tend more to do volunteer work. Hypothesis 2 is partly supported.

**H3:** The control variables in table 2 explain 13.7% of the variance, with F(2,1151) = 92.786, p < .01. The added explained variance by the predictors is significant (F(4,1149) = 50.577, p < .01) but low: ΔR² = 1%. Only the effect of social environment is significant (β = .097). In table 3 the effect of social capital on volunteer work is illustrated in the second regression. Step 1 is significant (F(2, 2106) = 47.663, p < .01), with 4.2% of the variance explained. Step 2 is significant as well (F(4, 2104) = 60.744, p < .01), and adds 6.0% of explained variance, which can be attributed to the effect of social environment (β = .246, p < .01). This positive relation between social environment and prosocial behavior is contrary to hypothesis 3. Therefore, hypothesis 3 is rejected.

**H6:** Step 1 (table 2) explains 14% of the variance (F(2, 1145) = 90.937, p < .01). Altruism contributes a valuable amount of explained variance: ΔR² = 3.9%, with F(3, 1144) = 82.360, p < .01. The regression coefficient of altruism is significant (β = .204, p < .01). In table 3 we observe a significant step 1 (F(2, 2095) = 48.416, p < .01), with 4.4% of variance explained, and a significant step 2 in the model (F(3, 2095) = 128.456, p < .01), with 11.1% of added explained variance, which can be attributed to altruism (β = .339, p < .01). The higher the score on altruism, the more people tend to do volunteer work and donate to charity. Hypothesis 6 is fully supported.
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>-0.086</td>
<td>-0.030</td>
<td>0.570**</td>
<td>0.325**</td>
<td>0.106**</td>
<td>0.106**</td>
<td>-0.133**</td>
<td>0.234**</td>
<td>0.149**</td>
<td>0.307**</td>
<td>0.171**</td>
<td>0.215</td>
<td>0.078**</td>
<td>-0.072</td>
<td>-0.047</td>
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<td></td>
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</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>0.132*</td>
<td>0.159**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.051**</td>
<td>0.119**</td>
<td></td>
<td>0.133</td>
<td></td>
<td></td>
<td></td>
<td>0.115</td>
<td>0.084*</td>
<td>0.052</td>
<td>0.052</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.115</td>
<td></td>
<td></td>
<td></td>
<td>0.008*</td>
<td>0.008*</td>
<td>0.120</td>
<td>0.090</td>
<td></td>
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</tbody>
</table>

Note: The unstandardized coefficients (b) as well as the standardized coefficients (β) are included in the table.
H7a, b: Step 1 in table 2 contributes significantly (F(2, 1147) = 90.638, p < .01) by explaining 13.5% of the variance. The addition of the used subscales of empathy (step 2) is significant as well (F(4, 1145) = 64.102, p < .01), which contributes 4.5% of explained variance. This contribution can be attributed to the positive effect of empathic concern (β = .196, p < .01) and the negative effect of personal distress (β = -.115, p < .01). Table 3 shows the identical pattern of the previous research questions, with regard to step 1. The model with the control variables explains 4.3% of the variance (F(2, 2103) = 47.954, p < .01). The model with the added subscales of empathy is significant as well (F(4, 2101) = 52.201, p < .01) by adding 4.7% of explained variance. Similar to the effect on donating behavior this result can be attributed to a positive effect of empathic concern (β = .202, p < .01) and the negative effect of personal distress (β = -.113, p < .01). So, the higher people score on empathic concern the more they tend to do prosocial behavior, which provides support for hypothesis 7a. The opposite results are found for personal distress, so hypothesis 7b is rejected.

H8, 9: Step 1 stays identical in this regression as well. The control variables add 13.7% of explained variance (F(2, 1146) = 92.013, p < .01). Attitudes contribute significantly as well with ∆R² = 7.8% (F(4, 1144) = 79.485, p < .01). Attitude toward helping others (β = .149, p < .01) and attitude toward charitable organizations (β = .171, p < .01) have a significant positive effect. The model only with control variables with regard to volunteer work (table 3) is similar to the foregoing. We observe a significant contribution of 4.4% (F(2, 2096) = 49.412). The model with the predictors adds 8.1% of explained variance (F(4, 2094) = 75.464). Similar to the previous model this can be attributed to an effect of both predictors: attitude toward helping others (β = .208, p < .01) and attitude to charitable organizations (β = .111, p < .01). So, people with positive attitudes toward charitable organizations or helping others are inclined to do more prosocial behavior. Hypothesis 8 and 9 are fully supported.

