

Association in Context and Association as Context

Causes and Consequences of Voluntary Association Involvement

typeset with $\text{\LaTeX} 2_{\epsilon}$

Cover design: Taco van Iersel (www.id-architecten.nl)

Printed by Ponsen & Looijen bv, Wageningen

ISBN 978-90-9022529-6

© Stijn Ruiter, 2008

Association in Context and Association as Context

Causes and Consequences of Voluntary Association Involvement

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 besluit van het College van Decanen
in het openbaar te verdedigen op donderdag 13 maart 2008
om 15.30 uur precies

door

Stijn Ruiter

geboren op 17 november 1976
te Eindhoven

Promotor: Prof. dr. N.D. de Graaf

Manuscriptcommissie: Prof. dr. W.C. Ultee
Prof. dr. R.C.A. Andersen (University of Toronto)
Prof. dr. P. Dekker (Universiteit van Tilburg)

to Bas

Acknowledgments

Writing this dissertation on voluntary association involvement often impelled me to voluntarily choose not to spend enough time with many people I love, care about, and respect. At the same time, I frequently chose to spend much time with colleagues, many of whom I came to love, care about, or respect over the years. In this dissertation, I stress the importance of the social network of individuals, affecting their recruitment chances into voluntary associations as well as their chances on a favorable socioeconomic position. My own social network has proven to be really important in making the past couple of years such a pleasurable time. Therefore, I would like to devote these first pages to express my gratitude to many people from my own social network.

Much I owe to my supervisor, Nan Dirk de Graaf. I would like to thank him for giving me the freedom to pursue my own research interests. I always found an open door when I wanted to update him on my latest results. I enjoyed the laughs we had and I feel honored that we continue working together even though he left the ICS and was appointed Official Fellow at Nuffield College.

I would also like to thank the members of the reading committee, Wout Ultee, Bob Andersen, and Paul Dekker, for their time and effort assessing the manuscript. I would especially like to thank Wout for he has inspired me ever since I started my undergraduate studies in Sociology in 1995.

Furthermore, I am particularly grateful to two of my co-authors, Doug Baer and René Bekkers, without whom Chapters 3 and 4 would have been considerably less interesting. I also thank Doug and his wife Ursula for their hospitality and enjoyable moments during my visits of the Department of Sociology of the University of Victoria in beautiful BC. I much liked those days that our computers were cranking away on statistical models while we could enjoy the ocean view.

There are quite some colleagues I would like to thank. Without some of them, I would not have become the statistical modeling nerd some of my friends consider me to be. I am really grateful to Tom Snijders for his helpful tips and tricks concerning multilevel modeling. I thank Manfred te Grotenhuis and Ben Pelzer for the intriguing but often endless discussions on statistical modeling techniques. The problem of how to disentangle age, period, and cohort

effects will probably hunt us for the rest of our lives. Furthermore, this research would not have been possible without the technical assistance provided by Theo van der Weegen and Pieter van Groenestijn. I do not recall how often I came to their doors asking for some more data files. I thank Ayşe Güveli, Christiaan Monden, Ellen Verbakel, Eva Jaspers, Evelyn Hello, Giedo Jansen, Gijs Weijters, Jan Reitsma, Jannes de Vries, Jochem Tolsma, Johan van Wilsem, Marieke van Londen, Marieke van de Rakt, Marike van Tienen, Mark Levels, Maurice Gesthuizen, Natascha Notten, Nicole Tieben, Nienke Moor, Olav Aarts, Peter Tammes, Rianne Kloosterman, Ruud van der Meulen, Tamar Fischer, Tim Huijts, Tom van der Meer, Vivian Meertens, Wilko van Iperen, and Wouter van Gils for all the nice and fruitful meetings we had. I owe especially warm thanks to Wouter, for all the joy we had in Ann Arbor, for all the coffee he poured me, for introducing me to the Wedrenners and the Kelme Boys, and for much more. I thank Eva for all the nights we went out attending seminars on the natural sciences, even though they probably distracted us from Sociology, because they often made us dream of a career in science. My other colleagues, Ariana Need, Bas Kurver, Fransje Smits, Gerbert Kraaykamp, Jan Lammers, Maarten Wolbers, Marcel Coenders, Marcel Lubbers, Paul de Graaf, Peer Scheepers, Rob Eisinga, Roderick Sluiter, and William van der Veld all inspired me in their own way. Finally, many thanks go to Marijke Ristivojčević-Lefering, who helped me with innumerable secretarial tasks throughout the years.

Now, I would like to thank several people who played a major role in the spare time I spent outside academia. I thank Marilyn Roth, Mike and Tara Corman, and Theresa Vladicka for their hospitality and for distracting me from my studies in order to get wasted in downtown Victoria. Frank van Tubergen, Jasper Muis, Jos Philips, and Ruud van der Meulen, my most paradoxical friends, have the ability to combine serious discussions with occasional games of chess, darts, abalone, and what not. With Cindy Paans, Pieter Liefink, and Roland van Loosbroek, I can easily pretend I am someone else...a real treat! I am really happy to count as friends the “bikkels”, Marianne Boelens, Dim Coumou, and Bas Kortmann who unfortunately is no longer among us. Although we lived in different countries for the past several years, I really appreciate how our friendship remained untouched by distance or occasional lack of contact. Furthermore, I owe my loving thanks to my dear family. Joyce, Lud, Remco, Isabelle, Hannah, and Raf, I am happy to count you as my best friends too.

Finally, I want to stress the importance of social networks once more. I am deeply thankful for the existence of the Hyves network, because it allowed me to remeet Hanneke. To her I just want to say: I love you.

Stijn Ruiter, December 2007

Contents

Acknowledgments	vii
Contents	ix
List of Tables	xiii
List of Figures	xv
1 Introduction	1
1.1 Background	1
1.2 Studying contextual differences in voluntary association involvement	2
1.3 Studying socioeconomic consequences of voluntary association involvement	6
1.4 Outline of this study	9
I Causes	11
2 National context, religiosity, and volunteering	13
2.1 Introduction	14
2.2 Theory and hypotheses	16
2.2.1 Hypotheses on individual religiosity and volunteering	16
2.2.2 Hypotheses on national religious context and volunteering	18
2.3 Data and methods	19
2.3.1 Dependent variables	22
2.3.2 Independent variables	23
2.3.3 Methods	26
2.4 Results	26
2.4.1 General volunteering	26
2.4.2 Memberships versus volunteering	31

2.4.3	Spillover	33
2.4.4	Volunteering and the welfare state	36
2.5	Conclusions and discussion	36
3	Generational explanations for cross-national differences in voluntary association involvement	41
3.1	Introduction	42
3.2	Generational explanations for differences in voluntary association involvement	44
3.3	Data and methods	49
3.3.1	Dependent variables	52
3.3.2	Independent variables	52
3.3.3	Methods	58
3.4	Results	58
3.4.1	Voluntary memberships	59
3.4.2	Volunteering	63
3.5	Conclusions and discussion	66
4	Religion and voluntary association involvement over the life course	71
4.1	Introduction	71
4.2	Theory and hypotheses	73
4.2.1	Individual religiosity and voluntary association involvement	73
4.2.2	Religious contexts and voluntary association involvement	75
4.3	Data and methods	77
4.3.1	Dependent variables	78
4.3.2	Independent variables	80
4.3.3	Methods	85
4.4	Results	85
4.4.1	Joining voluntary associations and starting volunteer work	85
4.4.2	Quitting volunteer work and leaving voluntary associations	90
4.4.3	Spillover of religious involvement	94
4.5	Conclusion and discussion	95
II	Consequences	99
5	Socioeconomic payoffs of voluntary association involvement	101
5.1	Introduction	102
5.2	Theory and hypotheses	104
5.2.1	Why would voluntary association involvement have socioeconomic payoffs in the first place?	104

5.2.2	Which voluntary associations provide most socioeconomic benefits?	106
5.3	Data and methods	107
5.3.1	Dependent variables	108
5.3.2	Independent variables	108
5.3.3	Methods	112
5.4	Results	112
5.4.1	Socioeconomic payoffs of involvement in general	112
5.4.2	Socioeconomic payoffs of different associations	120
5.5	Conclusion and discussion	122
 III Conclusions and discussion		 125
6	What have we learned and how to proceed?	127
6.1	Summing it all up	128
6.1.1	Causes of voluntary association involvement	128
6.1.2	Socioeconomic consequences of voluntary association involvement	134
6.2	Voluntary association involvement and inequality	136
6.3	Explanations for puzzling findings	137
6.3.1	The impact of the contemporaneous versus past religious context	137
6.3.2	Democracy and voluntary association involvement	139
6.3.3	Educational expansion and volunteering	140
6.4	Trends in voluntary association involvement	141
6.5	Future research	144
6.5.1	Theoretical reconsideration: networks or norms?	144
6.5.2	Suggestions for new empirical tests and future data collections	145
 Bibliography		 147
A Educational expansion and volunteering		165
B Engagement in religious associations		167
 Summary in Dutch - Nederlandstalige samenvatting		 171
 Curriculum Vitae		 179
 ICS dissertation series		 181
 Index		 189

List of Tables

2.1	Respondents per country and wave and percentage volunteers per country . . .	20
2.2	Descriptive statistics for independent variables	23
2.3	Multilevel logistic regression models for general volunteering and voluntary memberships	28
2.4	Multilevel logistic regression models for non-religious volunteering and non-religious voluntary memberships	34
3.1	List of surveys per country	50
3.2	Descriptive statistics for dependent and independent variables	56
3.3	Variance components for subsequent multilevel logistic regression models for voluntary membership	58
3.4	Variance components for subsequent multilevel logistic regression models for volunteering	59
3.5	Multilevel logistic regression models for voluntary membership	60
3.6	Multilevel logistic regression models for volunteering	64
4.1	Relationship between hypothetical results and cross-sectional findings	80
4.2	Descriptive statistics for dependent and independent variables	84
4.3	Discrete time logit models for joining a voluntary association and starting volunteer work	87
4.4	Discrete time logit models for leaving a voluntary association and quitting volunteer work	89
4.5	Discrete time logit models for joining a non-religious voluntary association and starting non-religious volunteer work	92
5.1	Voluntary association characteristics	109
5.2	Descriptive statistics for dependent and independent variables	111
5.3	Estimates for socioeconomic effects of voluntary association involvement . .	114

5.4	Estimates for socioeconomic effects of voluntary association characteristics	118
A.1	The effect of educational expansion on the likelihood to volunteer	165
B.1	Discrete time logit models for joining a religious voluntary association and starting religious volunteer work	168

List of Figures

1.1	Multilevel explanation of voluntary association involvement	3
1.2	Voluntary association involvement and socioeconomic position	7
2.1	Effect of church attendance on general volunteering	32
6.1	Expected probabilities by year	143

Chapter 1

Introduction

1.1 Background

Voluntary association involvement attracts quite some attention in both public and scientific debate in many Western societies that seem to struggle with issues of social cohesion. This study elaborates on both individual-level and contextual-level causes of such involvement as well as its socioeconomic consequences for individuals who are involved. This way, it links research on voluntary associations to two classical topics of sociology, namely social cohesion and social inequality. First and foremost, we study the social contexts that evoke people's participation in voluntary associations, and, to a somewhat lesser extent, we also deal with the way voluntary associations themselves form social contexts in which members gain access to more favorable socioeconomic positions. At first sight, these two topics may only seem related because both deal with voluntary association involvement; the former as causes and the latter as consequences. However, we show in this study that social network explanations play an important role in explaining both.

Before we move on it is important to clarify what we mean by voluntary association involvement. Basically, it refers to engagement in formal organizations, such as political parties, labor unions, religious groups, and environmental organizations¹. We consider people to be involved when they are actively volunteering for such organizations but also when they are only a member. Of course, we distinguish mere members from volunteers whenever we expect them to differ². So, this study deals with contextual differences in both

¹We forgo an extensive discussion of what voluntary association involvement really "is", because such essentialist discussions are not as informative as discussions about theories and hypotheses (Popper 1972).

²Throughout this study we use "involvement", "participation", and "engagement" interchangeably for either voluntary memberships of formal organizations or volunteering for these organizations, or both. In all other cases, we explicitly refer to either memberships or volunteering.

voluntary memberships and volunteering as well as with the socioeconomic consequences of both. Below, we first outline the way in which this study contributes to research on contextual differences in voluntary association involvement. We describe how this study aims to make progress regarding the research questions being raised, the theories proposed, and the methods employed. After that, we explain similarly how we contribute to the research on socioeconomic benefits of voluntary association involvement. Finally, we give an outline of this study.

1.2 Studying contextual differences in voluntary association involvement

Previous research has shown that large contextual differences in voluntary association involvement exist. For example, it is now well known that countries differ a great deal in the likelihood that citizens will participate (Baer 2006; Curtis et al. 1992, 2001; Hodgkinson 2003; Howard 2003; Lam 2006; Parboteeah et al. 2004; Salamon and Sokolowski 2003; Schofer and Fourcade-Gourinchas 2001; Van Oorschot et al. 2006), even if these countries are geographically proximate (Wessels 1997). Next to these between-country differences, other research shows that large differences in participation also exist within countries, e.g., across regions in Canada (Hwang et al. 2007), Italy (Putnam 1993), Switzerland (Bühlmann and Freitag 2004), and the United States (Putnam 2000). Of course, much of these between- and within-country differences can be attributed to compositional differences (and most of the aforementioned studies take these into account). That is to say, participation rates differ across countries and regions for a large part because the populations differ with respect to specific characteristics that are known to be related to voluntary participation. For example, church members³ are generally known to be more involved in voluntary associations than non-members (Becker and Dhingra 2001; Curtis et al. 2001; Hodgkinson 2003; Lam 2002; Wilson and Janoski 1995). Now, suppose that many people from country *A* belong to some religious denomination, whereas many of on all other aspects equal people from country *B* have no religion. Clearly, we would expect higher volunteer rates in country *A* than in country *B*. However, this difference would be solely the result of the fact that religious people are generally more likely to volunteer and religiosity is unevenly distributed over these two countries. So, after we statistically control for individual-level differences in religious belonging, the different volunteer rates between these two countries would disappear. The same would be true if other characteristics that are known to be related to voluntary association involvement (e.g., education) would be unevenly distributed.

It is important to note that research that deals with contextual differences should always

³Throughout this study, we use “church” also for non-Christian holy places (e.g., mosques and synagogues). Consequently, a non-Christian is also called a church member.

carefully consider compositional differences such as those described above; not only when comparing one context to another at a specific moment in time, but also when studying the same context over time. Although every good textbook on statistical techniques for studying group or contextual differences (e.g., textbooks on multilevel modeling) will discuss the importance of distinguishing contextual effects from compositional differences, we have stressed it here, because it is of major importance for this study, since most of it explicitly focuses on contextual differences in voluntary association involvement. Of course, if all differences between countries or between regions within countries could be fully explained by compositional differences, we would not have to study contextual differences as such; we could then simply study why individual-level differences (e.g., those between church members and non-members) arise. However, compositional differences clearly do not tell the whole story. Quite some variation between countries and regions remains after taking compositional differences into account. Yet, Smith (1994) and Wilson (2000) conclude in their overview articles that research on the impact of the context on individual volunteering is underdeveloped. Similarly, Curtis et al. argue that scholars paid little attention to developing “*theories of cross-national variation in association involvement*” (2001: 784) and Hodgkinson also concludes that “future research would greatly benefit from a stronger theoretical base to explain the differences in rates of volunteering across nations” (2003: 52). This study explicitly focuses on such contextual explanations for voluntary association involvement.

Much of the early work in this area consists of simple between-country comparisons of proportions of individuals reporting voluntary association involvement (Almond and Verba 1989; Smith 1973). Although this form of analysis continues in some fairly recent studies (Salamon and Anheier 1998; Newton and Montero 2007; Norris and Davis 2007; Wilensky 2002), we claim that it is crucial for understanding why voluntary association involvement is high in some contexts and low in others to study these differences in a multilevel framework (see Figure 1.1).

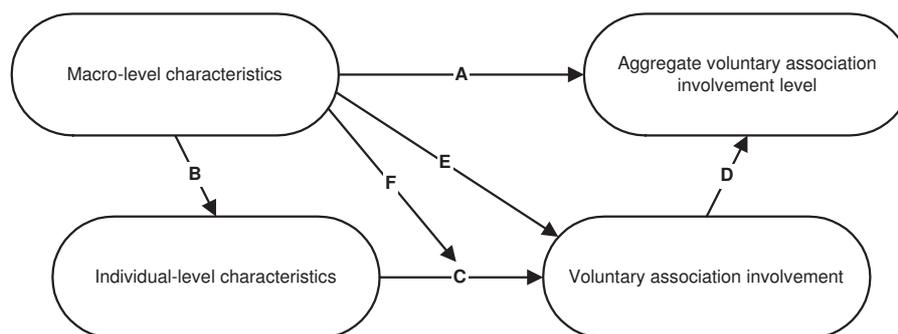


Figure 1.1: *Multilevel explanation of voluntary association involvement*

Some researchers have only studied the relationship between macro-level characteristics and aggregate levels of involvement (as depicted by arrow **A**). For example, it has been argued that national involvement levels depend on economic development (Inglehart 2003a), the size of the welfare state (Salamon and Sokolowski 2003), and democracy (Halman 2003; Paxton 2002). However, Figure 1.1 shows that such macro-level relations could be the result of quite distinct processes. We already mentioned that compositional differences provide one explanation. So, certain individual-level characteristics (e.g., religiosity) are unevenly distributed over contexts (as depicted by arrow **B**), which, in turn, affect voluntary association involvement (as depicted by arrow **C**), which, in turn, results in different involvement levels (as depicted by arrow **D**). If, however, contextual-level differences remain after controlling for such compositional differences, these may be explained by direct effects of macro-level characteristics on voluntary association involvement. These are truly contextual effects (as depicted by arrow **E**), since they reflect effects of some contextual-level characteristic on voluntary association involvement over and above the effects of individual-level characteristics. That is to say, these contextual characteristics (e.g., the religious context) affect all people living in that context, irrespective of their own characteristics. Finally, contextual differences can also arise due to so-called cross-level interactions. This means that some macro-level characteristic (e.g., the religious context) conditions the relation between an individual-level characteristic (e.g., religiosity) and voluntary association involvement (as depicted by arrow **F**). In this study we use this multilevel framework to derive our hypotheses for contextual differences in voluntary association involvement.

Although some previous studies have also adopted a multilevel framework for studying contextual effects on voluntary association involvement, either for country-level differences (Baer 2006; Curtis et al. 2001; Lam 2006; Parboteeah et al. 2004; Schofer and Fourcade-Gourinchas 2001), regional-level differences (Bühlmann and Freitag 2004), or even for town-level differences (Rotolo 2000b), the religious context plays only a marginal role in explaining involvement (with a noticeable exception of Lam 2006). However, we argue that both individual-level religiosity as well as the religious context are strongly related to the likelihood to be asked to participate. Since such recruitment seems crucial for many people to become involved (Bryant et al. 2003; Musick et al. 2000), religion should play an important role in explaining voluntary association involvement. For this reason, we start our study with a chapter on the link between religion and volunteering. In Chapter 2, we build on network recruitment arguments and results from the sociology of religion (Kelley and De Graaf 1997) to derive new hypotheses about the impact of individual-level religiosity, the national contemporaneous religious context, and their interplay on volunteering. We test these hypotheses employing multilevel analysis techniques on a large-scale data set with over 100,000 individual respondents from 53 countries.

All previous multilevel studies relate voluntary association involvement to contemporaneous contextual explanations (so-called “period effects”) only. In Chapter 3, we extend this

research by also studying the degree in which the social context that people experienced when growing up affects their involvement (so-called “cohort effects”). We test hypotheses derived from the line of research that focuses on trends in voluntary association involvement. This line of research was sparked by the work of Putnam (1995a; 1995b; 2000; 2002) who claims that voluntary association involvement in the United States (and possibly other Western countries) has declined due to cohort replacement. In other words, younger birth cohorts would be less engaged and they replace the older, and supposedly more engaged cohorts and this cohort replacement would gradually lead to diminishing involvement levels. Putnam’s claim initiated a lively debate and much new research about whether such a decline really happened in the United States in particular but also more generally, in other Western societies (Baer et al. 2001; Costa and Kahn 2003; Curtis et al. 2003; Fischer 2005; Goss 1999; Hooghe 2002; Jennings and Stoker 2004; Ladd 1999; Norris 1996; Paxton 1999; Rotolo 1999; Rotolo and Wilson 2004; Stolle and Hooghe 2005; Thomson 2005). Although we have no intention to settle this debate, we try to contribute to this field of research by studying the explanations that have been provided for why the younger birth cohorts would be less engaged than their older counterparts. In fact, we claim that this has more theoretical importance than studying the trends as such. We improve upon studies that investigate whether people from different generations differ with respect to their involvement in voluntary organizations by shifting the research question towards why they would differ in the first place (De Graaf 1999). We do this by specifying how contextual conditions experienced when growing up affect voluntary association involvement. This implies that the macro-level characteristics in the top left corner of Figure 1.1 can also refer to these historical conditions. In Chapter 3, we test the hypotheses concerning cohort effects with multilevel analysis techniques on data obtained from 11 different cross-national surveys which were collected over the period 1973–2002. These data consist of more than 200,000 individual respondents from 56 countries.

In our third and final chapter on the causes of voluntary association involvement (Chapter 4), we follow quite an important suggestion by McPherson (1981) for making progress in this field of research, namely that research should focus on the dynamic processes of voluntary association involvement. Most research in this field uses cross-sectional designs (so do we in Chapters 2 and 3). Although this can provide important information with respect to the link between certain individual-level and contextual-level characteristics and voluntary association involvement, merely studying participation rates does not tell us much about the intrinsically dynamic nature of voluntary engagement. That is to say, participation in voluntary associations involves, as Rotolo (2000a: 1134) argues, “two conceptually related but distinct acts: joining an organization and then remaining a member for a specific duration (i.e., not leaving)” and cross-sectional studies do not shed light on these dynamics. Already in the early 1980s, McPherson argued in favor of research on these dynamic processes that determine voluntary association involvement. He wrote, “[...] that the move toward dynamic formulations in the area of voluntary affiliation research is necessary, if the literature is to

progress beyond its current state” (McPherson 1981: 724). Although this has resulted in some studies on these dynamics (e.g., McPherson et al. 1992; Oesterle et al. 2004; Popielarz and McPherson 1995; Rotolo 2000a; Rotolo and Wilson 2003), none of these paid attention to the way religion affects the dynamics of voluntary association involvement. As a consequence, little is known about whether individual-level and contextual-level religiosity affect the likelihood of joining associations, leaving them, or both. To answer this question, we focus in Chapter 4 on the way both individual-level and contextual-level religiosity affect these dynamics. Using Dutch life course data on voluntary association involvement, we estimate event history models to determine the impact of individual religious belonging, the contemporaneous religious context (period effect), and the religious context experienced during adolescence (cohort effect) on both joining and leaving voluntary associations. According to De Graaf (1999), these models are well-suited to disentangle such period and cohort effects.

