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Religiosity and Solidarity

Dimensions and Relationships Disentangled and Tested

Reitsma, J.
Religiosity and Solidarity – dimensions and relationships disentangled and tested

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Religiosity and Solidarity
Dimensions and relationships disentangled and tested

Religiositeit en Solidariteit
Dimensies en relaties ontvlochten en getoetst

Een wetenschappelijke proeve op het gebied van de Sociale Wetenschappen

PROEFSCHRIFT

ter verkrijging van de graad van doctor
aan de Radboud Universiteit Nijmegen
op gezag van de Rector Magnificus prof. mr. S.C.J.J. Kortmann
volgens het bestluit van het College van Decanen
in het openbaar te verdedigen op vrijdag 19 oktober 2007
om 10:30 uur precies

door

Jan Reitsma
geboren op 3 augustus 1979 te Nunspeet

Promotores:	Prof. dr. P.L.H. Scheepers Prof. dr. J.A.P.J. Janssen
Beoordelingscommissie:	Prof. dr. R. Eisinga Prof. dr. P.A.M. van Lange (Vrije Universiteit) Dr. V. Saroglou (Université catholique de Louvain)

Voorwoord
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Jan Reitsma
Utrecht, Augustus 2007

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1 Introduction

1.1 Background and research question

All religions stress the importance of solidarity and brotherhood of man. The general thought can be summarised as the golden rule: "Do unto others as you would have others do unto you" (see Batson, Schoenrade, & Ventis, 1993, p. 331-332; Schroeder, Penner, Dovidio, & Piliavin, 1995, p. 7-10). Within the Christian tradition, which is the most prominent in Europe, Jesus' explanation of the principle 'love your neighbour as yourself', as expressed in the famous parable of the 'Good Samaritan' (Luke 10, 25-37), is a typical example of stressing benevolent behaviour. Islam, the second largest religion in Europe, proclaims the religious duty to support the poor (the *zakāh* and *sadaqah*) as one of its five obligations (Farah, 2000). These religious teachings provide believers with high moral standards. However, believers do not necessarily conform to these moral standards (Hood, Spilka, Hunsberger, & Gorsuch, 1996). In addition, religious people may have preferences for certain kinds (e.g., volunteering or personal care) or targets (e.g., religious or non-religious) of solidarity. Moreover, different aspects of religiosity may play a role with regard to the different kinds and targets of solidarity. Therefore, our research question reads: *to what extent are different aspects of religiosity related to different kinds and targets of solidarity?*

This chapter will provide an introduction to this research question. First of all, the theoretical perspective on relations between religiosity and solidarity will be discussed while introducing the different dimensions of religiosity. Furthermore, different kinds of solidarity will be described and their importance in relation to dimensions of religiosity will be discussed. Next, we will introduce different motivations for prosocial behaviour and their link with dimensions of religiosity. Finally, the plan of the book is presented by describing the contents of the following chapters.

1.2 Dimensions of religiosity

1.2.1 Glock's distinction: collective versus individual aspects

Durkheim ([1912] 1995) stated that social solidarity and cohesiveness are promoted by religion and for this reason he regarded religion as necessary for the proper function of moral life. Religions provide norms, like concern for others, and reinforce these norms by collective rituals. Participation in these rituals is considered an indicator of an individual's integration into the religious community. The stronger people are integrated, the more they will comply with the norms of the group (Durkheim, 1897; Stark, 1994; Ultee, Arts, & Flap, 2001). From another perspective, prosocial behaviour is more attractive for people who are integrated in

a social network that rewards such behaviour (Bekkers, 2002b; Deutsch & Lamberti, 1986). Following both propositions, the collective aspect of religiosity is important with regard to prosocial behaviour.

However, church membership and attendance have declined substantially over the last decades, especially in Europe (see Norris & Inglehart, 2004; Te Grotenhuis & Scheepers, 2001). Nonetheless, people donate and volunteer often, even in a highly secularised country like the Netherlands (Bekkers, 2004; Dekker, 1999; Schuyt, 2003). The still high contributions to solidarity in secularised countries make Durkheim's claim that integration in a religious network is central to solidarity at least questionable. Nonetheless, indicators of integration in a religious network, like church membership or church attendance, are indeed still found to be important with regard to charitable donations (Barry, 1996; Bekkers, 2002a, 2003; Flanagan, 1991; Regnerus, Smith, & Sikkink, 1998; Scheepers & Te Grotenhuis, 2005) and volunteering (Bekkers, 2001, 2003, 2004; Bowen, 1999; De Hart, 1999; Ruiter & De Graaf, 2006).

Although important, church membership and attendance are not the most popular aspects of religiosity. Davie (1990a; 1990b; 1994; 2002) argued that although religious affiliation and attendance have declined, religious beliefs have remained relatively popular in Europe. This situation of upholding religious beliefs with marginal or no institutional involvement is characterised by Davie as believing without belonging. Although Davie's claims have been heavily disputed (see Aarts, Need, Te Grotenhuis, & De Graaf, 2006; Bruce, 2002; De Graaf & Need, 2000; see Gill, Hadaway, & Marler, 1998; Voas & Crockett, 2005), all research results point out that believing is much more popular than belonging. With regard to solidarity, individual religious beliefs and practices provide an alternative explanation for the previously found relationships between religious belonging and solidarity. Therefore, it is important that investigations on the relationship between religiosity and solidarity do not only incorporate church membership and church attendance, but also individual religious beliefs and practices.

In addition to religious belonging or public practice as indicated by church membership and church attendance, Glock and Stark (Glock, 1962; Glock & Stark, 1965, 1966; Stark & Glock, 1968) distinguished private practice, belief, experience and consequences.[1] Private practice points to prayer and meditation. Belief refers to religious views such as particularism and dogmatism. Experience stands for religious emotions and revelations. Consequences refer to the importance of religion in people's daily lives.

Several previous studies did include some of Glock's dimensions and they turned out to be relevant with regard to certain kinds of solidarity. Importance of religious faith is positively related to charitable donations (Bekkers, 2002a, 2003; Regnerus et al., 1998) and frequency of prayer and dogmatic convictions are

---

1 Glock regarded knowledge about religion also as a dimension of religiosity. However, knowledge about religion is not an aspect of religiosity per se. One can know a lot about religion without being religious. For this reason, the dimension knowledge about religion is generally not used in empirical research.

positively related to volunteering (De Hart, 1999, p. 225; Lam, 2002). However, a systematic analysis of Glock's dimensions of religiosity in relation to solidarity is still lacking.

1.2.2 Intrinsic, extrinsic and quest: a motivational perspective

Another important distinction of individual religiosity is made by Allport (1950; 1959; Allport & Ross, 1967). Allport used the terms intrinsic and extrinsic to describe two religious motivations. People with an intrinsic motivation 'live' their religion. For them, religion is of the greatest importance in their lives; all other things are brought into harmony with it. People with an extrinsic motivation 'use' their religion for their own ends (e.g., for security or social activities).

Batson (1971; Batson & Ventis, 1982) argued that there exists a third religious orientation which he called 'quest'. The quest dimension covers three related aspects of religiosity: it is integrative in the sense that it encourages people to face complex problems – for instance on ethical issues - without reducing their complexity; it involves readiness to doubt and self-criticism; and there is an emphasis on tentativeness and an openness to change in religious belief. Quest religiosity is characterised by taking existential questions seriously, a critical view on clear-cut solutions, and an open-ended search for tentative answers.

While providing an overview of research on intrinsic, extrinsic and quest religiosity in relation to both prejudice and prosocial behaviour, Batson, Schoenrade and Ventis (1993, p. 364) conclude: "The quest dimension is related to reduced intolerance and increased sensitivity to the needs of others, whereas the intrinsic, end dimension is related to the appearance of these social benefits." Moreover, Batson observes that the kind of solidarity is important with regard to relations of dimensions of religiosity and prosocial behaviour.

1.3 Different kinds of solidarity

The ways to provide solidarity are numerous: donating money to charity, doing voluntary work, providing practical help, personal care or advice, etc. These different ways of providing solidarity have certain general characteristics that seem important for a better insight into the nature of the differences between the various forms of behaviour. Pearce and Amato (1980) developed a cognitive map of helping situations. Helping situations differ in that they are *planned and formal* (e.g., voluntary work) or *unplanned and informal* (e.g., telling someone that he lost his wallet). Helping situations can also differ in whether help involves *indirect* assistance (e.g. donating money to charity) or *direct* help for the person in need (e.g., personal care). Finally, the *seriousness* of the problem can also differ (e.g., giving first aid versus lending a pen).

Especially the distinction between formal and informal kinds of solidarity seems to be important with regard to the relations between dimensions of religiosity and solidarity. Previous research on formal helping behaviours such as volunteering and donating to charity indeed showed strong relations between religiosity and self-reported formal solidarity (Barry, 1996; Bekkers, 2001, 2002a, 2003, 2004; Bowen, 1999; De Hart, 1999; Flanagan, 1991; Regnerus et al., 1998; Ruiter & De Graaf, 2006; Scheepers & Te Grotenhuis, 2005). However, many experiments on informal helping have not found a relationship between religiosity and helping (Annis, 1975, 1976; see Batson et al., 1993; Darley & Batson, 1973; Eckel & Grossman, 2004; Forbes, Te Vault, & Gromoll, 1971; McKenna, 1976).

Pearce and Amato (1980) provided insight into different kinds of behaviour. However, they neglected an important characteristic of behaviours in general: the *target* of the behaviour (cf. Eagly & Chaiken, 1993). Some people may help members of their in-group, but refrain from helping members of out-groups. This means that one way to specify different types of solidarity is by the specification of the targets of these behaviours (e.g., religious or non-religious, relatives or strangers).

Characteristics of the target of solidarity do matter with regard to the relations between dimensions of religiosity and prosocial behaviour, as has been shown in previous research. A recent study found that religiosity is related to helping close targets such as family and friends, but found no relation of religiosity with helping unknown or unfamiliar targets (Saroglou, Pichon, Trompette, Verschueren, & Dernelle, 2005). Moreover, the religiosity of the target may be an important criterion for religious actors in their decisions whether or not to provide help. Yinon and Sharon (1985) showed that the similarity in religiosity between potential helper, solicitor, and recipient is important with regard to donating behaviour. Not only religiosity, but also similarity in value patterns derived from religious convictions (for instance on homosexuality), is found to be important. Intrinsic religiosity is negatively related to helping when the target has conflicting values while quest religiosity is only negatively related to helping when it would induce value-violating behaviour of the target. Therefore, quest religiosity has been claimed to be a source of universal compassion (Batson, Eidelman, Higley, & Russell, 2001; Batson, Floyd, Meyer, & Winner, 1999). However, Goldfried and Miner (2002) showed that prosocial behaviour induced by quest religiosity is also limited, since quest religious people are less willing to help religious fundamentalists than religiously neutral targets.

1.4 Prosocial motivations

Prosocial behaviour by religious people may be encouraged by different motivations. Religious teachings provide believers with high moral standards (see Batson et al., 1993, p. 331-332; Schroeder et al., 1995, p. 7-10). This suggests that religiously induced prosocial behaviour is not acted out of egoistic motivation. Are

religious people really serving higher goals, or is their prosocial behaviour ultimately born out of self-interest?

Batson (1995) distinguished four different possible motivations for prosocial behaviour: egoism, altruism, collectivism and principlism. Egoism motivates people to benefit others as a means to self-benefit. Benefits people aim at may be either material rewards (e.g. when work for a charitable institution is paid), social rewards (e.g., people get praise and improved status when their voluntary contribution is visible to their friends) or self-rewards (e.g., enhancing or maintaining mood by being proud of their helping behaviour (see Isen, 1970; Isen & Levin, 1972; Manucia, Baumann, & Cialdini, 1984)). In contrast to egoism, altruism motivates people to benefit others as an end in itself. Although altruistically motivated prosocial behaviour may have self-benefit as a side effect, altruism does not aim for this self-benefit but aims to benefit others. Feelings of empathy for the target of help seem to evoke such altruistic motivations (e.g., imagining the needs of someone who asks for help (see Batson, 1991)). Next to self-benefit and other-benefit, there may be other motivations that cannot be reduced to pure egoism or altruism. Collectivism motivates people to benefit a group (e.g., the local community). The prosocial behaviour that is motivated by collectivism is not aimed at self-benefit, neither at benefiting specific others, but at benefiting a certain group as a whole. Finally, the motivation behind a prosocial act may be principlism: benefiting others to uphold a moral principle (e.g., justice). Principlism does not care about self-interest, the interests of others or of certain groups, but is based on moral principles that benefit humanity as a whole.

In particular the altruistic and egoistic motivations behind religiously induced prosocial behaviour have dominated empirical research on prosocial motivations and religiosity. Darley and Batson (1973) designed an experiment modelled on the parable of the Good Samaritan. They found that no dimension of religiosity turned out to be related to providing help. However, intrinsic religiosity turned out to be related to much more persistent helping efforts than quest religiosity. Even when the 'victim' explicitly stated that he did not need any help, intrinsic religious people still insisted on helping, while quest religious people adapted their behaviour to the expressed needs. Darley and Batson interpreted this remarkable finding as an indication that help induced by intrinsic religiosity is motivated by the person's own need to be helpful (egoism), while help induced by quest religiosity is motivated by empathic concern for the needs of the target (altruism). Several experimental studies confirmed the finding that intrinsic religiosity is related to egoistic motivations for prosocial behaviour, while quest religiosity is related to altruistic motivations (Batson, 1976; Batson & Flory, 1990; Batson & Gray, 1981; Batson et al., 1989). However, collectivistic and principlistic motivations for prosocial behaviour, as alternatives for egoism and altruism, have not yet been systematically investigated in relation to dimensions of religiosity.

1.5 Plan of the book

This thesis aims to contribute to the understanding of the relationships between dimensions of religiosity and different kinds of solidarity. Each chapter focuses on a specific part of the field. The thesis starts with international comparisons of formal kinds of prosocial behaviour. Chapters 2 and 3 investigate charitable donations and volunteering respectively. Next, Chapter 4 analyses psychometric properties of religiosity measures, which will be used in subsequent chapters. Chapter 5 investigates the relationships between aspects of religiosity and kinds of informal and direct helping behaviour towards different targets in the Netherlands. Chapter 6 provides an experimental test of the moderating influence of priming with prosocial motivations on the relationships between dimensions of religiosity and cooperation on request. Finally, Chapter 7 presents the general conclusion and discussion of this thesis.

1.5.1 Chapter 2: religiosity and charity

Chapter 2 deals with the relations of dimensions of religiosity with charitable donations in a European perspective. Research to date has shown that people who often attend religious services donate significantly more money than less frequent visitors (Barry, 1996; Bekkers, 2002a, 2003; Flanagan, 1991; Regnerus et al., 1998; Scheepers & Te Grotenhuis, 2005). Moreover, religious people also donate more than average to secular funds (Bekkers, 2002a, 2003). But which particular aspects of religiosity are responsible for this behaviour? To what extent does the network of the individual and personal attitudes affect willingness to donate? Are effects similar across countries or do they depend on country characteristics?

This chapter improves on previous research in several ways. First, we investigate different dimensions of religiosity including religious beliefs and experiences, which have not been investigated so systematically in relation to charitable donations. Second, we thoroughly control for competing explanations of charitable donations. Third, we use a standardised request for generosity rather than self-reported donations which are influenced by many factors beyond the researcher's control, such as number of times people are asked for a contribution (Bekkers, 2003), or varying characteristics of the solicitor (Yinon & Sharon, 1985). Fourth, we provide cross-national comparisons of the relations between dimensions of religiosity and willingness to donate.

1.5.2 Chapter 3: religiosity and volunteering

Chapter 3 studies the relations of dimensions of religiosity with volunteering for religious and secular organisations in a European perspective. Previous research showed that religious people do more voluntary work (Bekkers, 2001, 2004; Bowen, 1999; De Hart, 1999; Home Office, 2004; Lam, 2002; O'Beirne, 2004; Ruiter & De Graaf, 2006). Several investigators made a distinction between

religious and secular volunteering and found that religiosity has an effect on both kinds of volunteering (Bekkers, 2003; Bowen, 1999; De Hart, 1999; Park & Smith, 2000; Ruiter & De Graaf, 2006). However, what aspects of religiosity induce such behaviour? Do religious people volunteer more because they are integrated in a religious denomination or because of their individual beliefs? Do effects of aspects of religiosity differ between religious and secular volunteering? Are effects of religiosity on volunteering comparable across different countries?

Our analysis will improve on previous research on three important points. First, we investigate different dimensions of religiosity and analyse the relative importance of collective and individual aspects of religiosity with regard to different kinds of volunteering. Second, we distinguish between volunteering for religious (not only churches, but all faith-based organisations) and secular organisations. Third, we provide cross-national comparisons of the relations between different dimensions of religiosity and religious and secular volunteering.

1.5.3 Chapter 4: convergent and discriminant validity of religiosity measures

Chapter 4 considers the convergent and discriminant validity of religiosity measures among church members and non-members. The traditional measurement instruments for intrinsic, extrinsic and quest religious orientations (e.g., Batson & Schoenrade, 1991a; Batson & Schoenrade, 1991b; Gorsuch & Venable, 1983) have been criticised because they are considered to be only applicable to religious people (Donahue, 1985; Kirkpatrick, 1989; Maltby, McCollam, & Millar, 1994). To enable the enquiry into non-religious people, Maltby suggested adaptations to the measurements (Maltby & Day, 1998; Maltby & Lewis, 1996). A further prerequisite to the comparison of religious and non-religious people is that the measurement instruments have comparable psychometric characteristics for both religious and non-religious people. This study provides a thorough analysis of the comparability of intrinsic, extrinsic and quest religious orientations as well as Glock's dimensions of religiosity for both church-members and non-members in the Netherlands.

This chapter provides several contributions relative to previous research. Most importantly, we investigate the usefulness of the distinction of intrinsic, extrinsic and quest religiosity in religiously heterogeneous samples consisting of both church members and non-members. Furthermore, we analyse a representative sample from the Netherlands, while most previous investigations used non-representative samples consisting of religious students, seminarians, and members of specific churches. We allow correlations between factors and measurement error on items in our analyses, while previous analyses often assumed zero correlations between factors and no measurement error. Finally, we investigate how intrinsic, extrinsic and quest religious orientations relate to the practice, belief, experience, and consequences dimensions distinguished by Glock.

1.5.4 Chapter 5: religiosity and informal and direct helping

Chapter 5 investigates the relations between dimensions of religiosity and different kinds of informal and direct helping towards different targets. Previous survey research on religiosity and solidarity focused mainly on the planned, formal and indirect kinds of prosocial behaviour such as donating money to charity and volunteering (Barry, 1996; Bekkers, 2001, 2002a, 2003, 2004; Bowen, 1999; De Hart, 1999; Flanagan, 1991; Regnerus et al., 1998; Ruiter & De Graaf, 2006; Scheepers & Te Grotenhuis, 2005). In this chapter we set out to investigate whether and to what extent dimensions of religiosity are related to a) practical work, personal care, loaning something and/or advisory talk, and b) helping specific targets: partner, family, friends, neighbours and colleagues.

This chapter provides a number of contributions to the existing research. While previous survey research on religiosity and solidarity mainly focused on formal solidarity, this chapter extends the debate to informal and direct helping behaviour. It distinguishes different kinds of helping behaviour towards different targets. Moreover, target characteristics (e.g., religiosity and previously having provided help) are taken into account. Furthermore, this chapter takes into consideration value orientations, personality characteristics, time constraints, and background characteristics as alternative explanations for the relationships between religiosity and solidarity.

1.5.5 Chapter 6: religiosity, prosocial motivation, and cooperation on request

Chapter 6 provides an experimental test of religiosity and solidarity while including a test for the influence of prosocial motivations. Previous experimental tests have not found relations between religiosity and prosocial behaviour (Annis, 1975, 1976; see Batson et al., 1993; Darley & Batson, 1973; Eckel & Grossman, 2004; Forbes et al., 1971; McKenna, 1976). However, several studies indicated that intrinsic religiosity is related to egoistic motivations for prosocial behaviour, while quest religiosity is related to altruistic motivations (Batson, 1976; Batson & Flory, 1990; Batson & Gray, 1981; Batson et al., 1989). However, collectivistic and principlistic motivations for prosocial behaviour, as alternatives for egoism and altruism (see Batson, 1995), have not yet been systematically investigated in relation to dimensions of religiosity. This chapter sets out to investigate the moderating influence of egoistic, altruistic, collectivistic and principlistic primes on the relations between religious orientations and planned helping on a request from a relatively unfamiliar target.

This chapter improves on previous experimental research in several ways. First, it tests for collectivistic and principlistic – in addition to the usual egoistic and altruistic – motivations for prosocial behaviour in relation to religiosity. Second, it uses a national survey sample in its experimental design. This provides the

advantage of a relatively representative sample and extensive possibilities to control for alternative explanations for relations between dimensions of religiosity and prosocial behaviour, while it avoids (unknown levels of) social desirability by using behavioural measures.

1.5.6 Chapter 7: general conclusion and discussion

Chapter 7 gives an overview of the conclusions from the research and discusses possibilities for future investigation.

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2 Dimensions of religiosity and charitable donations in Europe*

Abstract
The relation between religiosity and charitable donations has frequently been the subject of research. We analysed the effects of dimensions of individual religiosity (Glock & Stark, 1966) on people's intention to donate to the poorest countries. We tested for cross-national effect differences in representative samples of seven European countries. Results turned out to be relatively robust across countries. We found that church attendance, dogmatic conviction and a consequential religious attitude affect intentional donations positively. The religiosity of one's network does have an additional effect. Partner's church attendance is positively related to willingness to donate. However, people whose friends are mainly of the same religious opinions are less willing to donate.

2.1 Introduction

All world religions stress the importance of benevolence with regard to people in need (see Batson et al., 1993, p. 331-332; Schroeder et al., 1995, p. 7-10). Within the Christian tradition, which is the most prominent in Europe, Jesus' explanation of the principle 'love your neighbour as yourself', as expressed in the famous parable of the 'Good Samaritan' (Luke 10, 25-37), is a typical example of stressing benevolent behaviour.[2] Islam, the second largest religion in Europe, proclaims the religious duty to support the poor (the *zakāh* and *sadaqah*) as one of its five obligations (Farah, 2000). One of the most common ways to practise benevolence is to donate money. The question has been raised frequently whether there is actually a positive relation between the religiosity of individuals and their donations. Research to date has shown that people who often attend religious services donate

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2 To answer the question, "Who is my neighbour?", Jesus told a story about a man who fell into the hands of robbers and was left half dead. Two religious functionaries, a priest and a Levite, found him on their way, but did not help him. However, a Samaritan (one of the outcast) bound the wounds and brought the victim to an inn. Jesus then reversed the question: who of the three was a neighbour to the victim? The answer is obvious, and Jesus instructed to act likewise.

significantly more money than less frequent visitors (Barry, 1996; Bekkers, 2002a, 2003; Flanagan, 1991; Regnerus et al., 1998; Scheepers & Te Grotenhuis, 2005).

However, do religious people also donate more than average to non-religious targets, such as the poor in Third World countries? Previous research has shown that religious people indeed donate a large amount to secular funds (Bekkers, 2002a, 2003). But then again, which particular aspects of religiosity are responsible for this behaviour? To what extent does the network of the individual and personal attitudes affect willingness to donate? Are such effects also robust across countries, or do they depend on country characteristics? In our investigation of these issues, we will improve upon previous research in four ways.

First, religiosity is a multifaceted phenomenon. The influential studies of Glock and Stark (Glock, 1962; Glock & Stark, 1965, 1966; Stark & Glock, 1968) distinguished different dimensions of religiosity: *practice, belief, experience* and *consequences.*[3] Previous research with regard to intentional donations includes only some of these dimensions. Much research has made use of measures of practice (e.g., denomination and church attendance) and some also of consequences (e.g., importance of religious faith (Bekkers, 2002a, 2003; Regnerus et al., 1998)), but has neglected the other dimensions of religiosity like religious beliefs and experiences. In this research, we will investigate the decisive impact of all these dimensions of religiosity on intentional donations. By doing this, we will get more detailed information on which aspects of religiosity are important with regard to determining charity.

Second, the religiosity of the individual is related to other determinants of generosity to charity. In our investigation, we include several of those factors that have not been investigated before. We will estimate the effects of the religiosity of the network and of personal attitudes with regard to collectivism *versus* individualism (e.g., income inequality, norm-conformity, and free-riding) as well as the effects of interest in society on intentional donations. In addition, we will control our estimates for background characteristics that have been found to be relevant in previous research.

Third, charity is usually measured with a self-report of the amount of money donated or the frequency of donations within a certain time frame (Bekkers, 2002a, 2003; Regnerus et al., 1998; Scheepers & Te Grotenhuis, 2005). The actual frequency and amount of money donated by people is influenced by many factors beyond the researcher's control (e.g., the number of times people are asked for a contribution (Bekkers, 2003), the way in which this is done, and by whom (Yinon & Sharon, 1985)). An experiment by Eckel and Grossman (2004) suggests that religious people do not donate more to secular charities than non-religious persons when they are in the same situation. To avoid overestimation of the impact of religiosity on money donations due to frequency and characteristics of requests, we

[3] Glock regarded knowledge about religion also as a dimension of religiosity. However, knowledge about religion is not an aspect of religiosity per se. One can know a lot about religion without being religious. For this reason the dimension of knowledge about religion is generally not used in empirical research.

asked people whether and how large a percentage of their income they would donate for a specific goal, i.e. the poorest countries.[4]

Fourth, previous research has predominantly been carried out with samples from North America (Regnerus et al., 1998) and the Netherlands (Bekkers, 2002a, 2003). Generalisation on the basis of these national samples is difficult if not impossible, since the influence of specific characteristics of the country is not precisely known. Only recently, Scheepers and Te Grotenhuis (2005) investigated a cross-national European sample. However, they operationalized religiosity only as church affiliation and attendance. In this research, we will investigate whether the impact of aspects of religiosity on intentional donations with improved – yet comparable – measurements differs across countries. Moreover, this provides us with possibilities to test previously developed theoretical propositions more thoroughly than before.

2.1.1 Norms, integration and dimensions of religiosity

Why would people be willing to donate at all? At first glance, donating money seems just a loss. There are two general kinds of motivations which explain why people nonetheless may be willing to donate to certain targets. The first motivation is egoism: people try to gain advantage through their behaviour (e.g., reciprocity credit, esteem, or enhanced self-image). The other motivations are characterized by concern for a certain goal outside the actor: benefiting others to benefit one's own group (collectivism); concern for the well-being of recipients (altruism); or a moral norm such as justice (principlism, see Batson, 1995).

Religions provide norms - like collectivism, altruism and principlism - and reinforce these norms by collective rituals (Durkheim, [1912] 1995). Participation in these rituals is an indicator of an individual's integration into the religious community. The more strongly people are integrated, the more they will comply with the norms of the group (Durkheim, 1897; Stark, 1994). Following Durkheim's ideas, religiosity is important in two ways with regard to charity: a) beliefs and corresponding norms, and b) integration into a group that reinforces these norms.

Several dimensions of religiosity distinguished by Glock and Stark (Glock, 1962; 1965; 1966; Stark & Glock, 1968) are indicators of norms or integration. Glock and Stark distinguished the dimensions *practice, belief, experience* and *consequences* of religiosity. *Practice* points to public practice – church membership and church attendance – and private practice – prayer and meditation. *Belief* refers to religious views such as *particularism* and *dogmatism*. *Experience* stands for religious emotions

[4] A criticism of a measurement of intentions could be that it is 'cheap talk'. However, one should consider that self-reported behaviour is also subject to social desirability. Moreover, it is unclear whether the temptation for social desirability is higher with regard to intentions compared to self-report measures. A recent meta-analysis of the theory of planned behaviour (TPB) by Armitage and Conner (2001) showed that behavioural intentions are substantially correlated with prospective measures of actual behaviour – on average .47. Although intentions are certainly subject to social desirability, they are also strong predictors of actual behaviour.

and revelations. *Consequences* refers to the importance of religion in people's daily lives.