H10a, 11, 12: Step 1 (table 2) is similar to the foregoing. The control variables explain 14.4% of the variance, with F(2, 1122) = 94.706, p < .01. Step 2 adds a significant but marginal amount of variance (∆R² = .8%) with F(5, 1119) = 41.071, p < .01. This can be attributed to a small negative effect of esteem enhancement motivations (β = -.112, p < .01) and a small positive effect of control motivations (β = .095, p < .01). So, people who are motivated to have a say in how charitable organizations tend to donate more and people who are motivated to enhance their esteem by doing prosocial behavior tend to donate less. These
predictors contribute more significant with regard to volunteer work (table 3). Step 1 explains 4.5% of the variance (F(2, 1832) = 44.121, p < .01). The model with the added predictors contributes 13.1% of explained variance (F(5, 2102) = 78.712, p < .01). This can be attributed to a positive effect of social interaction motivations (β = .444, p < .01), a rather marginal effect of control motivations (β = .058, p < .01) and a negative effect of esteem enhancement motivations (β = -.200, p < .01). So, with regard to volunteer work, people who are looking for social interaction tend to do volunteer work, and people that are driven by esteem enhancement do not tend to do volunteer work. So, hypothesis 10a is partly supported, 12 is fully supported, and 11 is rejected.

H13a, b: Step 1 of this regression (table 2) adds 13.3% with F(2, 1147) = 88.793, p < .01. The contribution of beliefs is significant but relatively small with ΔR² = 3.4% (F(4, 1145) = 58.726, p < .01). We observe a positive effect of belief in a just world for self (β = .157, p < .01) and a negative effect for belief in a just world for others (β = -.176, p < .01). With regard to volunteer work (table 3) the control variables explain 4.3% the variance (F(2, 2102) = 47.712). The addition of the beliefs contributes significantly but small with ΔR² = 1.7% (F(4, 2100) = 33.691, p < .01). Both predictors are found to be significant: belief in a just world for self has a similar positive effect (β = .141, p < .01) and belief in a just world for others has a rather small negative effect (β = -.077, p < .01). We conclude that people who believe in a just world for self are more inclined to do prosocial behavior in opposite to people who believe in a just world for others who tend more not to do prosocial behavior. Hypothesis 13a and b are fully supported.

H14: In the last regression analysis, the model with only control variables explains 13.6% of the variance with F(2, 1140) = 90.980. The addition of identity salience is significant with a contribution of 8.4% of explained variance (F(3, 1139) = 108.596). The regression coefficient of identity salience is .295, p < .05. With regard to volunteer work (table 3) the model without identity salience explains 3.9%, which can be considered rather low even though it is significant F(2, 1219) = 25.602. The contribution of identity salience, with a β = .146, p < .01, is rather low but significant (ΔR² = 2.1%), with F(3, 1218) = 26.448. So, people who identify themselves with certain charitable organizations are more inclined to do prosocial behavior in favor of the organization concerned. Hypothesis 14 is fully supported.
### Table 3: Hierarchical regression analysis on volunteer work

