Who Gives? A Literature Review of Predictors of Charitable Giving

I – Religion, Education, Age, and Socialization

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Abstract

This is the first of two articles in which we present a comprehensive review of the multi-disciplinary academic literature on philanthropy, identifying the predictors of charitable giving. For each predictor, we discuss the evidence for the mechanisms that may explain why the predictor is correlated with giving. We conclude with a brief agenda for future research. In this first article we present the evidence on the relationship of giving with religion, education, age, and socialization.

Keywords: charitable giving; philanthropy; donations; methodology; religion; age; education; socialization

Introduction

The academic literature on charitable giving is enormous. On Google Scholar, the keyword ‘charitable giving’ yields more than 163,000 results. Moreover, the literature is spread over many different disciplines including economics, sociology, and (social) psychology. As a result, it is difficult for scholars and practitioners to get an overview of the literature. The present article is the second journal article resulting from a comprehensive project reviewing the literature on charitable giving (Bekkers & Wiepking, 2007) that we conducted as a background study for the Science of Generosity at the University of Notre Dame, a funding scheme sponsored by the John Templeton Foundation. In line with most of the literature, we define charitable giving as the voluntary donation of money to an organisation benefiting others beyond one’s own family.

In the first article (Bekkers & Wiepking, 2010b) we categorized and described the eight major mechanisms that drive charitable giving, addressing the question ‘Why do people give?’. The mechanisms are (1) awareness of need; (2) solicitation; (3) costs and benefits; (4) altruism; (5) reputation; (6) psychological benefits; (7) values; (8) efficacy. In the present and following second article which will appear in a future issue of *Voluntary Sector Review*, we aim to guide scholars as well as practitioners in the third sector through the available knowledge on individual and household characteristics as predictors of charitable giving. We address the question ‘Who gives?’ In this first part, we present the evidence on religion, age, education, and socialization practices as correlates of charitable giving. In the second part we discuss the evidence on gender, marital status, income and wealth. For the sake of brevity we omit discussion of variables that have been studied less frequently, such as voluntary association participation, occupational prestige, political preference and health, instead referring the reader to the original literature review.

Why would it be important to know who gives to charitable causes? Obviously, the answer is of great practical importance for organisations that rely on fundraising to generate income. Charitable donations form a substantial portion of income for many non-profit organisations across the world (Anheier & Salamon, 2006). Knowing which characteristics of individuals and households are predictive of donations informs rational decisions on fundraising strategies.

For scholars, charitable giving is a fascinating form of human behaviour because it presents challenges for several theoretical perspectives. Questions about altruism and generosity go back to the founding fathers of economics and sociology such as Adam Smith (1976 [1759]) and Auguste Comte (1973 [1851]). Empirical research on who gives is useful for testing theories on charitable giving. Stated generally, hypotheses about the relationship between charitable giving and characteristics of individuals and households imply arguments about the relationship between these characteristics and the mechanisms that drive charitable giving.

In a multiple regression framework the mechanisms that drive charitable giving can be viewed as intermediary variables. They may mediate the relationship between individual or household characteristics and charitable giving, explaining why some people give more than others. We advocate such an approach in research on charitable giving. Many articles present regression analyses of amounts donated on a set of ‘standard predictors’. But without explicit arguments about the pathways linking individual and household characteristics to charitable giving, even the most sophisticated econometric analyses remain superficial ‘variable sociology’ (Esser, 1996; Goldthorpe, 2001). Therefore we do not merely summarize the evidence on relationships between charitable giving and individual and household characteristics, but also discuss the mechanisms that may explain why these relationships exist.

While we present various mechanisms as mediating variables, we acknowledge the possibility that the mechanisms precede the individual or household characteristics in a multiple regression framework. For instance, values may determine the level of church attendance, and altruism plays a role in maintenance of relationships. For matters of simplicity, we do not discuss these relations in this article and instead focus on the mechanisms as mediators between household or individual characteristics and giving. Nevertheless, we remind the reader that arguments about causality are very difficult if not impossible to substantiate using cross-sectional data.

Methods

The present article and its twin sister are based on an extensive literature search using fairly narrow criteria through seven types of sources, which eventually yielded a set of about 550 publications. We restricted our review to publications in English of empirical research on charitable giving by adults included in academic databases. We refer to our first article based on the review (Bekkers & Wiepking, 2010b) for a full description of the sources and criteria used. Quite a few of the papers that were still work in progress when we completed our literature search in August 2007 have subsequently been published in academic journals;. here we refer to the published versions of those papers.

For the purposes of this overview article it was not possible to provide extensive and comparative details on the data and methods used in the studies that find results that are consistent with the overall picture emerging from these studies. However, we will discuss data and methodology issues when the findings of a study diverge from those in other studies that examined the same variables.

Throughout the article we distinguish engagement in charitable giving (whether or not a donation is made, sometimes called ‘participation’) from the amount donated (sometimes called the ‘level of giving’) when the conclusions for these two different variables diverge. When the conclusions are similar for associations with participation in giving and levels of giving we simply refer to ‘higher/lower giving’.

Results

The characteristics which emerge from our literature review as typical for donors are affiliation with a religion (especially Judaism and Protestantism), stronger religious involvement, a higher age, a higher level of education, income and wealth, home ownership, a better subjective financial position, being married, having children, having a paid job, higher cognitive ability, having prosocial personality characteristics such as empathy, and growing up with parents with higher education, income, religiosity, and volunteering activity. The evidence on town size, gender, race, and political preferences is mixed. In this article we will discuss the relationship of giving with religion, age, education and socialization.

1. Religion

Religion has received ample attention not only in philanthropic studies (Hodgkinson & Weitzman, 1996), but also in the sociology of religion (e.g., Wuthnow (1991); the December 1994 volume of the *Review of Religious Research*). Under the generic label ‘religion’ several more specific characteristics should be distinguished, four of which have been studied most frequently: (1) religious affiliation or church membership, i.e. whether one is a member of a religious group or church; (2) religious attendance involvement or participation, i.e. to what extent one participates in a religious group; (3) religious preference or denomination, i.e. to which religious group one belongs; (4) religious belief, i.e. the content of ones religious views.

Church membership and attendance. Positive relationships between church membership, the frequency of church attendance and giving appear in almost all articles in which this relation has been studied (Bekkers, 2003; Bekkers & Schuyt, 2008; Bennett & Kottasz, 2000; Bielefeld, Rooney, & Steinberg, 2005; Brooks, 2003b, 2003c, 2004; E. Brown & Ferris, 2007; Bryant, Slaughter, Kang, & Tax, 2003; Chang, 2005; Chaves, 2002; Davidson & Pyle, 1994; Eckel & Grossman, 2003; Eschholz & Van Slyke, 2002; Feldman, 2007; Forbes & Zampelli, 1997; Hoge & Yang, 1994; Hunter, Jones, & Boger, 1999; Jackson, Bachmeier, Wood, & Craft, 1995; Lee & Farrell, 2003; Lunn, Klay, & Douglass, 2001; Lyons & Nivison-Smith, 2006; Lyons & Passey, 2005; Olson & Caddell, 1994; Park & Park, 2004; Reed & Selbee, 2001, 2002; Regnerus, Smith, & Sikkink, 1998; Schiff, 1990; Schlegelmilch, Diamantopoulos, & Love, 1997; Sokolowski, 1996; Sullivan, 1985; Tiehen, 2001; Van Slyke & Brooks, 2005; Zaleski & Zech, 1992, 1994). Church members are more likely to report engagement in charitable giving and report higher donations. More frequent church attendance is also associated with higher levels of engagement in charitable giving and higher amounts donated.

Specific types of giving. The finding that church membership and attendance is associated with more giving is hardly surprising. It may even be called tautological as membership, attendance and giving are all indicators of religious involvement. Therefore many studies have looked specifically at the relationships between religious involvement and giving to organisations other than the church itself, often referred to as ‘secular giving’. The common finding in these studies is that secular giving is also positively associated with religious affiliation and attendance (Bekkers & Schuyt, 2008; Bennett & Kottasz, 2000; Bielefeld, et al., 2005; Brooks, 2003b; E. Brown & Ferris, 2007; Eckel & Grossman, 2003; Lyons & Nivison-Smith, 2006).

However, there are also a few exceptions. One study among US Presbyterians found a negative relationship between religious attendance and secular giving (Lunn, et al., 2001). One study using data from the Centre on Philanthropy Panel Study (COPPS) found no relationship between religious affiliation and secular giving (Wilhelm, Brown, Rooney, & Steinberg, 2008). This study applied an extensive set of controls including concurrent parental giving, which indicates that the relationship between religious affiliation and secular giving might be spurious. Two studies from Australia report this finding at the high end of the distribution of religious involvement – i.e. attending church more than once a week (Lyons & Nivison-Smith, 2006; Lyons & Passey, 2005). Brooks (2004) found no relationship between self-identifying as Christian and secular philanthropy. In a later study the relationship between (more than) weekly church attendance and secular philanthropy was negative (Brooks, 2005), while rarely/never attending church was negatively related to both religious and secular philanthropy. A study of giving to human services found no relationship with religious affiliation (Marx, 2000).