Norms are indicated by several dimensions of religiosity. The dimension of *consequences* is an indicator of adhering to norms with regard to benevolence since benevolence is one of the universal religious values (see Batson et al., 1993, p. 331-332; Schroeder et al., 1995, p. 7-10). Hence, to practise your religion means to some extent to practise benevolence. Donating money to charity is a clear and easy form of benevolence. Therefore, we hypothesize a positive relation between the consequential dimension and the willingness to donate money (*H1*). *Particularistic beliefs* are likely to be related to norms with regard to targets to be benefited. People with particularistic beliefs are convinced that they are adherents of the one and only true religion. They are likely to be somewhat reserved with regard to donations to secular funds, since it may not be guaranteed that their money will be used in the one and only correct way. Hence, we expect that particularism has a negative effect on intentional donations to secular charity funds (*H2*).

Integration into a religious network is indicated by *public practice*. People who are members of a church are more integrated than those who are not affiliated. Moreover, the effect of affiliation may depend on the type of denomination. According to Durkheim (1897), Catholics were more integrated into their intermediary group than Protestants and were therefore more likely to conform to the norms. When this still holds, Catholics should follow the norm with regard to intentional donations more than Protestants (*H3a*). [5] A contradictory hypothesis can be derived from Weber ([1930] 1993), who argued, with reference to Protestant charitable organisations, that Protestants are more rationalised. Donating money to a charity fund is a highly rationalized way of benevolence since the fund does all the work for the donor. On the basis of this theory, one would expect that Protestants are more willing to donate than Catholics (*H3b*). Church attendance is also an indicator of integration in one's denomination. People who are more integrated are more likely to conform to the norms of their group (Durkheim, 1897). We therefore expect a positive relation between church attendance and intentional donations (*H4*).

When the hypothesized effects of norms and integration are taken into account, other aspects of religiosity are not likely to be related to intentional donations. Private practices, like prayer, are individual rituals and as such may not be considered to be a direct indicator for integration. Although people may pray for the poor, this is not necessarily the case. Usually, people pray for their own ability to cope with discomfort in their environment (Janssen, Prins, Van der Lans, & Baerveldt, 2000). Hence, frequency of prayer is also not an indicator for norms with regard to benevolence. Therefore, we expect that there is no effect of frequency of prayer on intentional donations. Dogmatic beliefs about Jesus Christ are only very indirectly related to norms with regard to benevolence and they are

[5] Greeley (1989) found that Catholics are still more integrated in their intermediary group than Protestants.

also not very indicative for integration in a religious community. We therefore expect that such dogmatic convictions do not have an effect on willingness to donate. A religious *experience* is ultimately the experience of the solitary individual in relation to whatever he or she may consider the divine (James, [1902] 1985). Individual experiences are not indicative for integration, neither has experiencing something divine anything to do with norms with regard to benevolence. We therefore expect that people with such experiences are not substantially more or less generous than other people.

2.1.2 Network and attitudes

Analogous to the concepts of integration and norms derived from Durkheim (1897), we propose network characteristics and personal attitudes as alternative measures for effects of dimensions of religiosity.

The *network* of people is important since donating money is more attractive for religious people when they are integrated in a social network that rewards such behaviour (Bekkers, 2002b; Deutsch & Lamberti, 1986). Although financial contributions are usually anonymous, it is likely that people within a network where positive norms on donating prevail encourage each other in their intentional donations. The more religious people in the network, the more prevalent the social pressure to conform to the religious norms, i.e. donating money to the poor. Therefore, we hypothesize that the religiosity of the network positively affects intentional donations (*H5*).

People's *attitudes* are indicative for the motivations people might have to donate. People with a positive attitude towards norm conformity are likely to conform to norms about charitable donations due to social pressure. Therefore we hypothesize that people who are inclined to norm conformity will have higher intentional donations (*H6*). People who are concerned for people in need will be more willing to donate. Free-riding can be a motivation to refrain from contributing to the collective good that is called charity. People with a low free-rider tendency turn out to be relatively more willing to help (Piliavin & Charng, 1990). A clear example of free-riding is tax evasion. We hypothesize that people to whom tax evasion is relatively legitimate, are less willing to donate *(H7)*. People who are interested in society have a broader perspective and may therefore be more aware of the need for charity. Societally interested people will have more concern to benefit society or the world as a whole. An indicator for interest in society is interest in politics. We therefore hypothesize that people who are interested in politics are more willing to donate than less interested persons (*H8*). Since a principle such as fighting inequality may be a motivation to donate to charity, we expect that a positive attitude towards income inequality has a negative relation with intentional donations (*H9*).

In order to estimate more precisely the net effects of dimensions of religiosity, network characteristics and personal attitudes on intentional donations,

we have to control for a number of background characteristics that have been shown to correlate with intentional donations: education (Hodgkinson & Weitzman, 1994; Hoge & Yang, 1994), income (Regnerus et al., 1998), household size, employment status, gender (Piliavin & Charng, 1990), age (Regnerus et al., 1998), having a partner (Hoge & Yang, 1994) and community size (Bekkers, 2004).

2.1.3 Societal circumstances

The extent to which dimensions of religiosity are related to intentional donations may vary across countries, possibly depending on societal circumstances. Countries differ importantly in the degree to which the government cares for people in need. Esping-Andersen (1990) distinguished different types of regimes with regard to the development of the welfare state: *social democratic, conservative-corporatist* and *liberal* regimes.

In the *social democratic* regimes (typically, the Nordic countries of Europe), the welfare state is elaborately developed. Social security benefits are at a high level compared to other regimes. The social policy is aimed at reducing market influence on the distribution of scarce resources and maximizing individual independence of the financially weak. The welfare state is less developed in *conservative-corporatist* regimes (typically, France and Germany). The leading principle of social policy is that social security benefits are only provided when family resources are exhausted. In *liberal* regimes (typically, the Anglo-Saxon countries), the welfare state is even less developed. Social security benefits are modest and the distribution of resources is mainly left to the market. Leibfried (1992) proposed to consider the Mediterranean countries as a separate kind of regime: the *Latin Rim*. In these regimes there is no official level of social security; only an underdeveloped system exists. Another group of countries has also been neglected in the typology of Esping-Andersen: *(former) communist* regimes. In these regimes the state interference in market distribution of resources is – or has been until recently – higher than anywhere else.

The amount of government regulation to fight poverty in a country is likely to have an impact on the intentional donations of individuals. People have more possibilities to donate money when their financial prospects are good. When social security in a country is high, people do not need to hoard their money as a guarantee for their future financial position. In this privileged situation, people can spend a larger part of their money on whatever they like. Those people who are already inclined to donate to the poorest countries because of their personal characteristics, will donate even more to the poorest countries when their own social security is already guaranteed. Building on previous knowledge on different welfare states (Esping-Andersen, 1990), we expect the effects of people's characteristics to vary across countries that differ in terms of social security. More particularly, we expect that the individual determinants of intentional donations to

the poorest countries are stronger in countries where the development of the welfare state is high – e.g., in social democratic regimes (*H10*).

2.2 Methods

2.2.1 Data

We tested the hypotheses with data from the cross-national survey, 'Religious and Moral Pluralism' (Jagodzinski & Dobbelaere, 1999). An international committee of social scientists developed this survey. The original questionnaire was in English. The questions were carefully translated and retranslated for control for use in non-English-speaking countries. The data were collected in countries representing all types of welfare regimes: Belgium, Great Britain, Hungary, Italy, the Netherlands, Poland and Portugal.[6] In these countries, a total of 9,415 individuals were interviewed face-to-face during the winter of 1998-1999. In each country, a probability sample was taken of people of 18 years and older using a multi-stage random method. Response rates differed from country to country: from 42% in the Netherlands up to 90% in Italy, with an average response rate of about 64%. The representativeness of the sample compared to the population of a country was tested with regard to age, gender, education and religion. In countries where the representativeness was not completely satisfactory, weight factors have been provided. A comparison of normal and weighted data revealed only minor differences in the results. Therefore, we decided to use the unweighted data.

2.2.2 Measurements

2.2.2.1 Intentional donations

Respondents were asked for their willingness to help the poor by donating a fraction of their net household income: "Would you be willing to take a cut in your net household income in order to help the poorest countries?". Respondents could answer: "Yes, I would accept a cut", or indicate that they would not accept a cut for several reasons: "No, unless everybody had a cut", "No, it wouldn't solve the problem", "No, I already pay enough", "No, I cannot afford it", and "No for some other reason". Those willing to take a cut were then asked: "Roughly what percentage of your net household income would you be willing to have cut to help the poorest countries?" Answer categories were: "Up to 1 per cent of income", "Up to 2 per cent" and "More than 2 per cent". We recoded these variables into a new variable in which refusal to donate was scored as 0, willingness to donate up to 1 per cent as 1, up to 2 per cent as 2 and more than 2 per cent as 3.

[6] The 'Religious and Moral Pluralism' survey was also carried out in Denmark, Finland, Norway, and Sweden, but the dependent variable analysed in this chapter was not part of the questionnaire in these countries.

2.2.2.2 Religiosity

Religiosity was measured along the conceptual lines of Stark and Glock's (1968) dimensions of religiosity. The *practice* dimension was divided into public and private practice. *Public practice* was measured by church membership and church attendance. Church membership distinguishes five denominations: Catholic, Protestant, other Christian, non-Christian and non-affiliated people. Church attendance was measured with the question: "Apart from ceremonies for birth, marriage or death, roughly how often do you attend religious services these days?" The eight-point response scale ranged from 'every day' to 'never'. We recoded this variable into an estimate of frequency of church attendance per week ranging from 0 to 7. *Private practice* was measured as the frequency of prayer: "About how often do you pray?" The eight point response scale ranged from 'every day' to 'never'. We recoded this variable into an estimate of frequency of prayer per week ranging from 0 to 7.

The *belief* dimension was measured as dogmatic conviction and particularism. *Dogmatic conviction* was asked for with the statements: "Jesus was both God and man", "Jesus was a prophet", "Jesus was a religious leader" and "Jesus never existed" (reverse scored). The response scale ranged from definitely not true' to 'definitely true' in seven steps. Cronbach's alpha of this scale is .67. As an indication of their religious *particularism*, respondents were asked to make a selection of one out of five statements on a scale from with which they agreed most. The scale ranged from: "There are important truths to be found in all religions", "There are important truths in many religions", "There is one true religion, but important truths to be found in other religions" to "There is only one true religion". A dummy variable was created for people who stated: "There are no important truths to be found in any religion".

Religious *experience* was measured with two questions: "Have you ever had an experience of something that exists, but transcends (goes beyond) everyday reality, and which you may or may not call God?" and "Whether or not you think of yourself as a religious person, would you say that you have a spiritual life – something that goes beyond a merely intellectual or emotional life?". Respondents could answer on a five-point response scale from 'never' to 'all the time' and on a seven-point scale from 'definitely not' to 'definitely yes' respectively. A reliability test of these items showed that spirituality and experience are better regarded as two separate phenomena (Cronsbach's alpha was .36).

The *consequential* dimension was measured as the mean of two items: "My religious beliefs have a great deal of influence on my daily life", and "My religious beliefs have a great deal of influence on how I make important decisions" (items developed by Eisinga, Felling, Konig, Peters, & Scheepers, 1999). Respondents rated whether or not they agreed with these statements on a seven-point scale. These items form a reliable scale (Cronbach's alpha was .92).[7]

[7] The dimensions of religiosity are correlated to each other. The highest correlation is .58 between frequency of prayer and consequences of religion, all other correlations are lower than .50. Hence, one can rule out large statistical problems caused by multicollinearity.

2.2.2.3 Network and attitudes

The extent of religiosity of the social network was measured with regard to partner and friends. When people had a steady life partner they were also asked about their partner's religiosity. Partner's denomination was used as a dummy variable in order to distinguish between Catholic, Protestant, other Christian, non-Christian and non-affiliated people.[8] Partner's church attendance was ascertained by the question: "Apart from ceremonies for birth, marriage or death, roughly how often does your partner attend religious services these days?". The eight-point response scale ranged from 'every day' to 'never'. People without a partner scored 'never' on this variable, since religious influence from the partner did not exist in these cases.[9] We recoded this variable into an estimate of frequency of church attendance per week ranging from 0 to 7.[10] Every respondent was asked: "How many of your closest friends have views on religion that differ from yours?". Possible responses ranged in five steps from 'none of them' to 'all of them'. We used this item, reverse scored, as an indicator of religious similarity between the respondents and their friends. Dummies were created for those respondents who do not know the religious views of their friends and those respondents who do not have friends. An interaction of this similarity measure and respondent's church attendance indicates the religiosity of the friends.

Several questions aimed to measure attitudes. Norm conformity was measured with the question: "Very generally speaking, do you tend to do what you yourself want to do, or do you tend to do what others want you to do?". The response scale ranged from: "I always tend to do what I myself want to do" (1) to "I always tend to do what others want me to do" (7). The extent to which respondents justify free-riding was assessed with the statements: "Tax evasion is more justifiable…": 1) "the more everyone is cheating away", 2) "the higher the taxes are", 3) "the more the government is wasting our money", 4) "the more unfair the tax laws are". The response scale ranged from 'strongly disagree' (1) to 'strongly agree' (7). Cronbach's alpha of this scale was .83. Political interest was measured with the question: "How interested are you in politics?". The response scale ranged from "not at all interested" (1) to "very interested" (7). In order to measure attitude towards income inequality, the statement was put to respondents: "In order to encourage people to work harder, there should be greater differences between people's incomes." The response scale ranged from "strongly disagree"(1) up to "strongly agree" (7).

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8 The majority of the partners (74%) belong to the same denomination as the respondent.

9 The exact value given on partner characteristics to the respondents without a partner does not affect the unstandardised estimates in multivariate analyses since a dummy is included for having or not having a partner.

10 The correlation between the church attendance of the respondents and the partners is .54 ($p < .001$).

2.2.2.4 Background characteristics

Education was measured as educational level, with the categories of; incomplete primary, primary completed, incomplete secondary, secondary completed, university incomplete, university degree completed. Respondents indicated their net household income. We standardized household income within countries because of the large income differences between countries. Household size is the summation of the number of household members in four age categories: above 18, between 13 and 17, between 5 and 12, and below 4. Respondents were asked whether they are self-employed, employed, retired or belong to a group of non-paid persons. We used straightforward measures for gender (male or female) and age (subtraction of year of interview and birth year). Respondents were also asked whether they had a steady life partner or not. The community size of the respondent's place of residence was measured with ten categories from 'less than 500' up to '1,000,000 and over'.

2.2.2.5 Societal circumstances

Societal circumstances were measured with the typology of welfare-state regimes (Esping-Andersen, 1990). The data analysed in this chapter were collected in Belgium, Great Britain, Hungary, Italy, the Netherlands, Poland and Portugal. There are ample empirical reasons to regard the Netherlands as a *social-democratic* regime and Belgium as a *conservative-corporatistic* regime (Wildeboer Schut, Vrooman, & De Beer, 2000). Arts and Gelissen (1999) ascertained that all authors agree that Great Britain is a *liberal* regime. Following Leibfried (1992), most authors agree that Italy and Portugal are *Latin Rim* regimes. We are left with the *former Communist* countries of Hungary and Poland. In our analyses, these countries are regarded as a separate category. As a check for the rank ordering of regimes and to decide where former communist countries belong, we used the percentage of gross national income that is spent on social security (ILO, 2004). Since data for the year of interview is not available, we took data for the year nearest to the year of interview. Former Communist countries are placed between the Liberal and Latin Rim regimes (see Table 2.1).

2.2.3 Analyses

We will first describe the average amount donated within several countries. Second, we present separate models for the variables with regard to religiosity, network and attitudes. These models are controlled for background characteristics, country and missing values – we included dummy variables for missings on each variable in the model. The SPSS regression analyses have some assumptions that might not hold: a) homoscedasticity of the dependent variable in the different countries; b) similar effects within all countries. Therefore we finally estimated a LISREL multi sample

model to test for these assumptions (Jöreskog & Sörbom, 1993a, 1993b). This method analyses covariance matrices within samples and compares parameters between samples. Initially, we imposed equality constraints on all parameters, which implies that parameters were considered equal in the different countries. First, we tested the homoscedasticity assumption: equality constraints are freed for those countries where the residual variance deviates significantly ($p<.05$) from other countries. Second, we tested for country interactions: equality constraints are freed if the unstandardized effect in a country deviates significantly from the effect of the same variable in other countries. For testing both assumptions we proceeded step by step, freeing the most significant deviation first, until no significant deviations existed ($p<.05$).

2.3 Results

2.3.1 Descriptives

Table 2.1 shows the willingness of respondents to donate in different countries. About 18% of the respondents are willing to donate something to the poorest countries. This percentage is lowest in Hungary (4.3%) and highest in the Netherlands (34.3%). The average willingness to donate is also lowest in Hungary (.072) and highest in the Netherlands (.672).

2.3.2 Multivariate results

Table 2.2 represents regression effects of determinants that we proposed to be theoretically interesting, controlled for background characteristics, country and missing values. Models 1 to 15 show the effects of independent variables on willingness to donate to the poorest countries separate from the other theoretically interesting determinants, but controlled for background characteristics, country and missing values. In the full model, all predictors are simultaneously estimated in one model to find out which variables are most significant. Comparing the estimates of the models 1 to 15 with the full model provides us with information on spuriousness of effects of certain determinants (e.g., denominational affiliation) but also on hidden effects that turn significant in the full model (e.g., particularism). Considering our goal to assess decisive determinants, we will focus on the findings of the full model.

As expected, we find a positive effect of the consequential dimension (*H1*) on intentional donations. Although there is no significant effect of particularism in the separate analysis, we do find the expected negative effect of particularism (*H2*) in the full model. This indicates that particularistic people, given their other characteristics, are less willing to donate to the poorest countries than others.

Table 2.1 Frequencies and descriptives of willingness to donate in different countries

	All	Social democratic	Corporatistic	Liberal	Former communist		Mediterranean	
		NL	BE	GB	PL	HU	IT	PR
% GNP social security		31.70	27.21	21.60	21.36	20.90	12.40	10.96
in the year		1993	1995	1994	1992	1996	1993	1996
% willing to donate	18.0	34.3	20.4	13.7	7.9	4.3	26.1	11.3
Mean willingness	.309	.672	.392	.226	.113	.072	.397	.192
SD	.743	1.054	.859	.638	.422	.381	.767	.594
N	9294	989	1645	1433	1132	972	2149	974

NL Netherlands; BE Belgium; GB Great Britain; PL Poland; HU Hungary; IT Italy; PR Portugal

We derived two contradictory hypotheses on denominations from Durkheim's theory on integration and from Weber's thesis on rationalization in relation to Protestantism (*H3a* and *H3b*). However, there is no support for both hypotheses. The results showed no differences between Catholics and Protestants in their willingness to donate. In the separate model we find that non-Christians and non-affiliated people deviate significantly in their willingness to donate, but these differences are spurious due to other characteristics since they disappeared or lost significance in the full model. Church attendance has the expected positive effect (*H4*), both in the separate and the full model.

Frequency of prayer and religious experiences both show a significantly positive effect in the separate models, but these effects disappear in the full model, indicating that other characteristics in the model are responsible for the relation initially found. Unexpectedly, dogmatic conviction and spirituality show positive effects on intentional donations to the poorest countries that stand relatively strongly in the full model.

People with a non-religious partner are less willing to donate in the separate model, but the difference decreased to non-significance in the full model. Church attendance of the partner does positively affect intentional donations in both the separate and the full model, which confirms our hypothesis (*H5*). Having friends with similar religious views has a negative effect. The interaction effect of friends' views with respondents' church attendance (not presented in Table 2.2) shows a positive effect when analysed separately (.023; $p<.001$), but a negative one in a full model (-.014; $p<.01$), which contradicts our hypothesis (*H5*). Because of the unexpected result, we did not include the interaction in subsequent analyses. We will deal with the interaction and its unexpected result in the discussion section.

We found a small positive effect of norm conformity that lost significance in the full model, which does not clearly support our hypothesis (*H6*). The negative effect of free-riding, the positive effect of political interest and the again negative effect of income inequality, all stand firm in the full model and confirm our hypotheses (*H7, H8,* and *H9*).

Table 2.2 Unstandardized regression parameters (B) on intentional donations controlled for background characteristics, country and missings

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Full
Religiosity																
Denomination																
Catholic (ref.)																
Protestant	.008															-.001
Other Christian	.061															-.002
Other (Non-Christian)	.166 **															.070
None	-.107 ***															.008
Church attendance/wk		.093 ***														.056***
Prayers/week			.025 ***													.001
Dogmatic conviction				.049 ***												.023***
Particularism					.004											-.021**
No truths (dummy)					-.182 ***											-.102**
Experience						.048 ***										-.002
Spirituality							.041 ***									.016***
Consequences								.047 ***								.019***
Network																
Partner's denomination																
Catholic (ref.)																
Protestant									-.008							.001
Other Christian									.027							-.068
Non-Christian									.021							.009
None									-.110 **							-.042
Partner's church att./wk										.088 ***						.037***
Friends' similar views											-.036 ***					-.029***
Don't know views											-.229 ***					-.167***
Don't have friends											-.184 ***					-.116**
Attitudes																
Norm conformity												.008 †				.002
Free-riding													-.014 **			-.011*
Political interest														.033 ***		.027***
Income inequality															-.008*	-.009**
Adj. R^2	.092	.102	.095	.095	.091	.091	.098	.102	.088	.095	.092	.087	.087	.088	.093	.123

*** p < .001; ** p < .01; * p < .05; † p <.10 (two-tailed);
N = 9294

Table 2.3 LISREL estimates (Gamma) on intentional donations

	Main	Country specific						
		NL	BE	GB	PL	HU	IT	PR
Religiosity								
Denomination								
Catholic (ref.)								
Protestant	.032				[a]			
Other Christian	.022							
Other (Non-Christian)	-.135†			.412***				
None	-.008			.139**				
Church attendance/week	.025**	.226***	.141***	.088***				
Prayers/week	.000							
Dogmatic conviction	.021***							-.026†
Particularism	-.009							
No truths (dummy)	-.063*							
Experience	.014†					-.019†		
Spirituality	-.002	.064***	.023*				.024**	
Consequences	.012**							
Network								
Partner's denomination								
Catholic (ref.)								
Protestant	-.033							
Other Christian	-.059							
Non-Christian	-.007							
None	.030	-.161*						
Partner's church att./week	.038***				-.019			.110***
Friends' similar views	-.021***							
Don't know views	-.141***				[a]			
Don't have friends	-.082*							
Attitudes								
Norm conformity	.004							
Free-riding	-.008*							
Political interest	.024***	.067***				-.003		
Income inequality	.000	-.035*	-.025**					
Background								
Education	.006	.135***	.095***	.094***	-.031**		.076***	
Income	.047***	.189***						
Household size	.005							
Employment								
Self employed	.068**							
Employed	-.039*							
Retired	-.047*							
Other non-paid (ref.)								
Female	-.027*							
Age/10	-.007							
Partner	-.032*							
Community size	.005						-.012†	
N	9294	989	1645	1433	1132	972	2149	974

Chi^2=495.74; df=320; p=.000
Estimates are controlled for missing values. There are significant (p < .05) effects for missing values on dogmatism (.114; N=134), retirement (-.058; N=386), and - only in the Netherlands - income (-.446; N=79); NL Netherlands; BE Belgium; GB Great Britain; PL Poland; HU Hungary; IT Italy; PR Portugal
[a] Exceptional effect of marginal number of cases (N = 3 and 2 respectively)
*** p < .001; ** p < .01; * p < .05; † p <.10 (two-tailed)

2.3.3 Testing for robustness across countries

With a LISREL multi-sample procedure we tested for homoscedasticity and country interactions. The assumption of homoscedasticity did not hold. All countries differed with regard to the residual variance in willingness to donate to the poorest countries. Therefore, we did not impose this assumption in our further analysis.

The LISREL estimates from our test for country interactions are presented in Table 2.3. The left column shows the main effect for each determinant. In the case that a significant country interaction is found, the deviant estimate within the country is presented in the corresponding country specific column. When there is no country specific effect for a variable in a country, the main effect applies.

We find that the positive effect of the consequential dimension (*H1*) on intentional donations to the poorest countries is cross-nationally robust. However, the negative effect of particularism (*H2*) is no longer significant after allowing heteroscedasticity and controlling for country specific effects.

We still do not find any substantial difference between Catholics and Protestants with regard to their willingness to donate, which does not support any of our hypotheses on denominational affiliation (*H3a* and *H3b*). With regard to other denominations, we also do not find significant differences with Catholics in the main effects. Positive country-specific effects for non-Christian and non-religious people in Great Britain constitute the only exceptions.

As expected, church attendance has a positive effect on intentional donations in all countries (*H4*). In the Netherlands, Belgium and Great Britain the effect of church attendance is even stronger than in other countries. Effects of frequency of prayer and religious experiences are still non-significant. Although the parameter for religious experiences in Hungary differs from the main effect, it is still not significant. For spirituality we find that the unexpected positive effect is only found in the Netherlands, Belgium, and Italy. The positive effect of dogmatic conviction, which was also unexpected, turns out to be quite robust over countries, Portugal constituting the only exception. Apparently, these convictions inspire their holders to donate to the poorest countries.

When we consider the effects of social network, religious affiliation of the partner does not show significant main effects. Only in the Netherlands are people with a non-affiliated partner less willing to donate. However, partner's church attendance shows a robust positive effect, which supports our hypothesis (*H5*). The effect is especially strong in Portugal, whereas Poland is the only country where it is not found. Again, similarity with friends has a negative effect that is robust across all countries.[11]

Now, let us turn to the effects of particular attitudes. Our hypothesis that norm conformity positively affects intentional donations is not supported in any

[11] Because of the unexpected result of the interaction of friend's views and respondent's church attendance in the SPSS analysis, we did not include the interaction in our LISREL analysis. We will deal with the interaction and its unexpected result in the discussion section.

country (*H6*). Free-riding still shows the expected negative effect without exceptions across countries (*H7*). Political interest shows the hypothesized positive effect (*H8*), which turns out to be especially strong in the Netherlands, whereas Hungary constitutes the only exception. Attitude towards income inequality has no significant main effect; the hypothesized negative effect is only found in the Netherlands and Belgium (*H9*).

To give complete information, we now also present results for background characteristics. Education shows no significant main effect, but has country-specific effects: a positive effect in the Netherlands, Belgium, Great Britain and Italy and a negative effect in Poland. People with a relatively high income are more willing to donate than others, and this effect is especially strong in the Netherlands. Self-employed people are more willing to donate whereas employed and retired people are less willing to donate than non-paid persons. Females have lower intentional donations than males. People with a steady life partner are also less willing to donate. All other background characteristics do not show significant effects.

Contrary to our expectations, the effects of the independent variables on intentional donations turn out to be quite robust for most determinants. Nonetheless, several country specific effects are found. Some of these effects are consistent with our proposition that effects are stronger in developed welfare regimes (e.g., effects of church attendance). However, other effects do not fit into this pattern (e.g., the strong effect of partner's church attendance in Portugal). This implies that there is only moderate support for the hypothesis that effects on intentional donations to the poorest countries are stronger when the development of the welfare state is more elaborate (*H10*).

2.4 Discussion

We investigated which aspects of individual religiosity determine willingness to donate to the poorest countries, and whether estimates of effects are robust across countries. Frequent church visitors, dogmatically convinced people and persons who take the consequences of their religiosity in everyday life more seriously are actually more willing to donate. Religiosity of one's social network also affects willingness to donate. Church attendance of one's partner has a positive influence on intentional donations. These findings are found to be quite robust across the seven countries investigated.

The most surprising anomaly we found is that having friends with similar religious views has a negative, instead of a positive, effect on intentional donations, which even holds in cases where respondents are frequent church attendees. On the basis of Durkheim's (1897) theory on integration, one would expect that religious people with similar friends are more rather than less willing to donate than persons with a less religious network. The best explanation available for this surprising finding is the 'bystander effect' (Darley & Latané, 1968). The bystander effect has two prerequisites that are both present: ambiguity of the need for help

and diffusion of responsibility. It may be ambiguous to some people whether there is a need to provide help to poor countries and whether individuals (especially religious individuals) should provide such help. There is also diffusion of responsibility since there are more religious persons (who should help) in the network of the respondent. The presence of other people who should help apparently reduces feelings of personal responsibility and intentions to help. Future research with more direct measurements of religiosity of friends may shed more light on this issue.