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Step 1: Control variables</th>
<th>Step 2: Predictors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H2</strong> H8, 9</td>
<td>Step 2: Predictors</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-0.006</td>
<td>0.894**</td>
</tr>
<tr>
<td>Age</td>
<td>0.676**</td>
<td>0.667**</td>
</tr>
<tr>
<td><strong>H3</strong></td>
<td>Step 2: Predictors</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>0.246**</td>
<td></td>
</tr>
<tr>
<td>Attitude toward Helping Others</td>
<td>0.650**</td>
<td></td>
</tr>
<tr>
<td>Household Income</td>
<td>-0.030</td>
<td>-0.032</td>
</tr>
<tr>
<td>Attitude toward Charitable Organizations</td>
<td>0.406**</td>
<td></td>
</tr>
<tr>
<td>Part-Time Work</td>
<td>-0.430**</td>
<td>-0.127**</td>
</tr>
<tr>
<td><strong>H4a, H11, H12</strong></td>
<td>Step 2: Predictors</td>
<td></td>
</tr>
<tr>
<td>Social Environment</td>
<td>0.635**</td>
<td></td>
</tr>
<tr>
<td>Level of Urbanization</td>
<td>-0.024</td>
<td>0.102</td>
</tr>
<tr>
<td><strong>H5</strong></td>
<td>Step 2: Predictors</td>
<td></td>
</tr>
<tr>
<td>Belief in a Just World for Self</td>
<td>0.444**</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-0.529**</td>
<td>-0.200**</td>
</tr>
<tr>
<td><strong>H6</strong></td>
<td>Step 2: Predictors</td>
<td></td>
</tr>
<tr>
<td>Belief in a Just World for Others</td>
<td>-0.284**</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-0.284**</td>
<td>-0.077**</td>
</tr>
<tr>
<td><strong>H7a, b</strong></td>
<td>Step 2: Predictors</td>
<td></td>
</tr>
<tr>
<td>Altruism</td>
<td>1.380**</td>
<td>0.339**</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.088</td>
<td>-0.012</td>
</tr>
<tr>
<td><strong>H8</strong></td>
<td>Step 2: Predictors</td>
<td></td>
</tr>
<tr>
<td>Identity Salience</td>
<td>0.360**</td>
<td>0.398**</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.199**</td>
<td>-0.012</td>
</tr>
<tr>
<td><strong>H9</strong></td>
<td>Step 2: Predictors</td>
<td></td>
</tr>
<tr>
<td>Empathy Concern</td>
<td>0.643**</td>
<td>0.284**</td>
</tr>
<tr>
<td>Personal Distress</td>
<td>-0.149**</td>
<td>-0.017</td>
</tr>
<tr>
<td>Gender</td>
<td>0.093</td>
<td>0.014</td>
</tr>
</tbody>
</table>

Note: The unstandardized coefficients (b) as well as the standardized coefficients (β) are included in the table.

*p < .05
**p < .01
In order to find support for hypothesis 4 we executed an ISTT on donating behavior and volunteer work. First, we checked the difference in donating behavior. The T – test between men (M = 4.458, SD = 1.568) and women (M = 4.305, SD = 1.319) was not significant with t(928), p = .072. With regard to doing volunteer work, the T – test between men (M = 3.936, SD = 3.35055) and women (M = 3.914, SD = 3.270) was neither significant with t(2316), p = .877, so, hypothesis 4 is rejected.

We did a HRA (see table 4) with the purpose of finding evidence for hypothesis 10b. In order to test the moderating role of age we included the interaction term of age and social interaction motivation. The interaction term, with regard to donating behavior, is found to be significant (F(3, 1218), p < .05) but the added explained variance is of a rather marginal order (ΔR² = .2%), and the effect is in the opposite direction (β = -.057, p < .05). The interaction term with regard to volunteer work is not found to be significant, so age does not moderate the relation between social interaction motivations and volunteer work. Therefore we reject hypothesis 10b.

With the object of obtaining the best set of predictors for future donating behavior we executed a regression analysis with all investigated predictors by using the stepwise method. We added the control variables in the first block using stepwise method, and in the second block we added the complete list of predictors used in this research. The final model is described in table 5. In general, this model explains 78.7% of the variance in future donating behavior, with F(6, 735) = 456.209, p < .01. It may be obvious that past behavior is the best predictor, with a β = .790, p < .01 for donated money and a β = .063, p < .01 for number of donations. The higher the score on the RFM variables, the more people intent to continue giving to charity. With regard to the socio-demographic variables, we observe two predictors in this ultimate model: age (β = .041, p < .05) and education (β = .042, p < .05). So, the older people are and the higher their highest completed level of education, the more they are inclined to continue giving to charity. At last, the most important psychological predictors appear to be attitudes. Attitudes toward charitable organizations (β = .043, p < .05), as well as attitudes toward helping others (β = .075, p < .05) show a significant positive effect on future donating behavior. We conclude that people with positive attitudes toward helping others and charitable organizations intent to continue giving to charity.
### Table 4: Regression analysis of social interaction motivations and age on prosocial behavior