In summary, the next three chapters aim to study the influence of individual-level and contextual-level characteristics on voluntary association involvement. They provide answers to the first general research question of this study, which reads:

(1) To what extent is voluntary association involvement affected by the interplay between (a) individual-level characteristics, (b) the context in which people currently live, and (c) the context cohorts of people experienced when growing up?

1.3 Studying socioeconomic consequences of voluntary association involvement

In the second part of this study, we switch from explaining voluntary association involvement to the study of its socioeconomic consequences for individuals who are involved. Generally, there are two reasons why people who are involved in voluntary associations are expected to have better chances on the labor market: (1) voluntary associations would provide people with certain job-related skills that might be conducive to the professional career, and (2) joining these organizations extends the social network of people, providing them with contacts that might help them getting better jobs. These contacts could provide relevant job-related information as well as the leverage needed to convince future employers (Wilson and Musick 2003). The latter explanation is closely linked to the work of Granovetter (1973; 1983; 1995) who claims that many people get their jobs through informal channels. If so, it could be crucial whom to connect to. This is often exaggerated when people claim that “it’s not what you know, but who you know that matters”. Lin et al. (1981a; 1981b; 1986; 1990; 1999) provide arguments for this claim arguing that people benefit most from ties to others who rank high on the occupational ladder. This makes clear that network theories not only play an important role in explaining voluntary association involvement (as studied in Chapters 2

to 4), they also provide an explanation for its socioeconomic consequences. So, people's social networks are highly important in determining whether they will become involved. And once they have, their social networks are further enlarged, which we claim to be beneficial to their socioeconomic career. In Chapter 5, we use these network arguments to derive new hypotheses about the socioeconomic benefits of voluntary association involvement.

Although quite some scholars claim that involvement in voluntary associations provides people with better chances on the labor market (e.g., Astin et al. 1999; Beggs and Hurlbert 1997; Day and Devlin 1998; McPherson and Smith-Lovin 1982, 1986; Wilson and Musick 1999, 2003), we believe that there is only little convincing empirical evidence for such socioeconomic payoffs of involvement. Most studies rely on cross-sectional designs with which it is only possible to determine *whether* people who are involved in voluntary associations hold better jobs. That is to say, such studies only provide insight in the association between voluntary association involvement and socioeconomic position at a specific moment in time (as depicted by the curved double-headed arrow **A** in Figure 1.2). With such designs, however,

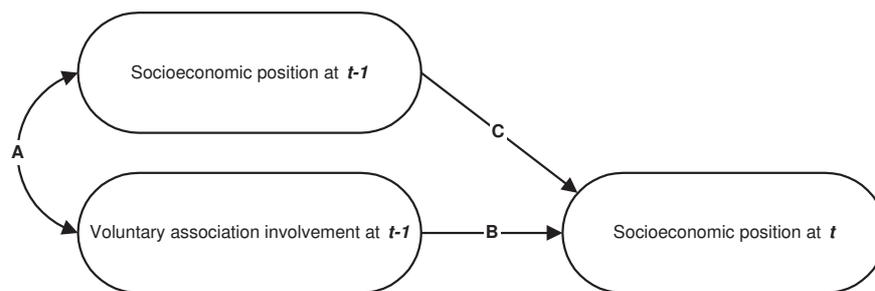


Figure 1.2: *Voluntary association involvement and socioeconomic position*

it is impossible to test the claim that these people have those better jobs *because of* their involvement. In fact, research on the causes of voluntary association involvement (e.g., as presented in Chapters 2 to 4) provide good reasons to expect that the causal link might go in the opposite direction. That is to say, the positive association between voluntary association involvement and socioeconomic position might simply exist because those who hold better jobs are generally more likely to become involved. Rotolo and Wilson seem to argue in favor of this explanation when they state that “Undoubtedly, many managers and professionals reap the benefits of these memberships in the form of human and social capital they can use to build their careers. But it is unlikely that voluntary association memberships cause careers. The evidence suggests, rather, that careers cause memberships” (2003: 604). Nevertheless, the results of Astin et al. (1999) and Wilson and Musick (1999; 2003) lend some credibility to the claim that voluntary association involvement does provide socioeconomic payoffs, because they show on the basis of panel data that volunteering at an earlier time point is

positively related to job outcomes later on.

In Chapter 5, we study the socioeconomic consequences of voluntary association involvement employing event history models on Dutch life course data containing both occupational careers and voluntary association involvement histories. This allows us to take the timing of events into account (i.e., one state of affair of some independent variable X precedes the state of affair of some dependent variable Y). We study whether someone's socioeconomic position at some point in time (say, t) is affected by voluntary association involvement that started earlier (at time $t-1$), controlling for the socioeconomic position that the person had held earlier (at time $t-1$). Thereby, we are able to provide a rigid test of the claim that voluntary association involvement pays off in the labor market. If so, we should find a positive effect of voluntary association involvement at time $t-1$ on the socioeconomic position at time t (as depicted by arrow **B** in Figure 1.2). Effect **C** will clearly be positive, since someone's socioeconomic position (at time t) is, of course, strongly determined by his/her socioeconomic position at an earlier point in time ($t-1$).

Next to determining whether voluntary association involvement as such pays off in the labor market, we are also able to study whether some organizations are more beneficial to the career than others, since we know the types of organizations which respondents belonged to. Based on network theories, we argue that the composition of the organization is crucial in explaining such differential effects. Because some organizations contain relatively a lot of members that could be helpful to someone's career whereas other organizations have a somewhat less favorable composition in this respect. This composition of a voluntary association is closely related to what McPherson and Rotolo call the niche a specific organization. They specify this niche "[...] by the mean and standard deviation of member characteristics. The mean describes the location of the center of the niche, and the standard deviation indicates the niche width" (McPherson and Rotolo 1996: 183). We use this niche positioning of voluntary associations to estimate whether the composition of voluntary associations determines the effect of involvement on socioeconomic outcomes.

Of course, there are other possible consequences of voluntary association involvement that we could examine in this study. For example, research shows that volunteering is beneficial to (perceived) mental and physical health, life satisfaction, happiness, self-esteem, and sense of control over one's life (Li and Ferraro 2005; Musick and Wilson 2003; Thoits and Hewitt 2001; Van Willigen 2000). However, there are two reasons why we only study socioeconomic consequences. First, the aforementioned studies on other consequences use longitudinal designs which allow for a careful control for selection effects and reverse causality. As already noted, in the study of socioeconomic benefits of involvement, this approach has scarcely been applied. Second, in our approach we use retrospective information concerning the entire occupational history as well as information about voluntary association involvement over the life course. We lack such data for other possible consequences of voluntary association involvement. Consequently, in Chapter 5, we only study the link

between voluntary association involvement and socioeconomic outcomes. It answers the following general research question:

(2) To what extent does voluntary association involvement generate socioeconomic payoffs, and how do these payoffs differ with the composition of these associations?

1.4 Outline of this study

This study is organized in three parts. After this introductory chapter, the study proceeds with three chapters in which individual-level and contextual-level explanations for voluntary association involvement play a central role. Chapter 2 focuses on the way religion affects volunteering (and voluntary memberships to a somewhat lesser extent). We study the impact of individual religiosity, the national contemporaneous religious context, and their interplay on volunteering (and memberships) with data on more than 100,000 individuals from 53 countries. In Chapter 3, we extend this cross-national perspective by studying generational explanations for voluntary association involvement with about twice as many respondents from 56 countries. We explicitly try to disentangle the way in which the societal context people experienced during adolescence (cohort effects) affects their current voluntary association involvement from contemporaneous contextual effects (period effects) like those studied in Chapter 2. Subsequently, Chapter 4 builds on both Chapter 2 and Chapter 3 by zooming in on the social mechanisms underlying the cross-sectional findings that religious people are generally more involved in voluntary associations. For Dutch society, it presents event history analyses of the dynamics (i.e., joining and leaving) of voluntary association involvement. This way, we are better able to more carefully scrutinize the causal relationship between the contemporaneous religious context (period effect) and the religious context experienced during adolescence (cohort effect) on the one hand and voluntary association involvement on the other. Subsequently, in Part II, we shift our attention from the explanation of voluntary association involvement (as presented in Chapters 2 to 4) to its socioeconomic consequences for individuals. In Chapter 5, we first study to what extent voluntary association involvement in general results in better paid and higher status jobs, and subsequently, whether some associations provide larger socioeconomic payoffs than others. Finally, Part III concludes this study. In Chapter 6, we provide answers to our two main research questions, discuss some puzzling findings, reflect on trends in voluntary association involvement in the Netherlands, and we discuss the limitations of this study. Furthermore, we provide some clues for future research.

Before we move on to the empirical chapters of this study (Chapters 2 to 5), we should note that these chapters were originally written as journal articles and therefore they should be readable independently of one another. This, however, makes some repetition unavoidable.

Part I
Causes

Chapter 2

National context, religiosity, and volunteering: Results from 53 countries*

Abstract

To what extent does the national religious context affect volunteering? Does a religious environment affect the relation between religiosity and volunteering? To answer these questions, we specify individual-level, contextual-level, and cross-level interaction hypotheses. We test the hypotheses by simultaneously studying the impact of religiosity of individuals, the national religious context, and their interplay on volunteering while controlling for possible confounding factors both at the individual level and the contextual level. Based on multilevel analyses on data from 53 countries, frequent churchgoers are more active in volunteer work and a devout national context has an additional positive effect. However, the difference between secular and religious people is substantially smaller in devout countries than in secular countries. Church attendance is hardly relevant for volunteering in devout countries. Furthermore, religious volunteering has a strong spillover effect, implying that religious citizens also volunteer more for secular organizations. This spillover effect is stronger for Catholics than for Protestants, non-Christians and non-religious individuals.

*A slightly different version of this chapter was published (under the same title) in the February 2006 issue of *American Sociological Review*. Nan Dirk de Graaf is co-author. In all subsequent chapters, we refer to this chapter either by a reference to the original article (Ruiter and De Graaf 2006) or by a reference to Chapter 2.

2.1 Introduction

Church members generally are more involved in voluntary organizations than non-members (Becker and Dhingra 2001; Curtis et al. 2001; Hodgkinson 2003; Lam 2002; Wilson and Janoski 1995). Not only are membership rates among them higher, they are also more likely to volunteer. Therefore, it comes as no surprise that voluntary organizations often have religious backgrounds. This is not only true for the United States, where over one third of all volunteers is active in religious organizations (Boraas 2003). Even in more secular European societies, religious organizations are among the most common voluntary organizations (Gaskin and Davis Smith 1995).

Although church members volunteer more than non-members, research suggests that volunteering is not driven by church membership, but instead by levels of church attendance (De Hart 1999; Hodgkinson et al. 1990; Watt 1991; Wilson and Musick 1997). Nominal members who never visit church and non-members volunteer equally often, whereas the highest volunteer rates are found among frequent churchgoers. Regular churchgoers are better integrated within religious networks than those who never attend church. Being part of such networks enhances the chance to volunteer (Bekkers 2003).

Non-members volunteer less. But, what if they are nested within a highly religious context? Most probably, in such a scenario, they have a considerable number of active church members amongst their family, friends, and acquaintances. Will this make them more likely to volunteer? We know that avid church members volunteer more because they are better integrated within religious networks (Bekkers 2003; Wilson and Musick 1997). They are more likely to know about voluntary organizations, more likely to be asked to participate (Bryant et al. 2003; Musick et al. 2000), and it will be harder for them to refuse such requests (Snow et al. 1980). However, it is unclear to what extent this network argument applies also to people who themselves never visit church. Are they affected by the religiosity of their social environment too? This would make the network explanation more general: being more strongly integrated within networks of religious people makes one more likely to volunteer. This should then hold for all people, not just for regular churchgoers.

The general network hypothesis implies differences between countries: citizens in more devout societies are more likely to associate with active church members (cf. Kelley and De Graaf 1997), which should increase their chance to volunteer. If the religious environment indeed is an important predictor, we expect not just higher volunteer rates in more devout societies (i.e., a composition effect), but also that all citizens of those societies – irrespective of their own religiosity – are more likely to volunteer. Hence, we predict that devoutness of society is positively related to participation level (i.e., a context effect). Secular people in devout countries should also volunteer more, since knowledge about volunteering reaches them more easily through their social networks and they are more likely to be recruited and motivated by the large number of religious fellow citizens. The national religious context

effect could imply a dampened effect of individual religiosity in more devout societies, since people who do not attend church would be more likely to volunteer and frequent churchgoers would not have to invest much time to sustain high levels of volunteering.

Whether people's religious environment influences their volunteering becomes an important question if we consider that many industrialized countries secularized in the past decades (with the United States as a possible exception: cf. Norris and Inglehart 2004; De Graaf and Need 2000). If religiosity indeed is an important factor, secularization might result in declining volunteer rates for two reasons. First, the number of avid church members – the people who are most likely to volunteer – declines. Consequently, levels of volunteering could drop sharply. Second, while more and more people turn their back on the church, it becomes increasingly less likely for non-members to have active church members within their social environment. This could, indirectly, cause a nation's volunteer rate to drop as well.

To test for effects of the national religious context, we have to study the impact of individual religiosity and national religious context simultaneously while controlling for confounding factors at both the individual level and the contextual level. This requires international comparative research. Smith (1994) and Wilson (2000) conclude in their overview articles that research on the impact of the context on individual volunteering is underdeveloped. Similarly, Curtis et al. argue that scholars paid little attention to developing “*theories of cross-national variation in association involvement*” (2001: 784). Hodgkinson also concludes that “future research would greatly benefit from a stronger theoretical base to explain the differences in rates of volunteering across nations” (2003: 52). Up until now, international comparative research on voluntary association involvement (studying either memberships or volunteering, and sometimes both) has focused mainly on political and economic factors (e.g., Hodgkinson 2003; Salamon and Sokolowski 2003; Schofer and Fourcade-Gourinchas 2001). However, because we hypothesize that religion is a key factor, we propose that international comparative research on volunteering should take the national religious context into account as well. Although religion is included in some recent studies (Dekker and Van den Broek 1998; Halman 2003), these studies do not discriminate compositional from contextual effects. Curtis et al. (2001) do distinguish these effects and find that working memberships (religious organizations and unions excluded) vary with national religious composition⁴. Parboteeah, Cullen, and Lim (2004) also find a strong positive effect of the national religious context, but unfortunately they do not control for church attendance at the individual level. We try to add to this research by providing new hypotheses on the influence of religious context and by testing them on a large-scale, international comparative data set containing information on volunteering in 53 countries between 1981 and 2001.

⁴Exactly the same World Values Survey items on unpaid work for voluntary organizations are sometimes used to measure *working memberships* (e.g., Curtis et al. 2001), while in other cases they are said to measure (*formal*) *volunteering* (e.g., Halman 2003; Hodgkinson 2003; Parboteeah et al. 2004). We address this issue in the data section.

2.2 Theory and hypotheses

Volunteering is a form of institutionalized, unpaid helping behavior that benefits other people, groups, or organizations (Hodgkinson 2003; Wilson 2000). Although such behavior could be beneficial to volunteers themselves, they certainly do not gain financially (Dekker and Halman 2003). Thus, to initiate volunteerism, people have to be motivated in another way. To understand why people volunteer, we build upon previous research distinguishing three types of explanations: (1) altruistic norms, (2) social networks, and (3) knowledge and skills⁵. First, we elaborate on the relation between individual religiosity and volunteering. Subsequently, we specify hypotheses on effects of the national religious context.

2.2.1 Hypotheses on individual religiosity and volunteering

Two general explanations for why church members volunteer more than non-members have been proposed. First, avid church members would have internalized the social norm of altruism (the intrinsic motivation to help others) more than non-members. Solidarity, love of one's neighbors, and self-sacrifice are important virtues promoted by the world's major religions (Wuthnow 1991: 122). Religious people would acquire these altruistic norms in church and this would lead to an increased chance of volunteering. Second, according to the social network explanation, church members would volunteer more because their social network provides stronger recruitment and motivation functions. Given that members are part of close-knit communities, they are more likely to know about existing voluntary organizations, it increases the chance that they are asked to participate (Bryant et al. 2003; Musick et al. 2000), and furthermore, the close-knit community makes it difficult to refuse such requests. Wilson and Musick refer to this network explanation when they argue that "most formal volunteers are persuaded to volunteer by family members, coworkers, or fellow worshippers" (1997: 700). Thus, based on both the altruism and the network explanation, our hypothesis is as follows: *Church members volunteer more than non-members (Hypothesis 1)*.

The explanation that church members volunteer for altruistic reasons is under attack. Cnaan, Kasternakis, and Wineburg (1993) show that volunteers and non-volunteers do not differ in their intrinsic religious motivation. Bekkers (2003) finds that volunteering directly varies with altruism, but altruism does not explain why church members volunteer more than non-members. By contrast, the social network explanation has received strong support (Becker and Dhingra 2001; Bekkers 2003; Jackson et al. 1995; Lam 2002; Park and Smith 2000; Yeung 2004). Empirical evidence suggests that church members have more active volunteers within their social networks. Consequently, church members are more likely to

⁵Wilson and Musick (1997) and Oesterle, Johnson, and Mortimer (2004) group these explanations under the following headings: (1) cultural, (2) social, and (3) human capital. We do not use these highly abstract terms, because their wide use have made their meaning unclear, which makes accumulation of knowledge difficult.

meet other volunteers and be recruited by them. Becker and Dhingra underline the power of this social network explanation stating “social networks, rather than beliefs, dominate as the mechanism leading to volunteering [...] the importance of religious beliefs plays little role in church attenders’ decisions to volunteer” (2001: 329-30). The fact that most volunteers were asked to join (Boraas 2003; Gaskin and Davis Smith 1995) is also in line with the social network explanation.

The network explanation suggests the importance of church attendance. Regular church-goers are more strongly connected to their religious group, making them more likely to be asked to volunteer. Most probably, this recruitment mechanism is considerably weaker for those church members who only occasionally visit church. This is exactly what De Hart (1999) and Bekkers (2003) find for the Netherlands: non-members and members who attend church infrequently are almost equally less likely to volunteer, whereas church members who often visit church are much more likely to volunteer. Wuthnow also indicates this when he argues that “religious inclinations make very little difference unless one becomes involved in some kind of organized religious community” (1991: 156). Because we expect church attendance to be highly influential, we predict the following: *Differences in volunteering between church members and non-members decline strongly after taking church attendance into account. (Hypothesis 2).*

Church members and non-members may differ considerably with regard to their volunteering, this does not make all members equally involved. Research shows large denominational differences among church members. In general, Protestants seem to volunteer more than Catholics (Curtis et al. 2001; Dekker and De Hart 2001; Lam 2002; Wuthnow 1991: 322). Dekker and De Hart (2001) provide an institutional explanation: the Protestant church is less hierarchically structured than the Catholic church. Furthermore, the Protestant church subdivides into smaller parishes. Both the less hierarchical structure and the smaller subdivisions would generate more involvement. Lam (2002: 408) argues that “Protestant principles discourage the pursuit of self-interests and induce a sense of social responsibility among their adherents.” Based on these explanations, our next hypothesis is as follows: *Protestants volunteer more than Catholics (Hypothesis 3).*

All previous hypotheses are about volunteering in general. However, it is reasonable to expect that religious involvement boosts volunteering for religious voluntary organizations to a larger extent than volunteering for secular organizations (Wuthnow 1999). Therefore, we have to study the impact of religious involvement on general volunteering apart from its effect on secular volunteering. However, the network explanation applies again. If those already involved in religious volunteering are more likely to get acquainted with people who volunteer for secular organizations, their chance to volunteer for secular organizations should be high as well. Jackson et al. (1995) and Dekker and De Hart (2002) find evidence for such a spillover effect. On top of the network explanation, they add that people active in religious volunteering obtain specific skills that are valuable for secular organizations as well. This

would make them more likely to be recruited by secular organizations, because organizations are actively “prospecting for participants” who have these skills (Brady et al. 1999). Thus, the spillover hypothesis reads as follows: *People who do religious volunteer work are more likely to volunteer for secular organizations as well (Hypothesis 4a).*

According to Wilson and Janoski (1995), some conservative Protestant denominations discourage secular volunteering. Volunteering for organizations that are directly linked to the church would be strongly supported though. Therefore, strong integration within these denominations should lower the chance to volunteer for secular organizations and raise the chance of religious volunteering. Consequently, there should be no spillover effect for these denominations. Park and Smith (2000) indeed find that high church attendance reduces the probability of volunteering through a non-church organization among churchgoing Protestants. However, since we cannot distinguish between different Protestant denominations within this study, we expect the following: *Conservative Protestants lower the overall spillover effect for Protestants compared to the spillover effect for other denominations (Hypothesis 4b).*

2.2.2 Hypotheses on national religious context and volunteering

So far, we have formulated hypotheses on the impact of individual religiosity on volunteering. Next, we elaborate on the relation between the national religious context and volunteer work. This relation is somewhat neglected in the literature. However, Kelley and De Graaf (1997) provide us with arguments to predict a positive impact of devoutness of a society. They find that people who were raised by secular parents in relatively devout countries are more religious than people who grew up with similar parents in more secular countries. According to Kelley and De Graaf, this comes about (a) through people’s exposure to religious culture and (b) because the pools of potential friends, teachers, colleagues, and marriage partners are predominantly devout. We expect that these two phenomena influence volunteering as well. As we have already argued, especially the social network of people influences their chance to volunteer. Under the assumption that people in devout countries have an increased number of religious people in their social networks, they likely acquaint themselves with an increased number of already active religious people who possibly recruit them for volunteer activities. Moreover, in such networks, the norm to volunteer could be stronger, as well as the social pressure to behave accordingly. Based on these arguments, we predict the following: *The chance to volunteer increases with the devoutness of the society (Hypothesis 5).*

Furthermore, both theoretical arguments and empirical findings lead us to expect that the impact of individual church attendance on volunteering varies with the national religious context. Hypothesis 2 suggests that all people are influenced equally by church attendance. However, we argue that the impact is weaker in more devout societies and stronger in more secular societies. Kelley and De Graaf (1997) find similar cross-level interaction effects

for religiosity: religious upbringing influences individual's religiosity in devout countries only marginally, whereas its effect is strong in secular societies. They argue that religious parents in secular societies have to invest more to inculcate religious beliefs in their children, whereas in devout societies, the religious context already produces much of this socialization. Consequently, the effect of parental religiosity is smaller in more religious contexts. As an analogy, we argue that frequent churchgoers in secular societies face the problem of insufficient volunteer involvement. Therefore, building up and sustaining vibrant voluntary organizations rest mainly on their shoulders⁶. As a result, the chance to volunteer should be strongly influenced by church attendance in secular societies. Conversely, in devout societies, if non-religious people indeed have a higher chance to be involved in volunteering (see Hypothesis 5), this relieves avid churchgoers of the task to invest much time keeping levels of volunteering high. Besides, if levels of volunteering are already high, the added value of an additional volunteer is lower. Based on these arguments we expect the differences between frequent and infrequent churchgoers to be smaller, implying that church attendance does not strongly affect volunteering in devout societies. In sum, we expect the following: *Individual church attendance influences volunteering less in more devout societies (Hypothesis 6)*.