Some other results are not such anomalies, but do also not support our hypotheses. Denominational differences are in general not found when controlled for dimensions of religiosity. This shows that norms and integration of the individual are far more important with regard to intentional donations than religious affiliation as such. This is even more underscored by the effect of non-affiliation - controlled for dimensions of religiosity - in Great Britain. Some exceptions to the general trend exist. The finding that in Great Britain non-Christians, compared to Catholics, are more willing to donate to the poorest countries is probably because many of these non-Christians come from former colonies that belong to the poorest countries.[12] Donating money to the poorest countries is for them sort of support for their own background.

We did not expect dogmatic convictions to affect intentional donations, but it turned out to do so. Neither did we expect the positive effects of spirituality on willingness to donate that appeared in some of the countries. These results suggest that not only norms and integration matter, but also (private) religious beliefs have their effects on willingness to donate. Future research is needed on the differential effects of adhering to dogmas that includes a broader range of beliefs to shed some light on what kind of religious beliefs are especially relevant. Attitudes with regard to norm conformity and income inequality did not, in general, show the expected effects. Norm conformity as such is probably too vague a concept since it is not known to what norm people actually conform. Attitude towards income inequality is probably a national topic that is not that easily applicable to international donations. Future research should make use of more specific measures of attitudes with regard to norm conformity and income inequality.

This research contributed to knowledge on the net relation between religiosity and money donation in several important ways. We analysed data from seven countries that differed largely in their social security arrangements, actually leading us to expect that individual level effects would vary across countries. Nonetheless, the effects are quite robust across countries. We showed that particular dimensions of religiosity affect not only the amount of actual helping behaviour, which depends largely on the opportunities people have, but also the intentions to donate. The effects of religiosity are now known in more detail because of the multidimensional approach underlying the measurement of

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12 There are 46 British respondents in the analysis who are affiliated to a non-Christian religion. Of these respondents, 16 are Indian, 8 Pakistani, 2 black-African, 1 black-Caribbean, 3 other non-white, 6 refused to indicate ethnic belonging, and the remaining 10 are white.

religiosity. The analyses confirmed positive effects of church attendance on donations, but also drew our attention to other aspects of religiosity that play a role. People who take consequences from their religiosity in their every day life and people who strongly believe in dogmas are more willing to donate. Furthermore, this research showed that not only the religiosity of the individual, but also the religiosity of the network affects intentional donations. Church attendance of a partner has a positive effect, while religious homogeneity of the circle of friends has a negative effect on intentional donations. These effects are net of the influence of background characteristics and attitudes, and are also quite robust across countries.

3 Dimensions of religiosity and volunteering in Europe[*]

Abstract

This chapter investigates effects of dimensions of religiosity on both religious and secular volunteering behaviour and tests for robustness of effects across countries. Religious volunteering is explained by aspects of both collective religiosity (church membership, church attendance, church attendance of the partner), and individual religiosity (frequency of prayer, religious experiences, spirituality and taking consequences from religiosity). Secular volunteering is explained by spill-over from religious volunteering and some direct effects of individual religiosity: particularistic attitudes reduce while religious experiences and spirituality increase the likelihood of volunteering for secular organizations. Effects of individual religiosity on volunteering are larger than the effects of collective religiosity; for secular volunteering the relative difference is even larger than for religious volunteering. Given that these results are quite robust across countries, research on volunteering should pay more attention to aspects of individual religiosity than it has up to now.

3.1 Introduction

Research showed that religious people do more voluntary work (Bekkers, 2001, 2004; Bowen, 1999; De Hart, 1999; Home Office, 2004; Lam, 2002; O'Beirne, 2004; Ruiter & De Graaf, 2006). Several investigators have made a distinction between religious and secular volunteering and found that religiosity has an effect on both kinds of volunteering (Bekkers, 2003; Bowen, 1999; De Hart, 1999; Park & Smith, 2000; Ruiter & De Graaf, 2006). However, what aspects of religiosity induce such behaviour? Do religious people volunteer more because they are integrated in a religious denomination or because of their individual beliefs? Do effects of aspects of religiosity differ between religious and secular volunteering? Are the effects of religiosity on volunteering comparable across different countries? While investigating these questions we will improve on previous research in three ways.

[*] This chapter is currently under editorial review. Previous versions of this chapter have been presented as J. Reitsma, P. Scheepers, M. Te Grotenhuis (2006b). *Dimensions of individual religiosity and volunteering in Europe*. Paper presented at the XVI ISA World Congress of Sociology, Durban, South Africa, 26 July 2006; and J. Reitsma, P. Scheepers, M. Te Grotenhuis (2005b). *Dimensions of individual religiosity and volunteering in Europe*. Paper presented at the NCVO & VSSN 11th Researching the Voluntary Sector Conference, University of Warwick, UK, 1 September 2005.

First, Glock and Stark (see e.g., Glock, 1962; Glock & Stark, 1965, 1966; Stark & Glock, 1968) argued that religiosity is a multidimensional phenomenon and they distinguished practice, belief, experience and consequences. Practice points to both collective religiosity (church membership and church attendance) and individual religiosity (prayer and meditation). Belief refers to religious views such as particularism and dogmatism. Experience stands for religious emotions and revelations. The consequential dimension refers to the importance of religion in people's daily lives. In previous research on volunteering, religiosity has usually been restricted to collective aspects of religiosity, like denominational affiliation and church attendance (Bekkers, 2001, 2004; Bowen, 1999; Ruiter & De Graaf, 2006). This leaves us with two questions. The first question is whether other dimensions of religiosity are also related to religious and secular volunteering. The second question is which dimensions of religiosity are most decisive with regard to both religious and secular volunteering.

Second, most researchers decide for themselves whether voluntary work is religious or secular in nature instead of asking the respondents (Bekkers, 2003; Bowen, 1999; De Hart, 1999; Ruiter & De Graaf, 2006). In this way, previous research has neglected the enormous amount of religiously-based civil organizations. The effect of religiosity on secular volunteering will be overestimated when religiously-based organizations are rated as secular. We will use data on volunteering where respondents indicated themselves whether it was for a religious or a secular organization.

Third, cross-national comparison of religiosity and voluntary work is very scarce. Recently, Parboteeah, Cullen and Lim (2004), as well as Ruiter and De Graaf (2006), analysed data on many countries. However, Parboteeah et al. (2004) limited their operationalization of religiosity to the importance of God and made no distinction between religious and secular volunteering. Ruiter and De Graaf (2006) investigated collective religiosity only, while they also decided themselves whether voluntary work was religious or secular in nature. We will investigate eleven European countries to assess differential effects of both collective and individual dimensions of religiosity on volunteering for both religious and secular organizations. Moreover, we will test to what extent effects are robust or different across countries.

3.1.1 Religious volunteering

3.1.1.1 Collective religiosity

Religions provide norms, like concern for the community, and reinforce these norms by collective rituals (Durkheim, [1912] 1995). Participation in these rituals is considered an indicator of an individual's integration into the religious community. The more strongly people are integrated, the more they will comply with the norms of the group (Durkheim, 1897; Stark, 1994). From another perspective,

volunteering is more attractive for people who are integrated in a social network that rewards such behaviour (Bekkers, 2002b; Deutsch & Lamberti, 1986). Following both propositions, the collective aspect of religiosity is important with regard to volunteering.

People who are members of a church are more integrated in a religious community than those who are not affiliated. Moreover, there may be denominational differences in volunteering behaviour. Catholics are found to be less individualistic and more communitarian than Protestants (Durkheim, 1897; Greeley, 1989) and are therefore more likely to volunteer for religious organizations (*H1*). A contradictory hypothesis can be derived from the democratic church organization of Protestant churches, which results in a higher demand for volunteers (Ruiter & De Graaf, 2006). On the basis of this proposition, one would expect that Protestants are more likely to do voluntary work for religious organizations than Catholics (*H2*).

Church membership is only a general indicator of religious integration. We propose that the extent of integration in a denomination will have an additional effect. People who attend church more often are more integrated and hence are more likely to conform to the norms of their group (Durkheim, 1897; Stark, 1994). We therefore expect a positive relation between church attendance and religious volunteering (*H3*).

Next to own church attendance, the church attendance of network members is also an indicator for integration in a religious community. A religious partner is likely to encourage religious volunteering more than a non-religious partner. Therefore, we hypothesize that the church attendance of the partner positively affects religious volunteering (*H4*).

3.1.1.2 Individual religiosity

Religiosity has more aspects than just participation in collective rituals. Religious people also have other individual beliefs and practices that differ from those of non-religious people. Glock and Stark (Glock, 1962; 1965; 1966; Stark & Glock, 1968) distinguished individual practice (e.g., frequency of prayer), belief (e.g., dogmatism and particularism), experience and consequences.

Individual practice - like frequency of prayer - is to some extent an alternative for collective practice of religiosity and may influence volunteering behaviour likewise (see Lam, 2002; J. Wilson & Musick, 1997; Yeung, 2004). Dogmatic beliefs indicate adherence to religious beliefs in general which may reinforce volunteering (see De Hart, 1999; Yeung, 2004). For example, people who believe in the Godly nature of Jesus will take his moral guidance more seriously than others. Particularism means believing that your religion is the only true one. Particularists adhere strongly to religious beliefs by definition. People who state that they have religious experiences, have very personal religious beliefs, which eventually include some idea of ‘calling’ (Weber, [1930] 1993). One of the

possibilities for manifesting consequences from religious beliefs in everyday life is to do voluntary work to benefit a collective. Since all of these dimensions of religiosity indicate individual adherence to religious beliefs, we expect that they are positively related to doing voluntary work for religious organizations (*H5*).

3.1.2 Secular volunteering

Durkheim (1897; [1912] 1995) argued that religious norms and integration are not only relevant for the religious sphere, but for society as a whole. When this is the case, dimensions of religiosity should also have effects on secular volunteering. Nonetheless, effects of dimensions of religiosity are likely to differ between secular and religious volunteering.

First, social identity theory states that people strive for a positive social identity, which they derive from belonging to positively evaluated groups (see Tajfel & Turner, 1986). Hence, people will derive some social identity from volunteering for certain organizations. Moreover, they will prefer volunteering for organizations they regard as the most positive. Religious people are likely to evaluate religious organizations more positively than secular organizations. Therefore, we expect that dimensions of religiosity have stronger relations with religious volunteering than with secular volunteering (*H6*).

Second, particularism is likely to have different effects on religious and secular volunteering. Particularistic people are convinced that they are adherents of the one and only true religion. These people are likely to be relatively reserved with regard to secular organizations because the goals of these organizations and their members do not necessarily all agree with the beliefs that are regarded as 'the one and only truth'. Therefore, we hypothesize that particularism has a negative effect on volunteering for secular organizations (*H7*).

Third, the relative influence of individual religiosity compared to collective religiosity is likely to be stronger for secular volunteering than for religious volunteering. Volunteering for a religious organization is in the self-interest of a religious community and its members. Therefore, a religious community will have stronger norms about volunteering for religious organizations than for volunteering in general. Similarly, members of a religious community will reinforce each others volunteering for religious organizations more than volunteering for secular organizations. This suggests that volunteering for a secular organization by religious people is likely to be better explained by individual religious beliefs than by norms and group pressure from a religious community. Therefore, we hypothesize that the relative effect of individual *versus* collective religiosity is stronger for secular volunteering than for religious volunteering (*H8*).

Several authors stress that the effect of religiosity on secular volunteering can be interpreted by spill-over from religious to secular volunteering (Bekkers, 2003; Dekker & De Hart, 2002; Jackson, Bachmeiser, Wood, & Craft, 1995; Ruiter & De Graaf, 2006). This means that the religious people volunteering for secular

organizations are recruited *via* the network of religious volunteers. This spill-over effect is especially likely to interpret the effects of collective religiosity since it is an explanation based on belonging to a religious community instead of individual preferences. We hypothesize that effects of individual religiosity on secular volunteering remain relatively strongly after control for religious volunteering (*H9*).

In order to estimate more precisely the net effects of dimensions of religiosity on both religious and secular volunteering, we have to control for a number of background characteristics that tend to correlate with volunteering: education, household size, employment status, gender, age, having a partner and community size (Bekkers, 2001, 2003, 2004; Bowen, 1999; Lam, 2002; Mattis et al., 2000; Park & Smith, 2000; Ruiter & De Graaf, 2006; Uslaner, 2002; J. Wilson & Musick, 1997).

3.1.3 Cross-national comparison

The theories and propositions on which we based our hypotheses pretend that they can be generalized over countries. To test whether effects are stable across countries we test the hypotheses on a heterogeneous set of countries. Ruiter and De Graaf (2006) found differential effects of religiosity depending on the religious composition of a country. Effects of church attendance tend to be stronger in less religious countries. Next to religious composition, variations in social policies across countries may lead to variation in effects (see Esping-Andersen, 1990). Large expenses on social security may influence both the demand for volunteering and the willingness to volunteer. Therefore, we test for the stability of effects across a set of countries that vary widely in both religious composition and social security expenditure.

3.2 Methods

3.2.1 Data and respondents

We tested the hypotheses with data from the cross-national survey ‘Religious and Moral Pluralism’ (Jagodzinski & Dobbelaere, 1999). An international committee of social scientists developed this survey. The original questionnaire was in English. The questions were carefully translated and retranslated for control for use in non-English-speaking countries. In each country, a probability sample was taken of people of 18 years and older using a multi-stage random method. Data were collected by face-to-face interviews during the winter of 1998-1999. Response rates differed from country to country. An overwhelming majority of 90% of the Italians contacted participated in the survey, whereas only 42% of the Dutch responded. The samples were compared with population data to control for representativeness. The data analysed in this chapter were collected in a heterogeneous set of countries: Belgium, Denmark, Finland, Great Britain, Hungary, Italy, the Netherlands,

Norway, Poland, Portugal and Sweden. In these countries, a total of 12,342 individuals were interviewed.

3.2.2 Operationalizations

3.2.2.1 Volunteering

Respondents were asked two questions about volunteering: "Do you do regular voluntary work - that is, unpaid work (not just belonging to an organization or group) - which is of benefit to other people or the community and not only to your family or personal friends? First: Do you do regular voluntary work for any religious organizations? Next: Do you do regular voluntary work for any non-religious organizations?" Answer categories for both items were yes or no.

3.2.2.2 Collective religiosity

The collective part of religiosity was operationalized as integration in a religious community. Religious affiliation was used as a dummy variable in order to distinguish between Catholic, Protestant, other Christian, non-Christian and non-affiliated people (the reference category).

Church attendance was measured with the question: "Apart from ceremonies for birth, marriage or death, roughly how often do you attend religious services these days?" The eight- point response scale ranged from "never" to "every day". We recoded this variable into an estimate of frequency of church attendance per week ranging from 0 to 7. When people had a steady life partner, they were also asked for their partner's religiosity with a similar question[13].

3.2.2.3 Individual religiosity

Individual religiosity was measured along the lines of Stark and Glock's (1968) dimensions of religiosity. *Private practice* was operationalized as the frequency of prayer: "About how often do you pray?" The eight-point response scale ranged from "never" to "every day". We recoded this variable into an estimate of frequency of prayer per week ranging from 0 to 7.

The *belief* dimension was operationalized as dogmatic conviction and particularism. *Dogmatic conviction* was asked for with the statements: "Jesus was both God and man", "Jesus was a prophet", "Jesus was a religious leader" and "Jesus never existed' (reversed scored). The response scale ranged from 'definitely not true' to 'definitely true' in seven steps. Cronbach's alpha of this scale is .67. As an indication of their religious *particularism*, respondents were asked to make a

[13] The correlation between the church attendances of partners is .55.

selection of one out of five statements with which they agreed the most. The scale ranged from: "There are important truths to be found in all religions", "There are important truths in many religions", "There is one true religion, but important truths to be found in other religions" to "There is only one true religion". A dummy variable was created for people who stated: "There are no important truths to be found in any religion".

Religious *experience* was measured with two questions: "Have you ever had an experience of something that exists, but transcends (goes beyond) everyday reality, and which you may or may not call God?" and "Whether or not you think of yourself as a religious person, would you say that you have a spiritual life - something that goes beyond a merely intellectual or emotional life?" Respondents could answer on a five-point response scale, ranging from "never" to "all the time" and on a seven-point scale from "definitely not" to "definitely yes" respectively. A reliability test of these items as a scale showed that spirituality and experience are better regarded as two separate phenomena.

The *consequential* dimension was operationalized as the mean of two items: "My religious beliefs have a great deal of influence on my daily life", and "My religious beliefs have a great deal of influence on how I make important decisions" (items developed by Eisinga et al., 1999). Respondents rated whether or not they agreed with these statements on a seven-point scale. These items formed a reliable scale (Cronbach's alpha is .93) [14].

3.2.2.4 Background characteristics

Education was measured as the highest level obtained. Since categories differed across countries, due to their different educational systems, we decided to standardize the measure for educational level within countries. Household size was computed as the summation of the number of household members in four age categories; above 18, between 13 and 17, between 5 and 12, and below 4. To avoid the disturbing influence of outliers, all households larger than six persons are coded as consisting of six individuals. Respondents were asked whether they are self-employed, employed, or belong to a category of non-paid persons. We used straightforward measures for gender (male or female) and age (subtraction of year of interview and birth year) and having a steady life partner. The community size of respondent's residence was measured with ten categories from 'less than 500' up to '1,000,000 and over'.

[14] The dimensions of religiosity are correlated to each other. The highest correlation is .61 between frequency of prayer and the consequences dimension, all other correlations are lower than .50. Hence, there is no need to bother about large statistical problems caused by multicollinearity.

3.2.3 Analysis

We first described the percentage of volunteers for religious and secular organizations within several countries. We investigated the relationships between independent and dependent variables by use of logistic regression analyses. The relative influence of collective *versus* individual religiosity was investigated by the computation of standardized sheaves (see Heise, 1972). We included dummies for missing values on each variable in the model to control for any possible systematic bias in missing data. To avoid disturbing country influences on the estimated effects, we included dummies for country in the logistic regression analyses. Country differences in effects of independent variables on religious or secular volunteering were explored by interaction terms between independent variables and country. Significant interactions were added stepwise to the model. This procedure enabled us to estimate an overall model that was not highly dependent on exceptional effects in one or some countries. Not all significant interactions should be regarded as refutations of equality of effects in countries. Only those interactions that are in contrast with the general trend of parameters (e.g., negative effect instead of positive) refute equality.

3.4 Results

3.4.1 Descriptives

Table 3.1 presents information on religiosity, social security expenditure and volunteering in different countries. The selected countries vary substantially in both religiosity and social security expenditure. This variation guarantees a strong test for effect differences across countries. On the average, 11.8% of respondents in the eleven countries were volunteers for a religious organization. There is some

Table 3.1 Frequencies and descriptives of volunteering in different countries

	All	SE	DK	NO	NL	FI	HU	GB	BE	PT	IT	PL
Average church attendance/wk		.12	.13	.21	.25	.28	.29	.35	.37	.53	.67	.92
% GNP to social security		34.66	33.01	19.93	31.70	32.27	20.90	21.60	27.21	10.96	12.40	21.36
in the year		1996	1996	1992	1993	1996	1996	1994	1995	1996	1993	1992
Volunteering												
Religious (%)	11.8	13.0	8.3	11.8	14.0	16.3	16.6	8.7	12.0	16.5	8.2	9.4
Secular (%)	24.8	48.2	31.8	37.7	33.0	33.2	27.9	22.0	29.9	17.7	9.9	9.1
N	12277	1025	603	501	1004	763	997	1464	1661	976	2149	1134

SE: Sweden; DK: Denmark; FI: Finland; NL: Netherlands; BE: Belgium; GB: Great Britain; PL: Poland; HU: Hungary; NO: Norway; IT: Italy; PT: Portugal

Information on social security expenditure is retrieved from the website of the International Labour Organisation (ILO, 2004).

variation across countries in the percentage of volunteers for religious organizations. The lowest percentage is found in Italy (8.2%), whereas the highest percentage of volunteers for religious organizations is found in Hungary (16.6%). Volunteering for secular organizations is on the average more popular: 24.8% of respondents were volunteers for a secular organization. There is substantial variation in the percentage of volunteers for secular organizations across countries. Secular volunteering is least popular in Poland (9.1%) and most popular in Sweden (48.2%).

3.4.2 Religious volunteering

Results for religious volunteering are described in Table 3.2. The left column shows the effects for all countries, except those with significantly different effects. Significant interactions are displayed in the other columns of the table. The effects of religiosity are controlled for background characteristics, country, and missing values on each variable separately.

Collective religiosity clearly affects religious volunteering. Regardless of denomination, church members volunteer more for religious organizations than non-members. The only exception is found in Finland, where the effect of Protestant affiliation is much smaller than in other countries (1.070 - .961 = .109). Protestants are in general more likely to volunteer for religious organizations than Catholics, which contradicts the hypothesis on the more communitarian values of Catholics (*H1*) but confirms the hypothesis on the demand for volunteers in Protestant denominations (*H2*). As predicted, church attendance of both the respondent (*H3*) and the partner (*H4*) contribute to the likelihood of volunteering for religious organizations.

Moreover, individual religiosity contributes to the explanation of volunteering for religious organizations. Frequency of prayer is positively related to religious volunteering in all countries, except Belgium. Religious experiences are also positively related to religious volunteering, in Finland even more strongly than in other countries. The Netherlands are the only exceptional case with a negative effect of religious experiences (.093 -.359 = -.266). Taking consequences from religious beliefs contributes also to religious volunteering, in all countries, Poland constituting the only exception, although the effect is somewhat smaller in Belgium, Italy and Hungary than in other countries. Religious beliefs like dogmatism and particularism in general do not add to the explanation of religious volunteering, although they do in some countries. Dogmatic beliefs are positively related to religious volunteering in Belgium and Portugal, and particularism in Sweden. The negative effects of dogmatism in Finland and Italy were not expected. Overall, our hypothesis that individual religiosity is positively related to religious volunteering is in general supported (*H5*).

Table 3.2 Logistic regression coefficients (B) on religious volunteering with country interactions

	All countries	Interactions										
		Sweden	Denmark	Norway	Netherlands	Finland	Hungary	Great Britain	Belgium	Portugal	Italy	Poland
Denomination (None=ref)												
Catholic	.729***											
Protestant	1.070***					-.961 **						
Other Christian	1.238***											
Other non-Christian	1.211***											
Church attendance/ week	.350***	1.374**	1.670*									
Church att. partner/ week	.229***											
Prayers/week	.070***		.141*						-.102**			
Dogmatism	-.002					-.243 **			.266**	.233*	-.217**	
Particularism	.026	.301**										
No truths	-.263											
Experience	.093**				-.359**	.209 *						
Spirituality	.062**										.186**	
Consequences	.313***						-.292***		-.120*		-.149*	-.375 ***
Education	.196***	-.387**							-.197*			
Household size	.059*											
Employment (non-paid=ref)												
Self employed	-.050						.798**					
Employed	.019											
Female	-.062											
Age/10	.372**											
Age/10 squared	-.038**					.019 **						
Partner	-.109											
Community size	-.082***	-.116*						-.377 **				
Country (Italy=ref)												
Belgium	-.010											
Denmark	-.723											
Finland	1.658**											
Great Britain	2.777*											
Hungary	1.533***											
Netherlands	.817*											
Norway	.420											
Poland	.660											
Portugal	-.814											
Sweden	.641											
Constant	-5.092***											

Missing cases on some variables are significantly related to religious volunteering, but all represent a relatively small number of missings: Church attendance (B=1.428; p=.031; N=21); Consequences (B=.883; p=.015; N=82); Education (B=1.087; p=.003; N=63); Employment (B=.636; p=.031; N=88).
Nagelkerke R^2 = .306; N = 12277; *** p < .001; ** p < .01; * p < .05; † p < .10 (two tailed)

Next to dimensions of religiosity, several background characteristics contribute to the explanation of religious volunteering. Education is positively related to religious volunteering, except in Sweden and Belgium. In all countries, members of large households volunteer more for religious organizations. Self-employed people in Hungary are more often found volunteering for religious organizations than others. Age is curvilinearly related with religious volunteering - except in Finland -, with people of middle age (10*(.372/(2*.038))=49) being most engaged in this behaviour. People living in larger communities are less likely to volunteer for religious organizations in all countries. A small number of people who had no score on church attendance, consequences of religion, education and employment turned out to be volunteers for religious organizations more often than people who had a score on these variables.

3.4.3 Secular volunteering

Analogous to the model for religious volunteering, a model for secular volunteering is estimated, which is presented in Table 3.3. Compared to the effects of aspects of religiosity on religious volunteering, effects are in general smaller for secular volunteering. This confirms our hypothesis that religious people will prefer religious volunteering above secular volunteering in order to enhance their social identity (*H6*). Effects of denominational affiliation are much smaller than for religious volunteering. The effects are insignificant in most cases and even negative for 'other-Christians' in Finland. However, membership of a Protestant denomination is positively related to volunteering for secular organizations in all countries. As an exception, Catholics in Hungary are also more likely to volunteer for secular organizations than non-affiliated people (-.108 + .484 = .376). Effects of church attendance and church attendance of the partner are both smaller for secular volunteering than for religious volunteering, but still significantly positive in all countries.

Like collective religiosity, dimensions of individual religiosity tend to have smaller effects on secular volunteering than on religious volunteering. Frequency of prayer has only a small positive effect on secular volunteering, and the effect even turns out to be negative in Sweden (.028 -.111 = -.083), Finland (.028 -.105 = -.077) and Great Britain (.028 -.118 = -.090). Particularism shows a robust negative effect on secular volunteering, which supports our hypothesis that believers in one true religion are antithetic to voluntary participation in secular organizations (*H7*). Religious experiences are positively related to volunteering for secular organizations, in Finland even more than in other countries. Similarly, spirituality positively affects secular volunteering, in Sweden and Italy even more than in other countries. A positive effect of taking consequences of religious beliefs is only significantly found in Great Britain, the effect even turns out to be negative in Norway, Italy and Poland.

Table 3.3 Logistic regression coefficients (B) on secular volunteering with country interactions

	All countries	Interactions										
		Sweden	Denmark	Norway	Netherlands	Finland	Hungary	Great Britain	Belgium	Portugal	Italy	Poland
Denomination (None=ref)												
Catholic	-.108						.484 **					
Protestant	.209 *											
Other Christian	.039					-1.023 *						
Other non-Christian	-.308											
Church attendance/ week	.094 **											
Church att. partner/ week	.073 *											
Prayers/week	.028 *	-.111**				-.105 **		-.118***				
Dogmatism	-.009								.113*			
Particularism	-.159 ***											
No truths	-.147											
Experience	.084 **					.278 ***						
Spirituality	.032 *	.071*									.112 **	
Consequences	.025			-.167**				.142**			-.116 **	-.124 *
Education	.305 ***	-.177*										
Household size	.056 **			.163*					.127**			
Employment (non-paid=ref)												
Self employed	.296 **								-.537**		-.435 *	
Employed	.029											
Female	-.301 ***				.383**	.524 **		.533***				
Age/10	.325 ***											
Age/10 squared	-.029 **					.016 **						
Partner	.002								-.472***			
Community size	-.074 ***		.072 *					-.234*				
Country (Italy=ref)												
Belgium	1.034 ***											
Denmark	1.014 ***											
Finland	.836 **											
Great Britain	2.455 ***											
Hungary	1.018 ***											
Netherlands	1.243 ***											
Norway	1.599 ***											
Poland	.314											
Portugal	.786 ***											
Sweden	2.030 ***											
Constant	-2.658 ***											

Missing cases on some variables are related to secular volunteering: Particularism (B=-.595; p=.000;N=593); Church attendance partner (B=-.258; p=.039; N=500); Education (B=.725; p=.012; N=63)
Nagelkerke R^2 = .176; N = 12277; *** p < .001; ** p < .01; * p < .05; † p < .10 (two tailed)

Table 3.4 Logistic regression coefficients (B) on secular volunteering with spill-over and country interactions

	All countries	Interactions										
		Sweden	Denmark	Norway	Netherlands	Finland	Hungary	Great Britain	Belgium	Portugal	Italy	Poland
Denomination (None=ref)												
Catholic	-.134 †						.523**					
Protestant	.160 †											
Other Christian	-.087					-1.250 *						
Other non-Christian	-.443 *											
Church attendance/ week	-.035											
Church att. partner/ week	.046									-.289*		
Prayers/week	.012	-.109**				-.086 *		-.105 **				
Dogmatism	.005											
Particularism	-.191 ***											
No truths	-.199 *											
Experience	.077 **					.243 **						
Spirituality	.042 **											
Consequences	-.031 †			-.182**				.160 ***				
Education	.279 ***											
Household size	.049 *			.173*					.126*			
Employment (non-paid=ref)												
Self employed	.141 †											
Employed	.061				-.335*							
Female	.050	-.453**	-.601 **						-.266*	-.912***		-.598 **
Age/10	.302 ***											
Age/10 squared	-.026 **					.014 **						
Partner	.013								-.493***			
Community size	-.060 ***								-.210*			
Religious volunteering	1.280 ***						-.550**		.725***	.923***		.763 **
Country (Italy=ref)												
Belgium	1.304 ***											
Denmark	1.561 ***											
Finland	.974 ***											
Great Britain	2.349 **											
Hungary	.866 ***											
Netherlands	1.453 ***											
Norway	1.422 ***											
Poland	.051											
Portugal	.886 ***											
Sweden	2.204 ***											
Constant	-2.678 ***											

Missing cases on some variables are related to secular volunteering: Particularism (B=-.648; p=.000;N=593); Church attendance partner (B=-.256; p=.044; N=500); Education (B=.642; p=.030; N=63)
Nagelkerke R^2 = .218; N = 12277; *** p < .001; ** p < .01; * p < .05; † p < .10 (two tailed)

To determine the relative effect of collective *versus* individual aspects of religiosity, we estimated the effect of standardized sheaves of the two sets of variables (see Table 3.5). For both religious and secular volunteering, individual religiosity is more important than collective religiosity. Moreover, the relative importance of individual *versus* collective religiosity is stronger in the case of secular volunteering (.374 / .178 = 2.10) than in the case of religious volunteering (1.006 / .719 = 1.40). This confirms our hypothesis that the collective part of religiosity is relatively unimportant for secular volunteering (*H8*).