**Hierarchical regression analysis on donating behavior**

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>b</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1: Control variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Interaction motivations</td>
<td>.031</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.379**</td>
<td>.141</td>
<td>.141**</td>
</tr>
<tr>
<td><strong>Step 2: Interaction Variable</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Interaction motivations x Age</td>
<td>-.057</td>
<td>.143</td>
<td>.002*</td>
</tr>
</tbody>
</table>

**Hierarchical regression analysis on volunteer work**

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>b</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1: Control variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Interaction motivations</td>
<td>.256**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.343**</td>
<td>.162</td>
<td>.162**</td>
</tr>
<tr>
<td><strong>Step 2: Interaction Variable</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Interaction motivations x Age</td>
<td>.013</td>
<td>.162</td>
<td>.00</td>
</tr>
</tbody>
</table>

** p < .01
* p < .05
Note. Only the values of unstandardized coefficients (b) are included because the standardized scores are used for the regression analysis.

### Table 5: Stepwise regression analysis on future donating behavior

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>b</th>
<th>β</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.068*</td>
<td>.041*</td>
<td></td>
</tr>
<tr>
<td>Donated money 2008</td>
<td>.790**</td>
<td>.815**</td>
<td></td>
</tr>
<tr>
<td>Attitude toward Charitable Organizations</td>
<td>.064*</td>
<td>.043*</td>
<td></td>
</tr>
<tr>
<td>Number of donations</td>
<td>.005**</td>
<td>.063**</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>.034*</td>
<td>.042*</td>
<td></td>
</tr>
<tr>
<td>Attitude toward Helping Others</td>
<td>.075*</td>
<td>.045*</td>
<td>.787**</td>
</tr>
</tbody>
</table>

** p < .01
* p < .05
Note. The unstandardized coefficients (b) as well as the standardized coefficients (β) are included in the table.
4 DISCUSSION

A lot of research has been conducted due to the growing pressure on charitable organizations to attract and retain private donors; thereby testing different predictors of donating and more general prosocial behavior. Some researchers (Bekkers, 2006) focused on socio-demographic variables as important predictors whereas others opted for a more psychological approach in order to predict prosocial behavior (Bègue et al., 2008). In this dissertation we included a large number of predictors, categorized in three groups, namely; socio-demographic, psychological and RFM variables in order to get an image of their importance in predicting different facets of prosocial behavior. More specific, this research had two main explorative goals: 1) investigate the individual predictors in relation to prosocial behavior and 2) determine the most important predictors of donating behavior.

With regard to the first hypothesis, we find strong support for the relation between past donating behavior and future donating behavior, by using the RFM conceptualization. Once again, the predictive power of RFM is illustrated, which totally justifies the lasting interest from the marketing, despite the presence of many other predictive marketing related models.

The following four research questions investigated the effects of socio-demographic variables on prosocial behavior. We find evidence for the effect of education, household income and 1 / 2 income household on donating behavior. Therefore, we can assume a positive relation between the available financial resources and magnitude of the donation. Then, we observed a positive effect of education and a negative effect of part-time work on volunteer work. The negative effect of part-time work illustrates that people who work part-time, and consequently have more time, tend more to do volunteer work. So, with the exception of education, it is confirmed that indicators of financial resources are not related to doing volunteer work.

Contrary to our expectations, the relation of social environment on donating behavior and volunteer work is positive. The effect of level of urbanization is not significant which is probably due to the fact that, despite the magnitude of the sample, many respondents are from urbanized places, and that the rural places, as described by Bekkers (2006), are hardly
represented in our sample. In other ways, with regard to the Flemish sample we achieved, the “level of urbanization” is possibly a superseded concept.

Analogue with Mortelmans (2008) we do not find a difference between men and women in donating behavior. This can be explained by referring to a psychological predictor as well used in this research. We assumed this difference between men and women because of a difference in empathy showed by Eisenberg (2006), which is allocated a predicting role in this research. Unfortunately, the variance in prosocial behavior explained by empathy is rather modest, so it does not have to be surprising that this assumed difference between men and women remains forthcoming. On the other hand, age has a significant effect on prosocial behavior. So, the older people are, the more they tend to show prosocial behavior.