2.3 Data and methods

For the test of our hypotheses, we use a concatenated data set from the 1981–1984, 1990–1993, and 1999–2001 waves of the European Values Surveys/World Values Surveys (European Values Study Group and World Values Survey Association 2005; World Values Study Group 1999). These waves contain similar questions on volunteering for seven types of organizations. Unfortunately, the third wave of the World Values Survey (1995–1997) cannot be used, because the questions on voluntary participation were changed too much. We select only those countries for which valid scores on all dependent and independent variables were available⁷. Furthermore, only people between 18 and 90 years old are selected. These selections result in a data set of 117,007 individuals distributed over 53 countries and the three waves. The distribution of all respondents over the countries and waves as well as average volunteer rates per country are displayed in Table 2.1.

⁶We assume that networks of secular people do not negatively affect the voluntary participation of religious people in secular countries. This seems plausible, since absence of a norm to volunteer does not mean there exists a norm not to volunteer.

⁷Because in the Chinese questionnaire serious translation errors were made with respect to our dependent variable (see codebook for World Values Study Group 1999), we do not include the Chinese data set.

Table 2.1: Respondents per country and wave and percentage volunteers per country

Country	1981-1984	1990-1993	1999-2001	Total	Average % volunteers
Albania			904	904	42.1
Argentina			1,210	2,331	15.5
Austria	529	592	1,497	2,899	17.5
Belarus			977	977	14.9
Belgium	976	2,624	1,762	5,362	19.5
Brazil			1,460	1,460	21.2
Bulgaria			965	1,910	14.6
Canada	1,187	1,664	1,868	4,719	31.5
Chile			1,136	2,586	25.9
Croatia			912	912	15.5
Czech Republic			1,809	1,809	18.5
Denmark	1,181	1,008	999	3,188	14.5
Estonia			977	977	12.1
Finland			927	1,509	25.6
France	1,197	582	1,517	3,628	13.6
Germany			1,999	1,999	10.2
Germany (East)			1,325	1,325	28.2
Germany (West)	1,273	2,063		3,336	18.0
Greece			1,050	1,050	31.9
Hungary			973	1,639	12.2
Iceland	797	666	944	2,419	22.2
India			1,337	1,337	33.0
Ireland	1,180	995	934	3,109	17.4
Italy	1,345	1,964	1,926	5,235	17.5
Japan	1,167	960	1,257	3,384	11.2
Latvia			937	1,369	17.3
Lithuania			970	970	10.0
Luxembourg			1,005	1,005	20.1
Macedonia			1,055	1,055	25.1
Mexico			1,120	2,288	25.4
Moldova		1,168	1,008	1,008	31.7
Netherlands	1,116	1,002	991	3,109	25.7
Northern Ireland	310	302	926	1,538	17.1
Norway	1,208	1,180		2,388	20.6
Peru			1,395	1,395	33.5
Philippines			1,181	1,181	42.7
Poland			1,084	1,084	9.6

Continued on Next Page...

Table 2.1 – Continued

Country	1981–1984	1990–1993	1999–2001	Total	Average % volunteers
Portugal		1,080	895	1,975	11.7
Puerto Rico			551	551	41.7
Romania		1,089	1,051	2,140	17.5
Russia		1,654	2,450	4,104	9.9
Slovakia			1,327	1,327	31.7
Slovenia		934	966	1,900	13.7
South Africa			2,621	2,621	44.3
Spain	2,297	3,670	2,215	8,182	11.4
Sweden	832	922	948	2,702	29.2
Tanzania			844	844	74.2
Turkey			944	944	5.5
Uganda			975	975	57.1
United Kingdom	1,192	1,458	838	3,488	16.6
Ukraine			1,116	1,116	9.1
United States	2,214	1,536	1,135	4,885	38.4
Zimbabwe			859	859	58.9
Total	20,001	37,719	59,287	117,007	21.4

2.3.1 Dependent variables

Although the complete list of voluntary organizations differs over the three waves, all three waves contain similar questions on volunteering for seven different types of organizations. Respondents were asked whether they were doing unpaid work for one or more of the following organizations: (1) social welfare services for elderly, handicapped, or deprived people; (2) religious or church organizations; (3) education, arts, music, or cultural activities; (4) labor unions; (5) political parties or groups; (6) conservation, environment, and animal rights groups; and (7) professional associations. Because respondents were first asked whether they were members of these organizations, some scholars refer to the unpaid work with “working membership” (e.g., Curtis et al. 2001) rather than volunteering. However, others use exactly the same survey items and call it volunteering (e.g., Halman 2003; Hodgkinson 2003; Inglehart 2003a; Parboteeah et al. 2004). Because we believe the items fit the aforementioned definition of volunteering, we refer to them as such. However, to determine whether results differ for memberships, we estimate our final models for volunteering as well as memberships.

We construct the variable general volunteering by assigning a score of 1 to respondents who did unpaid work for at least one of the seven organizations⁸. We assign a score 0 to respondents who did not do any volunteer work. We use this dichotomous dependent variable (cf. Curtis et al. 1992; Wuthnow 1999) instead of a count variable (cf. Curtis et al. 2001; Parboteeah et al. 2004) for two reasons. First, our hypotheses pertain to the chance of volunteering and not the number of organizations. Second, a count variable does not necessarily correspond to level of involvement. People who are involved in two or more voluntary organizations do not automatically invest more time than someone who volunteers for a single organization.

Although there exists considerable variation over the waves, countries with high volunteer rates in one wave generally also have high rates in the other waves. The Pearson *R* correlation between the volunteer rates in 1981–1984 with those of 1990–1993 is .75 ($N = 17$), for 1990–1993 and 1999–2001 it is .65 ($N = 26$), and for 1981–1984 and 1999–2001 it is .67 ($N = 15$). Averaged for all countries and waves, 21.4 percent of the respondents are active volunteers.

For the variable non-religious volunteering, we exclude volunteer work for religious and church organizations from general volunteering⁹. Since most volunteer work is done in religious organizations (over 46 percent of all volunteering for the seven different organizations is done for religious organizations), general volunteering and non-religious volunteering are far from identical.

⁸*Voluntary membership* is constructed similarly based on the seven items pertaining to the question on memberships which preceded the question on unpaid work.

⁹For *non-religious voluntary memberships*, we exclude memberships of religious organizations from *voluntary memberships*.

Table 2.2: Descriptive statistics for independent variables

Variable	Range	Mean	Standard Deviation
<i>Individual-level variables^a:</i>			
Sex (female = 1)	0–1	.53	.50
Education	0–9	5.39	3.01
Age	18–90	42.72	16.84
Age-sq.	324–8, 100	2, 108.87	1, 585.98
Married	0–1	.59	.49
Cohabiting	0–1	.04	.19
Divorced	0–1	.06	.24
Widow	0–1	.07	.26
Single	0–1	.23	.42
Catholic	0–1	.49	.50
Protestant	0–1	.22	.41
Non-Christian	0–1	.07	.25
Non-religious	0–1	.22	.42
Church attendance	0–104	19.19	30.88
<i>Contextual-level variables^b:</i>			
Average church attendance	2.13–69.74	19.14	14.79
GDP/capita (US\$1,000)	.48–44.01	14.68	7.91
Level of democracy	4–14	11.93	2.76
Welfare state expenditure (% of GNP)	.00–42.80	19.46	9.73

^aAverages and standard deviations are calculated over all 117,007 individuals.

^bAverages and standard deviations are calculated over 96 country-wave combinations for all but welfare state expenditure for which they are calculated over 83 country-wave combinations.

2.3.2 Independent variables

Basic descriptive statistics of the independent variables are displayed in Table 2.2. Church membership is measured by the question whether people belong to a religious denomination, and if so, which one. Question formulation differed somewhat between wave 1981-1984 and waves 1990-1993 and 1999-2001. Also, in some countries, different answer categories were used. However, we are able to assign respondents to the following four categories: Catholics, Protestants, non-Christians, and non-religious¹⁰. Originally the answer categories for the question on church attendance (apart from weddings, funerals, and christenings) ranged from “(practically) never” to “more than once a week.” We recode that ordinal variable to the approximate number of times someone visits church per year. This variable ranges from 0 to 104, which corresponds to no visits at all and two visits a week, respectively.

For every unique country-wave combination we average church attendance to obtain a

¹⁰Church membership should not be confused with membership of a religious organization. We thank one of the anonymous reviewers of the *American Sociological Review* for providing the following clear example. Being a member of the Catholic church is really different from belonging to the Knights of Columbus. In fact, of all church members in our data set (Catholics, Protestants, and non-Christians) only 23 percent is a member of a religious organization and only 12 percent volunteers for such an organization.

measure for the religiosity of the country. Note that this variable actually varies over the waves. Countries with a high average church attendance are relatively religious, whereas countries that score low on average church attendance are relatively secular.

Next to the variables that are relevant for testing our hypotheses, we include sex, age, educational level, and marital status at the individual level in our analyses. Women appear to volunteer more than men in the United States (Boraas 2003; Hayghe 1991), whereas in Europe the picture is less clear. In some European countries women are more involved while in others men contribute more (Gaskin and Davis Smith 1995). Men and women might differ because they are differently integrated in family, church, and work. Women are more involved in caring tasks, attend churches more often, but they less often have a job. Consequently, their social networks differ from men. Education is reported to have a strong positive impact on volunteering (Wilson 2000). We use the question at which age respondents finished their full-time education. The answers are recoded to a variable ranging from 0 (at the age of 12) to 9 (at 21 or older). Age is measured in years. We also include a quadratic term for age, because the relation between age and civic participation could be curvilinear (Boraas 2003; Curtis et al. 1992; Knoke and Thomson 1977). Middle-aged people would be most active because they are more strongly integrated in work and family than the young and old (Wilson 2000). Similar differences are found between the married and unmarried. Married people in the United States volunteer more than unmarried people (Sundeen 1990; Wilson 2000). Again, for Europe these differences are less clear-cut (Gaskin and Davis Smith 1995). We control for marital status because it might differ significantly over religious groups and countries. We distinguish married, cohabiting, divorced, widowed, and single people.

At the contextual level, we also include national economic development measured by real gross domestic product (GDP) per capita (Laspeyres index, US\$ in 1996 constant prices) which we obtain from Heston, Summers, and Aten (2002)¹¹. In the literature (cf. Curtis et al. 2001; Halman 2003), two arguments for a positive effect of economic development on level of volunteering can be found. First, it is argued that economic development leads to occupational specialization resulting in more diverse interest groups in which people would participate voluntarily. Second, affluent countries would provide people with more resources (e.g., time and training) necessary to participate. However, results are mixed. Parboteeah et al. (2004) do find a positive effect of gross national product (GNP) per capita, whereas Curtis et al. (2001) do not find a significant effect of the natural logarithm of GDP per capita on working memberships. Although Halman (2003) does find a positive bivariate relation between GDP per capita and level of volunteering, it appears to be spurious after

¹¹GDP per capita scores are unavailable for exactly the right years for the following countries. Therefore, we use the scores from the years in parentheses instead: Bulgaria (1991), Puerto Rico (1998), and Russia (1991). Although Penn World Tables 6.1 does not distinguish East and West Germany anymore, these regions are distinguished in WVS, and they have had radically different policies on religion in the past. Therefore, we decide to maintain the country distinction and estimate GDP per capita figures based of Penn World Tables 5.6 data.

taking other contextual characteristics into account. Country characteristics that turn out to be conducive to volunteering in Halman's analysis are years of continuous democracy and level of democracy. It is assumed that democracies provide the infrastructure (e.g., freedom of speech and the right to assemble) necessary for voluntary organizations to flourish. We do not use years of continuous democracy, because for many countries it is linearly related to year of survey. However, a variable for level of democracy is included. It is measured with the Gastil Index (Freedom House 2005)¹². We sum the scores on "political rights" and "civil liberties" and reverse the scale. This results in a scale ranging from 2 to 14.

Another possibly relevant context is implied by the crowding out hypothesis: collective welfare state arrangements would crowd out volunteering because they provide substitutes for individual efforts to provide collective goods (Menchik and Weisbrod 1987; Arts et al. 2003; Salamon and Sokolowski 2003). However, the opposite has also been argued. According to the interdependence theory, more state involvement in social welfare activities would lead to more volunteering because voluntary organizations would in fact be supported by the state (Salamon and Sokolowski 2003). Although a lot of research on the influence of the welfare state uses the typology of Esping-Andersen (1990), we use a real measure for welfare state investment (cf. Salamon and Sokolowski 2003). The International Labour Organisation provides us with such a measure, the percentage of the Gross National Product spent on social security (International Labour Office 1968–1996)¹³. This measure has four advantages over the use of Esping-Andersen's typology. First, the typology is based on decommodification measures, which suffer from methodological weaknesses (Van Voorhis 2002). Second, the data vary not only by country but also over time, whereas the typology remains fixed. Therefore, variations in volunteering between waves might be better explained with our measure. Third, this measure suits the theory better, since the degree in which the welfare state is developed is central to the hypothesis and because more welfare state arrangements require more social security expenditure. Fourth, Esping-Andersen's typology cannot easily be applied to countries outside his original sample, whereas data on social security expenditure are available for many more countries. However, because information on welfare state expenditures is not available for all 53 countries in our data set, we report the results based on 42 countries in a separate section after the analyses on our complete sample¹⁴.

Correlations between the contextual variables show that more prosperous countries are

¹²No scores are available for exactly the right years for the following countries. We therefore use the scores for the years in parentheses: East Germany (1989), Latvia (1991), Russia (1991), Slovenia (1991), and West Germany (1989).

¹³Because these data are unavailable for some countries for the years 1981, 1990, we calculate them on the basis of linear inter- and extrapolation of long term trends. All data for 2000 are based on linear extrapolation of the trends. Curve estimation per country show that linear trends are good approximations of the true developments.

¹⁴Data are unavailable for Albania, Croatia, Estonia, Latvia, Lithuania, Macedonia, Moldova, Puerto Rico, Slovenia, South Africa, and Zimbabwe.

generally more democratic ($R = .60$; $N = 96$), less religious ($R = .29$; $N = 96$), and spend more on social security ($R = .58$; $N = 83$). More democratic societies are less religious ($R = .24$; $N = 96$) and have more extensive welfare states ($R = .43$; $N = 83$). Extensive welfare states appear to be less religious ($R = .40$; $N = 83$).

2.3.3 Methods

Since we hypothesize individual and contextual level effects as well as cross-level interaction effects, we use multilevel analyses techniques (Bryk and Raudenbush 1992; Snijders and Bosker 1999). Because our data consist of repeated cross-sectional surveys, we distinguish three levels (cf. Duncan et al. 1996; Subramanian et al. 2003): level 1 is the lowest level and consists of the individual respondents; level 2 comprises the survey waves within countries; and level 3 is composed of the countries.

For the estimation of our models we use the statistical program HLM, version 6.02a (Raudenbush et al. 2004). Because we want to explain the probability of volunteering and our dependent variables are dichotomous, we estimate multilevel logistic regression models. The procedure we use is penalized quasi-likelihood estimation and all but the dummy variables are mean-centered in the analyses.

2.4 Results

2.4.1 General volunteering

We start our analyses with the estimation of the null model with random intercepts only (not shown in Table 2.3). From the null model it is clear that the probability of volunteering varies over countries and survey waves.

In model 1, we include church membership and test whether the probability to volunteer differs among religious denominations. Because Hypothesis 1 focuses on the difference between church members and non-members, we set the non-religious as reference category. By doing so, the beta parameters for the religious groups should be interpreted in terms of how much the logit deviates from the one for non-religious people. Next to church membership all control variables are added.

All religious affiliates appear to be much more likely to volunteer than the non-religious, which supports Hypothesis 1. Moreover, there are large differences among the denominations. Clearly, Protestants have a higher expected probability to volunteer (.31) than Catholics (.25), which corroborates Hypothesis 3¹⁵. Non-Christians (.32) are equally engaged in volunteer work as Protestants (differences between them are not significant), whereas the

¹⁵Expected probabilities of volunteering are calculated for married men with average age (42.7 years) and average educational level (5.4).

non-religious (.20) have a considerably lower probability to volunteer.

Besides the clear effect of church membership, the control variables are influential as well. The chance of volunteering increases strongly with educational level. As expected, the relation between age and volunteering is curvilinear. However, the effect of age cannot simply be interpreted as life course effects, since cohort explanations could be involved. Putnam (2000) argues that declining levels of volunteering might be due to cohort effects, i.e., older birth cohorts are more active than younger cohorts. This might partly explain the positive effect of age. The effect of marital status is also as expected. Married people are the most active volunteers compared with cohabiting, divorced, or widowed individuals, but singles are similarly active.

In model 2, we include church attendance and allow its effect to vary for countries (level 3) and waves (level 2). In general, attending religious ceremonies influences the chance of volunteering considerably. People who attend church twice a week have a more than 5 ($e^{(104 \times .016)}$) times higher odds to volunteer than people who never visit church¹⁶. However, the effect of church attendance varies over countries and waves. It can be calculated that the most frequent churchgoers have a – depending on the specific country-wave combination – between 1.2 ($e^{(104 \times .002)}$) to 24.7 ($e^{(104 \times .031)}$) higher odds to volunteer than people who never go to church¹⁷. This means that, at one extreme, church attendance does not influence volunteering much; in those countries, frequently attending church does not really increase the probability to volunteer. At the other extreme, church attendance has a strong impact on volunteering; in those countries, frequent churchgoers are much more likely to volunteer than people who do not go to church at all.

¹⁶Note that originally the church attendance variable was ordinal. So, be careful when interpreting the effect of a single day increase. We checked whether the positive effect of church attendance is less strong at the higher end of the scale. Indeed, we found evidence for such a curvilinear effect. However, because it resulted only in a slight adjustment of the expected probabilities to volunteer, we decided not to present it in our models.

¹⁷This calculation is based on the fact that the estimated beta parameter is assumed to be normally distributed. Therefore, 95 percent of all beta parameters are expected to lie between ± 1.96 times the standard deviation. So, $.016 \pm 1.96 \times \sqrt{(.000004 + .000052)}$ gives a range of [.002; .031].

Table 2.3: Multilevel logistic regression models for general volunteering and voluntary memberships
($N_1 = 117,007$; $N_2 = 96$; $N_3 = 53$)

	General volunteering					Voluntary memberships	
	Model 1	Model 2	Model 3	Model 4	Model 5A	Model 5B	
Intercept	-1.570*** (.094)	-1.271*** (.085)	-1.278*** (.077)	-1.326*** (.072)	-1.317*** (.073)		-.241* (.096)
<i>Level-1 Variables:</i>							
Sex (female = 1)	-.003 (.030)	-.103*** (.030)	-.104*** (.030)	-.105*** (.031)	-.104*** (.032)		-.214*** (.030)
Education	.113*** (.008)	.116*** (.007)	.116*** (.007)	.118*** (.007)	.118*** (.007)		.113*** (.006)
Age	.059*** (.005)	.062*** (.004)	.062*** (.004)	.063*** (.004)	.063*** (.005)		.061*** (.004)
Age-sq. (/100)	-.054*** (.005)	-.061*** (.005)	-.061*** (.005)	-.062*** (.005)	-.062*** (.005)		-.063*** (.005)
Married (ref.)							
Cohabiting	-.273*** (.078)	-.184*** (.065)	-.184*** (.065)	-.191*** (.068)	-.191*** (.069)		-.039 (.057)
Divorced	-.144*** (.032)	-.080*** (.029)	-.081*** (.029)	-.082*** (.031)	-.083*** (.031)		-.093*** (.033)
Widow	-.105*** (.034)	-.144*** (.031)	-.144*** (.031)	-.145*** (.033)	-.148*** (.033)		-.072* (.029)
Single	-.013 (.038)	-.016 (.030)	-.016 (.030)	-.018 (.031)	-.018 (.032)		-.068* (.034)
Non-religious (ref.)							
Catholic	.335*** (.041)	.018 (.035)	.018 (.035)	.020 (.037)	.018 (.038)		.030 (.039)
Protestant	.631*** (.080)	.305*** (.050)	.307*** (.050)	.313*** (.052)	.310*** (.053)		.477*** (.054)
Non-Christian	.646*** (.116)	.259*** (.097)	.260*** (.097)	.266*** (.104)	.263*** (.104)		.339*** (.096)
Church attendance		.016*** (.001)	.016*** (.001)	.017*** (.001)	.017*** (.001)		.013*** (.001)
<i>Level-2 Variables:</i>							
GDP/capita		.011 (.009)	.011 (.009)	.014 (.009)	.015 (.009)		.030* (.012)
Level of democracy		-.051* (.025)	-.051* (.025)	-.054* (.025)	-.057* (.025)		-.059 (.025)

Continued on Next Page...