Several background characteristics contribute to the explanation of secular volunteering. Education is positively related to secular volunteering, although this effect is somewhat weaker in Sweden than in other countries. In all countries, members of large households volunteer more for religious organizations. Self-employed people volunteer more often than others for secular organizations, although the opposite is true in Belgium and Italy. Females are generally less often volunteers for secular organizations than men are, although the reverse happens in the Netherlands, Finland and Great Britain. Age is curvilinearly related with secular volunteering - except in Finland -, with people of middle age (10*(.325/(2*.029)) =56) being most engaged in this behaviour. People living in larger communities are less likely to volunteer in all countries. People who had no score on particularism, church attendance of the partner or education turned out to be volunteers for secular organizations more often than people who had a score on these variables.

3.4.4 Spill-over

The spill-over model from religious to secular volunteering is represented in Table 3.4. Religious volunteering indeed shows a strong positive effect on secular volunteering in all countries, although the effect is somewhat weaker in Hungary and stronger in Belgium, Portugal and Poland. The control for religious volunteering leads to several changes for other parameters in the model. Effects of collective religiosity change substantially. Church membership shows negative rather than positive effects on secular volunteering, with Catholics in Hungary as the only exception. Church attendance and church attendance of the partner do not have a direct positive relationship with secular volunteering; it is even negative for church attendance of the partner in Portugal. The change in effects of collective religiosity supports our hypothesis that effects of collective religiosity can be interpreted by religious volunteering (*H9*).

Effects of individual religiosity differ from dimension to dimension. Frequency of prayer in general does not have a direct effect on secular volunteering; only exceptional negative relationships in Sweden, Finland, and Great Britain stand firm. Dogmatism does not have an effect in any country. The consequential dimension has no effect in general, with a negative exception in Norway and a positive exception in Great Britain. However, the negative effect of particularism stands firm in all countries and is even stronger than without control

for religious volunteering. We also find a significantly positive direct effect of spirituality in all countries. These robust direct effects of particularism, experiences and spirituality confirm our hypothesis of the importance of individual religiosity with regard to volunteering, regardless of religious volunteering (*H9*).

The relative importance of collective and individual religiosity in the model is represented by sheaves in Table 3.5. The total effect of collective religiosity is not reduced, contrary to our hypothesis, while the total effect of individual religiosity decreased. Overall, our hypothesis that effects of individual religiosity remain stronger than effects of collective religiosity after control for religious volunteering (*H9*) is partly supported. Effects of collective religiosity are adequately interpreted and several effects of individual religiosity remain strong.

Table 3.5 Logistic regression coefficients (B) of standardized sheaves on volunteering

	Religious	Secular	Spill-over
Collective religiosity	.719	.178	.193
Individual religiosity	1.006	.374	.302
Religious volunteering			.501

3.5 Discussion

We aimed to investigate effects of dimensions of individual religiosity in addition to collective religiosity on religious and secular volunteering to find out what aspects of religiosity are most important, whether effects differ between religious and secular volunteering, and whether effects are cross-nationally robust. Both collective and individual aspects of religiosity are related to volunteering. Aspects of religiosity in general have stronger effects on religious volunteering than on secular volunteering. These effects differed between religious and secular volunteering; the most important difference being a negative effect of particularism on secular volunteering. Moreover, effects of particularism (the belief dimension), religious experience and spirituality (the experiential dimension) on secular volunteering cannot be interpreted with spill-over from religious to secular volunteering. Overall, individual religiosity is relatively more important than collective religiosity with regard to volunteering, for secular volunteering even more than for religious volunteering. Effects of aspects of religiosity are quite robust across countries, although some minor variations exist.

Nonetheless, there are still some questions to be answered in future research. Although our results are relatively robust across countries, we did find some variation in results. We are quite happy to be able to analyse data on eleven countries, but a much larger number of countries with multidimensional information on religiosity would enable hierarchical modelling of context and composition effects and cross-level interactions. Hierarchical modelling may be able to interpret what at the moment seem to be exceptional effects (see Parboteeah et al., 2004; Ruiter & De Graaf, 2006). Because of the relative importance of individual religiosity with regard to volunteering behaviour, we are especially curious about composition effects of individual religiosity measures.

Another point is that volunteering behaviour is adifferent thing from willingness to volunteer. We found that people with certain kinds of religiosity volunteer more (or less), but are they doing this because they like to volunteer or is it because they are asked to do it? Ideally, one would like to ask all respondents to volunteer for a certain organization and investigate what kind of people do agree. Experimental research may shed more light on this type of questions.

The important points from this study are that aspects of individual religiosity are more important than aspects of collective religiosity with regard to the explanation of both religious and secular volunteering. In addition, we showed that effects of religiosity on volunteering are not always positive: particularistic beliefs are negatively related to secular volunteering. Moreover, next to spill-over from religious to secular volunteering, the dimensions belief and religious experience have direct effects on secular volunteering. Given that these results are quite robust across countries, future research on volunteering needs to take individual aspects of religiosity into account.

4 Convergent and discriminant validity of religiosity measures among church members and non-members[*]

Abstract
The applicability of religiosity measures among people who are not affiliated to a church is an important prerequisite for its use in religiously heterogeneous populations. This chapter provides a confirmatory factor analysis of intrinsic, extrinsic and quest (IEQ) religiosity measures and Glock's religiosity dimensions among church members and non-members. Moreover, it shows correlations between IEQ and Glock's dimensions. A three-factor solution of IEQ religiosity is found for both groups. Factor loadings were comparable between groups. Although theoretically fine, high inter-factor correlations call into question the empirical usefulness of the IEQ distinction for non-member samples. Glock's dimensions are also comparable between groups and correlate most strongly with intrinsic and extrinsic religiosity, but weakly with quest religiosity. The results stress the complementary characteristics of both perspectives on religiosity.

4.1 Introduction

The distinction of intrinsic, extrinsic (Allport, 1950, 1959; Allport & Ross, 1967) and quest (Darley & Batson, 1973) religiosity has produced an enormous debate in the field of the psychology of religion (see Hood et al., 1996; Wulff, 1997). One of the issues is that the traditional measurement instruments for these religious orientations (e.g., Batson & Schoenrade, 1991a, 1991b; Gorsuch & Venable, 1983) are only applicable to religious people (Donahue, 1985; Kirkpatrick, 1989; Maltby et al., 1994). Hence, only religious people can be compared among themselves, while the more interesting comparison of religious with non-religious people is impossible. To enable the inquiry of non-religious people, Maltby suggested adaptations to the measurements (Maltby & Day, 1998; Maltby & Lewis, 1996).

A further prerequisite to the comparison of religious and non-religious people is that the measurement instruments have comparable psychometric characteristics for both groups. In this chapter we will test the convergent and discriminant validity and reliability of intrinsic, extrinsic and quest (IEQ) religious

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orientation items with a sample from one of the most religiously heterogeneous countries, the Netherlands (Verweij, Ester, & Nauta, 1997). Doing this, we will improve on previous research in three ways.

First, previous tests of reliability of IEQ measurements have mainly used non-representative samples consisting of religious students, seminarians, and members of specific churches (Batson et al., 1993; Batson & Schoenrade, 1991b; Batson & Ventis, 1982; Finney & Malony, 1985; Hills, Francis, & Robbins, 2005; Hilty, Morgan, & Hartman, 1985). We will study religiosity measures with a representative sample of the Dutch population. This will provide us with more insight into the quality of these measurements when used in a religiously heterogeneous population. Furthermore, we will test reliability or convergent validity (high correlations between measurements for the same construct) and discriminant validity (low correlations between measurements for different constructs) for both church members and non-members simultaneously (see Van der Vijver, 2003a, 2003b).

Second, previous research mainly used principal component analysis (PCA) of scales rather than items (Batson et al., 1993; Batson & Ventis, 1982; Finney & Malony, 1985). This procedure is flawed for two reasons: a) scale scores do not provide insight in cross-loadings of items on other dimensions, and b) PCA assumes no measurement error, while each measurement actually has some error. Batson and Schoenrade (1991b) analysed a pool of items while allowing measurement error, but used varimax rotation which assumes zero correlation between factors. However, correlations between religious orientations are seldom zero (see Donahue, 1985). Moreover, most research explores rather than tests factor structures. Testing requires that all relevant items are included simultaneously in the analysis while imposing restrictions on cross-loadings. Although a confirmatory factor analysis (CFA) has been published recently (Hills et al., 2005), psychometric characteristics of the measurement instruments are not compared between religious and non-religious people. Therefore, we will perform CFA of IEQ items, comparing both groups and allowing measurement errors and correlations between factors.

Third, although the distinction between IEQ religious orientations has highly influenced social scientific research on religion, it is certainly not the only important way to assess dimensions of religiosity. The influential studies of Glock and Stark (1965; 1966; Stark & Glock, 1968) distinguished different dimensions of religiosity: *practice, belief, experience* and *consequences*. Huber (2002) argued that Glock's dimensions are part of an intrinsic or *centrality* dimension. We will test Huber's claim by empirical analysis of the relations between IEQ and Glock's dimensions.

4.1.1 Religious orientations

In the discussion on religious orientations, several dimensions have been distinguished. Allport (1950; 1959; Allport & Ross, 1967) used the terms 'intrinsic'

and 'extrinsic' to describe two motivations. People with an *intrinsic* motivation 'live' their religion. For them, religion is most important in their life, all other things are brought into harmony with it. People with an *extrinsic* motivation 'use' their religion for their own ends (e.g., for security, social activities). Initially, intrinsic and extrinsic motivations were regarded as opposite ends of a continuum. However, research with the Religious Orientation Scale (ROS) showed that the two motivations rather formed two different dimensions (Allport & Ross, 1967; Feagin, 1964; W. C. Wilson, 1960).

According to Batson (1971; Batson & Ventis, 1982) the ROS does not adequately operationalize several aspects of what Allport originally meant with intrinsic religiosity: 1) facing complex problems without reducing their complexity (e.g., on morality and ethics), 2) readiness to doubt and self-criticism, and 3) tentativeness or openness to change in religious belief. Therefore, Batson developed a scale to measure these aspects of religiosity. Analyses showed however, that this *quest* scale formed a third religious orientation.

One of the criticisms on the IEQ tradition has focused on the specifically Christian formulation of the measurement instruments. The inability of many non-Christian people to answer the questions makes it impossible to use IEQ scales in religiously heterogeneous samples (Kirkpatrick, 1989; Maltby et al., 1994). Maltby suggested adaptations to the questionnaire in order to enable the inquiry of non-Christian or non-religious people (Maltby & Day, 1998; Maltby & Lewis, 1996). Maltby asks to what extent statements apply to the respondent, instead of to what extent they agree. Nearly all respondents can answer the adapted items.

4.1.2 Glock's dimensions

Another important perspective on religiosity was developed by Glock and Stark (1965; 1966; Stark & Glock, 1968). They distinguished *practice, belief, experience* and *consequences* dimensions of religiosity. *Practice* points to public practice (church membership and attendance) and private practice, e.g., prayer. *Belief* refers to, e.g., belief in God and an afterlife. *Experience* stands for religious emotions and revelations. *Consequences* refers to the importance of religion in people's daily lives. Indicators for these dimensions of religiosity are widely used in cross-national surveys on religiosity (e.g., Inglehart, 2000; ISSP, 1993, 2000; Jagodzinski & Dobbelaere, 1999).

Up to now, there has not been empirical research on relations between IEQ and Glock's dimensions of religiosity. Recently Huber (2002) did some theoretical work to integrate the intrinsic and extrinsic religious orientations with Glock's dimensions. Huber distinguishes *centrality* as main religious factor and regards Glock's dimensions as aspects of centrality. However, Huber neither uses the quest dimension of religiosity nor does he provide empirical evidence for his theory. We aim to fill this gap with our empirical approach of investigating both multidimensional distinctions of religiosity.

4.2 Methods

4.2.1 Data

In the winter of 2000-2001 the 'Religion in Dutch Society' survey (SOCON 2000) was conducted (Eisinga et al., 2002). A two-stage stratified random sample method was used to obtain a representative sample of Dutch citizens between 18 and 70 years old. A total of1008 interviews were conducted, representing a response rate of 43.7%. The sample was representative for the Dutch population with regard to gender and marital status, but younger people (less than 29 years of age) are slightly underrepresented. The sample is religiously heterogeneous: 59% of the respondents did not regard themselves as a member of a Christian church. Of those who declared themselves to be a member of a Christian church 55% were Catholic, 36% Protestant (Reformed) and the remaining 9% belonged to other Christian churches. Respondents were asked whether they would be willing to cooperate in future research. Those who agreed received during the autumn of 2003 an additional questionnaire containing items on IEQ religiousness. Of the 929 mailed questionnaires, 512 were returned. Response to the additional questionnaire was not significantly related to Glock's dimensions of religiosity or marital status. However, there was a higher rate of return of the additional questionnaire by females (exp(B) = 1.56; $p < .01$) and older people (exp(B) = 1.02; $p < .001$).

4.2.2 Measurements

4.2.2.1 Religious orientations

Religious orientation items are derived from Maltby (Maltby & Day, 1998; Maltby & Lewis, 1996) and carefully translated into Dutch by a professional team (Harkness, 2003).[15] The items are presented in Table 2. Previous research showed that religious orientations are best measured with four categories (Koskinen-Hagman, 1999). To give respondents the opportunity of a neutral answer, we used a five-point scale ranging from 'does not apply to me at all' to 'completely applies to me'.

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[15] One item was rephrased: instead of: "I would prefer to go to Church more than once a week", we used ; "I like to go to Church", since church attendance of more than once a week is unusual in the Netherlands. To save space we eliminated some items that are similar to other items, e.g.: "I go to Church because it helps me make friends" and "I go to Church mainly because I enjoy seeing people I know there"; "God wasn't very important to me until I began to ask questions about the meaning of my own life" and "I have been driven to ask religious questions out of a growing awareness of the tensions in my world and in my relation to my world".

4.2.2.2 Glock's dimensions

As operationalization of church membership, respondents were asked whether they consider themselves a member of a Christian church or religious community. This information is used to distinguish members from non-members in our analyses. Operationalisations of Glock's dimensions of religiosity are presented in Table 5 and comparable to other surveys (e.g., Inglehart, 2000; ISSP, 1993, 2000; Jagodzinski & Dobbelaere, 1999). Church attendance was phrased as 'attending services of a church or religious community', with four response categories, from 'hardly ever/never' to 'about once a week', which are recoded into church attendance per year (0-52). Frequency of prayer was asked as: "Do you ever pray?", with four response categories from 'never' to 'often'. The belief dimension was measured as Christian worldview, indicated by a scale of 10 statements. Answer categories ranged in five steps, from 'not convinced at all' to 'entirely convinced'. Religious experience was operationalized as experiencing God in nature, with five answer categories ranging from 'don't agree at all' to 'agree entirely'. Respondents who considered themselves to be church members responded to five statements with regard to consequences of Christian faith with a five-point response scale ranging from 'don't agree at all' to 'agree entirely'. Respondents who indicated that they were non-members were given a similar scale about worldview instead of Christian faith.

4.2.3 Analysis

To test the factor structure of IEQ items, we performed multi-group confirmatory factor analyses with LISREL (Jöreskog & Sörbom, 1993a, 1993b). We compared nested models on the basis of several fit indicators: Chi^2, RMSEA, GFI and BIC (Bollen, 1989; Raftery, 1993, 1995). First, we tested the fit of the theoretical factor model for church members and non-members simultaneously. Items were only allowed to load on their theoretical factor. Second, we inspected modification indices in order to improve the fit of the factor solution. Poorly fitting items - either loading higher on other factors or behaving differently for the two groups - were eliminated. Also, following modification indices, significant covariances between error variances were allowed, since there may be clusters in the data that are not completely accounted for by the theoretical three-factor model (e.g., two items that share the word 'church').

A similar procedure was used to analyse the factor structure of Glock's dimensions. Since consequences of religiosity and worldview were only asked to church members and non-members respectively, we could not impose equal factor loadings between groups on consequences items.

Subsequently, we analysed relations between factor solution for IEQ and Glock's dimensions with SPSS. Factor scores are computed as the mean of scores

on items multiplied by their factor loading. Relations between IEQ and Glock dimensions are analysed with partial correlations.

4.3 Results

4.3.1 Confirmatory analyses of IEQ factors

First, we tested the fit of one (I/E/Q), two (I/E and Q) or three (I, E and Q) factor models, imposing equal loadings for both groups. All test statistics showed that the three-factor model of IEQ items has a significantly better fit than the other models (see Table 4.1). According to BIC, the model is satisfactory (BIC < 0), but Chi^2 is still significant, RMSEA is high (> .05) and GFI low (<.90). Post-hoc analysis for non-members only showed also best fit estimates for the three-factor model. This confirms that the three-factor structure applies also to non-members.

Table 4.1 Fit estimates for confirmatory factor analysis of IEQ items

Structure	Chi^2	df	p	RMSEA	Group GFI Church Member		BIC
					Yes	No	
1-factor IEQ	5966	756	.000	.173	.440	.652	1330
2-factor IE/Q	3527	754	.000	.127	.596	.704	-1097
3-factor I/E/Q	3073	750	.000	.116	.631	.726	-1527
-E1	2862	696	.000	.116	.646	.725	-1407
-E3	2264	644	.000	.105	.712	.737	-1686
-E7	1927	594	.000	.099	.745	.752	-1716
allow error covariances and different error variances	1108	544	.000	.067	.805	.863	-2228

$N_{Members}$=178; N_{NoMem}=283

Table 4.2 shows the factor loadings of IEQ items on their presupposed dimensions while other loadings are fixed to zero. Nearly all items loaded substantially on their theoretical factor, showing convergent validity. One item (E1) conflicts with other extrinsic religiosity items. Therefore we excluded this item from further analyses, which lowered Chi^2 although BIC increased (see Table 4.1).

Modification indices indicated that two extrinsic religiosity items (E3 and E7) did not fit the three-factor model because of stronger (negative) loading on the intrinsic factor among church members (-.98 and -.82 respectively), indicating poor discriminant validity. Deletion of these items improved the factor solution substantially according to all test statistics (see Table 4.1). Nonetheless, the model remained suboptimal (Chi^2 is significant; RMSEA > .05; GFI < .90).

Allowing error covariances and differences in error variances between groups, when indicated by modification indices, improved the model substantially according to all criteria (see Table 4.1). The model is still suboptimal, but turned out to fit much better than at first sight. Factor loadings of IEQ items in the final model are presented in Table 4.2.

Table 4.2 Factor loadings of three-factor confirmatory factor analysis of IEQ items

	Item	Initial			Final		
		I	E	Q	I	E	Q
I1	I try to live all my life according to my religious beliefs.	.748			.734		
I2	Prayers I say when I am alone are as important to me as those I say in Church.	.585			.655		
I3	It is important for me to spend time in private thought and prayer.	.695			.690		
I4	I have often had a strong sense of God's presence.	.737			.762		
I5	I enjoy reading about my religion.	.602			.594		
I6	I would rather join a Bible study group than a church social group.	.517			.470		
I7	My religion is important to me because it answers many questions about the meaning of life.	.775			.812		
I8	My whole approach to life is based on my religion.	.730			.678		
I9	I like to go to Church	.525			.528		
E1	It doesn't matter what I believe so long as I am good.		.157				
E2	What religion offers me most is comfort in times of trouble and sorrow.		-.734			.715	
E3	Although I am religious, I don't let it affect my daily life.		-.450				
E4	I go to Church mostly to spend time with my friends.		-.271			.235	
E5	I pray mainly to gain relief and protection.		-.784			.791	
E6	I pray mainly because I have been taught to pray.		-.497			.444	
E7	Although I believe in my religion, many other things are more important in life.		-.435				
E8	Prayer is for peace and happiness.		-.789			.781	
E9	Sometimes I have to ignore my religious beliefs because of what other people might think of me.		-.462			.464	
Q1	Questions are more central to my religious experience than are answers.			.539			.540
Q2	I do not find religious doubts upsetting			.256			.237
Q3	There are many religious issues on which my views are still changing.			.756			.753
Q4	I am constantly questioning my religious beliefs.			.728			.752
Q5	As I grow and change, I expect my religion also to grow and change.			.788			.794
Q6	My life experiences have led me to rethink my religious convictions.			.547			.550
Q7	For me, doubting is an important part of what it means to be religious.			.574			.534
Q8	I expect my religious convictions to change in the next few years.			.744			.708
Q9	It might be said that I value my religious doubts and uncertainties.			.751			.758
Q10	I was not very interested in religion until I began to ask questions about the meaning and purpose of my life.			.529			.578

$N_{Members}$=178; N_{NoMem}=283

Correlations between the factors are higher among non-members than among church members (see Table 4.3). This indicates that the distinction of IEQ religious orientations is most relevant for church members.

Table 4.3 Pearson correlations between IEQ factors in final model

	Members		Non-members	
	Intrinsic	Extrinsic	Intrinsic	Extrinsic
Extrinsic	.751		.928	
Quest	.429	.338	.856	.793

Table 4.4 Fit estimates for confirmatory factor analysis of Glock dimensions

Structure	Chi^2	df	p	RMSEA	Group GFI Church Member Yes	Group GFI Church Member No	BIC
Glock basic	877	504	.000	.051	.896	.880	-2214
allow error covariances and different error variances	540	500	.107	.017	.925	.930	-2527

N_{Member}=278; N_{NoMem}=642

Table 4.5 Factor loadings for Glock dimensions

Item	Scale: Church attendance	Frequency of prayer	Christian worldview	Experience of God in nature	Consequences of religion	Consequences of worldview
Church attendance	1.00					
Frequency of prayer		1.00				
There is a God who concerns Himself with every individual personally			.80			
There is a God who wants to be our God			.84			
For me, life only has meaning because of the existence of a God			.83			
Life has meaning because there will be something after death			.68			
Death only has meaning if you believe in God			.57			
Death is the passage to another life			.62			
Belief in God can bear a lot of pain			.54			
For me, sorrow and suffering have meaning only if you believe in God			.75			
Everything good that exists in the world originates from God			.83			
God ensures that, in the end, good will conquer evil			.83			
I experience God's hand in the beauty of nature				.94		
I experience God's goodness in the peace of nature				.92		
My Christian faith has great influence on my daily life					.91	
When I have to make important decisions, my Christian faith plays a major part in it					.92	
My Christian faith has great influence on my political attitudes					.76	
My life would be quite different had I not my Christian faith					.77	
Christian faith is something that interests me a great deal					.85	
My world view has great influence on my daily life						.85
When I have to make important decisions, my world view plays a major part in it						.89
My world view has great influence on my political attitudes						.70
My life would be quite different had I not my world view						.78
World view is something that interests me a great deal						.79

4.3.2 Confirmatory analysis of Glock's dimensions

The items indicating Glock's dimensions showed a relatively good fit with regard to their theoretical factor structure (see Table 4.4). BIC is strongly negative and RMSEA is .05. However, Chi^2 ($p<.001$) and GFI (<.90) indicate suboptimal fit. None of the items fitted poorly according to modification indices, but there are some significant error covariances as well as significant differences in error variances between groups. Allowing these exceptions results in a model with a non-significant Chi^2 ($p > .05$) and satisfactory GFI (>.90). Factor loadings for Glock's dimensions are represented in Table 4.5. The correlations between factors are remarkably low for church attendance and for consequences of worldview among non-members (see Table 4.6).

Table 4.6 Pearson correlations between Glock dimensions

	Members				Non-members			
	1	2	3	4	1	2	3	4
1 Church attendance								
2 Frequency of prayer	.579*				.281†			
3 Christian worldview	.661*	.688*			.249†	.641*		
4 Experience of God in nature	.553*	.690*	.770*		.227†	.574*	.863*	
5 Consequences of religion	.714*	.708*	.884*	.776*				
6 Consequences of worldview					.104†	.300†	.312†	.313†

*** p<.001; ** p<.01; * p<.05; † p<.10 (two-tailed)

4.3.3 Relations between IEQ and Glock dimensions

Partial correlations between IEQ and Glock's dimensions are presented in Table 4.7. For church members, intrinsic religiosity correlates highest with all Glock dimensions, while correlations with extrinsic and quest religiostiy are low, insignificant or even negative. For non-members, church attendance, and consequences of worldview correlate highest with the intrinsic factor, while frequency of prayer, Christian worldview and experience of God in nature correlate highest with the extrinsic factor.

For church members, these results support the view of Huber (2002) that Glock's dimensions are aspects of one centrality or intrinsic religiosity dimension. For non-members, there seem to be two groups of Glock's dimensions, one with weak correlations with intrinsic religiosity and one with moderate correlations to extrinsic religiosity. However, one should remember that the intrinsic and extrinsic factors correlate strongly for non-members. Last but not least, none of Glock's dimensions correlates strongly with quest religiosity.

Table 4.7 Partial correlations of IEQ and Glock factors controlled for other IEQ dimensions

	Members			Non-Members		
	I	E	Q	I	E	Q
Church attendance	**.588*****	-.123†	-.113	**.143***	-.044	-.041
Frequency of prayer	**.515*****	.273***	-.194**	.157**	**.295*****	-.048
Christian worldview	**.644*****	.081	-.253***	.147*	**.392*****	-.093
Experience of God in nature	**.543*****	.165*	-.028	.152*	**.364*****	-.074
Consequences of religion	**.712*****	-.053	-.156*			
Consequences of worldview				**.183*****	-.031	-.009

*** p<.001; ** p<.01; * p<.05; † p<.10 (two-tailed)
N_{Mem}=185-198; N_{NoMem}=275-299

4.4 Discussion

This research aimed to provide a confirmatory factor analysis of IEQ items for both church members and non-members. Moreover, it set out to provide insight into the relationships between IEQ and Glock's dimensions. Results showed a three-dimensional structure of IEQ items for both church members and non-members. Three extrinsic items turned out to fit the model poorly and their content points in one direction: they indicate that religion is unimportant rather than useful for other goals. All remaining IEQ items showed sufficient convergent and discriminant validity and have comparable loadings for both groups. Hence, IEQ items can be used not only in religious samples but also in religiously heterogeneous samples. However, the extremely high correlations between factors for non-members suggest that the distinction of IEQ religious orientations, although theoretically relevant, is empirically not very useful in samples of non-members only.

Huber's (2002) idea of centrality is supported by strong partial correlations between intrinsic religious orientation and all Glock's dimensions among church members. However, several of Glock's dimensions correlate most highly with the extrinsic religious orientation among non-members. Investigators who use the IEQ items in religiously heterogeneous samples should be aware that the scales can behave differently for different subsamples. However, the low(er), insignificant or even negative correlations of Glock's dimensions with extrinsic and quest religiosity support our view that the two distinctions of religiosity are complementary.