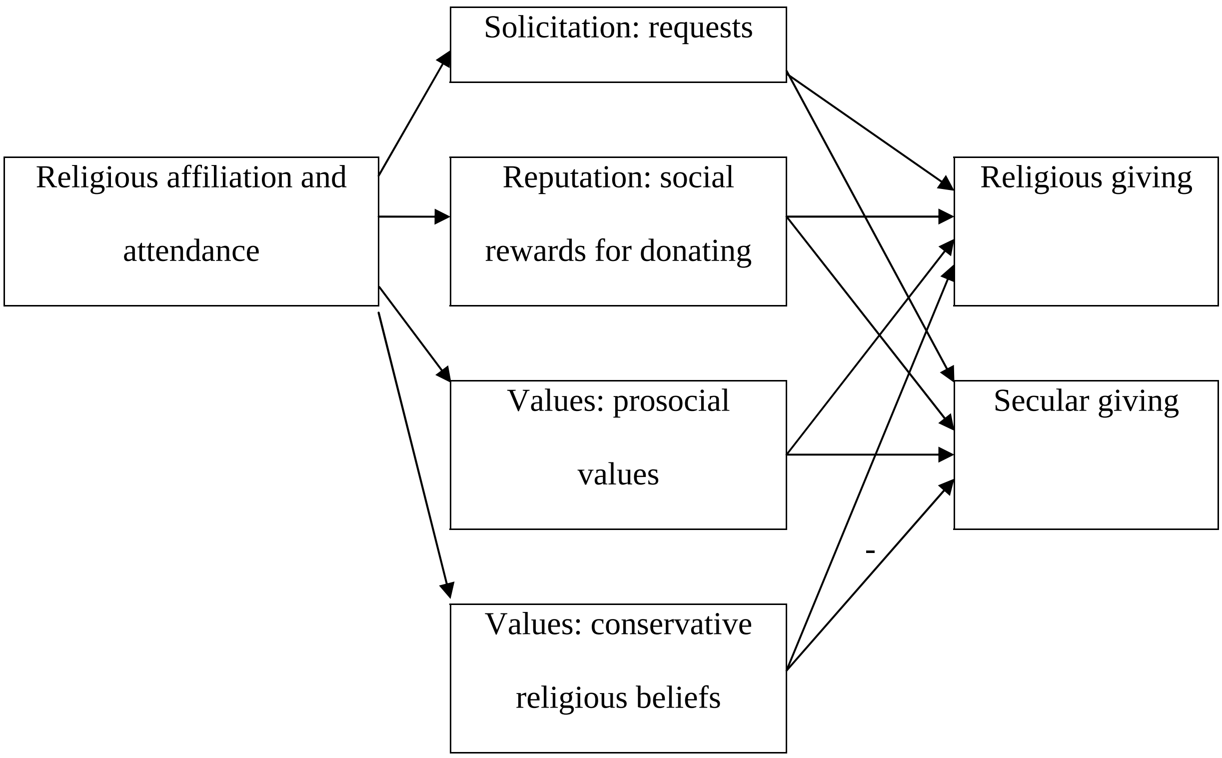
Another exception to the regularity of the finding that religious involvement is positively related to charitable giving comes from several experiments in which the participants had an opportunity to donate in a non-religious context (Bekkers, 2006c, 2007; Eckel & Grossman, 2004). One study, however, did find higher giving by religious participants (Eckel & Grossman, 2003). The fact that no statistically significant relationship between giving and religious involvement was found in three out of four experiments is informative about the mechanisms that mediate the relationship between religious involvement and giving, which we discuss later.

Denomination. Several studies have looked at differences between religious groups or denominations. In these studies, Protestants are often found to give more than Catholics, at least in the US, Canada, and the Netherlands (Bekkers & Schuyt, 2008; Berger, 2006; Chaves, 2002; Forbes & Zampelli, 1997; Hoge & Yang, 1994; Reed & Selbee, 2001; Zaleski & Zech, 1992, 1994). Studies that have used more refined categories of religious denominations find that more conservative Protestants give more than the more liberal groups of Protestants (Bekkers & Schuyt, 2008; Berger, 2006; Brooks, 2006). Only a few studies have considered donations by other religious groups. Hoge and Yang (2006) found that Jews donated higher amounts than Catholics and Protestants, but not as a proportion of income. In Canada, Jews are found to donate amounts similar to mainline protestants but lower proportions of income (Berger, 2006). In South Africa, Christians are more likely to engage in philanthropy than non-Christians or the non-religious (Everatt, Habib, Maharaj, & Nyar, 2005).

Religious beliefs. Religious beliefs have only rarely been analyzed in relation to philanthropy. Davidson and Pyle (1994) find that more orthodox and stronger religious beliefs are positively related to religious contributions. They also find that this relationship is mediated by church attendance, which indicates that people with more orthodox religious beliefs give more to their church because they are more strongly involved in the religious community. Olson and Caddell (1994) and Bekkers and Schuyt (2008) find that salience of religion (agreement with the statement that religion is important in the respondent's life) is positively related to religious giving mainly through church attendance. These results are in line with the finding by Davidson and Pyle (1994) because persons with more orthodox beliefs tend to find religion more important in their lives. A study among Presbyterians found that orthodox beliefs were negatively related to denominational contributions and donations to non-religious charities, but positively related to congregational and other giving, controlling for church attendance (Lunn, et al., 2001). Similar findings are reported in a national U.S. study (Brooks, 2004).

Mechanisms. Why would there be differences in giving between religious denominations? And why do people who attend religious services more often donate higher amounts? Which mechanisms may explain these differences? In figure 1 we have displayed the mechanisms that are emerging from the literature as explanations for the effects of religion on philanthropy. [1]

Figure 1. Mechanisms explaining the relationships between charitable giving and religious affiliation and attendance



All displayed relationships are positive unless noted otherwise

The difference between results from survey research and experiments suggests a potential role for solicitation (the likelihood of being asked to donate), reputation (the social rewards of donating), and values (the ideals people would like to see realized through their donation). The experimental results suggest that the religious are not necessarily more willing to donate than the non-religious when asked to donate to pre-selected secular organisations.

[1] We have omitted differences between religious denominations from this figure. For each denomination a separate variable would have to be included. This would make the figure very complex.

One key aspect of experiments is that solicitation is kept constant. All participants, whether religious or not, get the same opportunity to donate. Beyond these experimentally induced situations, however, religious persons receive more solicitations to contribute to charitable donations than non-religious persons (Bekkers, 2005b; Bekkers & Schuyt, 2008).

Another difference between donating money to charity in the experiments (as conducted thus far) and donating money in ordinary situations is the possibility of obtaining social rewards for donations. In the experiments, donations were made privately, in the absence of others and they were not announced to others. It is well known that anonymity reduces donations (e.g., Hoffman, McCabe & Smith (1996); a more comprehensive list of studies is in our article describing the mechanisms (Bekkers & Wiepking, 2010b)). The lack of a relationship between religion and giving in experiments may thus indicate that the higher giving among the religious is due to a heightened sensitivity to reputation among the religious. As one interesting experiment showed, a failure to give has a more negative effect on the reputation of religious persons than on that of nonreligious persons (Bailey & Young, 1986).

Consistent with reputation as an explanatory mechanism, Berger (2006) finds that Protestants in Canada are giving more than Catholics and the non-religious because of the stronger social norms on giving that they face along with their higher level of church attendance. This finding is in line with the finding of a US study that ‘public profession of faith is more strongly related to religious contributions than private devotional activities’ (Davidson & Pyle, 1994). A survey study in the Netherlands found that the higher level of religious giving among Protestants there is due to a higher number of solicitations for contributions and a higher level of social pressure to conform to group standards (Bekkers & Schuyt, 2008). Brown and Ferris (2007) find that, controlling for social capital measures including membership of organisations and social trust, an initially positive relationship between salience of religion and secular giving is actually reversed, to a significantly negative relationship.

On the other hand, in a study comparing reported donations in a survey on giving with actual donations as registered by a secular Dutch health charity, Bekkers and Wiepking (Bekkers & Wiepking, 2010a) find that Protestants underreport their donations in the survey when compared with their actual registered donations. This indicates that Protestants – at least in the Netherlands – do not like to share information on their donation behaviour with others, as illustrated in the biblical quotation "do not let your left hand know what your right hand is doing" (Matthew 6:3). Hence, a reputation effect might not account for heightened giving by all religious in all countries. Bekkers and Wiepking explain the underreporting of the Protestants as a result of altruistic and religious values (Bekkers & Wiepking, 2010a).

Thus, solicitation and reputation may not be the only two mechanisms involved in the relationship between religion and giving. Values also play a role. Decisions to attend church and to give to church are likely to be determined by a shared set of religious preferences, such as theological beliefs (Bekkers & Schuyt, 2008; Lunn, et al., 2001; Sullivan, 1985). The experiments failing to find a relationship between religion and giving gave participants the opportunity to donate to secular organisations. Churches were not included as potential recipient organisations. A preference to donate to churches and religious organisations may explain the lack of a relationship between religion and giving in experiments. At the same time, the religious have stronger prosocial values – such as social responsibility and altruistic values (Bekkers & Schuyt, 2008; Hardy & Carlo, 2005). One survey study of donations in the Netherlands showed that controlling for prosocial values reduces the relationship between religion and giving – especially to secular causes (Bekkers & Schuyt, 2008).

Finally, differences in psychological benefits are likely to play a role in denominational differences in giving. Several survey studies suggest that differences in solicitation methods may account for differences in level of religious giving between denominations. Protestant congregations more often use tithing and annual pledges, whereas Catholics mainly use the collection basket in church to collect donations (Hoge & Yang, 1994; Zaleski & Zech, 1994; Zaleski, Zech, & Hoge, 1994). The annual pledge may be viewed as a fundraising application of the promise elicitation technique, creating psychological costs for breaking a promise (Cialdini, 2001).

2. Education

The level of education is the second ubiquitous correlate of charitable giving. Positive relations between the level of education and giving are found in most empirical studies that have included education as a variable (Apinunmahakul & Devlin, 2004; Banks & Tanner, 1999; Bekkers, 2003, 2006b; Bekkers & De Graaf, 2006; Bielefeld, et al., 2005; Brooks, 2003a, 2003b, 2004; Eleanor Brown, 2005; E. Brown & Ferris, 2007; E. Brown & Lankford, 1992; Carroll, McCarthy, & Newman, 2006; Chang, 2005; Chua & Wong, 1999; Duncan, 1999; Eschholz & Van Slyke, 2002; Feldman, 2007; Gruber, 2004; Houston, 2006; Jones & Posnett, 1991a; Kingma, 1989; Lyons & Nivison-Smith, 2006; Lyons & Passey, 2005; Matsunaga, 2006; McClelland & Kokoski, 1994; Mesch, Rooney, Steinberg, & Denton, 2006; Olson & Caddell, 1994; Pharoah & Tanner, 1997; Reece & Zieschang, 1985; Reed & Selbee, 2002; Rooney, Steinberg, & Schervish, 2001; Schiff, 1990; Schlegelmilch, et al., 1997; Sokolowski, 1996; Tiehen, 2001; Todd & Lawson, 1999; Van Slyke & Brooks, 2005; Wiepking & Maas, 2009b; Wilhelm, et al., 2008; Yamauchi & Yokoyama, 2005; Yavas, Riecken, & Parameswaran, 1981). Higher levels of education are also associated with giving a higher proportion of income (Schervish & Havens, 1997).