Table 2.3 – Continued^a

	General volunteering					Voluntary memberships	
	Model 1	Model 2	Model 3	Model 4	Model 5A	Model 5B	
Average church attendance			(.023)	(.023)	(.023)	(.031)	
			.018***	.018***	.017***	.003	
			(.006)	(.006)	(.006)	(.006)	
<i>Cross-Level Interactions:</i>							
Average church attendance × Church attendance (/100)					-.027***	-.014*	
					(.005)	(.006)	
<i>Variance components:</i>							
Level-2 variance	.137***	.138***	.124***	.123***	.127***	.301***	
Level-3 variance	.385***	.294***	.307***	.234***	.231***	.396***	
Random effect Church attendance level-2 (/1000)		.004***	.004***	.004***	.004***	.036***	
Random effect Church attendance level-3 (/1000)		.052***	.052***	.053***	.030***	.043***	

^aNumbers in parentheses are robust standard errors; * $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed tests)

After controlling for church attendance, the effect of church membership drops considerably. The expected probability to volunteer is the same for Catholics and non-religious people who attend church equally often¹⁸. The effects for Protestants and non-Christians are still substantial but half as strong as in model 1. Apparently, the differences in volunteering between religious and non-religious people are for a large part due to differences in church attendance. This supports Hypothesis 2. However, not all differences between the religious denominations disappear. Even after controlling for church attendance, Protestants are still more likely to volunteer than Catholics, which supports Hypothesis 3. The parameter estimates of all control variables, except the one for sex, do not change much. Women are slightly less active in volunteer work than men. Because they visit church more often than men, this difference was not visible in model 1.

When we add GDP per capita and level of democracy in model 3, all other effects are virtually unchanged. The effect of level of democracy is contrary to the theoretical expectation. People appear to volunteer more in less democratic societies. This contradicts findings by Halman (2003) and Parboteeah et al. (2004). Halman finds a positive effect for years of continuous democracy as well as political rights (subscale of the Gastil Index used here). However, his analysis is restricted to European countries (a subset of the data set we use) and he does not distinguish individual-level from contextual-level effects. Consequently, the smaller variation in level of democracy in his data set as well as compositional differences between the countries could distort his results. Parboteeah et al. find a significant positive effect of degree of liberal democracy as well, but their analysis is also restricted to a smaller sample of countries¹⁹. We do not find a significant effect of economic development²⁰. This is in line with Curtis et al. (2001) and Halman (2003), but contradicts Parboteeah et al. (2004).

Model 4 shows that the national religious context has an additional positive effect. People living in the most devout country have, according to the model, an almost four times ($e^{(69.74 \times .018)} / e^{(2.13 \times .018)}$) higher chance to volunteer than people living in the most secular country. This supports Hypothesis 5. Consequently, people who never visit church but live in a devout country have a higher probability to volunteer than similar people in secular societies. The voluntary participation of these non-religious people is, in effect, elevated in more devout countries. A dynamic interpretation of this result would imply that change in

¹⁸In our large data set we have a considerable number of people who say that they do not belong to a church but still visit church often.

¹⁹To test whether our larger sample with more variation in level of democracy causes us to find a negative effect of level of democracy contrary to findings by Halman (2003) and Parboteeah et al. (2004), we re-estimated model 5A on two subsets of countries. Our sample has 31 and 16 countries in common with the analyses of Halman and Parboteeah et al. respectively. Indeed, results from these subsets differed considerably from model 5A. The sign of the effect of level of democracy was positive but it did not reach significance in both subsets. Other modeling differences were probably the reason why the effects in these subsets did not reach significance.

²⁰We also checked whether an increase of national wealth matters more for poor countries than for richer countries by including a quadratic term. Again, no significant results were found.

the national religious context causes change in volunteer rates²¹. Unfortunately, the World Values Survey data are not really suitable for a trend analysis to test this claim because the number of items on voluntary associations differs over the survey waves. This has unknown consequences for the estimation of volunteer rates based on items that remained the same over all waves. Besides, for half the countries only one survey wave is available. However, the fact that not only variance at level 3 but also variance at level 2 declines (albeit only marginally) when average church attendance is added to the model in line with a dynamic interpretation. We agree that this is not strong evidence, but we lack the data to provide a more rigorous test. However, if the dynamic interpretation holds, declining volunteer rates should not come as a surprise when societies continue to secularize.

In model 5, we test whether the effect of church attendance varies with the national religious context. As can be seen, the effect of church attendance is smaller in more devout countries. This implies that the differences between secular and devout people are substantially smaller in religious countries than in secular countries. This corroborates Hypothesis 6. The effects of the religious context and the cross-level interaction are depicted in Figure 2.1. This graph shows that church attendance barely affects general volunteering in the most devout country, whereas the impact is strongly positive in the most secular society. The interaction effect suggests that religious people who live in secularizing countries might become more active in volunteering. So, if the dynamic interpretation of the national religious context effect and the cross-level interaction effect holds, increased civic participation of religious people might compensate for the secularization effect²².

In order to test whether these effects exist only for specific organizations, we estimated separate models for all seven types of organizations. Although we do not present these seven separate models here, it should be stressed that for all but one type of organization, we found both religious context and cross-level interaction effects. Only for trade unions, neither individual church attendance nor the national religious context affected volunteering.

2.4.2 Memberships versus volunteering

In order to examine whether determinants of voluntary memberships differ from the ones we find for volunteering, we re-estimate model 5A for voluntary memberships. Results are displayed in the last column of Table 2.3 (model 5B). Although some effects differ, similarities at level 1 are striking. When we turn to level 2 however, some substantial differences stand out. Levels of voluntary memberships are not at all affected by the national

²¹We stress that this is a *ceteris paribus* argument. Not only new predictors might become relevant in the future, but declining volunteer rates caused by secularization might also to some extent be compensated by for example rising levels of education.

²²Although, we have three surveys over the period 1981-2001 for some countries, the parameter estimate for the interaction effect is based predominantly on differences between countries. This makes the empirical support for the dynamic interpretation of the cross-level interaction effect less strong.

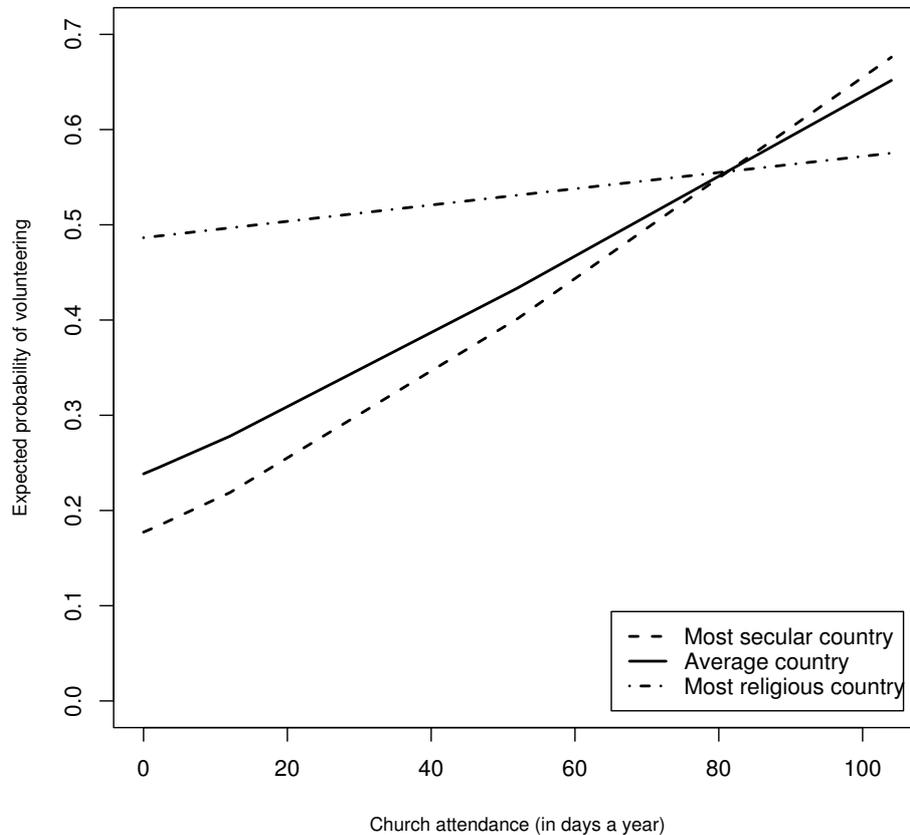


Figure 2.1: *Effect of church attendance on general volunteering*

religious context. Apparently, these looser ties to civic organizations are not influenced by the religious context, whereas the stronger ties of volunteers are. This fits the network theory, because getting people to volunteer requires more recruitment effort than just signing someone up. For memberships, economic development appears to be important though. In more prosperous societies people are more likely to join voluntary associations. The fact that we do not find this effect for volunteering is in accordance with Putnam's (2000) claim that "checkbook memberships" might have risen in Western societies. In affluent societies more people are just nominal members of voluntary organizations without being actively involved in volunteering. Again, we find a negative effect of level of democracy, which is contrary to findings by Curtis et al. (2001). However, it does not reach significance. Schofer and Fourcade-Gourinchas (2001) also find a negative though non-significant effect

for democracy. They argue that their effects might reach significance in a larger sample; a claim we are unable to support.

2.4.3 Spillover

For the test of the spillover hypothesis we estimate different models, which are displayed in Table 2.4. Although model 6 looks quite similar to model 3 in Table 2.3, we change two aspects. First, the dependent variable under consideration is now non-religious volunteering. Second, we change the reference category for church membership to Protestants in order to test whether the spillover effect is smaller for Protestants than for other denominations.

From model 6 it follows that people from different denominations (the non-religious included) are equally involved in volunteering for non-religious organizations when controlling for church attendance. Consequently, all residual denominational differences in model 3 (Table 2.3) are caused by differences in religious volunteering.

In model 7, we include religious volunteer work as a predictor for non-religious volunteering. It has a strong positive effect. People who are involved in religious volunteering have an almost 3.6 ($e^{1.281}$) higher odds to do non-religious volunteer work as well than those who are not volunteering for a religious organization. This is in line with the spillover hypothesis 4a. Although we cannot be sure that participation in religious volunteering actually causes people to start volunteering for other organizations as well, we believe that if spillover really happens, the direction of causation seems most plausible. Because most volunteer work is done for religious organizations, it is unlikely that the direction is the other way around.

When Catholics volunteer for religious organizations, they are, compared to Protestants, more likely to do non-religious volunteer work as well. Model 8A shows that Catholics who are active in religious volunteering have a more than 4 ($e^{1.059+.351}$) times higher odds to volunteer for non-religious organizations than Catholics who are not volunteering for religious organizations. For Protestants, this spillover effect is considerably smaller, which is in accordance with Hypothesis 4b. Protestants who are active in religious volunteering, have an almost 3 ($e^{1.059}$) times higher odds to do non-religious volunteer work than those who are not active. Although the parameters for the non-Christians and the non-religious are positive, they do not reach significance. So, the spillover effect is equally strong for Protestants, non-Christians, and the non-religious. This refutes Hypothesis 4b. We conclude that the spillover effect is stronger for Catholics than for the other denominations.

Table 2.4: Multilevel logistic regression models for non-religious volunteering and non-religious voluntary memberships ($N_1 = 117, 007$; $N_2 = 96$; $N_3 = 53$)

	Non-religious volunteering				Non-religious voluntary memberships			
	Model 6	Model 7	Model 8A	Model 8B	Model 6	Model 7	Model 8A	Model 8B
Intercept	-1.558*** (.074)	-1.855*** (.069)	-1.780*** (.067)	-1.780*** (.067)				-.594*** (.094)
<i>Level-1 Variables:</i>								
Sex (female = 1)	-.161*** (.036)	-.174*** (.038)	-.176*** (.038)	-.176*** (.038)				-.314*** (.031)
Education	.143*** (.007)	.143*** (.007)	.143*** (.007)	.143*** (.007)				.138*** (.008)
Age	.064*** (.005)	.062*** (.006)	.062*** (.006)	.062*** (.006)				.072*** (.005)
Age-sq. (/100)	-.063*** (.006)	-.060*** (.006)	-.060*** (.006)	-.060*** (.006)				-.075*** (.006)
Married (ref.)								
Cohabiting	-.134 (.066)	-.111 (.068)	-.111 (.068)	-.111 (.068)				.031 (.054)
Divorced	-.038 (.032)	-.015 (.032)	-.016 (.032)	-.016 (.032)				-.057 (.033)
Widow	-.160*** (.043)	-.150*** (.047)	-.150*** (.047)	-.150*** (.047)				-.128*** (.028)
Single	.005 (.030)	.015 (.029)	.011 (.029)	.011 (.029)				-.049 (.032)
Protestant (ref.)								
Catholic	-.032 (.038)	0.069 (.037)	-.038 (.042)	-.038 (.042)				-.126*** (.034)
Non-Christian	.018 (.085)	.066 (.085)	-.008 (.116)	-.008 (.116)				-.085 (.128)
Non-religious	-.007 (.044)	.133*** (.048)	.052 (.046)	.052 (.046)				.019 (.037)
Church attendance	.006*** (.001)	.001 (.001)	.001 (.001)	.001 (.001)				-.002*** (.000)
Religious volunteer work (yes = 1)		1.281*** (.074)	1.059*** (.065)	1.059*** (.065)				
Membership religious organization (yes = 1)								.665*** (.044)

Continued on Next Page...

Table 2.4 – Continued^a

	Non-religious volunteering		Non-religious voluntary memberships	
	Model 6	Model 7	Model 8A	Model 8B
<i>Level-1 Interactions:</i>				
Catholic × Religious volunteer work		.351*** (.087)		.255*** (.058)
Catholic × Membership religious organization			.201 (.201)	
Non-Christian × Religious volunteer work				.223 (.230)
Non-Christian × Membership religious organization				
Non-religious × Religious volunteer work			.270 (.155)	
Non-religious × Membership religious organization				.020 (.080)
<i>Variance components:</i>				
Level-2 variance	.141***	.131***	.132***	.220***
Level-3 variance	.180***	.108***	.102***	.353***
Random effect Church attendance level-2 (/1000)	.007***	.011***	.011***	.001***
Random effect Church attendance level-3 (/1000)	.017***	.011***	.011***	.015***

^aNumbers in parentheses are robust standard errors; * $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed tests)

Whether members of religious voluntary organizations are also more likely to join non-religious voluntary organizations is tested in model 8B. We re-estimate model 8A but replace religious volunteer work with membership of a religious voluntary organization and change the dependent variable to non-religious voluntary memberships. Clearly, the spillover effect is not limited to volunteering. Joining a non-religious voluntary organization is more likely among members of religious voluntary organizations than among non-members of religious voluntary organizations. Interestingly, it shows that Catholics who are not a member of a religious voluntary organization are less likely to join non-religious voluntary organizations than Protestants. However, if they have joined a religious voluntary organization, their chance to be a member of a non-religious organization is increased and even higher than that of Protestants. Again, the spillover effect is lowest for Protestants. Furthermore, the fact that we find a small but negative effect for church attendance indicates that frequent churchgoers are slightly less likely to join non-religious voluntary organizations than those who rarely attend church. Note however, that this effect is controlled for membership of a religious voluntary organization, something for which the chance is in fact strongly increased by church attendance.

2.4.4 Volunteering and the welfare state

To test the crowding-out hypothesis, we added social security expenditure to model 5A from Table 2.3. Because these data were unavailable for 11 countries, the analysis was limited to 104,555 respondents distributed over 42 countries. The effect of welfare state expenditure was all but significant and in sign even opposed to what is expected from the crowding-out hypothesis. We decided not to present a full table for this non-significant finding. However, the absence of a significant effect does not support the alternative interdependence theory either. Although Salamon and Sokolowski (2003) do find support for the interdependence theory, they control neither for compositional differences between the countries nor for possible confounding factors at the country level. In our analysis, most other parameters were similar to the ones from model 5A. However, the countries for which we lacked welfare state expenditure data were on average less democratic. Leaving them out of the analysis reduced the variance in level of democracy considerably, which caused the effect of level of democracy to be non-significant.

2.5 Conclusions and discussion

In this chapter, we studied the impact of individual religiosity, the national religious context, and their interplay on volunteering. Curtis et al. (2001) show in their general study on contextual determinants of associational involvement that working memberships (religious

organizations and unions excluded) vary with the national religious composition. We provided new hypotheses about the influence of religion by combining previous research on social networks and volunteering (Becker and Dhingra 2001; Bekkers 2003; Jackson et al. 1995; Lam 2002; Musick et al. 2000; Park and Smith 2000; Yeung 2004) with a study on the impact of both parental religiosity and the national religious context on individual religiosity (Kelley and De Graaf 1997). These new hypotheses were tested on a large data set containing information on volunteering for 53 countries in the period 1981–2001.

This chapter not only demonstrated that frequent churchgoers volunteer more, it also showed that there is an additional positive effect of devoutness of society: religious context matters. Interestingly, individual and contextual effects strongly interact. The differences between secular and devout people are substantially smaller in religious countries than in secular countries. Our findings imply that individual religiosity is hardly relevant for volunteering in devout nations.

Level of democracy affects volunteering, but contrary to the expectation, people in less democratic societies volunteer more. We are not sure how to interpret this result. One reason might be that the less democratic societies included in our data set have less extensive welfare states and therefore citizens of those countries provide for certain public goods themselves. This explanation builds of course on the crowding-out hypothesis, which we could not corroborate in this study. We were unable to test the explanation because welfare state expenditures for most of these countries were missing.

We did not find significant effects for economic development on volunteering. However, in our analysis on voluntary memberships GDP per capita showed a significant effect. In more prosperous societies, people join more organizations. Because we did not find this effect for volunteering, it seems that “checkbox memberships” are more common in wealthy nations (cf. Putnam 2000).

If secularization is an ongoing process in rich post-industrial societies, we expect declining levels of volunteering due to composition and context effects. We found that differences over time are to some extent explained by differences in national religious context, which supports this expectation. Of course, secularization theory is contested (e.g., Iannaccone 1998; Stark 1999; Stark and Finke 2000). Yet there is a large body of evidence showing that church attendance, an important indicator in the secularization debate, has indeed been declining over the past decades in most rich post-industrial countries (e.g., Norris and Inglehart 2004). Furthermore, the dynamic interpretation of our results implies that change in the national religious context causes change in volunteer rates. Although we were unable to provide strong evidence for this interpretation, the results suggest that diminished civic involvement goes hand in hand with ongoing secularization. However, the cross-level interaction effect suggests that religious people who live in secularizing countries might have an increased chance to volunteer. So, if the dynamic interpretation holds, increased volunteering of religious people could compensate for the secularization effect. Interestingly, Kelley and De Graaf (1997)

also show that family religiosity is more important for the religiosity of children in secular nations than in devout nations. In a secular context, parents have to invest more to keep their children religious. Similarly, religious people have to invest more in volunteering when a nation secularizes.

Furthermore, religious volunteering seems to have a strong spillover effect. This implies that religious people are also more involved in volunteering for secular organizations. Consequently, secularization could even cause declining participation in secular organizations. This spillover effect is strongest for Catholics. Unfortunately the World Values Survey data did not allow us to distinguish specific groups of Protestants to test whether especially conservative Protestants refrain from secular volunteering as suggested by Wilson and Janoski (1995).

Without doubt, the quality of the data differs over the 96 surveys involved in the analyses presented in this chapter. For this reason, we carefully tried to find countries that might be influential outliers. However, whatever country was excluded, we could not find substantial changes in our results. An analysis on a subsection of the complete data set to test the welfare state hypothesis showed that the results are robust. Keep in mind though that only 7 percent of the data population is non-Christian and that questions pertaining to religion in the World Values Surveys might be better applicable to Christians than to non-Christians. Therefore, we cannot make strong claims with respect to non-Christian countries. However, we did a preliminary test to see whether results are different for non-Christian countries. We re-estimated model 5A with a dummy variable for non-Christian countries included at level 3 as well as a cross-level interaction between this dummy and church attendance at level 1²³. Results showed that people living in non-Christian countries volunteer to the same extent as people in Christian countries. The effect of church attendance was only slightly smaller in non-Christian societies. This test is not ideal, but since the number of countries participating in the World Values Surveys increases with every wave, we hope that future research can provide stronger tests for non-Christian countries as well.

In this chapter, we showed that network theory especially provides important arguments for predicting volunteering behavior of both religious and non-religious people. Network theory predicts that all people in devout countries have more religious people within their social networks. Consequently, non-religious people should get to know more active religious people who could recruit them. Furthermore, in such networks the norm to volunteer could be stronger, as well as the social pressure to behave accordingly. Although we lacked actual network data, analyses of our large scale international data set showed that national religiosity strongly affects volunteering behavior of non-religious people. Also, the impact of church attendance on volunteering is much smaller in devout nations. Apparently, theoretical progress can be made for cross-national differences in volunteering. Further research to test

²³In India, Japan, Tanzania, and Turkey, the non-Christians form the largest group. For these countries the dummy variable was set to 1. In all other countries, at least 75 percent of the population claims to be either Protestant, Catholic, or non-religious, and therefore the dummy variable was set to 0.

the actual recruitment mechanisms in social networks would require network data collection in international surveys.

Chapter 3

Generational explanations for cross-national differences in voluntary association involvement: A multilevel study of 56 countries*

Abstract

Research on cross-national differences in voluntary association involvement has only studied the impact of the contemporaneous context. We extend this research with cohort-level explanations because the societal differences are often rooted in processes that occurred in the past. We propose five hypotheses concerning (a) the role of religion in early socialization, (b) the role of television, (c) the role of war, (d) the impact of the length of exposure to Communist rule, and (e) the importance of aggregate levels of educational attainment. These hypotheses are tested on large-scale data sets consisting of over 200,000 individual respondents from 56 countries. Results show that voluntary association involvement is more likely among people who grew up in a relatively devout context, without much exposure to television or Communist rule. Furthermore, wartime experience results in less volunteering and so does belonging to a higher educated cohort.

*A slightly different version of this chapter is currently under review. Douglas Baer is co-author.

3.1 Introduction

It is now well known in the study of voluntary association involvement that large differences in the likelihood that citizens will participate exist between countries (Baer 2006; Curtis et al. 1992, 2001; Hodgkinson 2003; Howard 2003; Ruiter and De Graaf 2006; Salamon and Sokolowski 2003; Schofer and Fourcade-Gourinchas 2001; Van Oorschot et al. 2006; Wessels 1997). As Wessels (1997) and others note, these differences are large even among countries that are geographically proximate (e.g., in Western Europe). Much of the early work in this area consisted of simple between-country comparisons of proportions of individuals reporting voluntary association participation (Almond and Verba 1989; Smith 1973). While this form of analysis continues in some fairly recent studies (Salamon and Anheier 1998; Newton and Montero 2007; Norris and Davis 2007; Wilensky 2002), a large number of the studies employ multilevel models to test hypotheses regarding the impact of country-level variables such as GDP, political regime type or religious tradition on voluntary association involvement (Baer 2006; Curtis et al. 2001; Kaariainen and Lehtonen 2006; Lam 2006; Parboteeah et al. 2004; Ruiter and De Graaf 2006; Schofer and Fourcade-Gourinchas 2001). We extend this research by introducing models that help us to assess generational differences that have been discussed in the literature (Putnam 1995a, 2000; Rotolo and Wilson 2004), and, specifically, to evaluate hypotheses concerning (a) the role of religion in early socialization, (b) the role of television, (c) the role of war, (d) the impact of the length of exposure to Communist rule, and (e) the importance of aggregate levels of educational attainment.