Although this study made substantial progress, there are still some issues to be solved. It is unknown whether the relative weakness of the IEQ distinction among non-members is due to the studied sample or inherent to the scale. Comparison with religiously heterogeneous samples from different countries may shed more light on this issue. A further test for convergent and discriminant validity would preferably also use multi-method data.

For the moment, we conclude that IEQ scales, given the comparable factor structure and loadings, can be used in religiously heterogeneous samples, although one should be careful with its use in non-member samples. Research on dimensions of religiosity can benefit from the use of both the IEQ and Glock

distinctions together rather than using just one of them, because they turned out to be complementary. Investigating these distinctions simultaneously will shed more light on the competitive advantages of the two multidimensional frameworks.

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5 Dimensions of religiosity and informal and direct helping*

Abstract
This chapter investigates the relations between aspects of religiosity and providing informal and direct prosocial behaviour. Religiosity matters with regard to practical work, lending and personal advice, as well as helping family, friends and neighbours. However, providing personal care and helping one's partner or colleagues were not related to religiosity. Results shed a different view on quest religiosity than previous research, since quest is not found to be a source of 'universal' compassion. Results also shed an interesting view on integration in a religious community since the religious affiliation does matter, but the degree of integration – measured as church attendance – does not matter with regard to informal and direct helping, which contrasts with research on formal and indirect kinds of helping.

5.1 Introduction

Previous research showed that dimensions of religiosity are related to several kinds of prosocial behaviour. Religious people are relatively often active in volunteering (Bekkers, 2001, 2003, 2004; Bowen, 1999; De Hart, 1999; Home Office, 2004; Lam, 2002; O'Beirne, 2004; Park & Smith, 2000; Reitsma et al., 2005b; Ruiter & De Graaf, 2006). Similarly, religious people are relatively generous in their charitable donations (Barry, 1996; Bekkers, 2002a, 2003; Flanagan, 1991; Regnerus et al., 1998; Reitsma, Scheepers et al., 2006a; Scheepers & Te Grotenhuis, 2005).

However, volunteering and donating money to charity are only some examples of prosocial behaviour. Pearce and Amato (1980) developed a cognitive map of helping situations. Helping situations differ in the extent that they are *planned and formal* (e.g., voluntary work) versus *unplanned and informal* (e.g., practical work, personal care, lending something, advisory talk). Helping situations can also differ in whether help involves *indirect* assistance (e.g., donating money to charity) or *direct* help of the person in need (e.g., partner, family, friends, neighbours and colleagues).

Survey research up to now has focused mainly on the planned, formal and indirect kinds of prosocial behaviour such as donating money to charity and volunteering. In this chapter we set out to investigate whether and to what extent dimensions of religiosity are related to: a) practical work, personal care, lending

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something and/or advisory talk, and b) helping specific targets such as partner, family, friends, neighbours and colleagues? To obtain net effects of dimensions of religiosity, we control for a set of competing mechanisms that may be at work such as value orientations, time constraints, background characteristics of the respondent, and characteristics of targets: did they provide help themselves, are they also religious and are religious people more willing to help religious targets?

5.1.1 Dimensions of religiosity

5.1.1.1 Intrinsic, extrinsic and quest: a motivational perspective

Investigations of relations between religiosity and unplanned and informal helping has mainly been experimental and made use of the distinction of intrinsic, extrinsic and quest religious orientations. Allport (1950; 1959; Allport & Ross, 1967) used the terms intrinsic and extrinsic to describe two motivations. People with an intrinsic motivation 'live' their religion. For them, religion is most important in their life, all other things are brought into harmony with it. People with an extrinsic motivation 'use' their religion for their own ends (e.g., for security, social activities). Batson (Batson, 1971; Batson & Ventis, 1982) argued that there exists a third religious orientation which he called 'quest'. The quest dimension covers three related aspects of religiosity: 1) facing complex problems (e.g., on morality and ethics) without reducing their complexity, 2) readiness to doubt and self-criticism, and 3) tentativeness or openness to change in religious belief.

While providing an overview of research on intrinsic, extrinsic and quest religiosity in relation to both prejudice and prosocial behaviour, Batson, Schoenrade and Ventis (1993, p. 364) conclude: 'The quest dimension is related to reduced intolerance and increased sensitivity to the needs of others, whereas the intrinsic, end dimension is related to the appearance of these social benefits'. Moreover, Batson et al. observe that intrinsic and quest religiosity are related to different kinds of prosocial behaviour. Intrinsic religiosity is related to institutional – planned and formal - prosocial behaviour, and quest religiosity is related to individual – unplanned and direct - prosocial behaviour. Therefore, we expect a positive effect of quest religiosity on informal and direct prosocial behaviour (*H1*). Next to institutional helping, there may also be some positive effect of intrinsic religiosity on informal and direct helping (*H2*). Extrinsic religiosity is not likely to be positively related to prosocial behaviour, it may even be negatively related to helping (*H3*).

Moreover, the help may be provided only to certain targets. A recent study found that religiosity is related to helping close targets such as family and friends, but not related to unknown or unfamiliar targets (Saroglou et al., 2005). The compassion associated with quest religiosity is relatively universal, while intrinsic religiosity is negatively related to helping when the target has conflicting values

(Batson et al., 2001; Batson, Floyd et al., 1999). Therefore we expect that quest religiosity is related to a broader range of targets than intrinsic religiosity (*H4*).

5.1.1.2 Glock's dimensions: collective *versus* individual aspects

Religions provide norms, like concern for others, and reinforce these norms by collective rituals (Durkheim, [1912] 1995). Participation in these rituals is considered an indicator of an individual's integration into the religious community. The more strongly people are integrated, the more they will comply with the norms of the group (Durkheim, 1897; Stark, 1994). From another perspective, prosocial behaviour is more attractive for people who are integrated in a social network that rewards such behaviour (Bekkers, 2002b; Deutsch & Lamberti, 1986). Following both propositions, the collective aspect of religiosity is important with regard to prosocial behaviour.

People who are members of a church are more integrated in a religious community than those who are not affiliated. Therefore, we expect church members – given religious norms like concern for others – to provide more help than non-members (*H5*). Moreover, there may be denominational differences in prosocial behaviour. Catholics are found to be less individualistic and more communitarian than Protestants (Durkheim, 1897; Greeley, 1989) and are therefore more likely to help others (*H6*). Church membership is only a general indicator of religious integration. We propose that the extent of integration in a denomination will have an additional effect. People who attend church more often are more integrated and hence are more likely to conform to the norms of their group (Durkheim 1897; Stark 1994). We therefore expect a positive relation between church attendance and providing help to others (*H7*).

Religiosity has more aspects than just participation in collective rituals. Next to integration in a religious community, individual beliefs and practices may be important with regard to prosocial behaviour. In addition to the collective aspects of religiosity, Glock and Stark (Glock, 1962; Glock & Stark, 1965, 1966; Stark & Glock, 1968) distinguished individual practice (e.g., frequency of prayer), belief, experience and consequences. *Individual practice* points to prayer and meditation. *Belief* refers to beliefs about God, meaning of life, life after death, etc. *Experience* stands for religious emotions and revelations. *Consequences* refer to the importance of religion in people's daily lives. Several studies have found relations between individual aspects of religiosity and planned and formal helping (see e.g., De Hart, 1999; Lam, 2002; Reitsma et al., 2005b; Reitsma, Scheepers et al., 2006a; Yeung, 2004). Since all these dimensions of religiosity indicate individual adherence to religious beliefs, we expect that they are positively related to direct and unplanned helping (*H8*).

5.1.2 Competing mechanisms

In order to estimate net effects of dimensions of religiosity, we include some competing mechanisms in our model. Value orientations are related to prosocial behaviour (see e.g. Simpson, 2004), while they also interfere with religiosity (Saroglou, Delpierre, & Dernelle, 2004; Schwartz & Huismans, 1995). Socially critical people who care about equality and justice in society are probably more likely to give a hand to people who need some help because of their personal norms (see e.g., Lee, Piliavin, & Call, 1999). People who value their family bonds are more likely to help their family. However, individualistic values like achievement and hedonism are likely to be negatively related to providing help (except when it serves egoistic purposes).

Trust in other people is important in many social interactions (see Cook, 2005; see Putnam, 2000). Trust is known to be related to more involvement in charity, volunteering and civic participation in general (Brehm & Rahn, 1997; Uslaner & Brown, 2005). Trust is also likely to be an important prerequisite for informal helping behaviour. When people do not trust each other, they will not ask for or provide help since they are afraid of betrayal.

Many publications have stressed the relation between personality and prosocial behaviour. In his literature review on the relation between the 'Big Five' personality factors and prosocial behaviour, Bekkers (2004, p. 28-32) concluded that agreeableness, extraversion and emotional stability (as opposed to neuroticism) are all found to be positively related to prosocial behaviour. Bekkers' empirical analysis also showed some positive effects of conscientiousness and openness on prosocial behaviours. Ashton, Paunonen, Helmes and Jackson (1998) argued that agreeableness is positively related to both kin altruism and reciprocal altruism, while emotional stability is negatively related to kin altruism and positively to reciprocal altruism. Agreeableness and extraversion are found to be positively related to helping behaviour at work (King, George, & Hebl, 2005). Moreover, personality characteristics and dimensions of religiosity are related (Saroglou, 2002). Relations between dimensions of religiosity and helping behaviour may be spurious due to personality characteristics.

Several general characteristics of respondents are taken into account: gender, age, having a partner, number of children, education and income, as well as urbanization of the environment. Most of these general characteristics are related to aspects of religiosity. Therefore, we need to control for them in order to obtain net effects of dimensions of religiosity. Moreover, many of these characteristics are related to planned and indirect prosocial behaviour (see e.g., Reitsma et al., 2005b; Reitsma, Scheepers et al., 2006a), to unplanned and direct helping (Amato, 1993; Komter & Vollebergh, 2002; J. Wilson & Musick, 1997), and to prosocial orientation in general (Van Lange, De Bruin, Otten, & Joireman, 1997).

Time spent on other activities cannot be spent on helping people. Hence one would expect a negative effect on helping people of time spent on e.g., work, hobbies, watching television, volunteering and clubs. Watching television is

regarded as especially devastating for engagement with others' needs and with society as a whole (Putnam, 2000). However, one could also argue that working and hobbies are indicators of capabilities that could be useful while helping other people. Time spent on hobbies and clubs also indicates opportunities to help people who are also engaged in certain hobbies or clubs. Time spent on volunteering indicates a certain willingness to contribute voluntarily, which may spill over to helping people directly.

With regard to the analyses of helping certain targets, we take target characteristics into account. Reciprocity is an important principle in prosocial behaviour and social interaction in general (Komter, Burgers, & Engbersen, 2000; Lévi-Strauss, 1965; Mauss, [1923] 1990; Van Lange, 1999). One who accepts help has a duty to help the benefactor somewhere in the future. Therefore, we expect that people are more likely to help targets who have also provided help to them (*H9*). Religiosity of the target may also play a role. Religious people are more willing to donate money when the target is also religious (Yinon & Sharon, 1985). When this also applies to direct helping, we would expect significantly positive interactions between religiosity of the target and the respondent. Since compassion induced by quest religiosity is proposed to be more universal than compassion induced by intrinsic religiosity (Batson et al., 2001), we expect significant target-respondent religiosity interactions for intrinsic but not for quest religiosity (*H10*).

5.2 Methods

5.2.1 Data

In the winter of 2000-2001 the 'Religion in Dutch Society' survey (SOCON 2000) was conducted (Eisinga et al., 2002). A two-stage stratified random sample method was used in order to obtain a representative sample of Dutch citizens aged between 18 and 70 years. A total of 1008 interviews were conducted, which represents a response rate of 43.7%. The sample was representative for the Dutch population with regard to gender and marital status, although there existed a slight underrepresentation of people younger than 29 years. Respondents were asked whether they would be willing to cooperate in future research. Those who agreed received during the autumn of 2003 an additional questionnaire containing items on intrinsic, extrinsic and quest religiousness. Of the 929 mailed questionnaires, 512 were returned. Response to the additional questionnaire was not significantly related to Glock's dimensions of religiosity.

5.2.2 Measurements

5.2.2.1 Providing help

Respondents were asked whether they had provided certain kinds of help in the last six months to one or more targets. The questions are: "To whom have you provided practical help in and around the house; in the household; or with shopping in the last six months?", "To whom have your provided help by taking care of the children or by giving personal care in the last six months?", "To whom have you provided help by lending something (for example, money or tools); or by filling in forms?", and "To whom have you provided help by giving personal advice to someone who went through some big changes in life; or by talking to someone who was feeling downhearted; or by giving advice in relational problems in the last six months?". The non-exclusive answer categories are: "partner", "family", "friend", "neighbour", "colleague" and "no help given". Percentages of people providing certain kinds of help to certain targets are represented in Table 5.1. Nearly everybody, except 3%, did provide some kind of help to someone.

Table 5.1 Percentage of respondents providing certain kinds of help to certain targets

	Partner[a]	Family	Friend	Neighbour	Colleague[b]	Total
Practical help	72	65	46	35	27	90
Personal care	12	29	13	10	2	51
Loan/forms	11	36	27	18	14	68
Personal advice	11	31	41	8	21	73
Total	75	81	67	48	45	97

[a] Of respondents with a partner
[b] Of employed respondents

5.2.2.2 Religiosity

Both the operationalizations of intrinsic, extrinsic and quest religiosity and Glock's dimensions of religiosity have been thoroughly factor-analysed and compared for church members and non-members (Reitsma et al., 2007). Results supported the theoretical factor structure and showed comparable loadings for church members and non-members, although correlations between factors differ for church members and non-members.

Intrinsic, extrinsic, and quest religiosity items were derived from Maltby (Maltby & Day, 1998; Maltby & Lewis, 1996) and carefully translated into Dutch. An example of an intrinsic item is: "My whole approach to life is based on my religion". An example of an extrinsic item is: "What religion offers me most is comfort in times of trouble and sorrow". An example of a quest item is: "I am constantly questioning my religious beliefs". Respondents rated on five-point scale to what extent the statements applied to them.

Operationalizations of Glock's dimensions are comparable to other investigations of Glock's dimensions of religiosity (e.g., Inglehart, 2000; ISSP, 1993, 2000; Jagodzinski & Dobbelaere, 1999). Church attendance was phrased as

'attending services of a church or religious community' with four response categories from 'hardly ever/never' to 'about once a week', which are recoded into church attendance per year (0-52). Frequency of prayer was asked as: "Do you ever pray?" with four response categories, from 'never' to 'often'. The belief dimension was measured as Christian worldview, indicated by a scale of ten statements, for example: "There is a God who wants to be our God". Answer categories ranged in five steps, from 'not convinced at all' to 'entirely convinced'. Religious experience was operationalized as experiencing God in nature with five answer categories ranging from 'don't agree at all' to 'agree entirely'. Church members responded to five statements with regard to consequences of religion (e.g., "When I have to make important decisions, my Christian faith plays a major part in it."), with a five-point response scale ranging from 'don't agree at all' to 'agree entirely'. Respondents who indicated that they are not a church-member were given a similar scale about worldview instead of Christian faith.

Dimensions of religiosity do correlate significantly (see Table 5.2) and most correlations are substantial. Since high correlations can lead to multicollinearity, we computed Variance Inflation Factors (VIF). The VIF indicates the multiplication factor for variances in parameter estimates caused by multicollinearity. A VIF higher than 10 is regarded as problematic. None of the dimensions of religiosity has a VIF that is higher than 10. Moreover, we analysed whether estimates would turn to non-significance when the intrinsic, extrinsic and quest distinction or the dimensions of Glock were separately analysed. This was not the case, effects turned out to be robust for multicollinearity.

Table 5.2 Correlations and variance inflation factors (VIF) of measures of religiosity

	1	2	3	4	5	6	7	8	9	VIF
1 Church attendance										2.73
2 Frequency of prayer	.59									2.77
3 Christian worldview	.59	.72								3.42
4 Experience of God in nature	.50	.70	.81							3.59
5 Salience of religiosity	.68	.71	.81	.69						9.43
6 Salience of worldview	.11	.29	.29	.33						3.49
7 Intrinsic	.61	.72	.75	.72	.77	.31				7.58
8 Extrinsic	.43	.70	.69	.71	.49	.24	.81			6.86
9 Quest	.21	.41	.40	.46	.19	.24	.63	.62		4.73

5.2.2.3 Competing mechanisms

Value orientation is operationalized with several statements which represent four dimensions: traditional achievement, traditional family, social criticism and hedonism, with Cronbach's alphas of .60, .73, .77 and .69 respectively. Respondents indicated how important they considered these values to be in their life at that moment with a five-point response range, from 'unimportant' to 'very much important'. Examples of items are as follows: for traditional achievement, "Getting

on in life"; for traditional family, "Living for one's family"; for social criticism, "Promoting greater equality in society"; and for hedonism, "Having fun".

Trust was measured with four statements: "I think most people are honest and trustworthy", "If somebody acts nice to me, I become suspicious" (reversed), "Most people take advantage of you" (reversed), and "I am inclined to think positive about people". The five response categories ranged from 'Don't agree at all' to 'Agree entirely'. Cronbach's alpha of the scale is .61. A multiple item operationalization with response scales is more trustworthy and less ambiguous than the usual one-item measure of trust (see Miller & Mitamura, 2003).

Personality characteristics were operationalized with the Big Five measurement instrument of Goldberg (1990), in a shortened Dutch version (Gerris et al., 1998). This instrument distinguishes neuroticism (*versus* emotional stability), conscientiousness, resourcefulness (or openness), introversion (*versus* extraversion), and agreeableness. Respondents were asked for 30 trait-descriptive adjectives of how far the qualities fit in with them (five answer categories from 'not at all' to 'very much'). Previous analyses on the same data had already shown a clear Big Five factor solution for the statements, with satisfactory Cronbach's alphas for the subscales ranging from .79 to .86 (Oomens, 2005).

We asked respondents straightforward questions with regard to gender, age, having a partner (either married or cohabiting) and number of children. Educational level was phrased as the 'highest school completed after elementary school', with eight categories from 'no school finished after elementary school to 'university'. Income was phrased as income per month after tax, in eleven categories, from less than €450 to more than €3400. Degree of urbanization was derived from the measure of address density that was designed by the Netherlands Central Bureau of Statistics (Den Dulk, Van de Stadt, & Vliegen, 1992), this contains five categories from no urbanization to very high degree of urbanization.

Respondents were asked how much time they spent on work, hobbies, clubs, volunteering and watching TV. Time spent on work, clubs and TV is coded in hours per week, while time spent on hobbies and volunteering is coded in hours per month. In order to avoid disproportional influence of outliers on our analyses, we recoded the highest 5%, which led to maxima of 55 hours per week working, 90 hours per month for hobbies, 16 hours per week for clubs, 25 hours per month for volunteering and 35 hours per week for watching TV.

Help provided by targets was operationalized as receiving some kind of help from partner, family, friends, neighbours and/or colleagues in the last six months. A dummy was created for help provided by certain targets. Targets' church membership was asked for partner, family and friends. We created a dummy for the partner, while church membership of family and friends is operationalized with a four-point response scale from "none" to "all".

5.2.3 Analysis

Data are analysed with the logistic regression procedure of SPSS. With regard to providing help to one's partner or colleagues, the analysis is only performed for those people who are 'at risk', i.e. who have a partner and who have a job respectively. We included dummies for missing data in the model for those variables where listwise deletion of missings would lead to more than 1% loss of cases. In order to avoid multicollinearity problems, we used a stepwise procedure with regard to interactions. Only significant interactions are part of the presented models.

5.3 Results

Table 5.3 shows the results of logistic regression analyses for different kinds of helping: practical work, personal care, lending, and personal advice. Results of logistic regression analyses for helping different targets, partner, family, friends, neighbours and colleagues, are presented in Table 5.4. In both tables, models are presented for dimensions of religiosity separately and with control for competing mechanisms.

When looking at the effects of dimensions of religiosity without controlling for competing mechanisms, we find some effects of religiosity with regard to practical work, lending and personal advice, but not with regard to personal care (see Table 5.3). We also find some effects of religiosity on helping one's partner, family and friends, but not with regard to helping neighbours or colleagues (see Table 5.4). After control for competing mechanisms, we find mainly more or less similar effects of dimensions of religiosity, but also some differences especially with regard to the targets of helping (see Table 5.4): religiosity does not have effects on helping one's partner, and much weaker effects on helping friends. Moreover, religiosity turns out to be important with regard to helping neighbours while the initial model did not show such relations.

Our hypothesis that there is a positive relationship between quest religiosity and helping behaviour (*H1*) is not supported: although we found relationships between quest religiosity and helping one's partner as well as helping friends, these main effects no longer reach significance after control for competing mechanisms.[16] There is some support for the hypothesis that intrinsic religiosity is positively related to helping (*H2*): we found this relationship for lending something, personal advice (although marginally significant) and helping neighbours (after control for competing mechanisms).[17] We also found some support for a negative

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16 Note that the model with competing mechanisms contains an interaction with quest religiosity which will be discussed later on in this results section.

17 Although there is no significant main effect of intrinsic religiosity on helping family, the model with competing mechanisms contains an interaction with intrinsic religiosity which will be discussed later on in this results section.

Table 5.3 Different kinds of informal and direct helping

	Practical work		Personal care		Loan or filling form		Personal advice	
	B	B	B	B	B	B	B	B
Intrinsic	.30	.33	-.05	.02	.47 *	.47 *	.44 †	.44 †
Extrinsic	-.41	-.20	-.01	.06	-.73 **	-.62 *	-.43 †	-.35
Quest	.13	-.09	.20	.09	.24	.15	.21	.16
Denomination								
Catholic	1.42 *	1.53 *	.14	.28	.44	.44	-.36	-.23
Protestant	2.31 **	2.39 **	-.16	-.06	.56	.39	-.49	-.32
Other Christian	1.48	1.49	-.17	.10	1.50 *	1.46 *	-.47	-.51
None (ref.)								
Church attendance	.01	.01	.00	.00	.00	-.01	-.01	.00
Prayer frequency	-.11	-.20	.01	-.16	.31 **	.24 †	.30 *	.13
Christian worldview	-.10	.18	-.14	-.13	-.09	.17	-.03	.28 †
Experience of God	.16	.16	.16	.18 †	-.16	-.11	-.02	.00
Consequences of religion	-.57 *	-.77 *	.05	-.06	-.31 †	-.41 *	.09	.05
Consequences of worldview	.06	-.04	.05	.02	-.05	-.12	.17	.15
Value orientations								
Traditional achievement		-.27		-.11		-.13		-.09
Traditional family		.10		.30 ***		.04		-.22 *
Social criticism		.34 *		.11		.12		-.04
Hedonism		.05		-.05		.03		.30 *
Trust		.14		.10		.07		.24
Personality								
Neuroticism – emotional stability		.30		-.02		.12		.22
Conscientiousness		-.01		-.13		-.01		.07
Resourcefulness or openness		.27		.25 *		-.02		-.02
Introversion – extraversion		-.03		-.05		-.19		-.43 **
Agreeableness		-.18		.09		.16		.46 *
Female		-1.32 ***		.76 ***		-.81 ***		.47 *
Age		-.04 ***		-.02 ***		-.04 ***		-.02 **
Partner		-.20		-.01		-.28		-.27
Children		.16		.28 ***		.04		.09
Education		.08		.02		.08 †		.11 *
Income		.11		-.01		.12 **		.05
Urbanization		.02		.09		.02		.13 *

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Hours spent on								
Work/week		.00		.00		.01		.01
Hobbies/month		-.01		.00		.00		.00
Clubs/week		-.01		.02		.05 *		.01
Volunteering/month		.03		.02		.02		.03 *
Television/week		-.03 *		-.03 **		-.02 *		-.01
Constant	2.18 ***	3.13 †	-.31	-.88	1.15 ***	1.46	.80 **	-1.43
N	995	995	995	995	995	995	995	995
Nagelkerke R^2	.068	.209	.026	.182	.061	.218	.048	.219

*** p<.001; ** p<.01; * p<.05; † p<.10 (two-tailed)

Table 5.4 Different targets of informal and direct helping

	Partner		Family		Friends		Neighbours		Colleagues	
	B	B	B	B	B	B	B	B	B	B
Intrinsic	-.26	-.35	.24	-.24	.30	.09	.30	.50 *	.21	.21
Extrinsic	.09	.38	-.10	-.13	-.63 **	-.50 †	-.28	-.31	-.26	-.29
Quest	.38 †	.33	.31	.27	.38 *	-.04	.07	-.01	.01	.00
Denomination										
Catholic	.64	.13	1.28 **	1.44 **	-.21	-.23	.35	-.02	.00	.01
Protestant	.96 †	.41	.48	.31	.03	-.05	-.38	-.76 †	-.03	-.06
Other Christian	.58	-.19	.89	.83	.34	.00	-.78	-1.25 *	.14	.19
None (ref.)										
Church attendance	.00	.00	.01	.01	-.01	.00	.01	.00	.00	.01
Prayer frequency	.06	-.10	.09	.02	.33 **	.24 †	.08	.06	.00	-.02
Christian worldview	.01	.25	-.11	.04	-.22 †	.11	-.05	-.04	-.14	.03
Experience of God	.14	.13	-.05	.35 †	-.06	.19	.07	.14	.15	.18
Consequences of religion	-.20	-.16	-.26	-.22	.12	.11	-.02	.06	.09	-.02
Consequences of worldview	.20	.09	.06	.04	.26 **	.18	-.07	-.06	.11	.04
Value orientations										
Traditional achievement		-.10		-.12		-.25		-.22		.13
Traditional family		-.03		.17		.02		-.01		-.08
Social criticism		.02		.08		-.06		.13		.04
Hedonism		.08		-.07		.38 **		.00		.11
Trust		.54 *		.07		.22		.12		.27
Personality										
Neuroticism – emotional stability		.50 **		.03		-.02		.10		.10
Conscientiousness		.26		.01		.04		.01		-.21
Resourcefulness/openness		.13		.15		.25 †		.11		.30 †
Introversion – extraversion		-.13		-.11		-.20		-.05		-.07
Agreeableness		-.02		-.21		.46 *		-.10		-.08
Female		-1.98 ***		.15		.18		-.34 *		-.48 *
Age		-.05 ***		-.02 †		-.05 ***		.00		-.01
Partner				-.25		-.25		-.13		-.31
Children		.05		.01		-.13		.08		-.04
Education		.02		.02		.18 ***		-.05		.09 †
Income		.07		.09 †		.03		.10 *		.08
Urbanization		-.01		-.03		.03		-.11 †		-.11

Hours spent on:										
Work/week		.00		.00		.00		.00		.02 †
Hobbies/month		.00		.00		.01		.00		.01 †
Clubs/week		.02		.02		.04		.04 †		.03
Volunteering/month		.02		.00		.03 *		.03 *		.00
Television/week		-.01		-.02		-.01		.00		.00
Target (group) characteristics										
Provided help		1.48 ***		1.03 ***		1.33 ***		1.79 ***		1.53 ***
Church membership		.20		-.05		.17				
Interactions Target * Religiosity										
Church membership * Experience				-.22 **		-.20 *				
Church membership * Intrinsic				.30 *						
Church membership * Quest						.35 **				
Constant	.73 *	-.58	1.37 ***	1.42	.49 †	-1.77	-.24	-.92	-.46	-2.58 *
N	736	736	991	991	988	998	995	995	694	694
Nagelkerke R^2	.089	.343	.055	.171	.070	.399	.058	.257	.031	.249

*** p<.001; ** p<.01; * p<.05; † p<.10 (two-tailed)

relationship between extrinsic religiosity and helping (*H3*): especially with regard to lending and helping friends (although marginally significant after control for competing mechanisms). The hypothesis that compassion induced by quest religiosity is more universal than compassion induced by intrinsic religiosity (*H4*) is not supported. To the contrary, we found that intrinsic religiosity is related to several helping tasks while no such relation is found for quest religiosity. Although quest religiosity seems to be related to a broader range of targets (partner and friends) than intrinsic religiosity (none at all) when only dimensions of religiosity are included in the model, the opposite turns out to be true when competing mechanisms are included in the analysis: quest religiosity does not significantly relate to helping towards any target after control for competing mechanisms, while intrinsic religiosity shows a significantly positive relationship to helping neighbours.