Specific types of giving. While the relationship between education and total annual giving is usually found to be positive, the relationship of education with giving is by no means the same across charitable subsectors. In a study of donations to specific types of charitable organisations in Austria, education was positively related to donations to environment and animal protection, development aid, and human rights but negatively related to donations to health care and emergency aid (Srnka, Grohs, & Eckler, 2003). The negative relationship between education and giving to health also emerges from studies of donations to the American Lung Association (Keyt, Yavas, & Riecken, 2002) and the Dutch Heart Association (Bekkers, 2008). In the US, Knoke (1990) found a negative relationship between the level of education and annual donations to 35 professional societies, recreational organisations and women's associations, controlling for income and occupational prestige. In two other studies from the US education did not correlate with the likelihood of giving to the poor (Regnerus, et al., 1998) and to human services (Marx, 2000). A field experiment with mail solicitations to fund a new centre for environmental policy analysis in the U.S. found no effect of education (List, 2004).

Specific populations. Wu, Huang and Kao (2004) found no effect of education on the likelihood of giving in Taiwan, though the amount donated was positively related to education. Park and Park (2004) found no relationship between education and donations in Korea. Feldstein and Clotfelter (1976) find no difference between college graduates and those with lower education, controlling for wealth, income and tax price. Hoge and Yang (1994) find a positive relationship of education with religious contributions for Protestants, but not for Catholics.

Model specification. Using data on the US from the 1994 Survey of Giving and Volunteering, Bryant et al. (2003) find no relationship between education and the likelihood of giving. The lack of a relationship between education and giving in this analysis may be due to the inclusion of a squared education variable and a number of other variables. Tiehen (2001) did find a substantial relationship between years of education and amounts donated, using data from a larger number of US 'Giving and Volunteering' surveys.

Using data from the 1995 Consumer Expenditure Survey in the US, Yen (2002) finds a positive relationship of education with secular giving, but no relationship with religious giving. This study used a sophisticated econometric model to take the simultaneity between religious and secular giving into account. The result suggests that the positive relationship between education and religious giving in other studies is due to omitted variables.

Using data from a later edition of the same dataset but collapsing religious and secular giving, Brooks (2002) finds no relationship of education with the amount donated to charities in a tobit regression of data, controlling for income, wealth, age and welfare income.

Field of education. Many studies report differences in donations between graduates in specific fields of education. Yet the picture emerging from these studies is far from clear. In the Netherlands, Bekkers and De Graaf (2006) find that graduates in social work and the social sciences, in agriculture and security donate higher amounts, controlling for a large number of variables. The finding on the higher amount donated by graduates in the social sciences is in line with results of a study of alumni giving to a small liberal arts college in the US, reported by Wunnava and Lauze (2001), who find that majors in social sciences give more. However, a study of alumni donations to two medium sized universities in the United Kingdom found that law graduates donated the highest amounts, and social science graduates gave the lowest amounts, along with graduates in education, medicine, and commerce (Belfield & Beney, 2000). These differences are not easily explained as the study included controls for a variety of potentially confounding variables such as gender, marital status, income, and solicitation.

Experiments conducted by economists among university students and professors in economics have typically found economists to give less than students and professors in other social sciences (Eckel, Grossman, & Johntson, 2005; B. Frank & Schulze, 2000; R. H. Frank, Gilovich, & Regan, 1993, 1996; Frey & Meier, 2004a, 2005; C. L. Smith & Ehrenberg, 2003). A study of giving to the social funds of the University of Zurich, Switzerland, (Frey & Meier, 2004a, 2004b) found not only lower giving among current students in economics, but also among students in computer science, theology, law and natural science (compared with students in arts and medicine). It seems possible that students who selected a field of study that includes courses on price theory, bargaining and rational choice and professors who teach such courses might be less likely to donate money to a charity without getting some kind of reward in exchange. However, economics graduates seem to be different from economics students and professors. Bekkers and De Graaf (2006) find that economics graduates do not differ from other graduates in their donations to charities in the Netherlands. Another study on alumni giving to a major university in the Netherlands also found no differences between economics graduates and graduates in other fields (Bekkers, 2010a). Blumenfeld and Sartain (1974) further find that business school students and economics graduates are more likely to donate to their alma mater than other students. This result may reflect a better income position among economics and business school graduates as the study did not include a measure of income. Another study lacking an income measure also found higher giving by business and economics alumni (Okunade, Wunnava, & Walsh, 1994). In a study of alumni at Vanderbilt University, Marr, Mullin and Siegfried (2005) find that alumni with economics, mathematics and social science majors are more likely to contribute to their alma mater, while performing arts and science majors have a lower likelihood to make donations, controlling for income. In a study among young graduates of a selective group of private universities in the US, Monks (2003) finds that graduates with an MBA or law degree gave more to their alma mater than those without an advanced degree, controlling for income. Monks also found that graduates with a major in fine arts or nursing give significantly less, while history majors give significantly more than humanities majors. Graduates with other majors (including business and management and social sciences) did not differ from humanities majors.

In sum, the findings on differences between alumni in different fields of study are inconsistent and vary from study to study. Given the few nationally representative studies, it may be that differences in the effects of field of study on giving vary from university to university within and between countries.

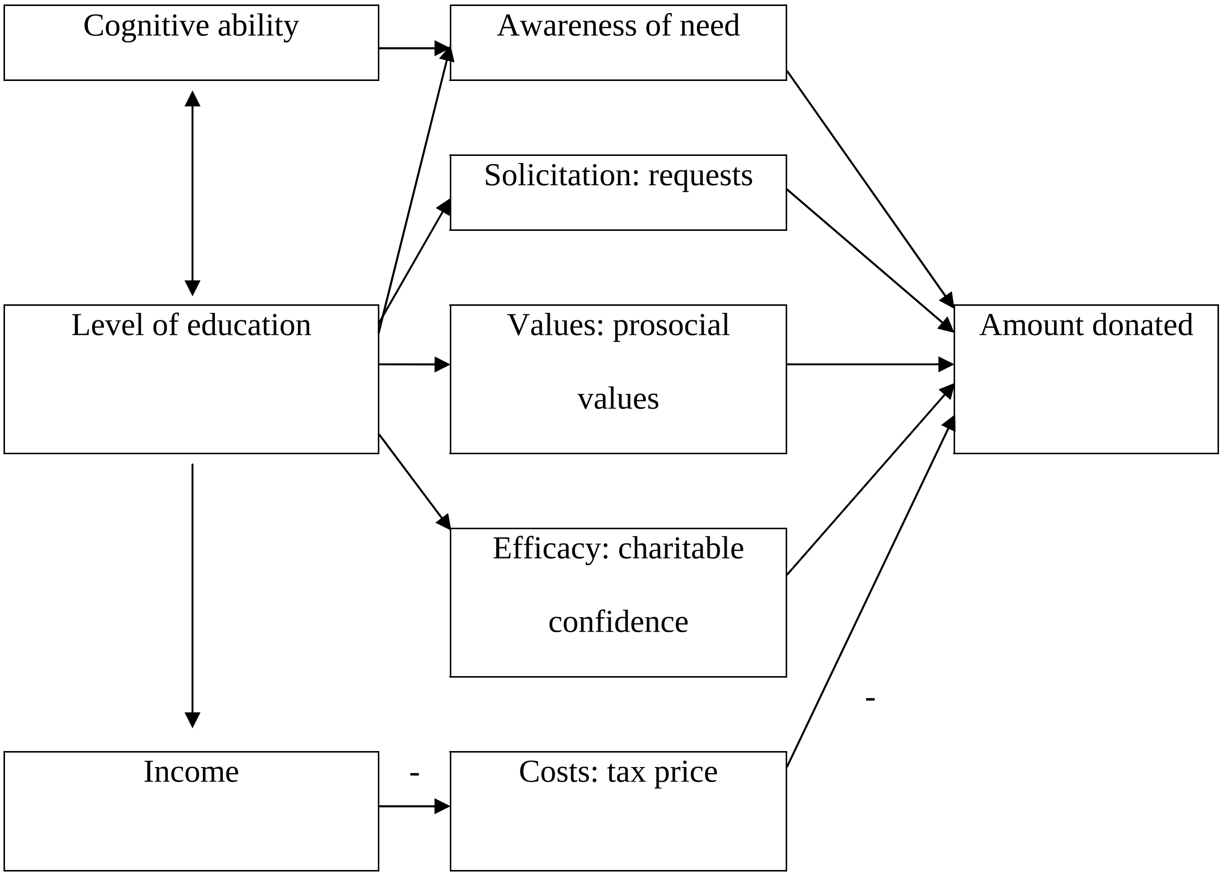
Cognitive ability. Persons with higher scores on a vocabulary test donate more (Bekkers, 2006a, 2006b; Bekkers & De Graaf, 2006; James, in press; Wiepking & Maas, 2009a). A study of hypothetical measures of altruism also revealed a positive relationship between altruism and intelligence measured with an IQ test (Millet & Dewitte, 2007). A study of alumni contributions found that contributions increase with Grade Point Average (Marr, et al., 2005).

The relationship between cognitive ability and philanthropy is puzzling and cannot easily be explained. Obviously cognitive ability and the level of education are highly correlated, but establishing the direction of causality is tricky. In spite of this problem, the available evidence clearly shows that the relationship between cognitive ability and giving persists when the level of education is kept constant. This suggests that the positive relationship between cognitive ability and giving is not the result of the higher level of completed education found among those with more cognitive ability. Speculative explanations may be that those with more verbal ability have a higher ability to cope with complex information or are more aware of social needs (Bekkers, 2006b). A finding supporting this interpretation is that students who view the world in more abstract terms were found to donate more often to the homeless (Levy, Freitas, & Salovey, 2002). However, this study was conducted only among students in higher education. Research among a broader sample is needed to test whether greater awareness of need explains the relationship between cognitive ability and giving.

Response bias. To some extent, the relationship found between education and giving may be an artefact resulting from imperfect methodologies. One study comparing self-reported donations in two surveys showed that lower educated people are more likely to misunderstand survey questionnaires, and are more likely to forget about donations they have made in the past year (Bekkers & Wiepking, 2006). Another study, comparing self-reported donations to a major charity in the Netherlands with donations as registered by the organisation, found that higher educated persons are more likely to overestimate donations in the past year (Bekkers & Wiepking, 2010a). These results suggest that the strength of the positive relationship between the level of education and giving is overestimated when using self-reported survey data. Nonetheless, registered donations increased significantly with the level of education. This indicates that the relationship between the level of education and giving is not merely a methodological artefact or a response bias.