Multilevel studies that have been published to date represent an important step forward in research in this area. Claims which had been based on restricted models using aggregated data have been tested in much of this research, which has found, for example, that levels of economic activity, as measured by GDP per capita, may have had an effect on voluntary involvement, but that this effect is considerably smaller²⁴ than that which was suggested by those analyzing data at a single level, usually in aggregate form (Howard 2003; Inglehart 2003a; Smith and Shen 2002; Van Oorschot and Arts 2005). One important theoretical issue that arises is the focus on contemporaneous context that actually represents processes that have historical roots or which involve processes that occurred in the past (especially during socialization). Put in other terms, we agree with Inglehart (1997) and Putnam (1995a; 1995b; 2000) that researchers should pay attention to cohort replacement which results in a gradual transformation of societal norms and behavioral patterns. We view differences in voluntary association involvement as at least partially attributable to changes in the structural conditions experienced by different cohorts of individuals, even within the same country, and seek to add “cohort-level” explanations as a further elaboration of the *social context* that existing multilevel studies of voluntary association involvement began to explore when

²⁴The effect may also be restricted to memberships as opposed to “active” volunteering (cf. Curtis et al. 2001; Ruiter and De Graaf 2006).

they assessed country-level effects. For example, one context variable, religious context, has played an important role in studies where religiosity is expected to affect voluntary association involvement both at the individual level (more religious individuals are more engaged in associational life) and at the level of society (depending on the models evaluated, either more religious societies or societies where Protestantism is the dominant religion foster more voluntary involvement; see Lam 2006; McConkey 2000; Parboteeah et al. 2004; Ruiter and De Graaf 2006). We argue that patterns of associational engagement are heavily influenced by socializing experiences early in life (especially around adolescence) and that, while the present religious context may have an independent effect on voluntary participation, the effect of contextual (society-wide) levels of religiosity during socialization has a very strong impact on subsequent voluntary association involvement – an impact that may well be greater than any effect attributable to contemporaneous aggregate levels of religious involvement.

Thinking about contextual processes in generational terms has implications for the manner in which contextual-level variables in multilevel studies of voluntary association involvement are interpreted. For example, Curtis et al. (2001) use a measure of “dominant religiosity” based on Inglehart (1997) which categorizes countries according to historical religious traditions rather than the present distribution of religious denominations. In societies that have been relatively stable, this is not an issue. However, for societies that have undergone transformations (such as different degrees of secularization) we would expect that this variable, represented in multilevel models as a single constant within any given country, is at best an approximation of an effect which we would expect to differ according to the period in which a survey respondent was socialized. The same consideration applies to some other explanations for cross-national differences in voluntary association involvement. For example, former Communist countries are often expected to have lower participation rates (Howard 2003; Kuti 2004). This expectation led scholars (Curtis et al. 2001; Howard 2003) to include a dummy variable for postcommunist societies in the analysis of voluntary association involvement. This form of conceptualization may be appropriate where it is felt that the transition from socialism to a market economy and the concomitant introduction of democracy has, as a single event, resulted in major changes in levels of economic security (see, for example, Roberts et al. 1995; Stolle 2003: 31-32). But, as noted by Rose (2001), widespread distrust of formal, usually state sponsored organizations has left a lasting legacy, as have the patterns of informal networks that were established as “second economies” both before and immediately after the democratization of these societies (Howard 2003; Juknevičius and Savicka 2003). From these accounts, we would expect that exposure to Communist regimes is best conceptualized as variable rather than as constant within any given country: younger individuals who have lived only a small proportion of their lives under Communist rule should not be assumed to have been exposed to the same degree of influences that suppress association involvement as older individuals who have lived virtually all of their lives under these regimes.

More generally, we would contend that important contextual effects may be underspecified in models that examine only the contemporaneous context that individuals find themselves in without also examining the contexts that existed during the key socialization period during which adult orientations, habits and norms are formed. This does not imply that contemporaneous effects are unimportant: we could concur with the resource-mobilization hypothesis linking levels of current societal wealth to levels of involvement, and could not imagine specifying multilevel models without some measure of this included. But for some key contextual variables such as the religious context and the aggregate effect of education, we believe that it is important to obtain measures that differentiate between individuals from different birth cohorts.

There are additional hypotheses concerning generational differences that can now be examined with the approach we propose. For example, Putnam offers a number of explanations for associational “decline” over the generations (Putnam 1995a,b, 2000), some of which really invoke exogenous mechanisms but some others – such as “cohort replacement” – are a bit more nebulous (cf. McLean 2002). Two interesting hypotheses in Putnam’s work deal with the societal-level impact of television and collective wartime experiences. Neither of these has been subjected to systematic testing because the structure of the models that have been previously used in the analysis of voluntary association involvement has not permitted such tests. We now propose a more appropriate test that incorporates a measure of the differential prevalence of television and a measure of differential exposure to war across different generations and countries.

3.2 Generational explanations for differences in voluntary association involvement

Religious differences provide one of the prime explanations for differences in voluntary association involvement (Becker and Dhingra 2001; Lam 2006, 2002; Ruiters and De Graaf 2006; Uslaner 2002; Wuthnow and Hodgkinson 1990). Ruiters and De Graaf (2006) clearly show that, on top of individual religiosity, the contemporaneous religious context strongly affects voluntary participation. They argue that people who are more strongly tied in a religious network are more likely to be recruited by a voluntary association. Furthermore, in a close-knit religious community it is hard to refuse such requests. Another explanation for the greater involvement lies in the importance of religious norms, since highly religious individuals would be expected to have internalized the social norm of altruism more than those who are not religious; after all, solidarity, love of one’s neighbors, and self-sacrifice are important virtues promoted by the world’s major religions (Wuthnow 1999: 122). This is likely to apply not only to individuals who are more religious than their contemporaries, but to between-county differences; research shows that people who grow up in relatively devout

countries are more religious than people who experienced a more secular environment during adolescence (Kelley and De Graaf 1997; Van Tubergen and Ruiter forthcoming). According to these scholars, this comes about through people's exposure to religious culture and because the pools of potential friends, teachers, colleagues, and marriage partners are predominantly devout. Ruiter and De Graaf (2006) show how the same argument holds for volunteering as well. They claim that, in devout societies, people are more likely to acquaint themselves with religious fellow citizens who possibly recruit them for voluntary associations. Moreover, within these networks of religious people the norm to volunteer, and the pressure to behave accordingly could be stronger.

Although Ruiter and De Graaf only test the hypothesis that the contemporaneous religious context has a positive effect on the likelihood to participate, we believe the argument extends to the religious context during socialization, that is, the extent to which individuals were raised in environments that were strongly religious. There are basically two arguments here. First, people raised in more religious settings are more exposed to religious cultures promoting altruism and community service, and possibly also civic participation in general, during their formative years, which are more important in establishing life-long patterns – even for those individuals who eventually abandon religion in later life – than subsequent periods. The second argument is that those raised in more religious settings develop stronger social networks in the community as a function of youth associational involvement related to religious and associated organizations and also as a function of the “bridging” nature of church attendance itself. These in turn make later-life recruitment into voluntary organizations more likely. Based on these arguments our religious exposure hypothesis reads that *people who grew up in a more religious context are more likely to be involved in voluntary associations than people who grew up in a more secular context (hypothesis 1)*.

We derive our second generational hypothesis from Putnam who claims that generational differences explain what he sees as declining levels of involvement in the United States (Putnam 1995a,b, 2000)²⁵. Putnam sees the rise of television as the major culprit. Because the “long civic generation” was the last to grow up without television, he argues, it is more engaged than younger generations. He writes (Putnam 2000: 272) that “the more fully that any given generation was exposed to television in its formative years, the lower its civic engagement during adulthood”. Most research on this question has been undertaken at an individual level of analysis. Many studies find that individuals who spend more time watching television are less engaged in voluntary associations (Brehm and Rahn 1997; Knulst and Van Eijck 2002; Moy et al. 1999; Norris 1996; Putnam 2000), though this finding does

²⁵While the decline in participation levels for the “baby boom” generation in relation to the “long civic generation” is assumed by some writers (e.g., Galston and Lopez 2006: 15) to have been amply demonstrated, the claim is not without controversy. See Baer et al. (2001), Paxton (1999), Rotolo (1999), Stolle and Hooghe (2005) and Andersen et al. (2006). We believe that neither Putnam's hypothesis that the pervasive presence of television leads to a decline in associational involvement nor the hypothesis that involvement is associated with wartime experience depends on the claim that there has been an overall decline in voluntary association involvement.

not obtain in all research when controls for other individual-level respondent attributes are applied (Bankston 2003; Norris 2000)²⁶. None of these studies deal with the proposition that there is an effect of the pervasive presence of television across entire cohorts of individuals as Putnam explicitly claims.

Although Putnam seems to rely mostly on time displacement effects (which should be true for all people, even for those from the “long civic generation”), he posits that television (or specific programmatic content) might also have psychological effects inhibiting participation. Gerbner and Gross (1976) were the first to provide arguments for such effects. According to their cultivation theory, people who watch a lot of television believe that the real world is similar to the mean and violent picture of the world that is presented on television (see also Uslaner 1998). From this we could conclude that heavy watchers would lose trust in their fellow citizens and consequently they would be less inclined to socialize and cooperate with others in voluntary associations. Indeed, Norris (2000) and Hooghe (2002) find negative effects of watching television on social trust and on values that promote civic-mindedness respectively. According to Putnam, it is this effect of television that is more profound among younger generations. Putnam argues that younger generations not only watch more television, but “they also watch television *differently* – more habitually, even mindlessly” (Putnam 2000: 272). It is during the formative years that such watching attitudes are set. Therefore, we propose the television exposure hypothesis which states that *people who grew up with more television exposure are less involved in voluntary associations than people who experienced less television exposure during the formative years (hypothesis 2)*. Not all of the literature would point in the direction of the hypothesized effect. Halpern (2005: 230), for example, dismisses the idea of an aggregate socialization effect, making “the straightforward observation that the same media are just as widespread in those nations that show little or no decline in social capital, such as Sweden and Japan,” and adding, “While it is true that TV became widespread in the United States a few years earlier than in many other nations, a difference between the late 1950s and early 1960s cannot be very significant forty-plus years on.” To our knowledge, we will be putting the hypothesis to a formal empirical test for the first time.

Although Putnam stresses the importance of the television exposure hypothesis in his earlier writings on changes in overall levels of civic participation (Putnam 1995a,b), he later adds wartime experience as another explanation for generational differences (Putnam 2000). The argument here is that the external conflict caused more civic-mindedness among the generations that experienced World War II, and this experience would have had long lasting effects on their civic participation. He writes that “the generational reformulation

²⁶Norris uses World Values Study data and finds a negative relationship which then becomes non-significant with controls for gender, class, education, age, marital status, and other variables (Norris 2000: 242, Table 10.8). Bankston (2003) also observes that the effect of television is non-significant with controls for demographic variables and recreational engagement and non-family sociability (but the effect is significant with controls for demographic variables alone). Both authors make note of a potential cause/effect issue with respect to the assessment of the effects of television at the individual level.

of our central mystery raises the possibility that the wartime Zeitgeist of national unity and patriotism that culminated in 1945 reinforced civic-mindedness. It is a commonplace in sociology that external conflict increases internal cohesion. [...] membership in civic associations has spurted after both major wars in the twentieth century, and political scientist Theda Skocpol has extended this argument to the whole of American history” (Putnam 2000: 267). Clearly, Putnam believes that wartime experience has long lasting effects, since he writes that “one plausible explanation for the strong generational effects in civic engagement that pervade our evidence is the replacement of a cohort of men and women whose values and civic habits were formed during a period of heightened civic obligation with others whose formative years were different” (2000: 272). According to Fischer (2005), the evidence for this wartime experience explanation is largely impressionistic. We agree with him and note that this issue has not been raised in previous publications attempting to explain either generational or cross-national differences. Since Putnam himself relates the effect of World War II to a general sociological principle about war causing internal cohesion, we believe he does not claim an American idiosyncrasy. His reasoning is buttressed by the claim that wartime mobilization serves to increase the civic skills of citizens, as wartime co-ordination in the military and the workplace provide citizens with the means by which postwar civic co-operation and engagement is enhanced (see also Kage 2006). Therefore, our general wartime experience hypothesis claims that *people who grew up in a country which experienced a major external conflict are more likely to be involved in voluntary associations than those who grew up without such an experience (hypothesis 3).*

Our fourth generational hypothesis stems from the observation in the comparative literature that former East bloc countries have considerably lower levels of voluntary association involvement than those elsewhere in Europe or North America (Curtis et al. 2001; Howard 2002). Some empirical data modelers have sought to explain these differences by suggesting generic variables such as religion at the aggregate level (Lam 2006) or state structure variables (Schofer and Fourcade-Gourinchas 2001) that group former Communist and some non-Communist countries together. Aside from these, there are two broad classes of explanations that are provided to explain why civil society in former Communist countries appears to be so impoverished, even in relation to other countries that have emerged from totalitarian states. One set of explanations focuses on the nature of the transition from Communism to postcommunism, suggesting that the economic transformation of these societies created a considerable amount of uncertainty; long-held job guarantees and a Soviet-era “safety net” disappeared during the transition, after which, at least in some societies, there was an absolute decline in the effective standard of living for substantial segments of the population (cf. Roberts et al. 1995; Stolle 2003; Twigg and Schecter 2003). While we cannot discount this “effects of disjunction” thesis, we suspect that a more powerful set of explanations resides in the assessment of the nature of civil society in Eastern bloc societies prior to 1989 and the role of the state in undermining the proclivity for getting involved in voluntary associations

(Howard 2002, 2003; Kuti 2004; Rose 2001). As Howard (2003) notes, on the one hand, Communist regimes repressed all forms of autonomous non-state activity, and on the other, these regimes “supplanted and subverted such activity by forcing their citizens to join and participate in mandatory, state-controlled organizations” (Howard 2002; see also Juknevičius and Savicka 2003). As these authors describe it, these “pseudo voluntary” activities permanently etched a level of suspicion and distrust with respect to the formal voluntary sector (Juknevičius and Savicka 2003: 132) and reinforced the tendency of citizens to eschew formal activities in favor of informal networks of mutual support which formed “second economies” (Rose 2001: 57). It is likely that these patterns of voluntary association (non-)involvement are not short lived, and have persisted in those individuals who experienced Soviet-style rule in proportion to the length of time these individuals lived under Communism. Howard argues that the younger generations are less influenced by living under Communist rule than the older generations, because their exposure to a Communist regime did not last long. Indeed, we believe that younger generations who have lived only a small proportion of their lives under Communist rule should not be assumed to have been exposed to the same degree of influences that suppress association involvement as older individuals who have lived virtually all of their lives under these regimes. This leads to our Communist rule hypothesis, which reads that *the longer people have been exposed to Communist rule, the less likely they are involved in voluntary associations (hypothesis 4)*.

Finally, our fifth generational hypothesis pertains to the large-scale educational expansion which occurred in most societies over the past decades. Although most studies in this field, especially those that focus on trends in voluntary association involvement, include individual-level education to estimate level of participation while controlling for educational expansion (Curtis et al. 2003; Esping-Andersen 1990; Putnam 2000; Rotolo 1999; Rotolo and Wilson 2004; Ruiter and De Graaf 2006), no studies that we know of include aggregate-level measures which capture educational expansion. Indeed, taking educational level of the respondent into account suffices to control for compositional differences over time. However, we argue that educational expansion might be influential in its own right, on top of individual-level education. The fact that younger birth cohorts on average reached higher educational levels implicates that the composition of their peer groups is really different from those of older birth cohorts (Dee 2004: 1700). This should increase their chance of recruitment, since most recruitment happens within the social network of the recruiter, which for younger cohorts is more likely to be highly educated. Consequently, we expect that *people from higher educated birth cohorts are more involved in voluntary associations than people from lower educated birth cohorts (hypothesis 5)*.

Although our analyses include contemporaneous contextual characteristics next to cohort-level characteristics, we do not specify separate hypotheses about contemporaneous contextual effects, because our main contribution lies in extending the cross-national research on voluntary association involvement with specific cohort-level explanations. In the next section, we describe the data we use to test our hypotheses.

3.3 Data and methods

For the test of our hypotheses, we needed a large data set containing as many countries for as many time periods as possible. Such a data set would enable us to disentangle life cycle, cohort, and period effects (De Graaf 1999; Rodgers 1982). Therefore, we constructed a concatenated data set from the following international surveys: Eurobarometer 4 (Rabier 2002), 8 (Rabier and Inglehart 2002), and 34 (Reif and Melich 2001), Political Action I (Barnes et al. 1999) and II (Jennings and Van Deth 1991), International Social Survey Programme 1998 (International Social Survey Program 2000), World Values Survey 1981–1984 (World Values Study Group 1994), 1990–1993 (World Values Study Group 1994), 1995–1997 (Inglehart 2003b), and 1999–2001 (European Values Study Group and World Values Survey Association 2005), and European Social Survey 2002 (Jowell and the Central Coordinating Team 2003). These international surveys contain questions on both memberships of voluntary associations and volunteering for these associations. We selected only those countries for which none of the variables included in our models were completely missing. Because some country-survey combinations contain only questions on memberships whereas others merely hold questions on volunteering, we constructed two data sets of different size²⁷. After selecting respondents of 18 years and over and only those countries for which we have valid scores on all contextual variables, our data set for the analysis of voluntary memberships consists of 230,749 respondents distributed over 56 countries and 10 surveys. For our volunteering data set these figures are 249,646, 56, and 10 respectively. In Table 3.1, a list of the countries included in this study, accompanied by the respective data sources, is presented. In the following sections we describe the dependent and independent variables and how we harmonized them for the different surveys.

²⁷Eurobarometer 34 only contains questions on memberships, whereas in ISSP 1998 only volunteering is measured.

Table 3.1: List of surveys per country

Country	Surveys ^d
Argentina	WVS1, WVS2, WVS3, WVS4
Armenia	WVS3
Australia	WVS3, ISSP98
Austria	PAL, WVS2, WVS4, ISSP98, ESS2002
Azerbaijan	WVS3
Bangladesh	WVS3, WVS4
Belarus	WVS3, WVS4
Belgium	EB4, EB8, EB34, WVS1, WVS2, WVS4, ESS2002
Bosnia & Herzegovina	WVS3, WVS4
Brazil	WVS3
Bulgaria	WVS2, WVS3, WVS4
Canada	WVS1, WVS2, WVS4, ISSP98
Chile	WVS2, WVS3, WVS4, ISSP98
China	WVS2, WVS4
Colombia	WVS3
Croatia	WVS3, WVS4
Czech Republic	WVS4, ISSP98
Denmark	EB4, EB8, EB34, WVS1, WVS2, WVS4, ISSP98
Dominican Republic	WVS3
East Germany	EB34, WVS2, WVS3, WVS4, ISSP98, ESS2002
Estonia	WVS3, WVS4
Finland	PAL, WVS2, WVS3, WVS4, ESS2002
France	EB4, EB8, EB34, WVS1, WVS2, WVS4, ISSP98, ESS2002
Georgia	WVS3
Hungary	WVS2, WVS4, ISSP98
Iceland	WVS1, WVS2, WVS4
India	WVS3, WVS4
Ireland	EB4, EB8, EB34, WVS1, WVS2, WVS4, ISSP98, ESS2002
Italy	PAL, EB4, EB8, EB34, WVS1, WVS2, WVS4, ISSP98
Japan	WVS1, WVS2, WVS3, WVS4, ISSP98
Latvia	WVS3, ISSP98, WVS4
Lithuania	WVS3, WVS4
Macedonia	WVS3, WVS4
Mexico	WVS2, WVS3, WVS4
Moldova	WVS3, WVS4
Netherlands	PAL, PAII, EB4, EB8, EB34, WVS1, WVS2, WVS4, ISSP98, ESS2002
Nigeria	WVS3

Continued on Next Page...

Table 3.1 – Continued

Country	Surveys
Northern Ireland	WVS4, ISSP98
Norway	EB34, WVS1, WVS2, WVS3, ISSP98
Peru	WVS3, WVS4
Philippines	WVS3, WVS4
Poland	WVS3, WVS4, ISSP98, ESS2002
Portugal	EB34, WVS2, WVS4, ISSP98
Romania	WVS2, WVS4
Russian Federation	WVS3, WVS4, ISSP98
Slovenia	WVS3, WVS4, ISSP98, ESS2002
South Africa	WVS4
Spain	EB34, WVS1, WVS2, WVS3, WVS4, ISSP98
Sweden	WVS1, WVS2, WVS3, WVS4, ISSP98
Switzerland	PAI, WVS3, ISSP98, ESS2002
Turkey	WVS3, WVS4
Ukraine	WVS3, WVS4
United States	PAI, PAII, WVS1, WVS2, WVS3, WVS4, ISSP98
Uruguay	WVS3
Venezuela	WVS3, WVS4
West Germany	PAI, PAII, EB4, EB8, EB34, WVS1, WVS2, WVS3, WVS4, ISSP98, ESS2002

^aPAI = Political Action I; PAII = Political Action II; EB4 = Eurobarometer 4; EB8 = Eurobarometer 8; EB34 = Eurobarometer 34; WVS1 = World Values Survey 1981–1984; WVS2 = World Values Survey 1990–1993; WVS3 = World Values Survey 1995–1997; WVS4 = World Values Survey 1999–2001; ISSP98 = International Social Survey Programme 1998; ESS2002 = European Social Survey 2002. We distinguish East and West Germany even after the reunification in 1990, because the histories of both nations strongly differ (both WVS4 and ESS2002 contain region variables which provide information to distinguish the two nations).

3.3.1 Dependent variables

In all surveys (excluding ISSP 1998) respondents were asked whether they belonged to specific voluntary associations. Because the list of associations presented to respondents differs over the surveys (a minimum of 8 items including the other category in Eurobarometer 4 and a maximum of 18 items in both Political Action surveys), we decided to include the question on memberships of any other voluntary association (unfortunately this question was not asked in WVS 1981–1984, but we believe that this survey contained a rather extensive list of voluntary associations). We recoded the answers on these questions to obtain a dichotomous variable indicating whether each respondent was a member of any association²⁸.