Support for the hypothesis that church membership is positively related to helping varies (*H5*). Catholics and Protestants do more practical work, other Christians lend more and Catholics help their family more than non-members. However, the (marginally significant) positive relationship between Protestantism and helping one's partner disappears after controlling for competing mechanisms. Moreover, control for competing mechanisms shows negative instead of positive effects of Protestant (although marginally significant) and other Christian church membership with regard to helping neighbours. Our expectation that Catholics are more likely to help others than Protestants (*H6*) is supported with regard to helping family members and helping neighbours, but not with regard to different kinds of helping since Protestants are actually more likely than Catholics to do practical work. Contrary to our expectation, we did not find any significant positive effect of church attendance (*H7*).

The hypothesis that individual beliefs and practices are positively related to helping behaviour is partly supported and partly contradicted (*H8*). Frequency of prayer is positively related to lending and helping friends (although only marginally significant after control for competing mechanisms). Christian worldview seems negatively related to helping friends. However, after control for competing mechanisms there is no negative effect of Christian worldview and a (marginally significant) positive relationship with providing personal advice appears. Although experience of God does not seem to affect helping behaviour when only dimensions of religiosity are investigated, they turn out to be positively related to providing personal care and helping family (although marginally significant) when competing mechanisms are taken into account.[18] Contradictory to the hypothesis, taking consequences of religion is found to be negatively related to doing practical work and loaning something. Consequences of worldview seem to affect helping friends positively. However, this effect disappears when competing mechanisms are included in the model.

---

18 Note that the models on helping family and friends with competing mechanisms contain an interaction with experience of God, which will be discussed later on in this results section.

Several value orientations do affect helping behaviour, but specific values are related to specific kinds of helping and helping specific targets. Traditional achievement does not matter with regard to helping behaviour. Traditional family values are positively related to providing personal care, but negatively related to giving personal advice. Social criticism is related to doing practical work. People with hedonistic values are more likely to give personal advice and help their friends.

The level of trust in other people has a significantly positive effect on helping one's partner, but does not increase the likelihood of helping with specific tasks or a broader range of targets. Several personality characteristics do matter with regard to helping, depending on the kind and the target of help. Neuroticism is positively related to helping one's partner. Conscientiousness is not related at all with help of any kind to any target. Resourcefulness or openness is positively related to providing personal care, helping friends and colleagues (although the latter two are only marginally significant). Introversion is negatively related to providing personal advice. Agreeableness is positively related to providing personal advice and helping friends.

General characteristics of people are substantially related to their helping behaviour. Females provide more personal care and advice than men do. However, females help less with practical work, and lending, and help their partner, neighbours and colleagues less than men do. Older people provide less practical work, personal care, loans, and personal advice. Older people are also less likely to help their partner, family (although marginally significant) and friends. Having a partner does not affect helping behaviour, but having children is positively related to providing personal care. Educational level is positively related to lending (although marginally significant), personal advice, helping friends and helping colleagues (although marginally significant). People with a high income provide more loans, and they are also more likely to help their family (although marginally significant) and neighbours. Urbanization is positively related to providing personal care and advice, while it is negatively related to helping neighbours (although marginally significant).

Hours per week spent on work and hobbies are not negatively related to prosocial behaviour, there are even marginally significant positive relationships with helping colleagues. Time spent on clubs is positively related to lending things and has also a marginally significant positive relationship with helping neighbours. The more people volunteer, the more they provide personal advice and help their friends and neighbours. Watching TV is negatively related to helping people with practical work, personal care and lending.

As expected, people do provide significantly more help to targets when they have received also help themselves from the target or target group (*H9*). Church membership of targets did not have a main effect on providing help to those targets. However, we found significant interactions between target and respondent's religiosity (*H10*) for both family and friends. The effect of intrinsic religiosity on helping family becomes significantly more positive when the family is more religious. The effect for a non-religious family is -.24, but the effect for a

family consisting of only church members is 3*.30-.24=.66. Similarly, the effect of quest religiosity on helping friends is significantly more positive when the friends are more religious. When all friends are church members, the effect of quest religiosity is 3*.35-.04=1.01. These results confirm our expectation that religious people prefer to help religious targets, but it contradicts the proposition that quest religiosity is a source of universal compassion. Contradictory to the hypothesis that religious people prefer to help religious targets, we found a significantly more negative effect of experience of God when either family or friends are more religious. While experience of God has a marginally significant effect when family members are not religious (.35), this effect is negative when all family members are church members (3*-.22+.35=-.31). Similarly, experience of God shows a negative effect when friends are church members (3*-.20+.19=-.41).

5.4 Discussion

This chapter set out to investigate the relation between dimensions of religiosity and informal and direct helping and with regard to different targets. We found that – after control for competing mechanisms – aspects of religiosity are related to doing practical work, lending things, helping family, and neighbours; somewhat weaker relations are found with personal care, personal advice and helping friends. However, there is no relationship between dimensions of religiosity and helping the partner or colleagues.

With regard to intrinsic and extrinsic religiosity, our results confirm the findingsof previous studies: intrinsic religiosity showed a positive or non-significant effect and extrinsic religiosity showed a negative or non-significant effect on helping. Main effects of quest religiosity that were initially found turned out to be spurious since they were successfully interpreted by competing mechanisms. Hence, quest is not found to be a source of universal compassion as claimed in previous research (Batson et al., 2001), since quest religiosity is only related to helping friends when most of these friends are church members. Our study shows that previous claims about quest religiosity in relation to prosocial behaviour cannot 'easily' be generalized to situations outside the laboratory and are probably spurious.

Integration into specific religious denominations does have effects on helping with practical work, lending and helping friends and neighbours. The less individualistic and more communitarian character of Catholicism is stressed by the willingness of Catholics to help their family and the unwillingness of members of non-Catholic denominations to help their neighbours. The degree of integration in a religious community, measured as frequency of church attendance does not have an additional effect over and above denominational affiliation. This result is strikingly different from research on formal and planned helping, like volunteering and money donation, where investigations show that the degree of integration in a religious community is of substantial importance with regard to volunteering and

money donation (see e.g., Reitsma et al., 2005b; Reitsma, Scheepers et al., 2006a; Ruiter & De Graaf, 2006; Scheepers & Te Grotenhuis, 2005).

Individual beliefs and practices like frequency of prayer, Christian worldview, and experience of God show some positive effects on helping, although the effects are usually weak. The negative effect that taking consequences of religiosity has on both helping with practical work and loaning seems anomalous. The consequential dimension seems to hit the spiritual rather than practical consequences of religiosity and there may be a trade off here in that time and energy spent on spiritual goals cannot be spent on helping other people with practical tasks.

With regard to helping family and friends, we found that intrinsic and quest religiosity respectively are more positively related to helping the targets when a larger part of the family or friends are church members. This underscores that religious people are more willing to help others when these others are also religious. For religious experience, we found the opposite: the effect of religious experience is more negative when a larger part of the family is religious. Like consequences of religion, religious experience seems to hit spiritual rather than practical aspects of religiosity.

All in all, we found that religiosity does play a role with regard to informal and direct helping. Religiosity matters with regard to doing practical work, lending things, helping family, and helping neighbours, while religiosity matters relatively little with regard to providing personal care and personal advice and helping friends. However, helping one's partner or colleagues is not related to religiosity. Results shed a different view on quest religiosity since it is not found to be a source of universal compassion. Results also shed an interesting light on integration in a religious community since the religious affiliation does matter, but more specified integration does not matter, with regard to informal and direct helping.

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6 Prosocial motivations and religious orientations: an experimental test of cooperation on request*

Abstract
In this study, we provide an experimental test of the relationships between intrinsic, extrinsic and quest religious orientations on the one hand, and egoistic, altruistic, collectivistic and principlistic prosocial motivations on the other hand with regard to prosocial behaviour, more specifically, cooperation on request. We show that religious orientations and prosocial motivations are related to each other. Extrinsically religious people are most willing to help when egoistic motivations are primed. Intrinsically religious people are most willing to help and quest religious people are least willing to provide help when altruistic motivations are suggested. Primes of collectivistic and principlistic motivations do not matter with regard to religiosity and cooperation on request. These results refute previous statements that intrinsic religiosity is egoistically motivated, as well as statements that quest religiosity is a source of universal compassion.

6.1 Introduction

Since Darley and Batson (1973) published their so-called 'Good Samaritan' experiment in which they investigated religiosity in relation to responding to a victim in need, there has been a continuous debate on religiosity and prosocial behaviour (Hood et al., 1996; Wulff, 1997). Two questions are important in the debate on religiosity and prosocial behaviour. First, to what extent is religiosity positively related to prosocial behaviour? Second, what motivates religious people to act prosocially?

With regard to the first question, Darley and Batson (1973) found no evidence of a relationship between religiosity and helping a victim. Many other experiments have also showed no relation of religiosity with providing help to others (Annis, 1975, 1976; see Batson et al., 1993; Eckel & Grossman, 2004; Forbes et al., 1971; McKenna, 1976). However, survey research has frequently demonstrated that religiosity is positively related to prosocial behaviours such as volunteering and money donation (Barry, 1996; Bekkers, 2002a, 2003; Bowen, 1999; De Hart, 1999; Flanagan, 1991; Park & Smith, 2000; Regnerus et al., 1998; Reitsma et al., 2005b; Reitsma, Scheepers et al., 2006a; Ruiter & De Graaf, 2006;

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Scheepers & Te Grotenhuis, 2005). The advantage of this survey research is twofold: a) it uses large samples that are more or less representative for society at large, and b) there are many other characteristics of these individuals known, which makes control for competing explanations possible. However, an important drawback of survey research is social desirability, especially in relation to religiosity (Batson, Naifeh, & Pate, 1978). Therefore, we would like to use the advantages of both methods by performing an experiment with subjects who were previously respondents in a survey. Doing this we can investigate a substantial sample, which is more or less representative for society, and we have the opportunity to control for competing explanations.

With regard to the second question, on the motivations of religious people, Darley and Batson (1973) observed that intrinsic religiosity turned out to be related to much more persistent helping efforts than quest religiosity. When the 'victim' explicitly stated that he did not need any help, intrinsic religious people insisted on helping, while quest religious people adapted their behaviour to the expressed needs. Darley and Batson interpreted this remarkable finding as an indication that help induced by intrinsic religiosity is motivated by one's own need to be helpful, while help induced by quest religiosity is motivated by concern for the needs of the target. Afterwards, several experimental studies confirmed that intrinsic religiosity is related to egoistic motivations for prosocial behaviour, while quest religiosity is related to altruistic motivations (Batson, 1976; Batson & Flory, 1990; Batson & Gray, 1981; Batson et al., 1989). However, collectivistic and principlistic motivations for prosocial behaviour, as alternatives for egoism and altruism (see Batson, 1995), have not yet been systematically investigated in relation to dimensions of religiosity.

This chapter sets out to provide an experimental test of relations between intrinsic, extrinsic and quest religiosity and cooperation on a request for planned and formal helping (see Pearce & Amato, 1980) towards a relatively unfamiliar target, i.e. participation in an opinion survey from a university. Moreover, we will test whether relationships of dimensions of religiosity with cooperation on request are moderated by primes of egoistic, altruistic, collectivistic or principlistic motivations. This aim will be approached by a combination of survey and experimental methods.

6.1.1 Religiosity

Religiosity is a multidimensional concept, as is stressed by the distinction of intrinsic, extrinsic (Allport, 1950, 1959; Allport & Ross, 1967) and quest (Batson, 1971; Batson & Ventis, 1982) religious orientations. Allport (1950) argued that it is important to consider religious types in order to understand the relation between religiosity and prejudice. He distinguished two kinds of religiosity: immature and mature. Somewhat later, he called them respectively extrinsic and intrinsic orientation (Allport, 1960). Persons with an extrinsic religious orientation use

religion for their own ends. They may find religion useful in a variety of ways (e.g., to provide security, sociability, distraction, status or self-justification). The creed is lightly held or else selectively shaped to fit more ultimate goals. People with an intrinsic religious orientation find their master motive in religion. Other needs are regarded as subordinate to the religious beliefs and prescriptions. The individual endeavours to internalize and follow the creed fully. In this sense the intrinsically religious person lives his or her religion (Allport & Ross, 1967).

According to Batson (1971; Batson et al., 1993; Batson & Schoenrade, 1991a, 1991b; Batson & Ventis, 1982), Allport and Ross (1967) failed to adequately operationalize several aspects of what Allport originally meant with intrinsic religiosity: 1) it is integrative in the sense that it encourages people to face complex problems (e.g., on ethical issues) without reducing their complexity, 2) it involves readiness to doubt and self-criticism, and 3) there is an emphasis on tentativeness and an openness to change in religious belief. This kind of religiosity is characterised by taking existential questions seriously, a critical view on clear-cut solutions, and an open-ended search for tentative answers. Therefore, Batson developed a scale, called 'quest', to measure these aspects of religiosity. Analyses showed, however, that the quest scale forms a third religious orientation rather than being a refinement of the intrinsic orientation. Batson and his colleagues elaborated the concept of quest and regard quest instead of intrinsic religiosity as the most important aspect of religiosity with regard to moral behaviour (Batson et al., 1993).

The multidimensionality of religiosity urges us to ask not only whether religiosity is boosting prosocial behaviour, but more specifically: (*Q1*) what aspects of religiosity are related to prosocial behaviour?

6.1.2 Prosocial motivations

All religions stress prosocial values, providing believers with high moral standards (see Batson et al., 1993:331-332; Schroeder et al., 1995:7-10). However, believers do not necessarily conform to these moral standards (Hood et al., 1996). Moreover, it can be questioned how moral their motives are when they do provide help to others. The distinction of intrinsic, extrinsic and quest religious motivations suggests that the combination of religiosity and egoistic motivations is very well possible. This paradox raises the question of what motivations are behind religiously induced prosocial behaviour and whether these motivations are related to certain dimensions of religiosity.

What kind of motivations might encourage people to act prosocially? Batson (1995) distinguished four different possible motivations for prosocial behaviour: egoism, altruism, collectivism and principlism. Egoism motivates people to benefit others as a means to self-benefit. The benefits people aim at may be either material rewards (e.g., when work for a charitable institution is paid), social rewards (e.g., people gain praise and improved status when their voluntary contribution is visible

to their friends) or self-rewards (e.g., enhancing or maintaining mood by being proud about their helping behaviour (see Isen, 1970; Isen & Levin, 1972; Manucia et al., 1984)).

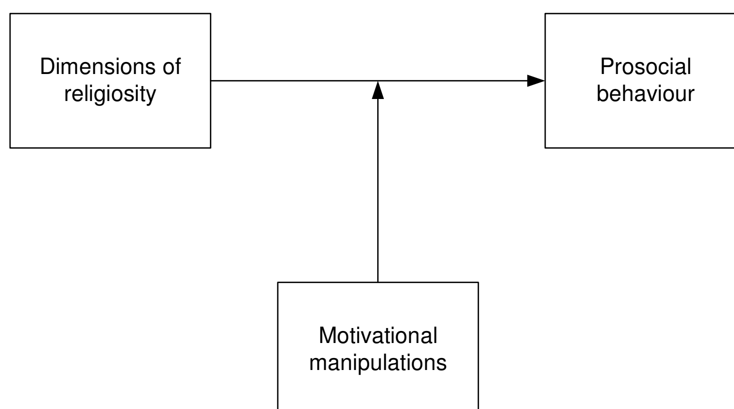
In contrast to egoism, altruism motivates people to benefit others as an end in itself. Although altruistically motivated prosocial behaviour may have self-benefit as a side effect, altruism does not aim at this self-benefit but aims to benefit others. Feelings of empathy for the target of help evoke such altruistic motivations (e.g., imagining the needs of someone who asks for help (see Batson, 1991)).

Next to self-benefit and other-benefit, there may be other motivations that cannot be reduced to pure egoism or altruism. Collectivism motivates people to benefit a group (e.g., the local community). The prosocial behaviour that is motivated by collectivism is neither aimed at self-benefit, nor at benefiting specific others, but at benefiting a certain group as a whole.

Finally, the motivation behind a prosocial act may be principlism: benefiting another to uphold a moral principle (e.g., justice). Principlism does not care about self-interest, the interest of others or certain groups, but builds on moral principles that benefit humanity as a whole. However, it has been very difficult to prove that principlism is an independent prosocial motivation that is not reducible to egoism, altruism or collectivism (Batson, 1998; Batson, Ahmad, & Tsang, 2002). To the contrary, there is quite some evidence of moral hypocrisy (Batson, Kobrynowicz, Dinnerstein, Kampf, & Wilson, 1997; Batson, Thompson, & Chen, 2002; Batson, Thompson, Seuferling, Whitney, & Strongman, 1999).

All these different motivations may play a role in relations between dimensions of religiosity and prosocial behaviour. Previous research has investigated altruistic and egoistic motivations in relation to religiosity (Batson, 1976; Batson & Flory, 1990; Batson & Gray, 1981; Batson et al., 1989). However, up to now collectivistic and principlistic motivations have not been taken into account in research on religiosity and prosocial behaviour. Given the motivational background of several dimensions of religiosity, we would like to investigate experimentally to what extent the relations between dimensions of religiosity and

Figure 6.1
Schematic representation of the experiment



prosocial behaviour are sensitive for situations where egoism, altruism, collectivism and principlism play a role (see Figure 6.1). Therefore our second question reads: (*Q2*) Do specific aspects of religiosity have stronger effects in conditions that contain egoistic, altruistic, collectivistic or principlistic incentives?

6.1.3 Hypotheses

6.1.3.1Main effects

Previous survey research did find positive relations of several dimensions of religiosity with prosocial behaviours like volunteering and money donation (Barry, 1996; Bekkers, 2002a, 2003; Bowen, 1999; De Hart, 1999; Flanagan, 1991; Park & Smith, 2000; Regnerus et al., 1998; Reitsma et al., 2005b; Reitsma, Scheepers et al., 2006a; Ruiter & De Graaf, 2006; Scheepers & Te Grotenhuis, 2005). Effects of dimensions of religiosity on prosocial behaviour differ somewhat between targets, but are in general positive. Therefore, we may expect positive relations between dimensions of religiosity and prosocial behaviour (*H1a*).

However, studies with behavioural measures of helping differ in their findings with regard to the relationship between religiosity and prosocial behaviour. Many experiments have not found a relationship between religiosity and helping (Annis, 1975, 1976; see Batson et al., 1993; Eckel & Grossman, 2004; Forbes et al., 1971; McKenna, 1976; Smith, Wheeler, & Diener, 1975). Bolt (1982), however, found that intrinsic religiosity is positively and extrinsic religiosity negatively related to willingness to volunteer. Other studies showed that both intrinsic and quest religiosity can be positively related to helping, depending on the specific situation (Batson et al., 2001; Batson, Floyd et al., 1999; Batson & Gray, 1981; Batson et al., 1989; Darley & Batson, 1973). Therefore we hypothesize that, if there are any main effects of religious orientations, there will be a negative effect of extrinsic religiosity and positive effects of intrinsic and quest religiosity on helping behaviour (*H1b*).

6.1.3.2 Interaction effects

Religious teaching with regard to prosocial behaviour stresses unselfishness. This suggests altruistic, collectivistic or principlistic motivations behind relations between religiosity and prosocial behaviour. Therefore, we expect stronger relations between religiosity and prosocial behaviour in conditions where people are primed with altruistic, collectivistic or principlistic motivations (*H2a*).

The definition of intrinsic, extrinsic and quest religious orientations results in more diverse expectations with regard to prosocial motivations. Extrinsic religiosity is using religion as a means to selfish ends. When this also applies to other behaviours of extrinsically religious people, priming with egoistic motivations may boost the relation between extrinsic religiosity and prosocial behaviour (*H2b*). In contrast to extrinsic religiosity, intrinsic religiosity is defined as religion being an

end in itself. When this also applies to other spheres of life of intrinsically religious people, priming with altruistic, collectivistic or principlistic motivations may result in stronger relations between intrinsic religiosity and prosocial behaviour than priming with egoistic motivations (*H2c*).

However, experimental research on intrinsic and extrinsic religiosity in relation to prosocial behaviour suggests that help induced by intrinsic religiosity is egoistically motivated. Intrinsic religiosity seems to be related to the appearance of prosociality rather than prosocial behaviour itself (Batson & Flory, 1990; Batson & Gray, 1981; Batson et al., 1989; Batson, Schoenrade, & Pych, 1985; Darley & Batson, 1973; Yinon & Sharon, 1985). Intrinsically religious people seem to be relatively sensitive to social desirability and aim at the praise of others who recognize their prosocial behaviour. In the absence of possible social rewards, intrinsically religious people will probably aim to provide themselves with self-rewards like pride in their prosocial behaviour. This leads to the expectation that priming with these egoistic motivations results in higher effects of intrinsic religiosity on prosocial behaviour than priming with other motivations (*H2d*).

Batson (1971; Batson et al., 1993; Batson & Schoenrade, 1991a, 1991b; Batson & Ventis, 1982) introduced quest religious orientation as neglected aspects of the 'mature' religiosity that was meant by Allport (1950). Batson argues that quest rather than intrinsic religiosity is related to help that is sensitive to the needs of others (Batson & Gray, 1981; Darley & Batson, 1973). This suggests that quest religiosity is related to more empathic concern for others, which would indicate altruistic motivation. Therefore, we expect that effects of quest religiosity on helping behaviour are higher in the case of priming with altruistic motivations than with other motivations (*H2e*).

Moreover, Batson and his collaborators (Batson et al., 2001; Batson, Floyd et al., 1999) argue that quest religiosity is a source of universal compassion. Intrinsic religiosity is related to helping people with similar values. However, quest religiosity is related to helping as long as values like tolerance are not threatened by helping the target. Similarly, quest religiosity is positively related to Kohlberg's principled morality (Sapp & Jones, 1986). This suggests that helping induced by quest religiosity is more motivated by principlism than is the case with prosocial behaviour out of intrinsic religiosity. We therefore expect that quest religiosity has stronger effects on prosocial behaviour after priming with principlistic motivations than priming with other motivations (*H2f*).

6.1.4 Competing mechanisms

In order to estimate the net effects of religious orientations, we include some competing mechanisms in our model. Value orientations may be related to prosocial behaviour, while they are also related to religiosity (Saroglou et al., 2004; Schwartz & Huismans, 1995). People who are critical about equality and justice in society are probably more likely to give a hand to people who need some help

because of their ideas on morality. However, individualistic values like achievement and hedonism are likely to be negatively related to providing help (except when it serves egoistic purposes).

Trust in other people is important in many social interactions (see Putnam, 2000). Trust is known to be related to more involvement in charity, volunteering and civic participation in general (Brehm & Rahn, 1997; Uslaner & Brown, 2005). Trust is likely to be also an important prerequisite for prosocial behaviour. When people do not trust us, they are not likely to provide help.

Many publications have stressed the relation between personality and prosocial behaviour. In his literature review on the relation between the 'Big Five' personality factors and prosocial behaviour, Bekkers (2004, p. 28-32) concluded that agreeableness, extraversion and emotional stability (*versus* neuroticism) are all found to be positively related to prosocial behaviour. Bekkers' empirical analyses also showed some positive effects of conscientiousness and openness on prosocial behaviours. Moreover, personality characteristics and dimensions of religiosity are related (Saroglou, 2002). Relations between dimensions of religiosity and helping behaviour may be spurious due to personality characteristics.

Several general characteristics of respondents are taken into account: gender, age, having a partner, number of children, education and income as well as the degree of urbanization of the place of residence. Most of these general characteristics are related to aspects of religiosity. Therefore, we need to control for them in order to obtain net effects of dimensions of religiosity. Moreover, many of these characteristics are related to prosocial behaviour (Amato, 1993; Bekkers, 2004; Komter & Vollebergh, 2002; Reitsma et al., 2005b; Reitsma, Scheepers et al., 2006a; Van Lange et al., 1997; J. Wilson & Musick, 1997).

Time used for other activities cannot be spent on helping others. Hence, one would expect a negative effect on prosocial behaviour of time used for e.g., work, hobbies, watching television, volunteering and clubs. Watching TV is regarded as especially devastating for engagement with others' needs and with society as a whole (Putnam, 2000). However, one could also argue that working, hobbies and club activities are indicators of capabilities that could be useful while helping other people. Time spent on volunteering indicates a certain willingness to contribute voluntarily, which may spill over to prosocial behaviour in general.

6.2 Methods

6.2.1 Data and procedure

In the winter of 2000-2001 the 'Religion in Dutch Society' survey (SOCON 2000) was conducted (Eisinga et al., 2002). This survey contained a large number of questions on abovementioned competing mechanisms. A two-stage stratified random sample method was used in order to obtain a representative sample of Dutch citizens aged between 18 and 70 years. A total of 1008 interviews were

conducted (with a response rate of 43.7%). The sample was representative for the Dutch population with regard to gender and marital status, although there was a slight underrepresentation of people younger than 29 years.

During the autumn of 2003, respondents of the SOCON 2000 survey who had agreed to participate in future research (929 individuals) received an additional questionnaire containing revised items on intrinsic, extrinsic and quest religiousness (Reitsma et al., 2007). Of the returned questionnaires, 510 could be identified as having been filled in by the same person as the SOCON 2000 survey. In the autumn of 2006, respondents received a letter with a request for cooperation, i.e. to give an interview for an opinion survey. In the experimental conditions, the letter these respondents received contained egoistic, altruistic, collectivistic or principlistic motivations for their cooperation. No such primes were provided in the control condition. The motiviations were phrased as follows:

> Egoism: "An important reason to participate is that it will give you a lot in return: it's fun because your contribution will play a very important role; you will be able to make a good impression and your friends will appreciate it; and last but not least the fee you will receive is 7 euros an hour!"
> [Original Dutch version: "Een belangrijke reden om mee te doen is dat het u heel wat oplevert: het is leuk omdat u een belangrijke bijdrage levert; daarnaast staat het niet verkeerd en zullen vrienden het waarderen; en last but not least verdient u er ook nog eens € 7,- per uur mee!"]
>
> Altruism: "An important reason to participate is that as a young researcher I will only be able to carry out my first research project if I have the help of friendly people who are able to understand my situation. I hope this concerns you and that you are willing to help me."
> [Original Dutch version: "Een belangrijke reden om mee te doen is dat ik als jonge onderzoeker mijn eerste onderzoek alleen kan doen met de hulp van vriendelijke mensen die begrip hebben voor mijn situatie. Ik hoop dat u zich aangesproken voelt en me wilt helpen."]
>
> Collectivism: "An important reason to participate is that the research is about how people like yourself experience the neigbourhood or district that you live in. With the results we will try to improve the area. Which means you are also able to help the people around you."
> [Original Dutch version: "Een belangrijke reden om mee te doen is dat het onderzoek gaat over hoe mensen zoals u de buurt of wijk waarin u woont ervaren. Met de resultaten wordt geprobeerd om de omgeving te verbeteren. U kunt zo dus ook de mensen om u heen verder helpen."]
>
> Principlism: "An important reason to participate in this research is that it is all about justice and honesty. The idea is that the results will be used to improve the principle of reasonableness."

[Original Dutch version: “Een belangrijke reden om mee te doen is dat het onderzoek gaat over wat rechtvaardig en eerlijk is. De bedoeling is om met de resultaten het principe van de redelijkheid te bevorderen.”]

People were asked to return their decision to the investigators, check their name and address, and provide their gender, birth year, and (if agreeing) telephone number. When the experiment was finished, subjects were carefully debriefed about the aim of the research and informed that no actual interview would be held.

6.2.2 Manipulation check

We designed a pilot study to check the effectiveness of the motivation manipulation (N=102). In the egoism condition, subjects reported significantly more often than in other conditions that they considered egoistic motivations (e.g., getting paid and increasing status; Cronbach’s alpha = .792) in their decision (p = .012). In the altruism condition, people considered altruistic motivations (e.g., to listen to the person who asks for help, feeling touched by the request; Cronbach’s alpha = .936) more often than in other conditions (p = .014). In the altruism condition, subjects scored also significantly higher (p =.003) on empathy towards the researcher (e.g., I can put myself in the researcher’s shoes, I feel close to the researcher; Cronbach’s alpha = .786). Subjects in the collectivism condition reported significantly more often than other subjects (p = .007) that they considered collectivistic motivations (e.g., help improving the neighbourhood, to improve the environment; Cronbach’s alpha = .876) in their decision. However, the effectiveness of the manipulation of principlism could not be proven, even after several trials. Although disappointing, this is not a huge surprise given the doubt on the existence of a principlistic motivation for prosocial behaviour (Batson, 1998; Batson, Ahmad et al., 2002).