Mechanisms. Why education matters for giving is far from settled. While some studies have directly investigated the mechanisms that may be involved, few studies have examined several mechanisms at once. This is unfortunate because it is likely that multiple mechanisms explain the relationship between education and giving. Such mechanisms could include awareness of need, solicitation, costs, and values. Figure 2 displays the likely relationships.

Figure 2. Mechanisms explaining the relationships between charitable giving and level of education



All displayed relationships are positive unless noted otherwise

Awareness of need and the level of exposure to information about charitable causes to support are likely to be higher among those with higher cognitive ability and among the higher educated (Bekkers, 2006b). The number of requests for donations is also likely to be higher among the higher educated. Brown (2005) and Brown and Ferris (2007) find that higher education increases donations because it draws people into memberships. A likely explanation of this finding is that memberships entail higher levels of solicitations. In the Netherlands, Bekkers (2005a, 2005b) established that the strength of the association measured between the level of education and the amount donated to charitable causes diminished when the number of solicitations was controlled statistically, but that the association remained sizeable. At least in the Netherlands exposure to a larger number of solicitations is not a complete explanation of the higher amounts donated by the more highly educated.

In their study of US philanthropy, Brown and Ferris (2007) find that education and giving are related not only through memberships but also through generalized social trust. People who are more trusting of others are likely to have more confidence in charitable organisations, suggesting a role for the mechanism of efficacy. Analyses of the Giving in the Netherlands Panel Survey (Bekkers, 2006a; Schuyt, Smit, & Bekkers, 2004) show that higher education is related to giving to a variety of specific causes through generalized social trust and enhanced confidence in charitable organisations.

In addition, the analyses of the Dutch data also suggest that higher verbal intelligence and income are variables that explain the higher amounts donated by the higher educated. Wiepking and Maas (2009b) even find that the effect of education on the total amount donated to charitable causes is completely mediated by higher verbal intelligence and higher income. While it is difficult to interpret the relationship between giving and verbal intelligence, the relationship with income seems less obscure. In countries with a progressive tax regime, citizens in higher income brackets face lower costs for giving when their donations are tax-deductable. In part II of this article we will discuss further the evidence on the relationship between income and giving.

A final explanation of the relationship between the level of education and giving is through the values mechanism. A study in the Netherlands showed that the higher educated more strongly endorse social responsibility values than the lower educated (Schuyt, et al., 2004). The same study showed that controlling for social responsibility diminished the relationship between the level of education and the amount donated.

3. Age

The typical finding about the relationship of age with philanthropy in the literature is that it is positive (Alpizar, Carlsson, & Johansson-Stenman, 2008; Apinunmahakul & Devlin, 2004; Auten, Cilke, & Randolph, 1992; Auten & Rudney, 1990; Banks & Tanner, 1999; Bekkers, 2003, 2006b; Bekkers & Schuyt, 2008; Bekkers & Wiepking, 2006; Belfield & Beney, 2000; Boskin & Feldstein, 1977; Bristol, 1990; Brooks, 2002; E. Brown & Lankford, 1992; Bryant, et al., 2003; Carman, 2006; Carroll, et al., 2006; Chang, 2005; Choe & Jeong, 1993; Chua & Wong, 1999; Clotfelter, 1980; Duquette, 1999; Eaton, 2001; Eckel & Grossman, 2003; Eckel, et al., 2005; Eschholz & Van Slyke, 2002; Farmer & Fedor, 2001; Feenberg, 1987; Feldstein & Taylor, 1976; Frey & Meier, 2004a, 2005; Greenwood, 1993; Hoge & Yang, 1994; Houston, 2006; Jones & Posnett, 1991a, 1991b; Kingma, 1989; Lankford & Wyckoff, 1991; List, 2004; Long, 2000; Lunn, et al., 2001; Lyons & Nivison-Smith, 2006; Lyons & Passey, 2005; Matsunaga, 2006; McClelland & Kokoski, 1994; Mesch, et al., 2006; Midlarsky & Hannah, 1989; Okunade, et al., 1994; Pharoah & Tanner, 1997; Reece & Zieschang, 1985; Reed & Selbee, 2002; Regnerus, et al., 1998; Rooney, Mesch, Chin, & Steinberg, 2005; Tiehen, 2001; Todd & Lawson, 1999; Weerts & Ronca, 2007; Wunnava & Lauze, 2001; Yamauchi & Yokoyama, 2005; Yavas, et al., 1981).

The majority of studies that have tested for quadratic trends find that the age relationship decreases at higher age (Auten, et al., 1992; Belfield & Beney, 2000; E. Brown & Lankford, 1992; Bryant, et al., 2003; Chang, 2005; Clotfelter, 1980; Glenday, Gupta, & Pawlak, 1986; Lunn, et al., 2001; Lyons & Nivison-Smith, 2006; Okunade, et al., 1994; Putnam, 2000; Simmons & Emanuele, 2004; Tiehen, 2001; Wunnava & Lauze, 2001; Zech, 2000).

While the exact age at which the age gradient becomes weaker varies from study to study, it tends to be after the age of 65. Auten and Joulfaian (1996) find that donations are higher among those aged 40-84 than among those younger or older. Andreoni (2001) and Hodgkinson and Weitzman (1996) find a positive relationship until age 75, after which a decrease is observed. Belfield & Beney (2000), Danesvary and Luksetich (1997), Landry, Lange, Price and Rupp (2006), Midlarsky and Hannah (1989) and Wu, Huang and Kao (2004) find a decrease in giving after the age of 65. In a study with a large proportion of respondents over 65, Schlegelmilch et al. (1997) found a negative relationship between age and the likelihood of giving to charity. Brown and Lankford (1992) find an increase of donations with age that levels off after 45. In contrast to these results, Randolph (1995) finds that giving increases with age, at an increasing rate for those over 40; a discrepancy that may be explained by the fact that Randolph did not include variables for the number of children and marital status other than marriage.

An early study by Feldstein and Clotfelter (1976) found no significant age differences in the amount donated. A later study had the same result, controlling for a large number of background and context characteristics (Schiff, 1990). Rooney, Steinberg, and Schervish (2001) do not find a significant relationship between age and charitable giving in analyses including income, tax itemization status, minority status, sharing a household, education and gender. Feldman (2007) found no relationship of age with the likelihood of making donations in a study including a wide variety of control variables. Taken together, the results of these studies suggest that the relationship of age with giving is due in part to other variables correlated with age, such as religion, marital status, and income.

Specific populations. Three studies that focused on specific populations found no age differences in giving. Age was not related to giving in a study on giving in Indonesia (Okten & Osili, 2004) and in a study of business school alumni giving in the U.S. (Okunade & Berl, 1997). Similarly, Park and Park (2004) found no relationship between age and donations in Korea.

Age differences interact with gender and income. There seem to be gender differences in the relationship between age and giving. Duncan (1999) found a significant age relationship for wives though not for husbands. A similar gender difference was found in a study of religious contributions (Sullivan, 1985). Daneshvary and Luksetich (1997) find that age differences vary by income: at higher income levels, giving does not decline after the age of 65.

Specific types of giving. Religious giving seems to be more strongly related to age than secular giving is. Reece (1979) and Hrung (2004) find a significantly positive relationship between age and religious giving, but not with other giving. Yen (2002) finds and a positive relationship of age with giving to religion and 'charity', but not to 'other organisations'. In contrast to these findings, however, Brown and Ferris (2007) find a positive but declining relationship between age and the amount donated to secular causes, but only a positive relationship of age with giving to religious organisations at higher ages. Several studies of giving to specific types of secular causes found no age differences. This is the case for donations to human services (Marx, 2000), to panhandlers (Lee & Farrell, 2003) and to professional societies, recreational organisations, and women's organisations (Knoke, 1990).

Wiepking (2006) finds a positive relationship between age and donations to organisations that use appeal letters as a fundraising method in the Netherlands. In contrast, she also finds that older people have a lower probability of donating to organisations that solicited donations by means of door-to-door collections. This is likely due to the inclination of older people not to answer the door during evenings (Wiepking, 2010).

Mechanisms. Why age is related to giving is unclear. Generally speaking, age differences can be due to life-cycle effects or cohort effects, that is, the stage of one's life or the generation to which one belongs (Alwin & Krosnick, 1991). In a single set of cross-sectional data, individuals with a higher age are born earlier and have lived longer. To disentangle life-cycle and cohort effects, a set of repeated cross-sectional surveys is required. Using such data, Wilhelm, Rooney and Tempel (2007) show that age differences in giving are a function of both life-cycle effects and cohort differences.

Both life-cycle effects and cohort differences often boil down to arguments about omitted variables. Age differences could simply be due to differences in variables correlated with age, such as income and religious involvement. An obvious life-cycle explanation is that disposable income increases with age. However, the age relationship persists in many studies controlling for income. Another factor to consider is religion. Olson and Caddell (1994) and Bekkers and Schuyt (2008) find that the relationship with age diminishes once church attendance is controlled. This finding suggests that older people give more because their level of religious involvement is higher. Yet the age relationship does not disappear completely when religious involvement is controlled, indicating that other mechanisms play a role as well.

The mechanism of altruism may explain the life-cycle effect of age in a different way. The result found in Auten and Joulfaian (1996) that the age differences decline when children's income is controlled suggests that older people donate more when they are less concerned about their children's financial future. The shift from benefiting children to donating to charitable causes may indicate a generic desire to contribute to the well-being of others. The elderly may be more responsive to the needs of others because their children's needs are met. The ageing of the population in times of increasing wealth and decreasing numbers of children per family may constitute a promising fundraising future for charitable organisations.

Another life cycle-explanation for the increase of giving with age is that in old age people are closer to the end of their lives. An experiment showed that reminding students about death leads them to give more to a charity (Jonas, Schimel, Greenberg, & Pyszczynski, 2002). Mortality salience may increase the psychological benefits of giving. No research to date however has explored this mechanism.

Cohort explanations for the age differences in giving have received less attention in the literature. Wilhelm, Rooney and Tempel (2007) show that generational differences in religious involvement explain the lower than expected giving by baby boomers. This finding is all the more interesting because younger generations on average have higher levels of education. Given the positive relationship between the level of education and charitable giving one would expect younger cohorts to give more than older cohorts, rather than less. Because the Wilhelm, Rooney and Tempel (2007) analysis did not include an education variable it is difficult to evaluate the effect of changes in average education. Of course it is possible that the lower religious involvement of younger cohorts had not had an even more negative effect if the younger cohorts had not had higher levels of education. Strictly speaking we can only conclude that the increase in education has not compensated for the negative effect of lower religious involvement among younger cohorts.