With regard to the psychological predictors, many of the postulated research questions are supported. With regard to the personality traits, we find a positive effect for altruism and for empathic concern. The higher people score on altruism or empathic concern, the more people tend to do prosocial behavior. The opposite results are found for personal distress, contrary to our expectations. This is probably due to the fact that, according to Davis (1999), the relation of this concept with prosocial behavior is not as unequivocal as its relation with empathic concern and that this relationship, because of its situational sensitivity, probably will be more easy to establish in an experimental setting, where someone asks for help in a stressful situation for example, than in survey research.

The regression analysis with attitude toward helping others and attitude toward charitable organizations as predictors shows a clear positive effect. So, positive attitudes toward helping others and toward charitable organizations lead to more prosocial behavior.

With regard to motivations we observe a negative effect of esteem enhancement motivations and a modest positive effect of control motivations in relation to prosocial behavior. People who are driven by esteem-enhancement to do prosocial behavior tend to do less volunteer work or donate less money. On the other hand, people who are motivated to have a say in various matters tend to donate more. Social interaction motivations are only found to be positively associated with volunteer work, which is not surprising. People who seek social interaction tend more to do volunteer work. The moderating role of age in this relationship is not established.

The assumed research questions with regard to beliefs are supported as well. People who belief in a just world for self tend to do prosocial behavior, in contrary to people who
believe in a just world for others who rather not tend to donate money or to do volunteer work.

The regressions concerning identity salience are in line with the assumed hypothesis, which gives support for the idea that people who identify themselves with a certain charitable organization, tend more to show prosocial behavior in favor of the organization concerned.

In general, with regard to the most of our psychological predictors and socio-demographic variables, we observe relatively modest effects on prosocial behavior, compared to the convincing effect of past behavior. Although some of these effects barely explain any variance, they are significant. Most likely, the latter can be explained because of the large sample. However, these limited effects do not have to be surprising. A possible explanation for the limited effect of household income for instance, is the limited response rate of the respondents on this particular item. According to Bekkers (2006), the relatively low effects of psychological predictors may be due to the fact that we measured these effects in relation to one single type of prosocial behavior at a time. According to him, these effects become stronger by aggregating multiple types of prosocial behavior into one score. Another explanation can be found in the idea that the relations between these predictors and prosocial behavior are not as univocal as we assumed them to be. At last, the effect of some psychological predictors will be rather small because of the way our dependents were measured. It may be obvious that self – reported measures of personality constructs will expose considerably less than, for example, experimental measures.

The results of our general model, with all predictors included, are in line with our previous results. The most important set of predictors is past donating behavior, in terms of amount and frequency of donations. The other predictors included in this model are age, education, attitudes toward charitable organizations and attitudes toward helping others and have similar effects on donating behavior. So, with regard to socio-demographic variables, we observe that age and education are the best predictors for prosocial behavior. Again we found that older people and people with a higher education tend to give more. The most important psychological predictors are found to be attitudes toward charitable organizations and helping others, which implies that people with positive attitudes toward charitable organizations or helping others tend to do more charitable donations. This finding is in line with Webb et al. (2000) who showed that people’s intentions to act are related to their attitudes. This is
encouraging for charitable organizations because it reveals interesting opportunities in a well-considered and fine-tuned marketing strategy. More specific, these 2 sets of attitudinal measures can be tailored to assess attitudes influencing a broad range of donating behavior. The latter in combination with the information provided by effective demographic predictors enables non-profit marketers to tune appeals to individuals with a larger inclination to donate.

4.1 Limitations of this study and implications for future research

In this section we will briefly elaborate on the limitations of our research context and provide implications for further research. This study suffers from the common limitations of survey research that uses retrospective, self-reported measures. The most important problem with regard to surveys is that they are subject to social desirability bias. Smith (2003) came up with empathy and reports of prosocial behavior as examples. Respondents may not be able to recall very accurately the amount of helping behaviors they participated in over the previous year and so they will tend to give a more positive answer. The fact that the survey was considered to be long, according to diverse respondents, will probably have had a negative effect on the vigilance during filling in the survey which, for its part, will probably have had a negative influence on the validity. The length of the survey will presumably have had a negative influence on the rate of completed answers.