6.2.3 Measurements

Religious orientation items are derived from Maltby (Maltby & Day, 1998; Maltby & Lewis, 1996), which are carefully translated and psychometrically tested for Dutch society (Reitsma et al., 2007). We used a five-point scale ranging from ‘does not apply to me at all’ to ‘completely applies to me’.

Value orientation is operationalized with several statements which represent four dimensions (Felling, Peters, & Scheepers, 2000): Traditional achievement, Traditional family, Social criticism and Hedonism, with Cronbach’s alphas of .60, .73, .77 and .69 respectively. Respondents indicated how important they consider the values to be in their life at that moment with a five-point response range from “unimportant” to “very much important”. Examples of items are: for Traditional achievement, “Getting on in life”; for Traditional family, “Living for one’s family”;

for Social Criticism, "Promoting greater equality in society"; and for Hedonism, "Having fun".

Trust was measured with four statements: "I think most people are honest and trustworthy", "If somebody acts nice to me, I become suspicious" (reversed), "Most people take advantage of you" (reversed), and "I am inclined to think positive about people". The five response categories ranged from "Don't agree at all" to "Agree entirely". Cronbach's alpha of the scale is .61.

Personality characteristics are operationalized with the 'Big Five' measurement instrument of Goldberg (1990), in a shortened Dutch version (Gerris et al., 1998). This instrument distinguishes neuroticism (*versus* emotional stability), conscientiousness, resourcefulness (or openness), introversion (*versus* extraversion), and agreeableness. Respondents were asked for thirty trait-descriptive adjectives of how far the qualities fit in with them (five answer categories ranging from 'not at all' to 'very much'). Previous analyses on the same data showed already a clear 'Big Five' factor solution for the statements with satisfactory Cronbach's alphas for the subscales ranging from .79 to .86 (Oomens, 2005).

We asked respondents straightforward questions with regard to gender, age, having a partner (either married or cohabiting) and number of children. Educational level was phrased as the 'highest school completed after elementary school', with eight categories from 'no school finished after elementary school' to 'university'. Income was phrased as income per month after tax in eleven categories, from less than €450 to more than €3400. Degree of urbanization contains five categories from no urbanisation to very high degree of urbanization (see Den Dulk et al., 1992).

Respondents were asked how much time they spent on work, hobbies, clubs, volunteering and watching TV. Time spent on work, clubs and TV is coded in hours per week, while time spent on hobbies and volunteering is coded in hours per month. In order to avoid disproportional influence of outliers on our analyses, we recoded the highest 5% which led to maxima of 55 hours per week working, 90 hours per month for hobbies, 16 hours per week for clubs, 25 hours per month for volunteering and 35 hours per week for watching TV.

6.2.4 Dependent variable, subjects and analysis

The dependent variable is a dichotomous score for the (non-) response of subjects on the request to cooperate in an opinion survey. Subjects who returned a positive response are coded as 1, subjects who returned a negative response or no response at all are coded as 0. Addressees of whom we got a message that they were unreachable because they had moved (N=73), or were deceased (N=11) were excluded, as were those from whom an unopened envelope was returned (N=26). Responses by people other than the intended recipient (checked by birth year and gender) were also excluded (N=22). Finally, some subjects who seemed to be sceptical about the received letter were excluded (N=7). Of the remaining 790

cases, 123 returned a positive response to the request for cooperation. Of these responses, 28 were in the egoism condition (N=160), 23 in the altruism condition (N=152), 24 in the collectivism condtion (N=164), 27 in the principlism condition (N=158), and 31 in the control condition (N=156).

The data are analysed by logistic regressions, which is a preferred method for multivariate analysis with a dichotomous and highly skewed dependent variable (Moore & McCabe, 1999). Since the number of subjects for each condition was relatively small compared to the amount of competing mechanisms we planned to control for, we decided to use a stepwise procedure. In order to reduce loss of data by listwise deletion, dummies are created to account for variables with missing data at more than 1% of cases. Effects of these dummies are always estimated, but not presented. Interactions are tested as a contrast between experimental and control conditions. Interaction models are controlled for those competing mechanisms that turned out to be relevant in either the experimental or control condition in previous analyses within conditions.

6.3 Results

Results of the logistic regressions are presented in Table 6.1 and Table 6.2. Table 6.1 presents the models without control for competing mechanisms, while Table 6.2 presents the results with control for competing mechanisms. Estimates of main effects over all conditions are presented in the left column, while estimates of effects within conditions are presented in the other columns on the right.

Table 6.1 Logistic regression of cooperation on request on IEQ religiosity

	All conditions B	Egoism B	Altruism B	Collectivism B	Principlism B	Control B
Condition						
Egoism	-.220					
Altruism	-.353					
Collectivism	-.420					
Principlism	-.188					
Control (reference)						
Intrinsic	.228	.052	.834†	-.037	.088	.114
Extrinsic	-.268	.368	-.816	.127	-.614	-.265
Quest	-.105	-.109	-.507	-.425	.012	.288
Constant	-2.580***	-2.773***	-2.303***	-3.977***	-3.178***	-2.327***
N	790	160	152	164	158	156
Nagelkerke R^2	.170	.159	.179	.216	.257	.190

*** p<.001; ** p<.01; * p<.05; † p<.10 (two-tailed)

Table 6.2 Logistic regression of cooperation on request on IEQ religiosity and competing mechanisms

	All conditions B	Egoism B	Altruism B	Collectivism B	Principlism B	Control B
Condition						
Egoism	-.100					
Altruism	-.253					
Collectivism	-.384					
Principlism	-.154					
Control (reference)						
Intrinsic	.184	-.040	1.611*	-.037	.119	-.435
Extrinsic	-.410†	.339	-1.623*	.127	-.660	-.254
Quest	.000	-.221	-.661	-.425	.152	.901†
Value orientations						
Traditional achievement	NS	NS	NS	NS	NS	NS
Traditional family	NS	NS	NS	NS	NS	NS
Social criticism	NS	NS	NS	NS	NS	NS
Hedonism	NS	NS	NS	NS	NS	NS
Trust	NS	NS	NS	NS	NS	NS
Personality						
Neuroticism – emotional stability	NS	NS	NS	NS	NS	NS
Conscientiousness	NS	NS	NS	NS	NS	NS
Resourcefulness or openness	NS	NS	NS	NS	NS	NS
Introversion – extraversion	-.326*	NS	NS	NS	-1.304**	-.725*
Agreeableness	NS	NS	NS	NS	NS	NS
Female	NS	NS	NS	NS	NS	NS
Age	.044***	.053**	.083***	NS	NS	.058**
Partner	NS	NS	NS	NS	2.749*	NS
Children	NS	NS	NS	NS	NS	NS
Education	NS	NS	NS	NS	NS	NS
Income	NS	NS	.252*	NS	NS	-.266**
Urbanization	NS	NS	NS	NS	NS	NS
Hours spent on:						
Work/week	NS	NS	NS	NS	NS	NS
Hobbies/month	NS	NS	NS	NS	NS	NS
Clubs/week	NS	NS	NS	NS	NS	NS

Volunteering/month	NS	NS	NS	NS	NS	NS
Television/week	NS	NS	NS	NS	NS	NS
Constant	-3.966***	-5.054***	-7.533***	-3.977***	-3.545*	-2.111†
N	790	160	152	164	158	156
Nagelkerke R^2	.222	.235	.349	.216	.419	.336

*** p<.001; ** p<.01; * p<.05; † p<.10 (two-tailed); NS: not significant

Table 6.3 Logistic regression of cooperation on request on IEQ religiosity and competing mechanisms with interactions

	Egoism	Altruism	Collectivism	Principlism
	B	B	B	B
Condition (vs. control)	-.123	.330	-.087	.270
Intrinsic	-.225	-.234	-.192	-.210
Extrinsic	-.322	-.272	-.383	-.380
Quest	.672	.606	.500	.615
Age	.051 ***	.062 ***	.043 **	.037 *
Partner				.916 †
Income	-.194 **	-.064	-.209 **	-.201 *
Introversion – extraversion	-.265	-.452 †	-.423 †	-.861 **
Condition by Intrinsic	.124	1.321 †	-.092	.179
Condition by Extrinsic	.545	-.836	.562	-.315
Condition by Quest	-.687	-1.087 †	-.627	-.211
Constant	-3.039 **	-4.020 ***	-2.817 **	-2.598 *
N	316	308	320	314
Nagelkerke R^2	.270	.287	.267	.318

*** p<.001; ** p<.01; * p<.05; † p<.10 (two-tailed)

Table 6.4 Post-hoc logistic regression of cooperation on request

	B
Egoism (vs. Altruism)	-.412
Intrinsic	1.091 *
Extrinsic	-1.225 *
Quest	-.495
Age	.062 ***
Income	.033
Condition by Intrinsic	-1.130 †
Condition by Extrinsic	1.536 †
Condition by Quest	.230
Constant	-5.338 ***
N	312
Nagelkerke R^2	.259

*** p<.001; ** p<.01; * p<.05; † p<.10 (two-tailed)

The results in Table 6.1 show that there are no significant main effects of either condition or religious orientations when computed over all conditions. However, Table 6.2 reveals that there is a marginally significant negative relationship of extrinsic religious orientation (p = .076) with cooperation on request when we take into account the role of age and introvert personality. This result refutes the hypothesis that relations between dimensions of religiosity and prosocial behaviour are positive (*H1a*), but it does support the expectation that extrinsic religiosity is negatively related to prosocial behaviour (*H1b*).

Separate analyses for the different conditions show differences between conditions in the results. Table 6.1 shows a marginally significant positive effect of intrinsic religiosity (p = .080) with cooperation on request in the altruism condition. After control for competing mechanisms (see Table 6.2), we find a clearly significant positive effect of intrinsic religiosity (p = .011) and a negative effect of extrinsic religiosity (p = .022) on cooperation on request in the altruism condition. In the control condition, we find a marginally significant positive effect of quest religiosity (p = .086).

Some competing mechanisms do matter in most conditions. Older people are more inclined to cooperation on request in the egoism, altruism and control conditions. Introvert people cooperate less often in the principlism and control conditions. A higher income does increase the likelihood of cooperation on request in the altruism condition, but it reduces it in the control condition. Finally, having a partner makes people more likely to cooperate in the principlism condition.
Interaction models, with control for relevant competing mechanisms in both the experimental and control condition, are presented in Table 6.3. The results show that the effect of intrinsic religiosity is marginally significantly higher (p = .078) while the effect of quest religiosity is marginally significantly lower (p = .098) in the

altruism condition compared to the control condition. Post-hoc comparison of effects in the egoism and altruism condition show that the effect of intrinsic religiosity is marginally significantly ($p = .085$) lower and the effect of extrinsic religiosity is marginally significantly higher ($p = .055$) in the egoism condition (see Table 6.4).

The hypothesis that effects of religiosity are stronger in altruistic, collectivistic and principlistic conditions (*H2a, H2c*) is only supported with regard to intrinsic religiosity in the altruism condition. Moreover the expectation of positive effects was contradicted by the finding that quest religiosity does show a lower effect in the altruism condition than in the control condition (*H2a*). We found weak support for the hypothesis that extrinsic religiosity shows a more positive effect on cooperation in the egoistic condition (*H2b*) since the effect of extrinsic religiosity in the egoism condition is only significantly different from the effect in the altruism condition and not significantly different from the control condition. Expectations of sensitivity for social and self-rewards of intrinsically religious people (*H2d*) are not supported by our results, since the effects of intrinsic religiosity in the egoism and control conditions do not differ significantly. Contrary to our expectations, quest religiosity does not have a positive effect in the altruism (*H2e*) or principlism (*H2f*) conditions. The effect of quest religiosity in the altruism condition is even marginally significantly lower than in the control condition.

6.4 Discussion

With this study, we set out to provide an experimental test of the relationships between religious orientations and prosocial behaviour with moderating effects of motivational manipulations. We found that there is a negative main effect of extrinsic religious orientation on prosocial behaviour, i.e. cooperation on request (see Bolt, 1982). The fact that extrinsic religious orientation has a more positive effect in case of egoism than in case of altruism supports the idea that the behaviour of extrinsic religious people is egoistically motivated. Intrinsic religious orientation is positively related to prosocial behaviour when altruistic motivations are suggested. This result suggests that help induced by intrinsic religiosity is not as egoistically motivated as suggested in previous research (Batson & Flory, 1990; Batson & Gray, 1981; Batson et al., 1989; Batson et al., 1985; Darley & Batson, 1973; Yinon & Sharon, 1985). Moreover, quest religiosity is not a source of universal compassion as suggested by Batson and collaborators (Batson et al., 2001; Batson, Floyd et al., 1999; Batson & Gray, 1981; Darley & Batson, 1973). To the contrary, quest religious people are less likely to provide help when altruistic motivations are suggested than when no motivations are suggested at all. There is no evidence that collectivistic and principlistic motivations are related to any religious orientation.

Although these findings are striking and important, we should be careful with our conclusions with regard to principlism. The principlistic motivation turned

out to be very hard to manipulate, which is understandable given the doubt with regard to the existence of principlism as a motivation for prosocial behaviour (Batson, 1998; Batson, Ahmad et al., 2002). The fact that we did find no interaction effects for principlism with religious orientations can be due to the weakness of the principlism manipulation. New research with clearly effective manipulations of principlistic motivations would be very welcome to clear up this issue. Future research may also shed more light on the different kinds of egoism that can be distinguished, which we treated as one motivation. Therefore, we do not exactly know what kind of egoism is appealing to extrinsically religious people. Separate manipulations of material, social and self-rewards could be very illuminating with regard to which people are sensitive for what kind of egoistic motivations.

All in all, with this study we were able to show that religious orientations and prosocial motivations are related to each other. Extrinsically religious people are most willing to help when egoistic motivations are provided. Intrinsically religious people are most willing to help, while quest religious people are least willing to provide help, when altruistic motivations are suggested. Collectivistic and principlistic motivations do not matter with regard to religiosity. These results refute statements that intrinsic religiosity is egoistically motivated as well as statements that quest religiosity is a source of universal compassion.

7 General conclusion and discussion

This thesis set out to investigate to what extent different aspects of religiosity are related to different kinds and targets of solidarity. The previous chapters provided an introduction to the subject as well as five empirical studies on religiosity and prosocial behaviour. In this final chapter we will briefly recapitulate the research topic and results. The chapter will close with a discussion of the merits of our findings and some ideas for future research.

7.1 Background of the research

All religions teach moral rules that stress the importance of solidarity with other people, for instance, the so-called golden rule: 'Do unto others as you would have others do unto you' (see Batson et al., 1993, p. 331-332; Schroeder et al., 1995, p. 7-10). These religious teachings provide believers with high moral standards. However, believers do not necessarily act according to these moral standards (Hood et al., 1996). In addition, religious people may prefer certain kinds (e.g., volunteering or personal care) or targets (e.g., religious or non-religious) of solidarity. Moreover, different dimensions of religiosity may be important with regard to the different kinds and targets of solidarity. Therefore, this thesis investigated *to what extent different aspects of religiosity are related to different kinds and targets of solidarity*.

Durkheim ([1912] 1995) stated that religion promotes social solidarity and cohesiveness. Religions provide norms (e.g., concern for others), and reinforce these norms by collective rituals. Participation in these religious rituals is an indicator of an individual's integration into the religious community. The more strongly people are integrated, the more they will comply with the norms of the group (Durkheim, 1897; Stark, 1994; Ultee et al., 2001). Following this proposition, the collective aspects of religiosity such as church membership and attendance are important with regard to prosocial behaviour.

Although still important, church membership and attendance have substantially declined in Europe during the last decades (see Norris & Inglehart, 2004; Te Grotenhuis & Scheepers, 2001) and are not the most popular aspects of religiosity. Davie (1990a; 1990b; 1994; 2002) characterised Europe's religious situation as 'believing without belonging' - upholding religious beliefs with marginal or no institutional involvement. Although Davie's claims have been heavily disputed (see Aarts et al., 2006; Bruce, 2002; De Graaf & Need, 2000; see Gill et al., 1998; Voas & Crockett, 2005), all research results point out that believing is much more popular than belonging. With regard to solidarity, individual religious beliefs and practices provide an alternative explanation for the previously found relationships between religious belonging and solidarity. Therefore, it is important that investigations on the relationship between religiosity and solidarity not only

incorporate church membership and church attendance, but also individual religious beliefs and practices.

In our research, we made use of the two most influential distinctions of individual religious beliefs and practices. Glock and Stark (Glock, 1962; Glock & Stark, 1965, 1966; Stark & Glock, 1968) distinguished private practice (e.g., prayer), belief (e.g., particularism and dogmatism), experience and consequences (or salience) in addition to religious belonging. Allport (1950; 1959; Allport & Ross, 1967) distinguished intrinsic and extrinsic religious orientations, while Batson (1971; Batson & Ventis, 1982) proposed the distinction of a quest religious orientation.

Next to different dimensions of religiosity, there are different kinds of solidarity to be distinguished. Pearce and Amato (1980) stated that helping situations differ in various respects: the extent that they are *planned and formal* (e.g., voluntary work) or *unplanned and informal* (e.g., telling someone that he has lost his wallet), and whether help involves *indirect* assistance (e.g., charitable donations) or *direct* help of the person in need (e.g., personal care). Next to these differences, we regard the *target* (friend or foe) of solidarity as an important aspect of helping situations (cf. Eagly & Chaiken, 1993).

Finally, prosocial behaviour may be encouraged by different motivations. Religious teachings provide believers with high moral standards (see Batson et al., 1993, p. 331-332; Schroeder et al., 1995, p. 7-10). Are religious people really serving higher goals, or is their prosocial behaviour ultimately out of self-interest? Batson (1995) distinguished four different possible motivations for prosocial behaviour: egoism, altruism, collectivism and principlism. We investigated to what extent primes with egoistic, altruistic, collectivistic and principlistic motivations moderate the relations between religious orientations and prosocial behaviour.

7.2 Charitable donations

In chapter 2, we investigated which aspects of individual religiosity determine willingness to donate to the poorest countries. This research contributed to knowledge on the relation between religiosity and money donation in several important ways. We analysed data from seven European countries that differed widely in their social security arrangements, leading us to expect that individual level effects would vary across countries. Nonetheless, the effects are quite robust across countries. We showed that particular dimensions of religiosity affect not only the amount of actual helping behaviour, which depends largely on the opportunities people have, but also the intentions to donate. Frequent church visitors, dogmatically convinced people and persons who take consequences of their religiosity in everyday life seriously, are found to be more willing to donate. The religiosity of people's network does also affect willingness to donate. Church attendance of one's partner has a positive influence on intentional donations

The most surprising finding is that having friends who hold similar religious views as the respondent has a negative effect on the intentional donations of the respondent. On the basis of Durkheim's (1897) theory on integration, we expected that having similarly religious friends would encourage donating behaviour. We propose that there is a 'bystander effect' at work here (Darley & Latané, 1968) - religious people expect their religious friends to provide help too, which results in diffusion of responsibility. Future research with better measurements of religiosity of friends may shed more light on this issue.

Denominational differences are in general not found when controlled for dimensions of religiosity. This shows that religious beliefs and integration of the individual are far more important with regard to intentional donations than religious affiliation as such. The importance of beliefs is furthermore stressed by the positive effect of dogmatic conviction and the incidental positive effects in some countries of taking consequences from religiosity on willingness to donate. Future research is needed on the differential effects of adhering to dogmas that includes a broader range of beliefs (e.g., beliefs in an afterlife in which current solidarity will be rewarded), to shed more light on why dogmatic convictions are especially relevant. Moreover, an extensive analysis of donating behaviour in relation to dimensions of religiosity in a longitudinal perspective may shed more light on the stability of relations between dimensions of religiosity and donating behaviour, and eventual effects of secularisation processes on charitable donations.

7.3 Volunteering for religious and secular organisations

In chapter 3, we aimed to study the effects of dimensions of individual religiosity in addition to collective religiosity on religious and secular volunteering to find out what aspects of religiosity are most important, whether effects differ between religious and secular volunteering, and whether effects are cross-nationally robust. The important points from this study are that aspects of individual religiosity are more important than aspects of collective religiosity with regard to the explanation of both religious and secular volunteering. In addition, we showed that effects of religiosity on volunteering are not always positive - particularistic beliefs are negatively related to secular volunteering. Moreover, effects of individual religiosity on secular volunteering cannot be interpreted with spill-over from religious to secular volunteering. Given that these results are quite robust across countries, future research on volunteering needs to take individual aspects of religiosity into account.

Nonetheless, there are still some issues to be answered in future research. We are quite happy to be able to analyse data on eleven countries, but a much larger number of countries with multidimensional data on religiosity would enable multilevel modelling of context and composition effects and cross-level interactions. Hierarchical modelling may be able to interpret what at the moment seem to be exceptional effects within specific countries (see Parboteeah et al., 2004;

Ruiter & De Graaf, 2006). Because of the relative importance of individual religiosity with regard to volunteering behaviour, we are especially curious about composition and cross-level interaction effects of individual religiosity measures.

Another issue for future research is that volunteering behaviour is something different from willingness to volunteer. We found that certain aspects of religiosity are (either positively or negatively) related to volunteering, but the reason why people do (or do not) volunteer may be that are they are (or are not) asked to do so because they are in (or are outside) a certain network. Ideally, one would like to ask all respondents to volunteer for a certain organization and investigate what kind of people do agree. Experimental research may shed more light on this type of question.

7.4 Convergent and discriminant validity of religiosity measures

Chapter 4 aimed to provide the psychometric analysis for the measurements of religious orientations which are used in the following chapters. The chapter presents a confirmatory factor analysis of intrinsic, extrinsic and quest (IEQ) religious orientation items for both church members and non-members. Moreover, it set out to provide insight into the relationships between IEQ and Glock's dimensions. Results showed a three-dimensional structure of IEQ items for both church members and non-members. Given the comparable factor structure and loadings, IEQ measures can be used in religiously heterogeneous samples. However, the extremely high correlations between factors for non-members suggest that the distinction of IEQ religious orientations, although theoretically relevant, is empirically not very useful in samples of non-members only.

Huber's (2002) idea of centrality is supported by strong partial correlations between intrinsic religiosity and all Glock's dimensions among church members. However, several of Glock's dimensions correlate most highly with the extrinsic religious orientation among non-members. Investigators who use the IEQ items in religiously heterogeneous samples should be aware that the scales can behave differently for different subsamples. However, the low(er), insignificant or even negative correlations of Glock's dimensions with extrinsic and quest religiosity support our view that the two distinctions of religiosity are complementary.

Although this study made substantial progress, there are still some issues to be solved. It is unknown whether the relative weakness of the IEQ distinction among non-members is due to the studied sample or inherent to the scale. Correlations between dimensions of religiosity within countries may be related to the degree of religious heterogeneity and secularity within a country. Comparison with religiously heterogeneous samples from different countries may shed more light on this issue.

7.5 Informal and direct helping of different targets

Chapter 6 set out to investigate the relations between dimensions of religiosity and informal and direct helping behaviour with regard to different targets. We found that aspects of religiosity are related to doing practical work, lending things, helping family, and neighbours; somewhat weaker relations are found with personal care, personal advice and helping friends. However, there is no relationship between dimensions of religiosity and helping one's partner or colleagues.

Denominational affiliation turned out to matter with regard to informal helping behaviour. Catholics are found to help the broadest range of targets, Protestants most often provide practical help, while members of other Christian denominations provide most help with loans. However, the degree of integration in a religious community, measured as frequency of church attendance, does not have an additional effect over and above denominational affiliation with regard to any kind or any target of informal helping investigated in this chapter. This result is strikingly different from research on formal and planned helping, like volunteering and money donation, where investigations show that the degree of integration in a religious community is of substantial importance with regard to volunteering and money donation (see e.g., Ruiter & De Graaf, 2006; Scheepers & Te Grotenhuis, 2005).

Individual beliefs and practices, like frequency of prayer, Christian worldview, and experience of God, show some positive effects on helping, although the effects are usually weak. The negative effect that taking consequences of religiosity has both on helping with practical work and on lending seems to be an anomaly. The consequential dimension seems to hit spiritual rather than practical consequences of religiosity and there may be a trade off here, that time and energy spent on spiritual goals cannot be spent on helping other people with practical tasks.

With regard to intrinsic and extrinsic religiosity, we found results that confirm the results of previous studies. Intrinsic religiosity showed a positive or non-significant effect and extrinsic religiosity showed a negative or non-significant effect on helping. With regard to helping family and friends, we found that intrinsic and quest religiosity respectively are more positively related to helping the targets when a larger part of the family or friends are church members. This underscores that religious people are more willing to help others when these others are also religious. For religious experience, we found the opposite: the effect of religious experience is more negative when a larger part of the family is religious. As consequences of religion, religious experience seems to hit spiritual rather than practical aspects of religiosity. The finding that the preference for religious targets holds also for quest religiosity contradicts previous claims that quest religiosity is a source of universal compassion (Batson et al., 2001).

Future research should focus on the interactions between target and actor characteristics. The current research showed that religious people prefer to help religious target groups. These interactions can be further investigated with data for

individual targets rather than target groups. Furthermore, interactions between actor and target characteristics with regard to helping targets beyond the group of family and friends should be investigated.

7.6 Religious orientations and prosocial motivations: an experimental test

Chapter 5 aimed to provide an experimental test of the relationships between religious orientations and prosocial behaviour with moderating effects of motivational manipulations. We showed that relations of religious orientations with prosocial behaviour do indeed vary between different motivational primes. Extrinsic religious people are most willing to help when egoistic motivations are provided, which supports the idea that the behaviour of extrinsic religious people is egoistically motivated. Intrinsically religious people are most willing to help, while quest religious people are least willing to provide help, when altruistic motivations are suggested. These results refute previous statements that intrinsic religiosity is egoistically motivated and that quest religiosity is a source of universal compassion (Batson et al., 2001; Batson & Flory, 1990; Batson, Floyd et al., 1999; Batson & Gray, 1981; Batson et al., 1989; Batson et al., 1985; Darley & Batson, 1973; Yinon & Sharon, 1985). To the contrary, intrinsically religious people are more, and quest religious people are less, likely to provide help when altruistic motivations are suggested than when no motivations are suggested at all. There is no evidence that collectivistic and principlistic motivations are related to any religious orientation.

Although these findings are striking and important, we should be careful with conclusions with regard to principlism. The principlistic motivation turned out to be very hard to manipulate, which is understandable given the doubt with regard to the existence of principlism as a motivation for prosocial behaviour (Batson, 1998; Batson, Ahmad et al., 2002). New research with clearly effective manipulations of principlistic motivations would be very welcome to clear up this issue. Future research could also focus on different kinds of egoism that can be distinguished (i.e. material reward, social reward, and self-reward; see Batson (1995)), to find out what kind of egoism is appealing to extrinsically religious people.

7.7 General conclusion and discussion

This thesis started with the question: *To what extent are different aspects of religiosity related to different kinds and targets of solidarity?* Several empirical chapters analysed these relationships with regard to different dependent variables. The results showed some striking differences. Most important, church attendance is strongly related to formal kinds of solidarity (chapter 2 and 3), but not related at all to informal kinds of solidarity (chapter 5). Individual religious beliefs and practices turned out to have direct effects on prosocial behaviour, independent of collective aspects of

religiosity. Moreover, it seems to be the individual beliefs that are decisive with regard to preferences for secular as opposed to religious targets. Particularists, who believe that their religion is the only true one, are substantially less likely to volunteer for secular organisations. Intrinsic and quest religiosity are only positively related to helping family and friends respectively, when these target groups are relatively religious.

The results shed a different light on previous research and have important consequences for understanding relations between religiosity and solidarity. Individual beliefs turned out to be by far more relevant than suggested by integration theories, which state that participation in collective rituals produces solidarity (Durkheim, 1897; [1912] 1995; Stark, 1994; Ultee et al., 2001). Integration is indeed very important with regard to formal solidarity, but substantially less so with regard to informal solidarity. Moreover, individual beliefs, not integration, are decisive with regard to the preference for secular as opposed to religious targets.