The construction of our dichotomous variable for volunteering was similar to that for voluntary memberships. In all surveys (excluding Eurobarometer 34) respondents were asked whether they volunteered for voluntary associations that were presented on a list. The one exception was Eurobarometer 4, where respondents were not asked whether they volunteered for every voluntary association separately but instead asked a single question pertaining to their volunteering for any of the associations from a list. Table 2 shows that 55.2% of the respondents in our data set (this ranges from 18.9% in Poland to 96.4% in Nigeria) were members of at least one voluntary association. Volunteering for these associations is less widespread, but still a considerable 31.2% of the respondents (this ranges from 4.3% in Armenia to 72.2% in Nigeria) said that they volunteered for at least one association.

3.3.2 Independent variables

Because our central hypotheses pertain to cohort effects, we start with the description of the cohort-level measures. We use the term cohort to refer to a body of people from the same birth year living in a specific country.

To measure the religious context in which people grew up, we relied on the following retrospective survey question from WVS 1990–1993, and 1995–1997: “Were you brought up religiously at home?”. Respondents could answer either yes or no. We used the information from this question to calculate trends in the proportion of the population that was raised religiously. In order to do so, we assumed that the answers to this question generally refer to young adolescence (say, around the age of 12). Thus, when 50-year olds were asked in 1990 whether they were brought up religiously, their answers roughly refer to the situation in the year 1952 ($1990 - 50 + 12$). So, based on all the 50-year olds we calculated estimated

²⁸We checked whether a longer list of voluntary associations results in more respondents identifying themselves as members. To the contrary, results of a logistic regression analysis (controlling for survey year and country dummy variables) show that respondents who were presented a longer list indicate to a lesser extent that they were a member. However, the effect of the number of items pertaining to voluntary associations on the odds of identifying a respondent as a member is rather small (unstandardized $B = -.006$). This finding is in line with Morales Diez de Ulzurrun (2002) who shows that shorter lists sometimes result in higher estimates of participation rates.

proportions for each country for 1952. Similarly, 51-year olds provide information on 1951, and so on. Because this approach often results in too few cases to estimate reliable proportions per year, we used an 11-year weighted moving average to smooth out irregularities. The measure we obtain correlates highly (Pearson $R = .95$) with a similar measure constructed by Iannaccone (working paper).

Television exposure during childhood was measured by the number of television sets per 1,000 inhabitants. We obtained trend figures per country from the World Resources Institute (2005). Because the trend figures start at 1965, we decided to set all figures prior to 1951 to zero, and subsequently use linear extrapolation to calculate the figures between 1950 and 1965. Again, we used the figures for the year in which respondents were 12 years of age²⁹.

Because we expected that not all wars have had the same impact, we decided to use a measure for the severity of wartime experience. We calculated the logged number of war casualties per 1,000 inhabitants alive at the start of a specific war. Clodfelter (2002) provides us with the number of casualties per country and we obtained population statistics from Lahmeyer (2006). We included only those wars from the twentieth century that took place in at least one of the countries in our sample and which resulted in a considerable loss of lives³⁰. For all respondents who experienced a specific war after³¹ the age of 12 we assigned the logged number of war casualties per 1,000 inhabitants for the country in which they live. When a respondent experienced more than one war the numbers were first summed, and then logged.

We calculated how many years after the age of 12 people lived under Communist rule by subtracting birth year from the year in which Communist rule (if it ever existed) came to an end (if it did come to an end prior to the survey year, otherwise we used survey year), adding 12. Thus, respondents who were born in Poland in 1950 would have experienced 37 years of Communist rule ($1989 - 1950 + 12$) by the time they participated in the WVS 1995–1997 survey.

Our final cohort-level variable captures the average educational level of the cohort. We

²⁹Because television exposure during childhood is probably directly related to television watching at later stages in life, we would prefer to control for individual watching behavior. However, such a measure is not available in most surveys. Nevertheless, we report on additional analyses on a subset of our sample (WVS 1981–1984, WVS 1995–1997, and ESS 2002) for which we do have a measure on the number of hours people watch television.

³⁰The minimum is 17,456 French killed in French-Algerian War. However, for all countries involved in a specific war we calculated these figures, resulting in lower figures for countries with minor losses. We used figures on the following wars: Balkan War (1912), World War I (1914), Armenian Massacres (1915), Russo-Polish War (1918), Greco-Turkish War (1919), Rif Rebellion (1921), World War II (1939), French-Algeria War (1946), French-Indochina War (1946), Korean War (1950), and the Vietnam War (1957).

³¹Analyses using a measure that only applies to people who have had a wartime experience between the ages 12 and 30 showed less pronounced results. We believe the extreme nature of war affects people of all ages and not just those in their formative years. So, this would imply that the wartime experience explanation in fact predicts a period effect instead of a cohort effect. However, such a period effect would result in generational differences, as claimed by Putnam, because younger cohorts in most countries did not experience severe wars. De Graaf (1988) argues similarly with respect to the impact of war on postmaterialistic values.

used individual-level scores (which we describe below) and averaged these over the cohorts. Again, we used an 11-year weighted moving average to smooth out irregularities due to small numbers of cases.

For the five cohort-level variables described above, we include six contemporaneous contextual variables. We include average educational level at the time of the survey (calculation based on individual-level scores, which we describe below), because, for the test of our fifth generational hypothesis, it is necessary to disentangle cohort differences from contemporaneous educational context effects. The latter should be interpreted as a period effect, affecting all citizens (even if they are from low educated cohorts), whereas the former really discriminates between different cohorts. Since rising educational levels among cohorts generally lead to an increase in the average educational level, we can only test our generational hypothesis after controlling for such a period effect. The average educational level at the time of the survey was calculated based on the surveys in our sample. To take differences in the level of economic activity into account, we include GDP per capita, which we obtained from the World Bank (2005)³².

Although GDP per capita captures differences in national wealth, it does not tell us how this wealth is distributed over the citizens of a country. Kennedy et al. (1998) show that income inequality is inversely related to voluntary memberships at the state level. Income inequality would lead to the breakdown of social cohesion, which in itself is directly related to civic engagement. We use the GINI index as a measure of income inequality. The GINI index ranges from 0 to 100. Since there is no good source for comparable annual GINI indices, we decided to use 1995 figures obtained from Human Development Reports (United Nations Development Program 2001, 2002, 2003, 2004)³³.

Countries that rank high in terms of religiosity at one point in time usually remain in the upper regions at a later point in time. However, secularization happened at different speeds. This means that we can separate effects of the national religious context (Ruiter and De Graaf 2006) from effects of socialization within a religious context. To do so, we include average church attendance at the time of the survey. For similar reasons we include television penetration at the time of the survey. Since we hypothesized that there will be a socialization effect of television exposure, we have to separate this from television penetration at the time of the survey, again, using the data from the World Resources Institute (2005). Although results have not been consistent, we also control for level of democracy. In most studies it is expected that democracy strengthens the position of voluntary associations (Halman

³²Although the World Bank does not provide GDP per capita figures for East and West Germany separately, we nevertheless kept the distinction between the two countries because they have had considerably different histories. We use the figures for Germany for both countries.

³³Sometimes we had to use figures for adjacent years, because 1995 figures were not available. Unfortunately, the Human Development Reports do not report GINI indices for Iceland and Northern Ireland. For these nations, we obtained figures from the University of Iceland (www.hi.is/~gylfason/gini.htm), and CIVICUS (www.civicus.org/new/media/Northern%20Ireland%20Country%20Report.pdf) respectively.

2003; Parboteeah et al. 2004). But findings have been mixed, depending on the measure of democracy used (years of continuous democracy, level of democracy, etc.), and Ruiters and De Graaf (2006) find that the probability of volunteering is higher in less democratic societies. Freedom House (2005) provides us with 7-point scores on “political rights” and “civil liberties”, which we first summed, and then reverse-coded.

In addition to contextual characteristics (both at cohort and national level), we include several individual-level characteristics. One major control variable is age. Because we want to separate cohort from life cycle effects, we include age in years; we also include a quadratic term for age, because it has often been shown that the relation between age and voluntary association involvement is curvilinear (Boraas 2003; Curtis et al. 1992; Ruiters and De Graaf 2006). We also include a dummy variable for gender, since, across some previous research, women appear to be less active in voluntary associations than men (Rotolo 1999). This probably relates to differences in their social networks which cause less recruitment. Because educational level was measured differently in the different surveys, we recoded the variables to the age at which people left school. We had to truncate the scores at the minimum of 14 and the maximum of 21, since the measurement of education took this form in many of the WVS surveys. Marital status is also included in our models, because countries differ strongly in marital composition. Research shows that married people are more likely to be engaged in voluntary associations than the unmarried (Sundeen 1990). We distinguish married, single, divorced, and widowed people. Because people who work are usually embedded in larger networks, they are probably more likely to be asked to participate. Furthermore, some jobs, especially those in managerial or professional occupations, seem to come with more engagement (Smith 1998; Wilson and Musick 1997; Wilson 2000). Because countries differ strongly in the composition of the workforce, we distinguish the following categories: managers/professionals, white collar workers, manual laborers, retired, those who are students or in the military force, and finally, individuals outside the workforce (unemployed, housewives). Finally, we include variables pertaining to religiosity. We distinguish Catholics, Protestants, Non-Christians, and the non-religious. Some people however are only nominal members, which causes that church membership does not really tell whether people are really religiously involved. Therefore, we include church attendance. We recoded all original variables from the different surveys to the number of days a year that people visit church. Basic descriptive statistics for all variables in our models are displayed in Table 3.2.

Table 3.2: Descriptive statistics for dependent and independent variables

	Range	Mean ^a	Standard deviation
<i>Dependent variables:</i>			
Voluntary membership	0–1	.552	.497
Volunteering	0–1	.312	.463
<i>Independent variables:</i>			
Political Action I	0–1	.043	.203
Political Action II	0–1	.016	.125
Eurobarometer 4	0–1	.028	.166
Eurobarometer 8	0–1	.027	.162
Eurobarometer 34 ^b	0–1	.046	.210
WVS 1981–1984	0–1	.078	.268
WVS 1990–1993	0–1	.141	.348
WVS 1995–1997	0–1	.242	.428
WVS 1999–2001	0–1	.226	.418
ISSP 1998 ^c	0–1	.123	.328
ESS 2002	0–1	.075	.264
Age	18–102	43.528	16.686
Age-sq.	324–10,404	2,173.090	1,591.990
Female	0–1	.525	.499
Educational level	14–21	17.458	2.675
Single	0–1	.217	.409
Divorced	0–1	.063	.239
Widowed	0–1	.082	.270
Manager/professional	0–1	.168	.365
Manual laborer	0–1	.243	.421
Retired	0–1	.171	.368
No job	0–1	.228	.412
Student/military force	0–1	.070	.244
Protestant	0–1	.204	.398
Other religion	0–1	.091	.282
Non-religious	0–1	.224	.412
Church attendance	0–104	19.120	3.103
<i>Cohort variables:</i>			
Religious context at age 12	0–1	.693	.240
Average # of TV sets at age 12 per 1,000 inhabitants	0–807	100.289	144.567
Wartime casualties after age 12 per 1,000 inhabitants (log)	–11.513–4.220	–8.124	5.666

Continued on Next Page...

Table 3.2 – Continued

	Range	Mean	Standard deviation
Years of Communist rule	0–80	9.101	18.063
Average educational level of cohort	1.4–20.632	17.104	1.291
<i>Period variables:</i>			
GDP/capita (log)	5.708–10.530	8.999	1.280
Average # TV sets	22–892	427.766	179.651
GINI	21.700–59.300	36.375	9.992
Level of democracy	2–14	12.190	2.595
Average educational level	14.771–20.371	17.449	1.112
Average church attendance	.364–78.647	18.240	13.778

^aAll but the means and standard deviations for the cohort and period variables are calculated over 249,646 respondents. For the cohort variables, they are calculated over 12,152 cases. For all but GINI, the period variables are calculated over 184 cases. Mean and standard deviation for GINI is based on 56 cases.

^bOnly included in the analyses on voluntary memberships

^cOnly included in the analyses on volunteering

3.3.3 Methods

Although we removed all countries and surveys for which some of our variables were completely missing, some notable patterns of missing data remain. In order to be able to use all available data from all respondents, we used the MCMC multiple imputation procedure on both data sets³⁴.

Since we hypothesized individual and contextual level effects, we use multilevel analyses techniques (Bryk and Raudenbush 1992; Snijders and Bosker 1999). Because our data consist of repeated cross-sectional surveys and we study cohort effects, we distinguish four levels (Duncan et al. 1996; Subramanian et al. 2003): level 1 is the lowest level which consists of the individual respondents; level 2 comprises the cohorts; level 3 is composed of the surveys within countries; and level 4 consists of the countries. For the estimation of our models we use the statistical program MLwiN, version 2.02 (Rasbash et al. 2004). Because we want to explain the probability of membership of voluntary organizations and the probability of volunteering and our dependent variables are dichotomous, we estimate multilevel logistic regression models. The procedure we use involves penalized quasi-likelihood estimation and all but the dummy variables are mean-centered in the analyses. In MLwiN, the models are estimated for each of the five imputed data sets and we combined the results according to Rubin's (1987) rules.

Table 3.3: *Variance components for subsequent multilevel logistic regression models for voluntary membership*

	Model 0	Model 1	Model 2	Model 3	Model 4
Country-level variance	.796 (.185)	1.034 (.215)	.956 (.203)	.951 (.202)	.595 (.136)
Survey-level variance	.384 (.051)	.212 (.030)	.234 (.033)	.237 (.034)	.228 (.033)
Cohort-level variance	.070 (.004)	.076 (.004)	.046 (.004)	.040 (.004)	.038 (.004)

3.4 Results

We start our analysis with the estimation of the null models in which it is determined how much of the probability to hold a voluntary membership or to volunteer varies over countries (level-4), surveys (level-3), and cohorts (level-2). The estimated variance components are displayed in Table 3.3 and Table 3.4. Clearly, voluntary memberships and volunteering

³⁴We generated five imputed data sets using SAS 9.1 (PROC MI); see Rubin (1987) and Allison (2002) for details.

vary at all three levels. In the following sections, we first describe the results for voluntary memberships, and then those for volunteering.

Table 3.4: Variance components for subsequent multilevel logistic regression models for volunteering

	Model 0	Model 1	Model 2	Model 3	Model 4
Country-level variance	.484 (.121)	.593 (.131)	.509 (.117)	.544 (.125)	.462 (.112)
Survey-level variance	.354 (.045)	.222 (.030)	.249 (.033)	.246 (.033)	.241 (.033)
Cohort-level variance	.054 (.004)	.056 (.004)	.050 (.004)	.043 (.004)	.041 (.004)

3.4.1 Voluntary memberships

In Model 1 of Table 3.5, we add survey dummy variables to control for survey design differences. Only respondents from WVS 1995–1997 and ESS 2002 appear to report substantially higher membership rates than respondents from Eurobarometer 4, which we used as reference category. After controlling for these survey dummy variables, the variance components in Table 3.3 differ substantially. Compared to the null model, country-level variance increases, whereas survey-level variance decreases. Note that because the survey years differ (from 1973 for Political Action I to 2002 for European Social Survey), including survey dummies in fact results in a control for a large part of the differences over time.

In Model 2, all individual-level variables are included. Results show that the relation between age and voluntary memberships is indeed curvilinear. Note however that the age effect is blurred by cohort and period effects in this model. Women are less likely to be a member of a voluntary association. Furthermore, education clearly is a strong predictor of voluntary memberships. Those with a higher education are much more likely to be a member than the low educated. Marital status is important too. The divorced and widowed are less involved than married people. Occupational status also has a substantial impact. Managers and professionals clearly stand out. They are more likely to join voluntary associations than any other occupational group. All other categories are less likely to be a member, with the retired and those without a job least involved. Religiosity also strongly affects the likelihood of holding a voluntary membership. Protestants are most likely to be a member, followed by other religions, Catholics, and the non-religious scoring lowest. Finally, those who attend church more frequently are much more likely to be a member of a voluntary association.

Table 3.5: Multilevel logistic regression models for voluntary membership ($N_1 = 230, 749$; $N_2 = 11, 275$; $N_3 = 171$; $N_4 = 56$)

	Model 1	Model 2	Model 3	Model 4
Constant	-.206 (.241)	.396 (.247)	.280 (.249)	.591 (.271)
Eurobarometer 4 (ref.)				
Eurobarometer 8	.391 (.250)	.398 (.262)	.408 (.264)	.356 (.260)
Eurobarometer 34	.152 (.231)	.055 (.243)	.149 (.245)	.090 (.268)
Political Action I	-.353 (.265)	-.319 (.278)	-.331 (.280)	-.319 (.281)
Political Action II	-.388 (.337)	-.402 (.354)	-.386 (.356)	-.399 (.357)
WVS 1981-1984	-.336 (.222)	-.435 (.233)	-.399 (.235)	-.546 (.244)
WVS 1990-1993	.184 (.213)	.061 (.223)	.159 (.225)	-.075 (.253)
WVS 1995-1997	.964*** (.221)	.887*** (.231)	1.022*** (.233)	.867** (.280)
WVS 1999-2001	.281 (.209)	.193 (.219)	.341 (.222)	.138 (.283)
ESS 2002	.478* (.238)	.422 (.250)	.576* (.253)	.313 (.322)
Age (/10)		.035*** (.005)	-.015 (.011)	-.016 (.011)
Age-sq. (/100)		-.039*** (.002)	-.033*** (.002)	-.032*** (.002)
Female		-.324*** (.011)	-.324*** (.011)	-.321*** (.011)
Educational level		.112*** (.002)	.113*** (.002)	.112*** (.002)
Married/cohabiting (ref.)				
Single		-.020 (.015)	-.016 (.015)	-.016 (.015)
Divorced		-.088*** (.021)	-.091*** (.022)	-.090*** (.021)
Widowed		-.062*** (.021)	-.057*** (.021)	-.055*** (.021)
White collar (ref.)				
Manager/professional		.145*** (.019)	.142*** (.019)	.140*** (.019)
Manual laborer		-.199*** (.017)	-.201*** (.017)	-.199*** (.017)
Retired		-.588*** (.023)	-.599*** (.023)	-.593*** (.023)
No job		-.652*** (.018)	-.661*** (.018)	-.654*** (.018)
Student/military force		-.205*** (.025)	-.214*** (.025)	-.213*** (.025)
Catholic (ref.)				
Non-religious		-.119*** (.015)	-.115*** (.015)	-.115*** (.015)
Protestant		.374*** (.019)	.367*** (.019)	.362*** (.019)
Other religion		.130*** (.027)	.125*** (.027)	.125*** (.027)
Church attendance		.011*** (.000)	.012*** (.000)	.011*** (.000)
<i>Cohort effects</i>				
Religious context at age 12			.361** (.111)	.350** (.111)
Average # TV sets at age 12 (/100)			-.087*** (.010)	-.087*** (.010)

Continued on Next Page...

Table 3.5 – Continued^a

	Model 1	Model 2	Model 3	Model 4
Wartime casualties after the age of 12 (log) (/100)			.102 (.182)	.085 (.181)
Years of Communist rule (/10)			-.062*** (.009)	-.060*** (.009)
Average educational level of cohort			.017 (.017)	.017 (.017)
<i>Period effects</i>				
GDP/capita (log)				.595*** (.120)
Average # TV sets (/100)				.068 (.068)
GINI				-.008 (.014)
Level of democracy				-.103* (.042)
Average educational level				.098 (.060)
Average church attendance				.000 (.008)

^aNumbers in parentheses are standard errors; * $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed tests)

All cohort-level variables are added in Model 3. Two important things are worth noting. First, the effect of age and age-squared change substantially, whereas all other effects remain virtually unchanged. This means that part of the age differences in Model 2 are indeed caused by generational differences. However, even after controlling for individual-level and cohort-level characteristics, the curvilinear relation between age and voluntary memberships remains. Second, three cohort-level characteristics turn out to influence voluntary memberships. The religious context in which people grew up clearly has a positive effect. Cohorts that grew up in a highly religious context (scoring 1 on the cohort variable) have 1.4 ($e^{.361}$) times the odds of being a member than those who grew up in a completely secular context (scoring 0 on the cohort variable). This is in line with our religious exposure hypothesis. We are also able to corroborate the television exposure hypothesis, since an increase of the number of television sets per 1,000 inhabitants at the age of 12 is related to a decrease in the likelihood that the respondent will be a member. Those who grew up without any television exposure have a two times higher odds ($e^{(807 \times -.00087)}$) of being a member than those who grew up with maximum television exposure. Wartime experience appears to be unrelated to the chance that people hold a membership of a voluntary association, which implies that there is no support for our wartime experience hypothesis. The effect for years of Communist rule is in the expected direction. Every 10 additional years of Communist rule reduces the odds of a membership with 6 ($e^{-.062}$) percent. This supports our Communist rule hypothesis. Finally, we are not able to confirm our fifth hypothesis. Voluntary memberships are not affected by the average educational level of the cohort.

When we add all six contemporaneous contextual variables in Model 4, nothing much changes, besides some of the effects for survey dummy variables. The changes in the parameters for the survey dummies are caused by the fact that they capture much of the changes over time, which are also partially explained by the contemporaneous contextual variables. Furthermore, only two period effects reach significance. People who live in more prosperous societies are more likely to hold voluntary memberships. This is in line with most cross-national research (Curtis et al. 2001; Ruiters and De Graaf 2006). However, the distribution of this wealth, as measured by the GINI index, does not affect the likelihood of joining voluntary associations, nor does television penetration at the time of the survey³⁵. We also find that level of democracy is related to a lower likelihood of membership. Most previous research has found opposite results, but their samples were often limited to mostly Western societies (Halman 2003; Parboteeah et al. 2004). Ruiters and De Graaf (2006) also use a large scale data set and they do find a negative effect for level of democracy too. However, in their

³⁵The latter finding seems to refute the thesis that higher levels of television watching causes civic disengagement. However, we re-estimated the model on a subset of our data set for which we could create a four-point measure (no television watching (0), up to 2 hours (1), between 2 and 3 hours (2), and over 3 hours (3)) of individual-level television watching. The results of this additional analysis show that people who watch more television do have a lower chance of holding voluntary memberships. However, even after controlling for this individual-level variable, the cohort and period effects pertaining to television penetration reported here are virtually unchanged.

analyses, it only reaches significance for volunteering and not for voluntary memberships. Finally, neither average educational level nor average church attendance³⁶ contribute to the likelihood that people hold memberships.