With regard to the sample we have to admit that even though we achieved a relative big sample it is very risky to make generalizing conclusions with regard to Flanders. We give different comments on this. The first remark we give concerns the age structure. An explanation for the underrepresentation of the older generation can be found in the difficulty to tailor appeals on them. Partly, the latter occurs due to their limited accessibility and their limited willingness to fill in surveys which, for its part, can be partially explained by the length of the questionnaire. The second remark concerning representativeness is related to the procedure as well. The lion’s share of the respondents completed the survey online. A small part of older and low educated people filled in a paper version. We used paper versions because we were forced to in order to make our sample as representative as possible. However, the paper versions represent only small share of all the surveys that were issued. Nevertheless, there is still a substantial part of the Flemish population that does not have an internet connection at home. So, the remark we postulate here is that, because of our decision
to do an online survey, we excluded a part of the population, at the expense of the representativeness, thereby creating sampling bias and error (Alreck & Settle, 2004).

Another limitation concerns the conclusions with regard to our supported hypotheses we are permitted to draw. Because psychological predictors, socio-demographic variables and prosocial behavior were measured at the same time, we cannot rule out the possibility that prosocial behavior affects self-reports on financial resources and psychological predictors, more specific personality traits, instead of the other way around. In order to get a better image of the direction of these relations other types of research (e.g. experimental) are mandatory.

As already mentioned, we found relatively weak main effects of some psychological predictors. However, this does not imply that they are irrelevant for predicting or understanding prosocial behavior. Perhaps they have a mediating or moderating role with regard to other predictors of prosocial behavior. Therefore we suggest a more explorative approach in order to get a better understanding of which role is reserved for each potential psychological predictor. It can be very enriching as well to question other types of prosocial behavior in order to get a more encompassing image. With regard to psychological predictors, we found the most convincing support for the attitude conceptualizations. As Webb (2008) suggested, it may be an enrichment to include values and norms besides the attitude constructs, in order to get a better understanding of the relation with prosocial behavior.
5 REFERENCES


Appendix 1: The full scales of the psychological predictors (in Dutch)

**Altruism**

1. Ik heb onbekenden al de weg gewezen.
2. Ik heb al geholpen met het dragen van de spullen (boeken, pakjes) van een onbekende.
3. Ik heb al een lift of een deur opengehouden voor een onbekende.
4. Ik heb iemand al toegestaan om voor te gaan in de rij (bvb. in de supermarkt).
5. Ik heb al een lift gegeven aan een vreemde.
6. Ik heb al gewezen op een fout van een bediende (bvb. in de bank, in de winkel) omdat deze mij te weinig had aangerekend.
7. Ik heb al eens een object van waarde uitgeleend aan een buur die ik niet zo goed kende (bvb. servies, tuingerei).
8. Ik heb vrijwillig, zonder dat het me gevraagd werd, op een buur zijn huisdier of kinderen gelet zonder hiervoor betaald te worden.
9. Ik heb een mindervalide of oudere hulp geboden bij het oversteken van de straat.
10. Ik heb mijn zitplaats in de bus/trein al eens afstaan aan een onbekende die moest rechtstaan.
11. Ik heb al goederen of kledij geschonken aan een liefdadigheidsinstelling.
12. Ik heb al vrijwilligerswerk gedaan voor een liefdadigheidsinstelling.
13. Ik heb al bloed gegeven.
14. Ik heb bewust kerstkaarten gekocht ten voordele van een goed doel omdat ik wist dat het een goed doel was.

**Empathic Concern & Personal Distress**

1. Ik ben dikwijls bezorgd over mensen die minder welvarend zijn dan mezelf. (EC)
2. Soms heb ik geen medelijden met andere mensen wanneer zij problemen hebben. (EC)
3. In noodsituaties voel ik me ongerust en niet op mijn gemak. (PD)
4. Wanneer ik zie dat iemand uitgebuit wordt, voel ik me geneigd die persoon te beschermen. (EC)
5. Ik voel me soms hulpeloos wanneer ik me in een erg emotionele situatie bevind. (PD)
6. Wanneer ik zie dat iemand gekwetst wordt, ben ik geneigd om kalm te blijven. (PD)
7. Tegenslagen van andere mensen verontrusten mij meestal niet erg. (EC)
8. Me bevinden in een intens emotionele situatie maakt me bang.
9. Als iemand oneerlijk behandeld wordt, heb ik niet altijd medelijden met hem. (EC)
10. Ik ben redelijk effectief in het omgaan met noodsituaties (PD)
11. Ik ben vaak aangedaan door dingen die ik zie gebeuren. (EC)
12. Ik ben geneigd om de controle te verliezen bij noodgevallen. (PD)
13. Wanneer ik iemand zie die dringend hulp nodig heeft bij een noodgeval, ga ik kapot van binnen. (PD)