4. Socialization

While relatively few studies have looked at the influence of parental background on giving, it is likely that parental characteristics affect children's giving behaviour.

Parental education, income and family stability. Material circumstances in the family of origin affect many child outcomes, including religiosity, education, income and health and longevity. As these variables are all predictive of giving, it is likely that positive material conditions in childhood are correlated with higher giving in adulthood. Indeed the level of parental education was found to be positively related to the amount donated in the Netherlands (Bekkers, 2005a). Conversely, a US study found that low income and family instability in childhood was related to lower giving in adulthood (Bandy & Wilhelm, 2007).

Two studies on alumni contributions show that current parental income (Marr, et al., 2005) and current parental church attendance (Lunn, et al., 2001) increase giving.

Religious socialization. Simmons and Emanuele (2004) find that people brought up in a religious household give higher amounts. While this result is difficult to interpret as a socialization effect because the analysis did not contain a measure of current religiosity, a study including such a measure and a variety of other controls does provide evidence for a religious socialization effect (Bekkers, 2005a).

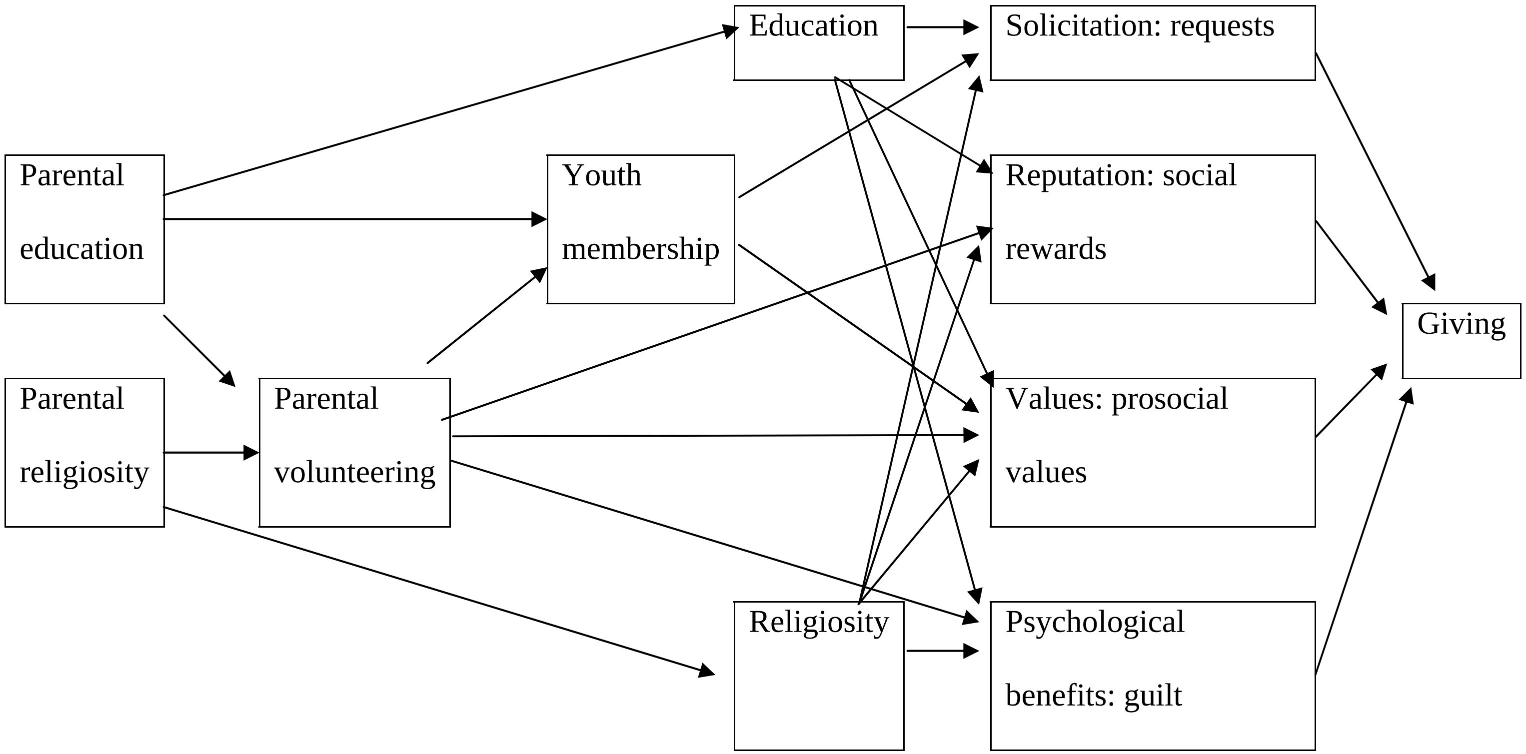
The effect of religious socialization does not extend to all types of giving. Regnerus, Smith and Sikkink (1998) find that the importance of religion in one's family of youth is not positively related to donating to organisations that help the poor and the needy once current church attendance and importance of religious faith are controlled. Hoge and Yang (1994) find that having attended religious Sunday School is associated with higher religious giving among Catholics, but not among Protestants. In more extensive regression models the relationship has been found to disappear once salience of religion, private religious practices and current church attendance are included. This result suggests that religious socialization influences current religious giving through current religiosity. In their study among Presbyterians, Lunn, Klay and Douglas (2001) find that the frequency of parents' church attendance when the respondent was a teenager is positively related to religious giving in a regression analysis including personal and spousal religious affiliation, personal church attendance and theological beliefs. Parental church attendance was not related to non-religious giving. Using data from the 1974 National Survey of Philanthropy, a representative sample of US citizens, Schiff (1990) comes to a similar conclusion.

In the study by Lunn, Klay & Douglass, being raised in the Presbyterian church was associated with less religious giving but there was no relationship with secular giving. This result may be explained as a selection effect. Among those who were not raised in the church, some were converted at a later age. It is likely that these individuals are prepared to donate substantially to the church; otherwise they would have chosen not to become a member.

Parental modeling. Giving is a form of prosocial behaviour that is often encouraged by parents: many people recollect that their parents taught them the value of helping others by volunteering themselves (Independent-Sector, 2000). A study in the U.S. including a wide variety of controls (Wilhelm, et al., 2008) finds that concurrent giving by parents and children are significantly correlated. Because parental giving behaviour in the past may be difficult for people to remember, most studies have sought to test parental modelling effects through questions on parental volunteering. While parental volunteering was found to be related to the likelihood of donating in one US study (Feldman, 2007), it was not found to be related in another (Bryant, et al., 2003). In the Netherlands, volunteering by parents in respondents' childhood was found to be associated with current giving, even when a wide variety of controls were included (Bekkers, 2005a). Parental volunteering was not related to the proportion of income donated (Schervish & Havens, 1997) when other correlates of giving were included.

Youth participation. A simple analysis by the Independent Sector (2000) comparing mean values reveals that adults in the US who report activity in voluntary associations when they were teenagers give more as adults. Feldman (2007) finds that this bivariate association holds when numerous controls are included. Using data from the Giving in the Netherlands Panel Study among adults in the Netherlands, Bekkers (2005a) reaches a similar finding. The study also reveals that youth participation is one of the channels through which parental background affects giving by children. Children of higher educated parents, children of parents who are more strongly involved in religion and children of parents who volunteered themselves when their children were young are giving higher amounts as adults because these children are more likely to be engaged in voluntary associations.

Figure 3. Mechanisms explaining the relationships between socialization characteristics and giving



All displayed relationships are positive

Mechanisms. The preceding discussion shows that socialization characteristics such as a religious upbringing, parental education and material circumstances, parental volunteering and youth membership are interconnected and likely to be related. Figure 3 summarizes these connections. In addition, the figure shows the mechanisms that are likely to explain the relationship between youth membership, parental volunteering and giving. Youth participation strengthens the social bonds of children in a community, making them accessible for nonprofit organisations. One study that explicitly measured this mechanism shows that youth participation is associated with current giving through solicitations for contributions (Bekkers, 2005a). The same study showed that respondents who reported memberships of youth organizations more strongly endorsed prosocial values such as social responsibility and altruistic values. Controlling for the presence of these values reduced the magnitude of the relationship between youth memberships and current giving. Solicitation and values are thus likely to be important mechanisms establishing a link between youth participation and philanthropy.

Encouragement to engage in philanthropy by parents – either by deeds or by preaching – yields social pressure on children to engage. As a result, children may engage in philanthropy because of reputational concerns. A second mechanism through which the parental example affects giving by their children is through values. Parental encouragement may result in the internalization of prosocial values (Eisenberg, 2000), leading to philanthropy. A third mechanism is solicitation: children of parents who volunteered in the past receive higher numbers of solicitations for charitable contributions (Bekkers, 2005a). A fourth mechanism potentially linking parental volunteering to giving is the psychological benefit associated with giving. Children of parents who volunteered are more likely to view giving to others as an important goal in their lives. For them living up to that goal is likely to produce a sense of satisfaction. To date, however, no study has tested this possibility.

Discussion

The interest in research on ‘who gives’ is often motivated by the goal of attracting or retaining donors. Fundraisers can use knowledge on ‘who gives’ to create donor profiles in order to target campaigns at those who are most likely to give and/or who will give higher amounts. Fundraisers and policy makers can also use this type of knowledge to understand trends and predict future changes in the size and nature of philanthropy. When using knowledge on ‘who gives’ for these purposes, two warnings should be put in place. First, the majority of studies analyse donations without controlling for the number of solicitations received. Knowing that religious people give more than non-religious people does not necessarily imply that religious people are more likely to respond positively to an additional solicitation for donations. In fact, several studies show that when solicitation is kept constant, religious people are not more likely to donate to secular organisations than non-religious people (Bekkers, 2007, 2010b; Eckel & Grossman, 2004). Increasing the number of solicitations among religious people may therefore be cost-inefficient. Moreover, growing donor irritation with the number of fundraising approaches may lower donations in the future.