We also found striking results with regard to motivations for prosocial behaviour: altruistic motivations encourage intrinsically religious people and discourage 'quest' religious people, while egoistic motivations are most appealing to extrinsically religious persons. This is in sharp contrast with previous research showing that intrinsic religiosity is egoistically motivated and that quest religiosity is a source of universal compassion (Batson et al., 2001; Batson & Flory, 1990; Batson, Floyd et al., 1999; Batson & Gray, 1981; Batson et al., 1989; Batson et al., 1985; Darley & Batson, 1973; Yinon & Sharon, 1985). These previous statements need a finer distinction: intrinsic religiosity is not always egoistic and quest religiosity not always a source of compassion.

Although we have made major steps in understanding the relations between religiosity and solidarity, there is a lot of work to be done in the future. First, given the enormous growth of secularization over the last few decades (see Norris & Inglehart, 2004; Te Grotenhuis & Scheepers, 2001), there is a need for improvement on previous research (see Parboteeah et al., 2004; Ruiter & De Graaf, 2006) by an extensive investigation of not only formal but also informal solidarity over time and place, that includes collective religiosity, individual religious beliefs and religiosity of the target, in order to portray the extent to which secularization influences the degree of solidarity between people.

Second, prosocial motivations should be further analysed in relation to religious orientations. An important point of research should be why intrinsic religiosity seemed so egoistic and quest religiosity a source of universal compassion in previous laboratory studies (Batson et al., 2001; Batson & Flory, 1990; Batson, Floyd et al., 1999; Batson & Gray, 1981; Batson et al., 1989; Batson et al., 1985; Darley & Batson, 1973; Yinon & Sharon, 1985). It could be due to, e.g., the relatively formal kind of prosocial behaviour in our experiment, unrepresentative samples in laboratory studies, or country differences between the United States and the Netherlands.

To summarise, this study applied a multidimensional approach with regard to both religiosity and solidarity. Our results underline the importance of both

collective and individual aspects of religiosity, the distinction between formal and informal kinds of solidarity, and religiosity of the target with regard to the relations between religiosity and solidarity. Individual beliefs are especially relevant because they account for preference for secular as opposed to religious targets. This study also broadens the perspective on prosocial motivations in relation to religious orientations by sharply and consistently contradicting previous statements about intrinsic religiosity as egoistically motivated and quest religiosity as a source of universal compassion.

Samenvatting
Summary in Dutch

Inleiding

Alle religies benadrukken morele regels voor solidariteit met andere mensen, bijvoorbeeld de zogenaamde gouden regel: 'behandel anderen zoals je zelf behandeld wilt worden' (zie Batson, Schoenrade, & Ventis, 1993, p. 331-332; Schroeder, Penner, Dovidio, & Piliavin, 1995, p. 7-10). Zulke religieuze leerregels verschaffen een hoge morele standaard aan de gelovigen. Het is daarmee echter niet gezegd dat gelovigen ook handelen in overeenstemming met deze morele normen (Hood, Spilka, Hunsberger, & Gorsuch, 1996). Daarnaast kan het zo zijn dat religieuze mensen een voorkeur hebben voor een bepaalde vorm van solidariteit (bijvoorbeeld vrijwilligerswerk of mantelzorg), of een voorkeur voor specifieke doelen (bijvoorbeeld religieuze of seculiere doelen). Verder kunnen verschillende religieuze dimensies een rol spelen in de voorkeur voor vormen en doelen van solidair gedrag. Daarom is in dit proefschrift onderzocht in hoeverre verschillende aspecten van religiositeit gerelateerd zijn aan verschillende vormen en doelen van solidariteit.

Durkheim ([1912] 1995) stelde dat religie solidariteit en samenhang in de maatschappij bevordert. Religies verschaffen normen, bijvoorbeeld betrokkenheid op anderen, en bekrachtigen deze normen door collectieve rituelen. Participatie in deze religieuze rituelen is een indicator van de integratie van een individu in de religieuze gemeenschap. Hoe sterker mensen zijn geïntegreerd, hoe meer ze hun gedrag zullen invullen volgens de normen van de groep (Durkheim, 1897; Stark, 1994; Ultee, Arts, & Flap, 2001). Volgens deze stelling zijn collectieve aspecten van religiositeit, zoals kerklidmaatschap en kerkbezoek, van belang met betrekking tot prosociaal gedrag.

Kerklidmaatschap en kerkbezoek zijn de afgelopen decennia sterk afgenomen (zie Norris & Inglehart, 2004; Te Grotenhuis & Scheepers, 2001) en het zijn niet de meest populaire aspecten van religiositeit. Davie (1990a; 1990b; 1994; 2002) karakteriseerde de Europese religieuze situatie als 'believing without belonging' wat wil zeggen dat men wel religieuze overtuigingen heeft, maar niet of nauwelijks betrokken is bij religieuze instituties. Alhoewel de claims van Davie sterk bekritiseerd zijn, laat het onderzoek wel zien dat individuele religieuze overtuigingen populairder zijn dan collectieve activiteiten, zoals kerkbezoek (zie Aarts, Need, Te Grotenhuis, & De Graaf, 2006; Bruce, 2002; De Graaf & Need, 2000; zie Gill, Hadaway, & Marler, 1998; Voas & Crockett, 2005). Met betrekking tot solidariteit vormen individuele religieuze overtuigingen en praktijken een alternatieve verklaring voor de eerder gevonden relaties tussen kerkbezoek en solidariteit. Daarom is het van belang dat onderzoek naar de relatie tussen religiositeit en prosociaal gedrag niet alleen kerklidmaatschap en kerkbezoek meeneemt, maar ook individuele religieuze overtuigingen en praktijken.

In het onderhavige onderzoek is gebruik gemaakt van de twee meest invloedrijke indelingen van individuele religieuze overtuigingen en praktijken. Glock en Stark (Glock, 1962; Glock & Stark, 1965, 1966; Stark & Glock, 1968) onderscheidden naast institutionele betrokkenheid diverse andere aspecten van religiositeit: private praktijken (bijvoorbeeld bidden), overtuigingen (bijvoorbeeld particularisme en dogmatisme), religieuze ervaringen en consequenties (of saillantie). Allport (1950; 1959; Allport & Ross, 1967) onderscheidde intrinsieke en extrinsieke religieuze oriëntaties. Batson (1971; Batson & Ventis, 1982) onderscheidde, in aanvulling op intrinsieke en extrinsieke religieuze oriëntatie, een religieuze zoektocht (quest) als aparte religieuze oriëntatie.

Naast verschillende dimensies van religiositeit zijn er ook verschillende soorten van solidariteit te onderscheiden. Pearce en Amato (1980) stelden dat hulpsituaties in diverse opzichten verschillen: in hoeverre ze gepland en formeel zijn (bijvoorbeeld vrijwilligerswerk) versus ongepland en informeel (bijvoorbeeld iemand attenderen op een verloren portemonnee), en in hoeverre de hulp indirect (bijvoorbeeld door donatie aan charitatieve instelling) of direct gegeven wordt aan de persoon die hulp nodig heeft (bijvoorbeeld mantelzorg). Verder onderscheidden we in dit onderzoek het type doel of ontvanger (bijvoorbeeld religieus of seculier, vriend of vreemde) van solidariteit als een belangrijk aspect van hulpsituaties (cf. Eagly & Chaiken, 1993).

Ten slotte kan prosociaal gedrag worden bevorderd door verschillende motivaties. Religieuze leerstellingen voorzien gelovigen van een hoge morele standaard (zie Batson et al., 1993, p. 331-332; Schroeder et al., 1995, p. 7-10). Zijn religieuze mensen werkelijk hogere doelen aan het dienen, of is hun prosociale gedrag uiteindelijk toch uit eigenbelang? Batson (1995) maakt onderscheid tussen vier mogelijke motivaties voor prosociaal gedrag: egoïsme, altruïsme, collectivisme en principlisme. Wij hebben onderzocht in hoeverre het prikkelen van deelnemers met egoïstische, altruïstische, collectivistische en principlistische motivaties de relaties tussen religieuze oriëntaties en prosociaal gedrag modereert.

Donaties aan charitatieve instellingen

In hoofdstuk 2 hebben we onderzocht welke aspecten van individuele religiositeit donaties aan de armste landen bepalen. Dit onderzoek heeft op verschillende manieren bijgedragen aan de kennis over de relatie tussen religiositeit en het doneren van geld. We hebben gegevens geanalyseerd van zeven Europese landen die sterk verschilden in hun organisatie van sociale zekerheid. Wij hadden dan ook verwacht dat effecten op individueel niveau zouden verschillen tussen landen. Desalniettemin bleken de gevonden relaties tamelijk robuust over de verschillende landen. We hebben laten zien dat specifieke dimensies van religiositeit niet alleen de hoeveelheid hulpgedrag beïnvloeden (die voornamelijk afhankelijk is van de mogelijkheden die mensen hebben), maar ook de intenties om te doneren. Frequente kerkgangers, mensen met dogmatische overtuigingen en personen die

consequenties trekken uit hun religiositeit voor het dagelijks leven, bleken meer bereid te zijn te doneren. Ook de religiositeit van het netwerk heeft effect op de bereidheid om geld te geven: mensen met een partner die frequent een kerk bezoekt, hebben een hogere donatie-intentie.

De meest verrassende vondst is dat vrienden, wanneer ze dezelfde religieuze overtuigingen hebben als de respondent, een negatief effect hebben op de bereidheid om geld te geven. Op basis van Durkheims (1897) integratietheorie hadden we verwacht dat het hebben van gelijkgestemde vrienden donaties zou bevorderen. Wij zijn van mening dat er hier sprake is van een omstandereffect (Darley & Latané, 1968): religieuze mensen verwachten van hun religieuze vrienden dat ze ook helpen, wat resulteert in een diffusie van verantwoordelijkheid. Toekomstig onderzoek met een betere meting van de religiositeit van vrienden kan meer licht werpen op deze kwestie.

Verschillen tussen diverse denominaties werden in het algemeen niet gevonden wanneer er gecontroleerd werd voor andere dimensies van religiositeit. Dit laat zien dat religieuze overtuigingen en integratie van het individu veel belangrijker zijn met betrekking tot donatie-intenties dan lidmaatschap van een religieuze denominatie als zodanig. Het belang van geloofsovertuigingen wordt nog verder onderstreept door het positieve effect van dogmatische overtuigingen en de incidentele positieve effecten in sommige landen van het trekken van consequenties uit religiositeit voor het dagelijks leven. Verder onderzoek is nodig om de effecten van meer specifieke overtuigingen te bestuderen, bijvoorbeeld geloof in een hiernamaals waarin solidariteit in het hier en nu zal worden beloond. Zodoende kan duidelijker worden waarom dogmatische overtuigingen in het bijzonder relevant zijn. Daarenboven kan een uitgebreide analyse van doneergedrag in een longitudinaal perspectief meer licht werpen op de stabiliteit van de relaties tussen dimensies van religiositeit en donaties, en de eventuele effecten van secularisatie processen op bijdragen aan charitatieve doelen.

Vrijwilligerswerk voor religieuze en seculiere organisaties

In hoofdstuk 3 hebben we de relaties onderzocht tussen dimensies van religiositeit en het doen van vrijwilligerswerk. We hebben onderzocht of de relaties verschillen voor religieuze en seculiere organisaties en geanalyseerd of de effecten robuust zijn over landen. Aspecten van individuele religiositeit bleken belangrijker te zijn dan aspecten van collectieve religiositeit om vrijwilligerswerk voor zowel religieuze als seculiere organisaties te verklaren. Verder hebben we laten zien dat effecten van religiositeit op het doen van vrijwilligerswerk niet altijd positief zijn: particularistische overtuigingen zijn negatief gerelateerd aan het doen van vrijwilligerswerk voor seculiere organisaties. Deze effecten van individuele religiositeit op seculier vrijwilligerswerk zijn niet te verklaren uit een spill-over van vrijwilligers van religieuze naar seculiere organisaties. Deze resultaten zijn robuust over de onderzochte landen.

Niettemin zijn er nog wel enkele punten voor toekomstig onderzoek. We zijn blij dat we gegevens uit 11 landen konden onderzoeken, maar data uit een groter aantal landen met multidimensionele informatie over religiositeit zou multiniveau-analyse mogelijk maken, zodat context en compositie effecten alsmede interacties tussen landniveau en individuniveau kunnen worden berekend (zie bijvoorbeeld Parboteeah, Cullen, & Lim, 2004; Ruiter & De Graaf, 2006). Vanwege het relatieve belang van individuele religiositeit met betrekking tot vrijwilligerswerk, zijn we in het bijzonder benieuwd naar compositie effecten en interacties van individuele religiositeit met landkenmerken.

Een andere punt voor toekomstig onderzoek is dat het doen van vrijwilligerswerk iets anders is dan de bereidheid om vrijwilligerswerk te doen. We hebben gevonden dat bepaalde aspecten van religiositeit (positief dan wel negatief) gerelateerd zijn aan het doen van vrijwiligerswerk. Dit kan komen omdat men via het netwerk waar men toe behoort al dan niet gevraagd is om vrijwilligerswerk te doen. In het ideale geval zou men alle respondenten willen vragen vrijwilligerswerk te doen voor een bepaalde organisatie en vervolgens onderzoeken welke mensen gevolg geven aan een dergelijk oproep. Experimenteel onderzoek kan meer licht werpen op deze vraag.

Convergerende en onderscheidende validiteit van metingen van religiositeit

Hoofdstuk 4 verschaft een psychometrische analyse van de meetinstrumenten van religieuze oriëntaties die worden gebruikt in de volgende hoofdstukken. Dit hoofdstuk presenteert een confirmatieve factor analyse van intrinsieke, extrinsieke en quest (IEQ) religieuze oriëntaties voor zowel kerkleden als niet-leden. Daarenboven is het hoofdstuk er op gericht inzicht te verschaffen in de relaties tussen IEQ oriëntaties en Glocks dimensies. De resultaten laten een drie dimensionale factor structuur zien van IEQ items voor zowel kerkleden als niet-leden. Gegeven de vergelijkbare factor structuur en ladingen kunnen we concluderen dat IEQ metingen kunnen worden gebruikt in religieus heterogene steekproeven. De extreem hoge correlaties tussen de factoren in de groep van niet-leden suggereren echter dat het onderscheid in IEQ religieuze oriëntaties dan wel theoretisch relevant mag zijn, maar empirisch niet erg bruikbaar in steekproeven die alleen bestaan uit personen die geen kerklid zijn.

De centraliteitsthese van Huber (2002), waarin gesteld wordt dat Glocks dimensies aspecten zijn van intrinsieke religiositeit, wordt ondersteund door sterke partiële correlaties tussen intrinsieke religiositeit en Glocks dimensies van religiositeit bij kerkleden. Bij niet leden correleren verschillende van Glocks dimensies echter sterker met extrinsieke religiositeit. Onderzoekers die de IEQ metingen willen gebruik in religieus heterogene steekproeven dienen er dan ook alert op te zijn dat deze dimensies verschillend kunnen correleren in deelsteekproeven. De lage(re), niet significante of zelfs negatieve correlaties van Glock's dimensies met extrinsieke en quest religieuze oriëntaties ondersteunt de

gedachte dat het gaat om twee complementaire indelingen van vormen van religiositeit.

Alhoewel deze studie een belangrijke stap vooruit is, is het nog onbekend of de gevonden relatieve zwakte van de IEQ indeling voor de onkerkelijke groep te wijten is aan de bestudeerde steekproef of dat dit resultaat inherent is aan het meetinstrument. Correlaties tussen dimensies van religiositeit binnen landen zouden gerelateerd kunnen zijn aan de mate van religieuze heterogeniteit en secularisering in een land. Een vergelijking van religieus heterogene steekproeven van verschillende landen zou een antwoord kunnen bieden op deze vraag.

Informeel en direct helpen van verschillende ontvangers

In hoofdstuk 5 hebben we de relaties tussen dimensies van religiositeit en informeel en direct hulpgedrag ten opzichte van verschillende ontvangers onderzocht. We vonden dat aspecten van religiositeit gerelateerd zijn aan het doen van praktische klussen, uitlenen van dingen, het helpen van familie en het helpen van buren. Wat zwakkere relaties werden gevonden met het geven van persoonlijke verzorging, persoonlijke adviezen en het helpen van vrienden. Met betrekking tot het helpen van de partner of collega's is er echter geen relatie met dimensies van religiositeit.

De denominatie waar iemand toe behoort bleek van belang met betrekking tot informeel hulpgedrag. Katholieken waren het meest bereid om verschillende soorten ontvangers te helpen, protestanten verschaften het meest hulp bij praktische klussen, terwijl leden van andere christelijke denominaties het meest bereid waren dingen uit te lenen. De mate van integratie in een religieuze gemeenschap (gemeten als frequentie van kerkbezoek) liet echter geen enkel significant effect zien boven dat van denominatie met betrekking tot de soorten informeel hulpgedrag ten behoeve van verschillende ontvangers die in dit hoofdstuk zijn onderzocht. Dit resultaat vormt een opvallend contrast met onderzoek naar formeel en gepland hulpgedrag, waar onderzoek aantoont dat de mate van integratie in een religieuze gemeenschap van substantiële betekenis is met betrekking tot het doen van vrijwilligerswerk en het doneren van geld (zie bijvoorbeeld Ruiter & De Graaf, 2006; Scheepers & Te Grotenhuis, 2005).

Individuele overtuigingen en praktijken zoals bidden, christelijke wereldbeschouwing, en godservaringen laten enkele positieve effecten zien op hulpgedrag, alhoewel deze effecten doorgaans zwak zijn. Het negatieve effect dat saillantie van religiositeit heeft op zowel helpen met praktische klussen en uitlenen is een anomalie. Het lijkt er op dat de saillantie van religiositeit meer te maken heeft met religieuze dan met praktische consequenties die men in het dagelijks leven uit het geloof trekt. Er lijkt hier sprake van een competitie om tijd en energie tussen verschillende doelen. Tijd en energie die wordt besteed aan spirituele doelen kan men niet meer besteden aan praktische doelen zoals het helpen van anderen.

Met betrekking tot intrinsieke en extrinsieke religiositeit vonden we resultaten die de uitkomsten van eerder onderzoek bevestigden: intrinsieke

religiositeit liet een positief – of niet-significant – en extrinsieke religiositeit liet een negatief – of niet-significant – effect zien op het geven van hulp. We vonden dat intrinsieke religiositeit positiever gerelateerd is aan het helpen van familie wanneer een groter deel van de familie religieus is. Quest religiositeit heeft een positiever effect op het helpen van vrienden wanneer een groter deel van de vriendengroep religieus is. Dit onderstreept dat religieuze personen bereid zijn meer hulp te geven aan anderen wanneer die eveneens religieus zijn. Met betrekking tot religieuze ervaringen vonden we het tegenovergestelde: het effect van religieuze ervaring is negatiever wanneer een groter deel van de familie religieus is. Net als de saillantie van religiositeit lijken religieuze ervaringen eerder betrekking te hebben op spirituele dan op praktische aspecten van religiositeit. De bevinding dat de voorkeur voor religieuze ontvangers van hulp ook geldt voor quest religiositeit spreekt eerdere claims tegen dat quest religiositeit een bron van universele compassie is (Batson, Eidelman, Higley, & Russell, 2001).

Toekomstig onderzoek zou zich moeten concentreren op interacties tussen eigenschappen van de gever en de ontvanger van hulp. Dit onderzoek liet zien dat religieuze mensen een voorkeur hebben voor het helpen van religieuze doelgroepen. Deze interacties kunnen verder worden onderzocht door gegevens te verzamelen over individuele ontvangers in plaats van groepen ontvangers. Verder zou het zinvol zijn onderzoek te doen naar interacties tussen kenmerken van gevers en ontvangers van hulp met betrekking tot ontvangers buiten de groep van familie en vrienden.

Religieuze oriëntaties en prosociale motivaties: een experimentele toets

Hoofdstuk 6 voorziet in een experimentele test van relaties tussen religieuze oriëntaties en prosociaal gedrag met modererende effecten van motivationele manipulaties. We lieten zien dat relaties van religieuze oriëntaties met prosociaal gedrag inderdaad variëren, afhankelijk van verschillende motivationele prikkels. Extrinsiek religieuze mensen zijn het meest bereid om te helpen wanneer egoïstische motieven worden verschaft. Dit ondersteunt de gedachte dat het gedrag van extrinsiek religieuze personen egoïstisch is gemotiveerd. Intrinsiek religieuze personen zijn het meest bereid om te helpen wanneer altruïstische motivaties worden verschaft, terwijl quest religieuze mensen in deze situatie het minst bereid zijn om te helpen. Deze resultaten zijn in scherp contrast met eerdere beweringen dat intrinsieke religiositeit egoïstisch gemotiveerd is en dat quest religiositeit een bron is van universele compassie (Batson et al., 2001; Batson & Flory, 1990; Batson, Floyd, Meyer, & Winner, 1999; Batson & Gray, 1981; Batson et al., 1989; Batson, Schoenrade, & Pych, 1985; Darley & Batson, 1973; Yinon & Sharon, 1985). Integendeel, intrinsiek religieuze mensen zijn meer en quest religieuze mensen juist minder geneigd hulp te verschaffen wanneer altruïstische (versus geen) motieven worden verschaft. Er is geen evidentie gevonden dat collectivistische en principlistische motivaties gerelateerd zijn aan een religieuze oriëntatie.

Alhoewel deze bevindingen opvallend en belangrijk zijn dient men zorgvuldig te zijn met conclusies over principlisme. De principlistische motivatie bleek erg moeilijk te manipuleren. Dit is wel te begrijpen, aangezien er twijfel is met betrekking tot het bestaan van principlisme als motivatie voor prosociaal gedrag (Batson, 1998; Batson, Ahmad, & Tsang, 2002). Nieuw onderzoek met manipulaties van principlisme die duidelijk effectief zijn, zou zeer nuttig zijn om meer licht te werpen op deze kwestie. Toekomstig onderzoek kan zich ook richten op de verschillende vormen van egoïsme die onderscheiden kunnen worden (bijvoorbeeld materiële beloning, sociale beloning, en zelf-beloning; zie Batson(1995)) om uit te vinden wat voor soort egoïsme kenmerkend is voor extrinsiek religieuze mensen.

Algemene conclusie en discussie

Dit proefschrift begon met de vraag in hoeverre verschillende aspecten van religiositeit gerelateerd zijn aan verschillende vormen en doelen van solidariteit. In deze studie analyseerden we deze relaties met betrekking tot diverse afhankelijke variabelen. De resultaten lieten enkele opvallende verschillen zien. Het meest belangrijke verschil is dat kerkbezoek sterk gerelateerd is aan formele vormen van solidariteit (hoofdstuk 2 en 3), maar in het geheel niet gerelateerd aan informele vormen van solidariteit (hoofdstuk 5). Individuele religieuze overtuigingen en praktijken bleken directe effecten te hebben op prosociaal gedrag, onafhankelijk van de collectieve aspecten van religiositeit. Daarenboven lijken het de individuele overtuigingen te zijn die beslissend zijn met betrekking tot de voorkeur voor seculiere versus religieuze ontvangers van solidariteit. Particularisten, die geloven dat hun religie de enige ware godsdienst is, zijn substantieel minder geneigd vrijwilligerswerk te doen voor seculiere organisaties. Intrinsieke en quest religiositeit zijn alleen gerelateerd aan het helpen van respectievelijk familie en vrienden wanneer deze doelgroepen relatief religieus zijn.

De resultaten werpen een ander licht op eerder onderzoek en hebben belangrijke consequenties voor het begrijpen van de relaties tussen religiositeit en solidariteit. Individuele overtuigingen bleken veel relevanter te zijn met betrekking tot prosociaal gedrag dan gesuggereerd wordt door integratietheorieën die stellen dat participatie in collectieve rituelen leidt tot solidariteit (Durkheim, 1897; [1912] 1995; Stark, 1994; Ultee et al., 2001). Integratie is inderdaad zeer belangrijk met betrekking tot formele vormen van solidariteit, maar veel minder belangrijk wanneer het gaat om informele vormen van solidariteit. Daarenboven zijn het de individuele overtuigingen, en niet de integratie, die bepalend lijken te zijn voor de voorkeur voor seculiere versus religieuze ontvangers van solidariteit.

We hebben ook opvallende resultaten gevonden met betrekking tot motivaties voor prosociaal gedrag: altruïstische motivaties stimuleren intrinsiek religieuze mensen en weerhouden quest religieuze personen, terwijl egoïstische motivaties het meest aansprekend zijn voor extrinsiek religieuze mensen. Deze

vondst is in scherp contrast met eerder onderzoek dat stelt dat intrinsieke religiositeit egoïstisch gemotiveerd is en dat quest religiositeit een bron is van universele compassie (Batson et al., 2001; Batson & Flory, 1990; Batson et al., 1999; Batson & Gray, 1981; Batson et al., 1989; Batson et al., 1985; Darley & Batson, 1973; Yinon & Sharon, 1985). Deze eerdere beweringen hebben meer nuancering nodig: intrinsieke religiositeit is niet altijd egoïstisch en quest religiositeit is niet altijd een bron van compassie.

Alhoewel we belangrijke stappen hebben gezet in het begrip van de relaties tussen religiositeit en solidariteit is er nog veel werk te doen in de toekomst. Ten eerste is er, gegeven de enorme secularisatie gedurende de laatste decennia (zie Norris & Inglehart, 2004; Te Grotenhuis & Scheepers, 2001), behoefte om voort te bouwen op eerder onderzoek (zie Parboteeah et al., 2004; Ruiter & De Graaf, 2006) met een uitgebreide analyse van niet alleen formele maar ook informele solidariteit over tijd en plaats. In deze analyse dienen zowel collectieve en individuele religiositeit als ook de religiositeit van de ontvanger te worden verdisconteerd om zo te bestuderen in welke mate secularisatie de solidariteit tussen mensen beïnvloedt.

Ten tweede dienen prosociale motivaties verder onderzocht te worden in relatie tot religieuze oriëntaties. Een belangrijk punt van onderzoek dient te zijn waarom intrinsieke religiositeit in eerdere laboratoriumstudies zo egoïstisch leek en quest religiositeit een bron van universele compassie scheen (Batson et al., 2001; Batson & Flory, 1990; Batson et al., 1999; Batson & Gray, 1981; Batson et al., 1989; Batson et al., 1985; Darley & Batson, 1973; Yinon & Sharon, 1985). Dit kan het resultaat zijn van bijvoorbeeld de relatief formele vorm van solidariteit in ons experiment, niet representatieve steekproeven in labstudies, of verschillen tussen de Verenigde Staten en Nederland als landen.

Samengevat heeft deze studie een multidimensionele aanpak toegepast met betrekking tot zowel religiositeit en solidariteit. Onze resultaten onderstrepen het belang van zowel collectieve als individuele aspecten van religiositeit, het onderscheid tussen formele en informele vormen van solidariteit, alsook de religiositeit van de ontvanger met betrekking tot relaties tussen religiositeit en solidariteit. Individuele overtuigingen zijn in het bijzonder relevant omdat ze van invloed zijn op de voorkeur voor religieuze of seculiere ontvangers van hulp. Deze studie heeft ook het perspectief op prosociale motivaties in relatie tot religieuze oriëntaties verbreedt doordat resultaten zijn gevonden die bij herhaling eerdere claims tegenspreken dat intrinsieke religiositeit egoïstisch gemotiveerd is en quest religiositeit een bron vormt van universele compassie.

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Curriculum Vitae

Jan Reitsma was born in Nunspeet, The Netherlands, on 3 August 1979. In 1997 he started to study Psychology at Utrecht University, where he received his MSc degree in Social Psychology in 2002. Subsequently, he became a PhD student at the Interuniversity Center for Social Science Theory and Methodology (ICS) and the Nijmegen Institute for Social and Cultural Research (NISCO), Department of Sociology, Radboud University Nijmegen, where he wrote this thesis. The present study is conducted in cooperation with the Behavioural Science Institute (BSI) in Nijmegen. Jan Reitsma has worked with Peer Scheepers and Manfred te Grotenhuis at the ICS and NISCO and Jacques Janssen and Mark Dechesne at the BSI. Recently, he has published articles in *Personality and Individual Differences* and *Review of Religious Research*. Jan Reitsma has been employed as a researcher at the Research and Documentation Centre (WODC) of the Ministry of Justice in The Hague. Currently, he is as a postdoctoral researcher associated to the Euresource research programme at the Department of Empirical Religion Studies, Radboud University Nijmegen.

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