3.4.2 Volunteering

In Table 3.6, we present the results for volunteering. Because the models contain exactly the same independent variables (there is only a difference in the dummy variables representing surveys) and most results are remarkably similar to those presented in Table 3.5, we focus on the differences between the results for voluntary memberships and volunteering.

Model 1 shows that respondents from WVS 1995–1997, WVS 1999–2001, and ISSP 1998 report more volunteering than those of Eurobarometer 4. All other surveys do not deviate significantly from Eurobarometer 4.

In Model 2, we include all individual-level variables. It shows that students and those who are in the military force are as likely as white collar workers to volunteer, whereas earlier in Table 3.5 we saw that they were less likely to hold voluntary memberships. All other effects are quite similar to those for voluntary memberships.

In Model 3, in which cohort-level characteristics are added, one clear difference with the results for voluntary memberships stands out. We find a negative effect of the average educational level of the cohort. This means that, contrary to our fifth hypothesis, people who belong to highly educated cohorts are less likely to volunteer. So, controlling for individual-level education, increases in the aggregate educational level of peers does not necessarily lead to more recruitment to volunteer. On the contrary, volunteering appears to be less likely among people who grew up in more highly educated cohorts. While one's level of education relative to his or her peers remains a very strong predictor of volunteering within cohorts (this is the positive relationship well known in the literature), increases in the aggregate educational levels of cohorts over time are not leading to major increases in rates of volunteering; if anything, as implied by the negative coefficient shown in Table 3.6, the negative aggregate effect more or less offsets individual-level positive effects. So, an increase in the educational level of the cohort could be interpreted as a relative decline for the individual. In other words, when ego's own educational level is kept constant, a increase in the average educational level of the cohort means that a greater number of peers have spent more time in school than ego.

³⁶We performed an additional analysis in which we tried to replicate the cross-level interaction effect between individual-level church attendance and country-level average church attendance found by Ruiter and De Graaf (2006). Indeed, the positive effect of individual-level church attendance diminishes when average church attendance increases. However, the effect of contemporaneous national religiosity is smaller in our model. Note though that contemporaneous national religiosity is strongly related (Pearson $R = .73$ ($N = 171$)) to national religiosity at age 12, so part of the national religiosity effect found by Ruiter and De Graaf should be attributed to differences in the religious context during socialization.

Table 3.6: Multilevel logistic regression models for volunteering ($N_1 = 249, 646; N_2 = 12, 152; N_3 = 184; N_4 = 56$)

	Model 1	Model 2	Model 3	Model 4
Constant	-1.331*** (.228)	-1.003*** (.235)	-1.243*** (.237)	-1.053*** (.267)
Eurobarometer 4 (ref.)	.229 (.271)	.225 (.272)	.241 (.271)	.211 (.270)
Eurobarometer 8	.338 (.271)	.488 (.286)	.488 (.285)	.421 (.288)
Political Action I	.554 (.344)	.656 (.364)	.720* (.363)	.632 (.365)
Political Action II	-.189 (.230)	-.231 (.243)	-.163 (.243)	-.245 (.252)
WVS 1981-1984	.237 (.223)	.189 (.236)	.373 (.234)	.235 (.263)
WVS 1990-1993	.651** (.224)	.598* (.236)	.861*** (.239)	.760** (.280)
WVS 1995-1997	.440* (.214)	.401 (.226)	.701*** (.228)	.569* (.281)
WVS 1999-2001	.805*** (.221)	.817*** (.234)	1.103*** (.236)	.969*** (.269)
ISSP 1998	-.363 (.243)	-.459 (.257)	-.137 (.259)	-.324 (.321)
ESS 2002				
Age (/10)	.026*** (.005)	.026*** (.005)	-.088*** (.013)	-.088*** (.013)
Age-sq. (/100)	-.037*** (.002)	-.037*** (.002)	-.027*** (.003)	-.027*** (.003)
Female	-.270*** (.011)	-.270*** (.011)	-.268*** (.011)	-.266*** (.011)
Educational level	.103*** (.003)	.103*** (.003)	.106*** (.003)	.105*** (.003)
Married/cohabiting (ref.)				
Single	.000 (.015)	.000 (.015)	.004 (.015)	.004 (.015)
Divorced	-.092*** (.021)	-.092*** (.021)	-.096*** (.021)	-.094*** (.021)
Widowed	-.086*** (.022)	-.086*** (.022)	-.075*** (.022)	-.073*** (.022)
White collar (ref.)				
Manager/professional	.159*** (.018)	.159*** (.018)	.157*** (.018)	.154*** (.018)
Manual laborer	-.190*** (.018)	-.190*** (.018)	-.188*** (.018)	-.187*** (.018)
Retired	-.305*** (.027)	-.305*** (.027)	-.331*** (.028)	-.329*** (.028)
No job	-.341*** (.022)	-.341*** (.022)	-.353*** (.022)	-.350*** (.022)
Student/military force	.043 (.025)	.043 (.025)	.029 (.025)	.028 (.025)
Catholic (ref.)				
Non-religious	-.057*** (.016)	-.057*** (.016)	-.048** (.016)	-.048** (.016)
Protestant	.242*** (.017)	.242*** (.017)	.239*** (.017)	.234*** (.017)
Other religion	.172*** (.027)	.172*** (.027)	.168*** (.027)	.167*** (.026)
Church attendance	.014*** (.000)	.014*** (.000)	.014*** (.000)	.014*** (.000)
<i>Cohort effects</i>				
Religious context at age 12	.644*** (.121)	.644*** (.121)	.633*** (.124)	.633*** (.124)
Average # TV sets at age 12 (/100)	-.093*** (.009)	-.093*** (.009)	-.092*** (.009)	-.092*** (.009)

Continued on Next Page...

Table 3.6 – Continued^a

	Model 1	Model 2	Model 3	Model 4
Wartime casualties after the age of 12 (log) (/100)			-.923*** (.210)	-.939*** (.209)
Years of Communist rule (/10)			-.046*** (.010)	-.045*** (.010)
Average educational level of cohort			-.093*** (.018)	-.093*** (.018)
<i>Period effects</i>				
GDP/capita (log)				.314** (.114)
Average # TV sets (/100)				-.024 (.065)
GINI				.008 (.012)
Level of democracy				-.051 (.043)
Average educational level				.023 (.058)
Average church attendance				-.005 (.007)

^aNumbers in parentheses are standard errors; * $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed tests)

This probably brings ego in a less favorable position, which makes him less likely to be recruited³⁷. Most other effects of cohort-level characteristics are quite similar to those for voluntary memberships. So, people are more likely to volunteer if they grew up in a more religious context, with less television exposure³⁸, less years of Communist rule³⁹. For volunteering however, we find a negative effect for wartime experience, whereas for voluntary memberships it was not significant. This contradicts our wartime experience hypothesis. As much as war gives rise to collective mobilization, it also disrupts community structures and other bases for voluntary collective engagement, even in those countries that have not experienced the destruction of cities and large population relocations. War involvement may also have negative consequences for generalized trust. Another possible explanation could be that people who have had wartime experience are more materialistic, as was shown by De Graaf (1988). These materialistic values could cause them to focus more on work for pay instead of unpaid volunteer work.

Of all contemporaneous contextual variables included in Model 4 only the effect of GDP per capita reaches significance. Apparently, wealthy conditions are conducive to volunteering. Similar to the results for voluntary memberships, we do not find significant effects of GINI, the average number of television sets per 1,000 inhabitants, average educational level, and average church attendance⁴⁰. However, for volunteering, the effect for level of democracy also turns out to be non-significant.

3.5 Conclusions and discussion

In this chapter, we argued that research on cross-national differences in voluntary association involvement should be extended with generational explanations which focus on processes

³⁷The gross effect of educational expansion is slightly positive though, as we show in Appendix A.

³⁸Again, we estimated a model in which we included individual-level television watching for a subsample of our data set containing an individual-level television viewership variable. Results were in line with the time displacement hypothesis: people who watch a lot of television are less likely to volunteer. However, controlling for individual-level television watching does not change the effect of television exposure at the age of 12 much. So, growing up with a lot of television exposure indeed results in civic disengagement.

³⁹We also checked whether the effect of our measure can simply be attributed to the distinction between countries with and countries without a Communist history. To test this we estimated an additional model which included an additional dummy variable capturing this distinction. Results showed that the effect of our measure remained virtually unchanged, and the effect for the dummy variable did not reach significance. We conclude that the effect of Communist rule varies according to length of exposure.

⁴⁰Again, additional analyses showed evidence for the cross-level interaction effect which was found by Ruiters and De Graaf (2006). Indeed, people who go to church more often are more likely to volunteer, but the difference between frequent churchgoers and those who do not attend church at all is smaller in more religious societies than in relatively secular societies. The inclusion of these cross-level interaction terms had at most a trivial impact on the coefficients reported in Tables 5 and 6 and did not alter any of the conclusions we reached in the random intercept models reported in these tables.

that have historical roots or which involve processes that occurred in the past. All previous research that used multilevel designs in which individual-level and contextual-level explanations were properly distinguished have only paid attention to the impact of the contemporaneous context (Baer 2006; Curtis et al. 2001, 1992; Lam 2006; Parboteeah et al. 2004; Ruiter and De Graaf 2006; Schofer and Fourcade-Gourinchas 2001). We proposed five hypotheses relating the national context in which people grew up to present voluntary association involvement. These hypotheses relate past religious context, television exposure during the formative years, wartime experience, exposure to a Communist regime, and educational expansion to the likelihood that people get involved in voluntary associations. For the test of these five hypotheses we constructed two large concatenated data sets from eleven international surveys which contain questions on memberships of voluntary associations and volunteering for these associations.

The results showed that adding the “cohort-level” proves to be fruitful not only because it provides a new way to properly test generational hypotheses, but also because it has theoretical implications for the manner in which previous contextual-level variables in multilevel studies should be interpreted. The most important of these revolves around the notion that adolescent and early adult socialization periods are important in the formation of life-long interaction patterns and orientations towards civic and political engagement (Zukin et al., 2006:11; Campbell, 2006:96). This view seems to be affirmed in our findings: while we cannot claim to have exhaustively tested every possible hypothesis regarding generational effects, overall, we seem to find that, when we put contemporaneous contextual variables and cohort-level variables in the same model, the latter have explanatory power whereas the former do not, with exceptions as we have noted.

Our first hypothesis claims that people are more involved in voluntary associations if they grew up in a more devout context. Our results corroborated this claim for both voluntary memberships and volunteering. Because we did not find a significant main effect of the contemporaneous religious context (although additional analyses showed a clear cross-level interaction effect between the contemporaneous religious context and church attendance) our results put the findings of Ruiter and De Graaf (2006) in another perspective. Apparently, a great part of their national religiosity effect should be attributed to differences in the religious context during socialization. We argued that people who grew up in a more religious society become more involved in voluntary associations because they were more exposed to a religious culture which promotes positive norms towards civic engagement, and these people were raised in more religious social networks which increases the likelihood to get recruited.

The television exposure hypothesis, which was first proposed by Putnam (1995a; 1995b; 2000) was also corroborated. Clearly, television exposure during socialization results in less voluntary involvement. Additional analyses showed that this effect could not be explained by mere time displacement. Heavy watchers are indeed less likely to be involved in voluntary associations, but even after controlling for individual-level watching behavior, television

exposure during the formative years still showed a negative effect. Although we found evidence for Putnam's major explanation for allegedly declining levels of civic engagement (the rise of television), his second generational explanation (Putnam 2000) was refuted. People are less likely to volunteer if their country suffered wartime casualties when they were over 12 years of age, even less so if the losses were larger. We have been able to place the "wartime mobilization" thesis in a wider context by simultaneously assessing the effects of other variables defining the societal-level context during periods of adolescent and early adult socialization and, with appropriate controls, determined that war is not necessarily conducive to greater levels of civic engagement and might, if anything, lead to the opposite outcome.

People who have lived under Communist rule are also less inclined to be involved in voluntary associations. This raises the question whether civil society in postcommunist societies will remain underdeveloped. Previous research could not answer this question properly, because it only distinguished between postcommunist societies and other societies (Curtis et al. 2001; Howard 2003), and consequently it implicitly assumed that everybody was equally affected by a Communist heritage. However, we were able to show that people who experienced Communist rule for a shorter period of time are more likely to be engaged than those who have lived almost their entire life under a Communist regime. Consequently, we expect that cohort replacement will gradually result in a more vibrant civil society in postcommunist societies.

Finally, we showed that people who belong to highly educated cohorts are less likely to volunteer. Although we hypothesized the opposite, it should be stressed that the effect of average educational level of the cohort was estimated with individual-level education controlled for. This implies that a rise in the former results in a relative decline for the individual. It seems that educational level functions as a sorting mechanism, which strongly depends on the average educational level. This suggests that education is mainly a positional good (Hirsch 1976) with respect to volunteering. It is difficult to wed this result with the human capital theory of volunteering (Wilson 2000). Human capital theory assumes that education provides the necessary knowledge and skills which would enable people to participate. Consequently, low educated cohorts might consist of only a few people who could face the demands of volunteering. In the reverse situation, highly educated cohorts would be more likely to volunteer because they are simply better able to. However, we found the opposite. This better fits theories based on recruitment arguments. Higher educated people are just more likely to be asked to volunteer (Brady et al. 1999). This should then hold even in a context in which people on average are low educated: what matters is not so much absolute levels of education but one's relative level of education and hence community social status. Our findings suggest that a mixture of these two explanations probably applies: although we found that an increase in the average educational level of the cohort is related to less volunteering, we also showed that the gross effect of educational expansion is somewhat positive. This suggests that education is not a pure positional good such that an increase in the benefits (in

terms of chances of recruitment) for one individual (who is relatively to his/her fellow cohort members highly educated) would be entirely at the expense of benefits to others (who are low educated in comparison to their fellow cohort members). If it were a pure positional good, volunteering would have remained stable during educational expansion. The fact that we did find a slight increase leaves some room for human capital interpretations of educational effects.

Although we did not hypothesize different effects for memberships of voluntary associations and volunteering for these organizations, our results showed some remarkable differences. Wartime experience does not affect voluntary memberships, whereas it results in a decrease in the likelihood of volunteering. Of course, those who have fought in wars are more likely to join veteran groups which, while constituting group memberships, do not usually entail additional voluntary service as would be the case with associations directly engaged in community service or politics. However, the proportion of respondents belonging to veteran groups is too small to explain these differences. Although we are not sure to what extent differences in materialistic values explain the negative effect of wartime experience on volunteering, if they do, the effect of these values should be smaller on voluntary memberships than on volunteering. This seems reasonable since the cost of volunteering is far greater than the cost of merely being a member. Furthermore, the results showed that volunteering is less likely for people from highly educated cohorts, whereas average education of the cohort does not affect voluntary memberships. As we argued above, the effect we found for volunteering seems in line with recruitment arguments. The fact that we did not find such an effect for memberships suggests that the selection on education is less strong when voluntary organizations recruit new members than when they recruit new volunteers.

The research we conducted in this chapter enabled us to put to a stronger empirical test some hypotheses which have some currency in the literature dealing with social capital and civic engagement. Some of these found support, while others did not. By drawing attention to the distinction between contemporaneous social context and the context experienced by individuals during their key socialization period, we hope to suggest the future importance of gathering retrospective data on individual-level circumstances in which people grew up so that the effect of cohort-level characteristics can be more clearly distinguished from individual-level attributes. Our work dealt with some wide-ranging social phenomena – secularization, the impact of war, the impact of television, the impact of the post-1989 transformation in Europe. Other events and processes – potentially equally important – still need to be investigated. For example, we believe that, in much the same fashion that we have studied television's effects using surveys taken over a number of decades, future researchers will be able to assess both the individual and contextual effect of the Internet on civic and political engagement. Again, we would expect and hope that this future research would devote itself to the task of distinguishing between the impact of cohort-level characteristics and individual-level ones, and between effects attributable to socialization experiences and

those which are put in place by later-life experiences and situations.

Chapter 4

Religion and voluntary association involvement over the life course: An event history analysis for the Netherlands*

Abstract

The positive association between religion and voluntary association involvement as found in cross-sectional research is expected to result from either religiosity causing an increase in the likelihood to join voluntary associations and to start volunteering, or because it diminishes the chance to quit volunteering and to leave the associations, or both. We study these dynamics of voluntary association involvement with life course data from the Family Survey of the Dutch Population 2000. Results from discrete time logit models show that both individual church membership and municipality-level religiosity positively affect joining rates, whereas leaving rates are unaffected. Furthermore, we find evidence for a clear spillover effect of involvement in religious associations to involvement in non-religious voluntary associations.

4.1 Introduction

The relationship between religion and voluntary association involvement has been studied frequently (e.g., Becker and Dhingra 2001; Bekkers 2000; Cnaan et al. 1993; Lam 2006, 2002; Ruiter and De Graaf 2006; Uslander 2002; Wilson and Janoski 1995). In general,

* A slightly different version of this chapter is currently under review. René Bekkers is co-author.

it seems justified to claim that religion is one of the prime factors explaining voluntary participation. On the one hand, most cross-sectional research shows that religious people are generally more likely to be a member of all kinds of voluntary associations, and they also appear to volunteer more. Of course, much of their voluntary participation is directly linked to their own religious group (Wilson and Janoski 1995). However, even outside their own groups, religious people seem to be more involved (Jackson et al. 1995; Park and Smith 2000; Ruiters and De Graaf 2006). On the other hand, recent research shows that people who grew up (see Chapter 3) or currently live (Curtis et al. 2001; Parboteeah et al. 2004; Ruiters and De Graaf 2006) in relatively devout contexts are, irrespective of their own religiosity, more likely to be engaged in voluntary associations than those without such exposure to a religious context.

Although cross-sectional studies provide important information with respect to the link between religion and voluntary association involvement, mere participation rates do not tell us much about the intrinsically dynamic nature of voluntary engagement. Rotolo acknowledges this when he states that “membership involves two conceptually related but distinct acts: joining an organization and then remaining a member for a specific duration (i.e., not leaving)” (2000a: 1134). Clearly, only some people join voluntary associations at a specific moment in time, and subsequently some of those who have joined might end their memberships sooner than others. The same holds for starting and quitting volunteer work. In fact, differences in these starting and stopping rates determine the participation rates we find in cross-sectional research. Results from such studies, however, do not tell us much about these dynamics, whereas results from research on joining and leaving voluntary associations easily translate back to the cross-sectional findings (McPherson 1981; Rotolo 2000a). The theoretical aim of this study is to disentangle the social mechanisms explaining the relationship between religion and voluntary association involvement.

McPherson and Lockwood (1980) were the first to analyze the dynamics of voluntary association involvement with multivariate techniques. In 1981, McPherson again argued in favor of research on the dynamic processes that determine voluntary association involvement. He wrote, “[...] that the move toward dynamic formulations in the area of voluntary affiliation research is necessary, if the literature is to progress beyond its current state” (McPherson 1981: 724). Notwithstanding the growth of knowledge in this field of study, for example in the area of cross-national research (e.g., Curtis et al. 2001; Lam 2006; Ruiters and De Graaf 2006; Schofer and Fourcade-Gourinchas 2001), a reviewer might conclude that research has not progressed much over the past 25 years. With noticeable exceptions (e.g., McPherson et al. 1992; Oesterle et al. 2004; Popielarz and McPherson 1995; Rotolo 2000a; Rotolo and Wilson 2003), little research explicitly pays attention to the intrinsically dynamic nature of voluntary association involvement. Of course, some might claim that this is due to the absence of adequate panel data. However, the studies based on the Ten Towns Project (McPherson et al. 1992; McPherson and Rotolo 1996; Popielarz and McPherson 1995; Rotolo 2000a; Rotolo

and Wilson 2003) show that the dynamic nature of voluntary participation can adequately be studied with retrospective data, which are much more easily and less costly collected than panel data. Nevertheless, none of these studies focus on the way religion affects the dynamics of voluntary involvement. In this study, we do, since the higher participation rates among religious people can only be caused by them either being more likely to become engaged, less likely to end their participation, or both. We are able to study these dynamics because we have life course data on voluntary engagement as well as church memberships. We answer the following research questions: (1) *To what extent are religious people more likely than non-religious people to become engaged in voluntary associations, and (2) to what extent do they have a lower chance to end their engagement?* Because recent research shows that not only individual religiosity but also the current religious context (Bühlmann and Freitag 2004; Curtis et al. 2001; Parboteeah et al. 2004; Ruiter and De Graaf 2006) as well as the religious context in which people grew up (see Chapter 3) influence participation rates, we also answer the following research questions: (3) *To what extent does exposure to a religious context lead to a higher likelihood to become engaged in voluntary associations, and (4) to what extent does it lead to a lower chance to end engagement?*

In the next section, we describe general explanations for the link between religion and voluntary association involvement from which we derive new hypotheses about the likelihood that people begin or end their involvement.