Also, in most studies, cross-sectional data is used to establish the predictors of charitable giving. Strictly speaking, no conclusions can be drawn from cross-sectional data on the causality of the relationship between predictors, such as religious beliefs and the level of education, and charitable giving. For causal inferences either experiments or longitudinal data and appropriate statistical models are needed. As far as we know, there are only two publicly available longitudinal datasets that include measures of charitable giving: the US Centre on Philanthropy Panel Study, a supplement to the Panel Study of Income Dynamics (PSID-COPPS, 2001-2007) and the Dutch Giving in the Netherlands Panel Study (GINPS, 2001-2007). The two datasets have different strengths. COPPS has high quality wealth and income data, has a high response rate, and can be linked to other PSID modules such as the Child Development Supplement (Wilhelm, 2006). GINPS, in contrast, includes measures for several of the mechanisms that drive philanthropy, such as solicitation, social values, and efficacy (Bekkers & Schuyt, 2008). We think considerable progress in the study of philanthropy can be made by analyzing these two panel datasets and by creating more panel data for other countries. We applaud the initiatives of researchers in Austria and South Korea who have recently taken such steps, and we hope many other researchers will follow.

Limitations

As the above discussions about mechanisms show, most of the knowledge on *who gives what* is of limited value to scholars who want to test causal theories about determinants of philanthropy or to fundraisers who wonder how they should design successful fundraising campaigns. Few studies have included measures of the mechanisms that may explain relationships between predictors and charitable giving. Without these measures, we are often left with several possible explanations that are not mutually exclusive. As a result, we have a lot of descriptive knowledge about who gives what but we have very little knowledge about why some people give more than others. We urge our colleagues to advance the state of research on philanthropy by testing the mechanisms explaining relationships of socio-demographic characteristics with philanthropy. Including measures of mechanisms in new data collection exercises will enable future researchers to better understand why some people give more than others.

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References

Alpizar, F., Carlsson, F., & Johansson-Stenman, O. (2008). Anonymity, Reciprocity and Conformity: Evidence from Voluntary Contributions to a Natural Park in Costa Rica. *Journal Of Public Economics, 92*(5-6), 1047-1060.

Alwin, D. F., & Krosnick, J. A. (1991). Aging, Cohorts, and the Stability of Sociopolitical Orientations over the Life Span. *American Journal of Sociology, 97*(1), 169-195.

Andreoni, J. (2001). The Economics of Philanthropy. In N. J. Smelser, and P.B. Baltes (Ed.), *International Encyclopedia of the Social and Behavioral Science* (pp. 11369-11376). London: Elsevier.

Anheier, H. K., & Salamon, L. M. (2006). The Nonprofit Sector in Comparative Perspective. In W. E. Powell & R. Steinberg (Eds.), *The Nonprofit Sector: A Research Handbook* (Second Edition ed., pp. forthcoming). New Haven: Yale University Press.

Apinunmahakul, A., & Devlin, R. A. (2004). Charitable Giving and Charitable Gambling: An Emperical Investigation. *National Tax Journal, LVII*(1), 67-88.

Auten, G. E., Cilke, J., & Randolph, W. (1992). The Effects of Tax Reform on Charitable Contributions. *National Tax Journal, 45*(3), 267-290.

Auten, G. E., & Joulfaian, D. (1996). Charitable Contributions and Intergenerational Transfers. *Journal of Public Economics, 59,* 55-68.

Auten, G. E., & Rudney, G. (1990). The Variability of Individual Charitable Giving in the US. *Voluntas, 1*(2), 80-97.

Bailey, R. C., & Young, M. D. (1986). The value and vulnerability of perceived religious involvement. *Journal of Social Psychology, 126*(5), 693-694.

Bandy, R., & Wilhelm, M. O. (2007). *Family Structure and Income During Childhood and Subsequent Prosocial Behavior in Young Adulthood. Working paper, Department of*

Economics, IUPUI and The Center on Philanthropy at Indiana University.Unpublished manuscript.

Banks, J., & Tanner, S. (1999). Patterns in Household Giving: Evidence from UK Data. *International Journal of Voluntary and Nonprofit Organizations, 10*(2), 167-178.

Bekkers, R. (2003). Trust, Accreditation, and Philanthropy in the Netherlands. *Nonprofit & Voluntary Sector Quarterly, 32*, 596-615.

Bekkers, R. (2005a, November 18, 2005). *Charity Begins At Home: How Socialization Experiences Influence Giving and Volunteering.* Paper presented at the 34rd Annual ARNOVA-Conference, Washington, DC, USA.

Bekkers, R. (2005b). *It's Not All in the Ask. Effects and Effectiveness of Recruitment Strategies Used by Nonprofits in The Netherlands.* Paper presented at the 34rd Annual ARNOVA-Conference, Washington, DC, USA.

Bekkers, R. (2006a, September 13-14, 2006). *Keeping the Faith: Origins of Confidence in Charitable Organizations and its Consequences for Philanthropy.* Paper presented at the the NCVO/VSSN Researching the Voluntary Sector Conference 2006, Warwick University, UK.

Bekkers, R. (2006b). Traditional and Health Related Philanthropy: The Role of Resources and Personality. *Social Psychology Quarterly, 68*(4), 349-366.

Bekkers, R. (2006c). *Words and Deeds of Generosity: Are Decisions About Real and Hypothetical Money Really Different? Working paper, Department of Sociology, Utrecht University*.Unpublished manuscript.

Bekkers, R. (2007). Measuring Altruistic Behavior in Surveys: The All-or-Nothing Dictator Game. *Survey Research Methods, 1*(3).

Bekkers, R. (2008). Straight From the Heart. In S. Chambré & M. Goldner (Eds.), *Patients, Consumers and Civil Society: US and International Perspectives* (Vol. 10, pp. 197-221).

Bekkers, R. (2010a). George Gives to Geology Jane: The Name Letter Effect and Incidental Similarity Cues in Fundraising. *International Journal of Nonprofit and Voluntary Sector Marketing, 15*, 172-180.

Bekkers, R. (2010b). Who gives what and when? A scenario study of intentions to give time and money. *Social Science Research, 39*, 369-381.

Bekkers, R., & De Graaf, N. D. (2006). *Education and Prosocial Behavior*.Unpublished manuscript.

Bekkers, R., & Schuyt, T. (2008). And who is your neighbor? Explaining denominational differences in charitable giving and volunteering in the Netherlands. *Review Of Religious Research, 50*(1), 74-96.

Bekkers, R., & Wiepking, P. (2006). To Give or not to Give, that's the Question. How Methodology is Destiny in Dutch Data. *Nonprofit & Voluntary Sector Quarterly, 35*(3), 533-540.

Bekkers, R., & Wiepking, P. (2007). Generosity and Philanthropy: A Literature Review. Report commissioned by the John Templeton Foundation. Available at SSRN: http://ssrn.com/abstract=1015507.

Bekkers, R., & Wiepking, P. (2010a). Accuracy of Self-reports on Donations to Charitable Organizations. *Quality & Quantity*.

Bekkers, R., & Wiepking, P. (2010b). A literature review of empirical studies of philanthropy: Eight mechanisms that drive charitable giving. *Nonprofit & Voluntary Sector Quarterly*, DOI: 10.1177/0899764010380927.

Belfield, C. R., & Beney, A. P. (2000). What Determines Alumni Generosity? Evidence for the UK. *Education Economics, 8*(1), 65-80.

Bennett, R., & Kottasz, R. (2000). Emergency fund-raising for disaster relief. *Disaster Prevention and Management, 9*(5), 352-359.

Berger, I. E. (2006). The Influence of Religion on Philanthropy in Canada. *Voluntas, 17*, 115–132.

Bielefeld, W., Rooney, P., & Steinberg, K. (2005). How Do Need, Capacity, Geography, and Politics Influence Giving? In A. C. Brooks (Ed.), *Gifts of Money in Americas Communities* (pp. 127-158). Lanham, MD: Rowman & Littlefield Pub Inc.

Blumenfeld, W. S., & Sartain, P. L. (1974). Predicting Alumni Financial Donation. *Journal of Applied Psychology, 59*(4), 522-523.

Boskin, M. J., & Feldstein, M. (1977). Effects of the Charitable Deduction of Contribution by low and Middle Income Households: New Evidence of the National Survey of Philanthropy. *The Review of Economics and Statistics*, *59*, 351-354.

Bristol, R. B. (1990). The Life Cycle of Alumni Donations. *Review of Higher Education, 13*(4), 503-518.

Brooks, A. C. (2002). Welfare Receipt and Private Charity. *Public Budgetting & Finance, 22*(3), 101-114.

Brooks, A. C. (2003a). Charitable giving in transition economies: Evidence from Russia. *National Tax Journal, 55*(4), 743-753.

Brooks, A. C. (2003b). Charitable giving to humanitarian organizations in Spain. *Hacienda Pública Española / Revista de Economía Pública, 165*(2), 9-24.

Brooks, A. C. (2003c). Religious Faith and Charitable Giving. *Policy Review, 121*, 39-48.

Brooks, A. C. (2004). What Do "Don't Know" Responses Really Mean in Giving Surveys? *Nonprofit and Voluntary Sector Quarterly, 33*(3), 324-434.

Brooks, A. C. (2005). Does Social Capital Make You Generous? *Social Science Quarterly, 86*(1), 1-15.

Brooks, A. C. (2006). *Who Really Cares? America's Charity Divide - Who Gives, Who Doesn't, and Why It Matters*. New York: Basic Books.

Brown, E. (2005). College, Social Capital, and Charitable Giving. In A. C. Brooks (Ed.), *Gifts of Time and Money in Americas Communities*: Rowman & Littlefield.

Brown, E., & Ferris, J. M. (2007). Social Capital and Philanthropy: An Analysis of the Impact of Social Capital on Individual Giving and Volunteering. *Nonprofit and Voluntary Sector Quarterly, 36*(1), 85-99.

Brown, E., & Lankford, H. (1992). Gifts of Money and Gifts of TIme: Estimating the Effects of Tax Prices and Available Time. *Journal of Public Economics, 47*, 321-341.

Bryant, W. K., Slaughter, H. J., Kang, H., & Tax, A. (2003). Participating in Philanthropic Activities: Donating Money and Time. *Journal of Consumer Policy, 26*(1), 43-73.

Carman, K. G. (2006). *Social Influences and the Private Provision of Public Goods: Evidence from Charitable Contributions in the Workplace*.Unpublished manuscript.

Carroll, J., McCarthy, S., & Newman, C. (2006). An Econometric Analysis of Charitable Donations in the Republic of Ireland. *The Economic and Social Review, 36*(3), 229-249.