**Attitude toward Helping Others & Attitude toward Charitable Organizations**

1. Mensen moeten bereid zijn om anderen te helpen die minder bedeeld zijn. (AHO)
2. Ik vind het heel belangrijk om mensen in moeilijkheden te helpen met hun problemen. (AHO)
3. Mensen moeten zich meer menslievend opstellen tegenover anderen in de maatschappij. (AHO)
4. Mensen in nood moeten steun krijgen van anderen. (AHO)
5. Het geld dat gegeven wordt aan liefdadigheidsinstellingen gaat naar goede doelen.
6. Veel van het geld dat geschonken wordt aan liefdadigheid gaat verloren.
7. Mijn beeld over liefdadigheidsinstellingen is positief.
8. Liefdadigheidsinstellingen zijn al redelijk succesvol geweest in het helpen van hulpbehoevenden.
9. Liefdadigheidsinstellingen vervullen een nuttige en verdienstelijke functie in de samenleving.

_Esteem Enhancement, Social Interaction & Control motivations_
Ik doe schenkingen/vrijwilligerswerk om…
1. … nieuwe mensen te leren kennen. (SI)
2. … gezellig te kunnen praten met anderen. (SI)
3. … meer tijd te spenderen met anderen. (SI)
4. … mijn sociale status te verhogen. (EE)
5. … meer respect te krijgen van anderen. (EE)
6. … anderen te tonen dat ik een goede mens ben. (EE)
7. … mijn mening over de werking van die organisaties en hun sociale doelen te kunnen uiten. (C)
8. … gerust te zijn dat mijn gedacht en mening overwogen zal worden. (C)
9. … mee de acties van die organisaties te kunnen vastleggen. (C)
10. … de manier waarop de financiële middelen verdeeld worden over verschillende sociale doelen binnen die organisaties te kunnen beïnvloeden. (C)

_Identity Salience_
Een schenker van deze verenigingen zijn …
1. … is een belangrijk deel van wie ik ben.
2. … is iets waarover ik geen duidelijk gevoel heb.
3. … betekent meer dan enkel wat geld geven.
4. … is iets waarover ik nauwelijks nadenk.

_Belief in a Just World for Self & Belief in a Just World for Others_
1. Ik heb het gevoel dat de wereld me eerlijk behandelt. (BJWS)
2. Ik heb het gevoel dat ik krijg wat ik verdien. (BJWS)
3. Ik heb het gevoel dat de mensen rondom mij me eerlijk behandelen. (BJWS)
4. Ik heb het gevoel dat ik de beloningen en straffen krijg die ik verdien. (BJWS)
5. Ik heb het gevoel dat de mensen mij behandelen met het respect dat ik verdien. (BJWS)
6. Ik heb het gevoel dat ik datgene waar ik recht op heb ook krijg. (BJWS)
7. Ik heb het gevoel dat mijn inspanningen opgemerkt en beloond worden. (BJWS)
8. Ik heb het gevoel dat ik er zelf verantwoordelijk voor ben wanneer ik ongeluk heb met iets. (BJWS)
9. Ik heb het gevoel dat de wereld de mensen eerlijk behandelt. (BJWO)
10. Ik heb het gevoel dat mensen krijgen wat ze verdienen. (BJWO)
11. Ik heb het gevoel dat mensen eerlijk met elkaar omgaan. (BJWO)
12. Ik heb het gevoel dat mensen de beloningen en straffen krijgen die ze verdienen. (BJWO)
13. Ik heb het gevoel dat de mensen onderling met elkaar omgaan met het respect dat ze verdienen. (BJWO)
14. Ik heb het gevoel dat de mensen datgene waar ze recht op hebben, ook krijgen. (BJWO)
15. Ik heb het gevoel dat de inspanningen van een persoon opgemerkt en beloond worden. (BJWO)
16. Ik heb het gevoel dat mensen verantwoordelijk zijn voor hun ongeluk. (BJWO)