Chang, W.-C. (2005). Religious giving, non-religious giving, and after-life consumption. *Topics in Economic Analysis and Policy, 5*(1).

Chaves, M. (2002). Financing American Religion. *New Directions for Philanthropic Fundraising, 35*, 41-54.

Choe, Y. S., & Jeong, J. (1993). Charitable contributions by low- and middle income taxpayers: further evidence with a new method. *National Tax Journal, 46*(1), 33-39.

Chua, V. C. H., & Wong, C. M. (1999). Tax incentives, individual characteristics and charitable giving in Singapore. *International Journal of Social Economics, 26*(12), 1492-1504.

Cialdini, R. B. (2001). *Influence*. New York: Allyn and Bacon.

Clotfelter, C. T. (1980). Tax Incentives and Charitable Giving: Evidence from a Panel of Taxpayers. *Journal of Public Economics*(13), 319-340.

Comte, A. (1973 [1851]). *System of Positive Polity, Volume 1: Containing the General View of Positivism & Introductory Principles* (J. H. Bridges, Trans.). New York: Burt Franklin.

Daneshvary, N., & Luksetich, W. A. (1997). Income sources and declared charitable tax deductions. *Applied Economics Letters, 4*, 271-274.

Davidson, J. D., & Pyle, R. E. (1994). Passing the Plate in Affluent Churches: Why Some Members Give More Than Others. *Review of Religious Research, 36*(2), 181-196.

Duncan, B. (1999). Modeling Charitable Contributions of Time and Money. *Journal of Public Economics, 72*, 213-242.

Duquette, C. M. (1999). Is Charitable Giving by Nonitemizers Responsive to Tax Incentives? New Evidence. *National Tax Journal, 52*(2), 195-206.

Eaton, D. H. (2001). Charitable Contributions and Tax Price Elasticities for Nonitemizing Taxpayers. *International Advances in Economic Research, 7*(4), 432-442.

Eckel, C. C., & Grossman, P. J. (2003). Rebate versus matching: does how we subsidize charitable contributions matter? *Journal of Public Economics, 87*, 681-701.

Eckel, C. C., & Grossman, P. J. (2004). Giving to Secular Causes by the Religious and Nonreligious: An Experimental Test of the Responsiveness of Giving to Subsidies. *Nonprofit and Voluntary Sector Quarterly, 33*, 271-289.

Eckel, C. C., Grossman, P. J., & Johntson, R. M. (2005). An experimental test of the crowding out hypothesis. *Journal of Public Economics, 89*, 1543-1560.

Eisenberg, N. (2000). Emotion, Regulation, and Moral Development. *Annual Review of Psychology, 51*, 665-697.

Eschholz, S. L., & Van Slyke, D. M. (2002). *New evidence about women and philanthropy: Findings from Metro Atlanta*: United Way of Metropolitan Atlanta's Women's Legacy.

Esser, H. (1996). What Is Wrong with 'Variable Sociology'? *European Sociological Review, 12*(2), 159-166.

Everatt, D., Habib, A., Maharaj, B., & Nyar, A. (2005). Patterns of Giving in South Africa. *Voluntas, 16*(3), 275-291.

Farmer, S. M., & Fedor, D. B. (2001). Changing the focus on volunteering: an investigation of volunteers' multiple contributions to a charitable organization. *Journal of Management*, *27*, 191–211.

Feenberg, D. (1987). Are Tax Price Models Really Identified: The Case of Charitable Giving. *National Tax Journal*, *40*(4), 629-633.

Feldman, N. E. (2007). *Time is Money: Choosing between Charitable Activities. Working paper, Ben-Gurion University, Israel*.Unpublished manuscript.

Feldstein, M., & Clotfelter, C. T. (1976). Tax Incentives and Charitable Contributions in the United States. *Journal of Public Economics, 5*, 1-26.

Feldstein, M., & Taylor, A. (1976). The Income Tax and Charitable Contributions. *Econometrica, 44*(6), 1201-1222.

Forbes, K. F., & Zampelli, E. M. (1997). Religious Giving by Individuals: A Cross Denominational Study. *The American Journal of Economics and Sociology, 56*(1), 17-30.

Frank, B., & Schulze, G. G. (2000). Does Economics Make Citizens Corrupt? *Journal of Economic Behavior and Organization, 43*, 101-113.

Frank, R. H., Gilovich, T., & Regan, D. (1993). Does Studying Economics Inhibit Cooperation? *Journal of Economic Perspectives, 7*(2), 159-171.

Frank, R. H., Gilovich, T., & Regan, D. (1996). Do Economists Make Bad Citizens? *Journal of Economic Perspectives, 10*(1), 187-192.

Frey, B. S., & Meier, S. (2004a). Pro-social Behavior in a Natural Setting. *Journal of Economic Behavior & Organization, 54*(1), 65-88.

Frey, B. S., & Meier, S. (2004b). Social Comparisons and Pro-social Behavior: Testing “Conditional Cooperation” in a Field Experiment. *American Economic Review, 94*(5), 1717-1722.

Frey, B. S., & Meier, S. (2005). Selfish and Indoctrinated Economists? *European Journal of Law and Economics, 19*, 165-171.

GINPS. (2001-2007). *The Giving in the Netherlands Panel Study*. Machine readable datafile. Amsterdam: VU Amsterdam.

Glenday, G., Gupta, A. K., & Pawlak, H. (1986). Tax Incentives for Personal Charitable Contributions. *Review of Economics and Statistics, 68*(4), 688-693.

Goldthorpe, J. H. (2001). Causation, Statistics, and Sociology. *European Sociological Review, 17*(1), 1-20.

Greenwood, D. T. (1993). Price and income elasticities of charitable giving: how should income be measured? *Public Finance Quarterly, 21*(2), 186-209.

Gruber, J. (2004). Pay or Pray? The Impact of Charitable Subsidies on Religious Attendance. *Journal of Public Economics, 88*(12), 2635-2655.

Hardy, S. A., & Carlo, G. (2005). Religiosity and prosocial behaviours in adolescence: the mediating role of prosocial values. *Journal of Moral Education, 34*(2), 231-249.

Hodgkinson, V. A., & Weitzman, M. S. (1996). *Giving and Volunteering in the United States*. Washington: Independent Sector.

Hoffman, E., McCabe, K., & Smith, V. L. (1996). Social Distance and Other-Regarding Behavior in Dictator Games. *American Economic Review, 86*, 653-660.

Hoge, D. R., & Yang, F. (1994). Determinants of Religious Giving in American Denominations: Data from Two Nationwide Surveys. *Review of Religious Research, 36*(2), 123-148.

Houston, D. J. (2006). "Walking the walk" of public service motivation: Public employees and charitable gifts of time, blood, and money. *Journal of Public Administration Research and Theory, 16*(1), 67-86.

Hrung, W. B. (2004). After-Life Consumption and Charitable Giving. *American Journal of Economics and Sociology, 63*(3), 731-745.

Hunter, C. S., Jones, E. B., & Boger, C. (1999). A study of the relationship between alumni giving and selected characteristics of alumni donors of Livingstone College, NC. *Journal of Black STudies, 29*(4), 523-539.

Independent-Sector. (2000). *Childhood Events and Philanthropic Behavior*: Independent Sector.

Jackson, E. F., Bachmeier, M. D., Wood, J. R., & Craft, E. A. (1995). Volunteering and charitable giving: Do religious and associational ties promote helping behavior? *Nonprofit and Voluntary Sector Quarterly 24,* 59-78.

James, R. N. (in press). Charitable Giving and Cognitive Ability. *International Journal of Nonprofit and Voluntary Sector Marketing, online first*.

Jonas, E., Schimel, J., Greenberg, J., & Pyszczynski, T. (2002). The Scrooge Effect: Evidence That Mortality Salience Increases Prosocial Attitudes and Behavior. *Personality and Social Psychology Bulletin, 28*(10), 1342-1353.

Jones, A. M., & Posnett, J. W. (1991a). Charitable Donations by UK Households: Evidence from the Family Expenditure Survey. *Applied Economics, 23*(2), 343-351.

Jones, A. M., & Posnett, J. W. (1991b). The Impact of Tax Deductibility on Charitable Giving by Covenant in the UK. *Economic Journal, 101*(408), 1117-1129.

Keyt, J. C., Yavas, U., & Riecken, G. (2002). Comparing Donor Segments to a Cause-Based Charity: The Case of the American Lung Association. *Journal of Nonprofit & Public Sector Marketing, 10*(2), 117-134.

Kingma, B. (1989). An Accurate Measurement of the Crowd-Out Effect, Income Effect and Price Effect for Charitable Contributions. *Journal of Political Economy*, *97*, 1197-1207.

Knoke, D. (1990). *Organizing for Collective Action*. New York: Aldine de Gruyter.

Landry, C., Lange, A., List, J. A., Price, M. K., & Rupp, N. G. (2006). Toward an Understanding of the Economics of Charity: Evidence from a Field Experiment. *The Quarterly Journal of Economics*, *121*(2), 747-782.

Lankford, R. H., & Wyckoff, J. H. (1991). Modeling Charitable Giving Using a Box-Cox Standard Tobit Model. *The Review of Economics and Statistics*, *73*(3), 460-470.

Lee, B. A., & Farrell, C. R. (2003). Buddy, can you spare a dime? Homelesness, panhandling, and the public. *Urban Affairs Review, 38*(3), 299-324.

Levy, S. R., Freitas, A. L., & Salovey, P. (2002). Construing action abstractly and blurring social distinctions: Implications for perceiving homogeneity among, but also empathizing with and helping, others. *Journal of Personality and Social Psychology, 83*(5), 1224-1238.

List, J. A. (2004). Young, selfish, and male: Field evidence of social preferences. *Economic Journal, 114*(1), 121-149.

Long, J. E. (2000). Omitted-variable bias when using state tax rates to estimate the tax price effect on itemized deductions. *Public Finance Review, 28*(2), 120-133.

Lunn, J., Klay, R., & Douglass, A. (2001). Relationships among giving, church attendance, and religious beliefs: the case of the Presbyterian Church (USA). *Journal for the Scientific Study of Religion, 40*(4), 765-775.

Lyons, M., & Nivison-Smith, I. (2006). Religion and Giving in Australia. *Australian Journal of Social Issues, 41*(4), 419-436.

Lyons, M., & Passey, A. (2005). *Giving Australia: Research on Philanthropy in Australia*. Sydney: University of Technology.

Marr, K. A., Mullin, C. H., & Siegfried, J. J. (2005). Undergraduate financial aid and subsequent alumni giving behavior. *Quarterly Review of Economics and Finance, 45,* 123-143.

Marx, J. D. (2000). Women and Human Services Giving. *Social Work, 45*(1), 27-38.

Matsunaga, Y. (2006). *To give or not to give; to volunteer or not to volunteer; that is the question. Evidence on Japanese philanthropic behavior revealed by the JGS-2005 data set.*Unpublished manuscript.

McClelland, R., & Kokoski, M. F. (1994). Econometric Issues in the Analysis of Charitable Giving. *Public Finance Quarterly, 22*(4), 498-517.

Mesch, D. J., Rooney, P. M., Steinberg, K. S., & Denton, B. (2006). The effects of race, gender, and marital status on giving and volunteering in Indiana. *Nonprofit and Voluntary Sector Quarterly, 35*(4), 565-587.

Midlarsky, E., & Hannah, M. E. (1989). The Generous Elderly: Naturalistic Studies of Donations Across the Life Span. *Psychology and Ageing, 4*(3), 346-351.

Millet, K., & Dewitte, S. (2007). Altruistic behavior as a costly signal of general intelligence. *Journal of Research in Personality, 41,* 316-326.

Monks, J. (2003). Patterns of giving to ones alma mater among young graduates from selective institutions. *Economics of Education Review, 22*, 121-130.

Okten, C., & Osili, U. O. (2004). Contributions in heterogeneous communities: Evidence from Indonesia. *Journal of Population Economics, 17*, 603-626.

Okunade, A. A., & Berl, R. L. (1997). Determinants of charitable giving of business school alumni. *Research in Higher Education, 38*(2), 201-214.

Okunade, A. A., Wunnava, P. V., & Walsh, R. (1994). Charitable giving of alumni: micro-data evidence from a large public university. *American Journal of Economics and Sociology, 53*(1), 73-84.

Olson, D. V. A., & Caddell, D. (1994). Generous Congregations, Generous Givers: Congregational Contexts that Stimulate Individual Giving. *Review of Religious Research, 36*(2), 168-180.

Park, T. K., & Park, S. B. (2004). *An Economic Study on Charitable Giving of Individuals in Korea: Some New Findings from 2002 Survey Data.* Paper presented at the 6th International Conference of the International Society for Third-sector Research, Ryerson University, Toronto, Canada.

Pharoah, C., & Tanner, S. (1997). Trends in Charitable Giving. *Fiscal Studies, 18*(4), 427-433.

PSID-COPPS. (2001-2007). *Center on Philanthropy Panel Study, supplement to the Panel Study of Income Dynamics (PSID)*. [computer file]. Ann Arbour, MI: Institute for Social Research, University of Michigan.

Putnam, R. D. (2000). *Bowling Alone. The collapse and revival of American Community*. New York: Simon & Schuster.

Randoph, W. C. (1995). Dynamic Income, Progressive Taxes, and the Timing of Charitable Contributions. *Journal of Public Economy, 103*(4), 709-738.

Reece, W. S. (1979). Charitable Contributions: New Evidence on Household Behavior. *The American Economic Review, 69*(1), 142-151.

Reece, W. S., & Zieschang, K. D. (1985). Consistent Estimation of the Impact of Tax Deductibility on the Level of Charitable Contributions. *Econometrica, 53*(2), 271-293.

Reed, P. B., & Selbee, L. K. (2001). The Civic Core in Canada: Disproportionality in Charitable Giving, Volunteering, and Civic Participation. *Nonprofit and Voluntary Sector Quarterly, 30*(4), 761-780.

Reed, P. B., & Selbee, L. K. (2002). *Is There a Distinctive Pattern of Values Associated with Giving and Volunteering? The Canadian Case.* Paper presented at the the 32nd ARNOVA conference, Montreal, Canada.

Regnerus, M. D., Smith, C., & Sikkink, D. (1998). Who Gives to the Poor? The Influence of Religious Tradition and Political Location on the Personal Generosity of Americans Toward the Poor. *Journal for the Scientific Study of Religion, 37*(3), 481-493.

Rooney, P. M., Mesch, D. J., Chin, W., & Steinberg, K. S. (2005). The Effect of Race, Gender, and Survey Methodologies on Giving in the US. *Econometrics Letters, 86*(2), 173-180.

Rooney, P. M., Steinberg, K., & Schervish, P. G. (2001). A Methodological Comparison of Giving Surveys: Indiana As a Test Case. *Nonprofit and Voluntary Sector Quarterly, 30*(3), 551-568.

Schervish, P. G., & Havens, J. J. (1997). Social participation and charitable giving: a multivariate analysis. *Voluntas, 8*(3), 235-260.

Schiff, J. (1990). *Charitable Giving and Government Policy: An Economic Analysis* (Vol. 102). New York: Greenwood Press.

Schlegelmilch, B. B., Diamantopoulos, A., & Love, A. (1997). Characteristics affecting charitable donations: empirical evidence from Britain. *Journal of Marketing Practice: Applied Marketing Science, 3*(1), 14-28.

Schuyt, T. N. M., Smit, J., & Bekkers, R. (2004, November 2004). *Constructing a Philanthropy-scale: Social Responsibility and Philanthropy*. Paper presented at the 33d Arnova Conference, Los Angeles.

Simmons, W. O., & Emanuele, R. (2004). Does government spending crowd out donations of time and money? *Public Finance Review, 32*(5), 498-511.

Smith, A. (1976 [1759]). *The Theory of Moral Sentiments*. Oxford: Clarendon Press.

Smith, C. L., & Ehrenberg, R. G. (2003). The Sources and Uses of Annual Giving at Private Research Universtities. *New Directions for Institutional Research, 119*(Fall), 67-79.

Sokolowski, S. W. (1996). Show me the Way to the Next Worthy Deed: Towards a Microstructural Theory of Volunteering and Giving. *Voluntas, 7*(3), 259-278.

Srnka, K. J., Grohs, R., & Eckler, I. (2003). Increasing Fundraising Efficacy by Segmenting Donors. *Australasian Marketing Journal, 11*(1), 70-86.

Sullivan, D. H. (1985). Simultaneous Determination of Church Contributions and Church Attendance. *Economic Inquiry, 23*(2), 309-320.

Tiehen, L. (2001). Tax policy and charitable contributions of money. *National Tax Journal, 54*(4), 707-723.

Todd, S. J., & Lawson, R. W. (1999). Towards a better understanding of the financial donor: An examination of donor behavior in terms of value structure and demographics. *International Journal of Nonprofit and Voluntary Sector Marketing, 4*(3), 235-244.

Van Slyke, D. M., & Brooks, A. C. (2005). Why Do People Give? New Evidence and Strategies for Nonprofit Managers. *American Review of Public Administration, 35*(3), 199-222.

Weerts, D. J., & Ronca, J. M. (2007). Profiles of Supportive Alumni: Donors, Volunteers, and Those Who "Do It All". *International Journal of Educational Advancement, 7*(1), 20-34.

Wiepking, P. (2006, November 16-18, 2006). *Birds of a Feather Flock Together. Why People Donate to Specific Charitable Organizations.* Paper presented at the the 35th annual Arnova conference, Chicago.

Wiepking, P. (2010). Democrats support international relief and the upper class donates to art? How opportunity, incentives and confidence affect donations to different types of charitable organizations. *Social Science Research,* http://dx.doi.org/10.1016/j.ssresearch.2010.06.005.

Wiepking, P., & Maas, I. (2009a). Resources that Make You Generous: Effects of Social and Human Resources on Charitable Giving. *Social Forces, 86*(4), 1973-1996.

Wiepking, P., & Maas, I. (2009b). Resources that Make You Generous: Effects of Social and Human Resources on Charitable Giving. *Social Forces, 87*(4), 1973-1996.

Wilhelm, M. O. (2006). New data on charitable giving in the PSID. *Economics Letters, 92,* 26-31.

Wilhelm, M. O., Brown, E., Rooney, P. M., & Steinberg, R. S. (2008). The Intergenerational Transmission of Generosity. *Journal of Public Economics, 92*, 2146-2156.

Wilhelm, M. O., Rooney, P. M., & Tempel, E. R. (2007). Changes in Religious Giving Reflect Changes in Involvement: Age and Cohort Effects in Religious Giving, Secular Giving, and Attendance. *Journal for the Scientific Study of Religion, 46*(2), 217-232.

Wu, S.-Y., Huang, J.-T., & Kao, A.-P. (2004). An Analysis of the Peer Effects in Charitable Giving: The Case of Taiwan. *Journal of Family and Economic Issues, 25*(4), 483-505.

Wunnava, P. V., & Lauze, M. A. (2001). Alumni giving at a small liberal arts college: evidence from consistent and occasional donors. *Economics of Education Review, 20,* 533-543.

Wuthnow, R. (1991). *Acts of Compassion: Caring for Others and Helping Ourselves*. Princeton: Princeton University Press.

Yamauchi, N., & Yokoyama, S. (2005). *What Determines Individual Giving and Volunteering in Japan? An Econometric Analysis Using the 2002 National Survey Data.* Paper presented at the 34th Arnova Conference, Washington, DC.

Yavas, U., Riecken, G., & Parameswaran, R. (1981). Personality, Organization-Specific Attitude, and Socio-economic Correlates of Charity Giving Behavior. *Journal of the Academy of Marketing Science*, *9*(1), 52-65.

Yen, S. T. (2002). An Econometric Analysis of Household Donations in the USA. *Applied Economics Letters, 9*, 837-841.

Zaleski, P. A., & Zech, C. E. (1992). Determinants of Contributions to Religious Organizations. Free Riding and Other Factors. *American Journal of Economics and Sociology, 51*(4), 459-472.

Zaleski, P. A., & Zech, C. E. (1994). Economic and Attitudinal Factors in Catholic and Protestant Religious Giving. *Review of Religious Research*, *36*(2), 158-167.

Zaleski, P. A., Zech, C. E., & Hoge, D. R. (1994). Determinants of Religious Giving in Urban Presbyterian Congregations. *Review of Religious Research, 36*(2), 197-206.

Zech, C. E. (2000). Generational differences in the Determinants of Religious Giving. *Review of Religious Research, 41*(4), 545-559.