4.2 Theory and hypotheses

4.2.1 Individual religiosity and voluntary association involvement

In the literature, two general explanations prevail for why religion would have a positive effect on voluntary involvement. First, all major religions would promote altruistic behavior by stressing the importance of virtues like solidarity, self-sacrifice, and love of one's neighbors (Wuthnow 1991: 122). According to this explanation, religious people internalize these altruistic norms, which would make them more likely to participate in voluntary associations. Second, integration into a network of religious people would increase the likelihood to be recruited (Bryant et al. 2003; Musick et al. 2000), since "the homophily of the network constrains groups to recruit members within a restricted range of social space" (McPherson et al. 1992: 156). Besides, for those who are strongly integrated into such religious networks, a refusal to (continue to) participate might be sanctioned by others within the religious network. So, on the one hand, altruistic norms can have an effect at the individual level, but, on the other hand, group norms can also affect voluntary association involvement. The distinction between explanations that are based on either norms or networks is similar to what Wuthnow (1991) refers to with "conviction" and "community" respectively. He argues that individual conviction alone does not lead to more involvement unless someone becomes part

of a religious community. However, there still is some debate about the relative explanatory power of altruistic norms vis-à-vis recruitment through religious networks (Bekkers 2000, 2004a; Reitsma et al. 2006). Nevertheless, we emphasize that both explanations predict the higher participation rates for religious people which are usually found in cross-sectional research. However, the question remains whether these higher rates are caused by religious people joining more, and/or because they are less likely to end their involvement, or even both. Clearly, the recruitment argument predicts higher joining rates; religious people would be more likely to join voluntary associations because they have a higher chance to be asked to join by other religious people within their social network and refusing such requests might be sanctioned. Furthermore, if religious people are more likely than non-religious people to acquire altruistic norms, they should also have a stronger intrinsic motivation to participate in voluntary associations, which should also make them more likely to join. We believe these explanations not only hold for joining voluntary associations but they should also apply to starting volunteer work; if, on the one hand, recruitment leads to a higher likelihood for religious people to join organizations, it is likely that they, on the other hand, are also more likely to be asked to volunteer for the organization. Again, refusing such requests could be harder for them than for non-religious people, because the religious community might sanction their non-compliance. Besides, religious people might also be more inclined to do volunteer work based on a greater intrinsic motivation. All in all, both explanations lead to our first hypothesis, which reads: *Religious people are more likely (a) to join voluntary associations, and once they have joined, they are more likely (b) to start volunteering for an organization (hypothesis 1).*

If our first hypothesis holds, there seems to be a clear explanation for why cross-sectional research often shows that religious people are more involved in voluntary associations; they are simply more likely to join these organizations. However, this only holds if religious people do not end their involvement more quickly than non-religious people. We think this is a plausible assumption, which we are able to test in this study. In fact, the general explanations provide us with reasons to believe that religious people might even be less likely to end their involvement than non-religious people. Once people get involved, the recruitment function of the social network ends of course, but the social network might still exercise the sanctioning function. This implies that people who are strongly embedded into networks that hold norms in favor of voluntary participation should be less likely to end their participation, because quitters risk group sanctioning. This should apply to religious people. Furthermore, under the assumption that religious people are more intrinsically motivated than non-religious people, we have yet another reason to believe that they should be less likely to end their involvement. This leads us to expect that *religious people are less likely (a) to quit volunteering, and less likely (b) to end their voluntary memberships (hypothesis 2).*

Although our previous hypotheses pertain to voluntary association involvement in general, it is needless to say that religious people are especially expected to participate more in

religious organizations; more so than in secular organizations. However, several studies show that people who are engaged in religious voluntary associations are also more likely to be involved in secular organizations (Dekker and De Hart 2002; Jackson et al. 1995; Ruiter and De Graaf 2006). This conjunction of religious and secular participation is generally ascribed to a spillover effect of religious participation. On the one hand, people who already participate in religious organizations would get acquainted with people in secular organizations. On the other hand, they obtain certain skills in those religious organizations that might also be valuable for secular organizations, which makes them more likely to be recruited by these secular organizations. Both effects of participation in religious organizations would yield a higher probability to become engaged in secular organizations as well, which is reflected in the following spillover hypothesis: *People who have already become involved in a religious voluntary association are more likely to engage in non-religious voluntary associations (hypothesis 3)*. Of course, it is possible that the coincidence of religious and secular participation could also be explained by mere selection effects if both types of involvement can be attributed to some underlying mechanism explaining both. That would rule out true causation and consequently falsify the spillover hypothesis. Because we study the dynamics of voluntary association involvement with life course data, we are able to check one necessary assumption for actual causation; i.e., people should have started their religious involvement prior to joining secular organizations. Of course, this does not suffice to verify true causation, but it definitely provides a stronger test for the spillover hypothesis than merely showing co-occurrence in a cross-sectional design (as presented in Chapter 2).

4.2.2 Religious contexts and voluntary association involvement

Until recently, most research on the relationship between religion and voluntary association involvement only focused on individual-level religiosity. Some studies, however, show that a more religious contemporaneous context (Curtis et al. 2001; Parboteeah et al. 2004; Ruiter and De Graaf 2006) or a more religious context in which people grew up (see Chapter 3) also foster greater voluntary participation. However, again, the question remains whether both forms of exposure to religion cause people to join more, or whether it results in a smaller chance to end their involvement, or both. Two reasons for why the present religious context would affect voluntary association involvement have been provided (cf. Bekkers 2004a; Ruiter and De Graaf 2006). First, people who live in a more religious context would be more likely to be recruited, because their social network is likely to contain relatively a lot of religious people who are themselves already involved. Second, the norm to participate as well as the pressure to behave accordingly might be stronger in such networks. Both reasons imply that even non-religious people who belong to these networks should be more likely to become engaged in voluntary associations. In Chapter 3, we stated that “patterns of associational engagement are heavily influenced by socializing experiences early

in life”, which led us to extend the arguments of Ruiter and De Graaf (2006) to the religious context during socialization. As we argued in Chapter 3, people who grow up in a more religious setting are more exposed to religious cultures which would promote voluntary association involvement. This explanation builds of course on the idea that people internalize the altruistic norms prevalent in such religious contexts and as a consequence they should behave accordingly throughout their lives. Furthermore, we argued that those raised in more religious settings also develop stronger social networks in the community, which would make later-life recruitment into voluntary associations more likely. We believe, however, that this second explanation especially holds if people do not move out of the community. Because if they do, those strong network ties are likely to be ruptured. In Chapter 3, we could not fully disentangle this network recruitment explanation from the altruistic norms explanation because we did not know the residential mobility history of the respondents. Since we do in this chapter, we argue that all effects we might find for the religious context in which people grew up mainly reflect effects of exposure to religious culture and not so much of recruitment. Of course, this only holds under the assumption that most voluntary association involvement occurs within the municipality of residence. We believe this to be a plausible assumption and, consequently, we consider our analyses to test the relative importance of the network recruitment explanation vis-à-vis the altruistic norms explanation. To sum up, there is enough reason to expect that *people who (a) grew up or (b) currently live in a devout social context are more likely (1) to join voluntary associations, and once they have joined, they are more likely (2) to start volunteering for the organization (hypothesis 4).*

Hypothesis 4 would suffice to explain greater voluntary involvement in more devout social contexts. However, this only holds under the assumption that such exposure to religion does not lead to a greater chance to end voluntary involvement. Again, we believe that there are good reasons to argue that the reverse is more likely to be true. If a religious context (either present or experienced during socialization) brings about stronger altruistic norms, people who have been exposed to such contexts and became engaged as a consequence of it are likely to be intrinsically motivated. Furthermore, those who currently live in a more devout context face sanctioning when they decide to end their involvement. Therefore, we predict that *people who (a) grew up or (b) currently live in a devout social context are less likely (1) to quit volunteering, and (2) to end their voluntary memberships (hypothesis 5).* Again, we like to stress that any effects we might find for the religious context in which people were socialized mainly reflect effects of exposure to religious culture and, in this case, not so much of sanctioning.

Although hypotheses 4b and 5b suggest that all people would be similarly affected by exposure to a religious context, it seems reasonable to expect that these effects are in fact contingent upon length of residence. Clearly, for people who move to another municipality which is really different in terms of religiosity than their municipality of origin, it is unlikely they change instantaneously. We expect that it takes some time before such a change in

exposure to religion starts affecting people's voluntary participation. At first, the newcomers have few ties to the local community, so the new community is likely to have little effect in terms of recruitment and normative influence. Therefore, we expect that *the longer people live in a devout social context, the stronger its presumed impact (as stated in hypotheses 4 and 5) on the dynamics of voluntary association involvement (hypothesis 6)*.

Ruiter and De Graaf (2006) provide us with a reason to expect that the impact of individual religiosity varies with the present religious context. People who themselves are religious but who live in a rather secular context would "face the problem of insufficient volunteer involvement" (Ruiter and De Graaf 2006: 195). As a consequence, religious people should be more likely to become involved and less likely to end their involvement in such a context if they want to sustain vibrant voluntary associations. So, we hypothesize that *the presumed impact of individual religiosity (as stated in hypotheses 1 and 2) is stronger for people who live in a more secular context than for people exposed to a rather devout context (hypothesis 7)*.

4.3 Data and methods

For the test of our hypotheses, the primary source of data is the Family Survey of the Dutch Population 2000 (FSDP2000) (see for a detailed description of the data De Graaf et al. 2000). This unique survey contains life course information on voluntary association involvement as well as educational and occupational careers, residential mobility histories, marital status, family formation, and religiosity. This allows us to study voluntary association involvement over the life course. These data were gathered through a face-to-face computer-assisted personal interview with both primary respondents and their partners (provided that they were married or cohabiting). The primary respondents were randomly selected from a two-step stratified sample (random sample within 67 randomly sampled municipalities in the Netherlands, with an oversample of the married or cohabiting population). The complete data set consists of 1,561 Dutch speaking individuals (870 primary respondents and 691 partners) aging between 18 and 70. Because the survey recorded the residential mobility histories of respondents, we know exactly in which Dutch municipality respondents lived in any given year. This provides us with the opportunity to match the survey data with contextual data at the municipality level, which is necessary for the test of hypotheses 4 through 7.

In this study, we estimate discrete time event history models (Allison 1984; Yamaguchi 1991) which allow us to determine the impact of both time-constant and time-varying covariates on the likelihood that people become engaged in voluntary associations as well as the likelihood that they end their involvement. For the estimation of these models, it is necessary to restructure the original data in such a way that there is a record for every year that a respondent is at risk for experiencing the event of interest (e.g., joining a voluntary

organization or quitting volunteer work), up to and including the year in which the event of interest occurs. If the respondent does not experience the event, this so-called person-period file contains records for each year until the year 2000. Note, however, that this results in six different samples, because respondents are only included if they are at risk for experiencing the event and we are interested in six different events. We created the following samples: (1) a joining voluntary associations sample ($N = 21,262$), (2) a starting volunteer work sample ($N = 16,173$), (3) a leaving voluntary associations sample ($N = 23,082$), (4) a quitting volunteer work sample ($N = 8,288$), (5) a joining non-religious voluntary associations sample ($N = 21,945$), and (6) a starting non-religious volunteer work sample ($N = 16,135$). In the following sections, we first describe the dependent variables and both individual-level and municipality-level independent variables, and subsequently the methods we apply to test our hypotheses.

4.3.1 Dependent variables

In the FSDP2000, respondents were asked whether they were, at the time of the survey, a member of the following voluntary associations: (1) union or professional organizations, (2) political party or organization, (3) religious group or organization, (4) societal organization (e.g., Amnesty International), (5) environmental organization, (6) musical organization / choir / dramatic club, (7) youth organization (e.g., boy scouts), (8) school organization, (9) sports club, or (10) any other organization. If the respondents were a member of a specific type of organization, they were asked in which year they had joined that specific type of organization. If, however, they indicated not to be a member, they were asked whether they had once been a member of that specific type of organization after the age of 16. For all memberships, start years and end years (provided that the respondents ended their memberships prior to the year 2000) were recorded. All members were also asked, per association, whether and when they had done volunteer work for the organization⁴¹. Based on this life course information on voluntary association involvement, we constructed our dependent variables. Two things are important to keep in mind. First, we aggregated all information concerning different types of organizations. This means that we do not differentiate between all different types of organizations. However, for our analyses of non-religious voluntary association involvement, we aggregated the information on all but the religious organizations. Second, we only study transitions into and out of voluntary involvement. This means that, for example, our first sample (joining voluntary associations) only includes respondents who are not a member of any organization up to and including the year in which they join their first organization (if they had joined between the year in which they were 16 years old and the year 2000; otherwise they remain in the sample until the year 2000). Consequently, all joining events that happen

⁴¹This implies that the survey only recorded volunteering among members. Clearly, this has implications for the way the results should be interpreted. We come back to this issue when we describe Table 4.1.

while a respondent is already a member of some organization are excluded. However, some respondents end all of their memberships before they join another organization. Since these joining events do mark a transition from no involvement to involvement, we include them in our analysis. The same holds for our analyses of starting volunteer work, and vice versa for leaving voluntary organizations and quitting volunteer work. So, if a respondent ended a membership in a specific year, this is included as a leaving event only if the respondent did not remain a member of another organization in that year. Because the FSDP2000 only recorded a single involvement spell per type of organization, reentries into the same type of organization are outside the scope of this study. The dependent variables score 0 in all years in which the events of interest do not occur and they score 1 in the year of the event. Note, however, that our six dependent variables apply to different sets of respondents (the so-called risk sets). The joining analyses apply to all individual respondents who are not a member. The leaving analysis pertains to members only, since only they can end their membership. In the starting volunteer work analyses only members are included, because the FSDP2000 recorded formal volunteering among members of voluntary associations. Finally and obviously, the quitting volunteer work analysis pertains to volunteers only.

In order to clarify the implication of the differences in risk sets, we show in Table 4.1 how hypothetical results from our event history models relate to the cross-sectional finding that (individual-level and/or contextual-level) religiosity generally coincides with higher participation levels. The hypothetical findings presented in row (1) are in line with the hypotheses in this study. So, suppose we would find that religious people (or people living in a relatively devout social context) have a higher probability to join voluntary associations as well as a lower chance to leave them, a higher chance to start volunteering, and a lower probability to quit volunteering, we obviously expect to find higher participation rates for them in cross-sections (final column). However, not all effects have to be in line with our hypotheses to still get a similar result in cross-sectional research. Clearly, the cross-sectional findings are also in line with, for instance, a finding that religiosity only increases the likelihood to become engaged and not so much the likelihood to end engagement (as presented in row (2)). Even if we only find a significant positive effect of religiosity in the joining analysis, as presented in row (3), we should keep in mind that all subsequent analyses are based on a risk set which contains relatively a lot of religious people (or people living in relatively devout social contexts). This implies that these people constitute a larger share of all memberships than non-religious people (or people living in relatively secular contexts). Even if the likelihood to start volunteering is the same among religious and non-religious members, the fact that religious people make up a larger share of all memberships results in religious people volunteering more. Although we have argued in favor of the hypothesis that religious people have a higher likelihood to start volunteering (hypothesis 1b), it could very well be that non-religious people who have joined a voluntary association are in fact highly motivated (this clearly is a selective subsample of all non-religious people) to start volunteering; maybe

even more so than religious people who have joined a voluntary association. If this selection process is really strong, it could even lead to a reversed effect of religiosity on the chance to start volunteering. This, however, does not necessarily refute the cross-sectional finding, because as long as the positive effect of religiosity is large enough in the joining analysis (as presented in row (4)), the sample of people who are at risk of starting volunteer work is already highly religious.

Table 4.1: Relationship between hypothetical results and cross-sectional findings^a

	Hypothetical results in event history analyses				Cross-sectional findings
	Joining voluntary associations	Leaving voluntary associations	Starting volunteer work	Quitting volunteer work	Voluntary association involvement
(1)	+	–	+	–	+
(2)	+	0	+	0	+
(3)	+	0	0	0	+
(4)	++	+	–	+	+

^a++ strong positive effect; + positive effect; 0 no effect; – negative effect

4.3.2 Independent variables

Although we have already discussed some hypothetical effects of religiosity on voluntary association involvement without specifying the way in which religiosity is measured in this study, we should of course elucidate how these (and other) independent variables are operationalized. To start with individual religiosity, we use the life course information on church memberships. People were asked whether they considered themselves a member of a church or religious community. If they did, they were asked whether they were: (1) Roman Catholic, (2) Dutch Reformed, (3) Re-reformed⁴², (4) of some other Christian faith, (5) Muslim, or (6) of any other non-Christian faith. All respondents who claimed not to belong to any religious group were asked whether they once did. If so, the year in which they left the church or religious group was recorded. Religious switchers were recorded similarly. The years in which people left church or switched to another religion were used to determine church membership of all respondents for all years. We combined categories (5) and (6) for reasons of low frequencies. Furthermore, for all years respondents claimed not to belong to a religion, they were coded as non-religious.

⁴²In the Netherlands, two major Protestant groups exist, namely (1) the liberal Protestant denomination called Dutch Reformed (Nederlands Hervormde Kerk), and (2) the orthodox Protestant denomination called Re-reformed (Gereformeerde Kerk).

For the test of the spillover hypothesis, we created two dummy variables indicating for all years whether people were a member of a religious organization and whether they volunteered for such an organization (scoring 1 if people were indeed involved). However, spillover implies that participation in religious organization should have started before people became involved in non-religious organizations. Therefore, we set these dummy variables to 0 for all years in which people became involved in both religious and non-religious organizations.

Next to individual-level religiosity and participation in religious organizations, this study focuses on the impact of the religious context on the dynamics of voluntary association involvement. We distinguish the religious context during socialization from the contemporaneous religious context. Both variables were derived from trend estimates of the proportion of non-religious people in Dutch municipalities. These estimates are based on Dutch census data for the period 1849–1971 (Historisch Ecologische Databank 2004) combined with a selection of weekly surveys for the years 1984–2000 (NIPO/Steinmetz Archive 2005). Linear interpolation was used to fill gaps in these data for the years between censuses and surveys. We could match the resulting trend data with the life course data on voluntary association involvement because the FSDP2000 contains the complete residential mobility history of all respondents. These histories were recorded with the question about the municipality in which people lived at the age of 6, and subsequent questions about all moves to any other home over the entire life course. All (possible) moves were recorded by the year, and the name of the municipality to which people had moved was also recorded. We use the proportion of non-religious people in the municipality in which people lived when they were 12 years of age as a measure of the religious context experienced during socialization. The proportion of non-religious people in the municipality of residence captures the contemporaneous religious context. Note, however, that the person-period files contain records for all years after the age of 16 (provided that a respondent is at risk for experiencing the event of interest). As a result, what we refer to as contemporaneous, in fact, refers to all years contained in these files. So, our measure for the religious context experienced during socialization is a time-constant variable, whereas our measure for the contemporaneous religious context is a time-varying variable. Finally, we calculated the number of years people remained living in the same municipality, and we add it to our models in combination with a quadratic term. The interaction between this variable and the contemporaneous religious context captures the length of exposure to a certain religious context.

Next to the variables pertaining to religion, we include several other independent variables. In discrete-time models, it is crucial to include covariates that capture the duration that people are at risk for experiencing the event of interest. In all our analyses, the duration variables simply reflect the number of years a respondent was at risk. We also include the square of duration to model possible curvilinear duration effects⁴³. We expect to find that the likelihood that people experience a (joining or leaving) event decreases over time, since

⁴³Analyses with a set of dummy variables for 5-year duration intervals did not result in substantially improved fit.

those who are more likely to join (or leave) will probably not wait many years to do so. For the analyses on starting volunteer work, we include an additional dummy variable for the first year that people are at risk (duration = 0), because many people join an association and start volunteering straightaway. Next to the duration variables, we include age to capture life cycle effect. Much cross-sectional research has suggested that the relation between age and voluntary participation is curvilinear with the higher participation rates found among middle-aged people (e.g., Boraas 2003; Curtis et al. 1992; Ruiter and De Graaf 2006). However, Rotolo (2000a) shows that this curvilinear relationship could be explained by age differences in joining and leaving rates; both being high when people are young, and both declining as people grow older. Of course, these effects do not have to be curvilinear in event history models to result in a curvilinear relationship in cross-sectional research. However, we do include both linear and quadratic specifications of age to check whether the relationship between age and the dynamics of voluntary association involvement is in fact also curvilinear. Furthermore, we model trends in joining and leaving rates by the inclusion of year and year-squared. Note that if respondents had trouble remembering all voluntary association involvement from the distant past, the trend variables will also capture memory effects.

All other independent variables are included in our models to avoid possible selection effects. We include a dummy variable which scores 1 in the year that a respondent moved to another municipality and zero in all other years. Leaving this dummy variable out might lead to wrong inferences with respect to the effects for the number of years people remain living in the same municipality. Smith (1994: 250) argues that the length of residence is positively related to volunteering. People who settle down in one place would become more strongly integrated in the community which would increase the chance of recruitment. Besides, for people who are already participating, it is hard to remain active in the same voluntary associations when they move to another municipality. This would imply that people who move should have a lower chance to become engaged and a higher chance to end their engagement than people who remain living in the same community. On the other hand, moving could also have a positive effect on the likelihood to become engaged, if people use voluntary association involvement in their new municipality as an active way of integration into their new community. We also control for sex of the respondent, because women and men clearly differ with respect to religiosity (Kelley and De Graaf 1997) as well as voluntary participation (Gaskin and Davis Smith 1995; Ruiter and De Graaf 2006). Furthermore, we include time-varying covariates for marital status, the presence of children of different ages, educational level, employment status, and the level of urbanization of the municipality. Because the FSDP2000 recorded start and end years (provided that the relationship had come to an end prior to the year 2000) of all relationships people had had up to the year 2000, we were able to determine for every year whether they were single, married, separated/divorced, or widowed. We include a set of four indicators for whether children of various age ranges (0 – 4, 5 – 12, 13 – 18, and 19 and over) were living at home. Although Rotolo (2000a)

shows that the effects of family formation and marital status on joining and leaving voluntary associations are gendered, we do not include all interactions between these variables and the sex of the respondent in order to present more parsimonious and clear models. However, we estimated additional models to test for these gendered effects. We comment on the significant effect differences in footnotes. We include the highest completed educational level at any year, because respondents could still have been enrolled in school when they entered the risk set. This variable ranges from 0 (did not finish elementary school) to 10 (postdoctoral education)⁴⁴. For employment status, we determined for every year whether people had held a job. For all jobs we used the information on working hours (between 12 and 35 hours was coded part-time, and over 35 hours was coded full-time) and ISEI classification (Ganzeboom et al. 1992) (all ISEI scores ranging up to 39 were coded as low status jobs, between 40 and 54 as medium status jobs, and above 54 as high status jobs) to construct six dummy variables. Finally, we control for level of urbanization of the municipality of residence, because people who live in relatively urban municipalities are generally less religious and recruitment networks clearly differ from those in more rural municipalities. We use the 5-point classification of Statistics Netherlands for the year 2000. Note that for all years prior to the year 2000 the municipalities are also coded according to this classification. This assumes that the level of urbanization did not change much over the past decades. Although some municipalities clearly have developed from relatively rural to quite urban, we believe this crude measure is still useful in distinguishing truly rural areas from quite urban municipalities.

In Table 4.2, descriptive statistics are displayed for both dependent and independent variables. For variables that are included in all models, we display the statistics pertaining to the joining voluntary associations sample. All other descriptive statistics apply to specific subsamples concerning the event of interest.

⁴⁴For the Dutch educational system, this indicates level of education better than years of education.

Table 4.2: Descriptive statistics for dependent and independent variables

	N	Range	Mean	SD
<i>Dependent variables:</i>				
Joining voluntary associations	21,262	0–1	.054	.227
Starting volunteer work	16,173	0–1	.047	.212
Leaving voluntary associations	23,082	0–1	.020	.141
Quitting volunteer work	8,288	0–1	.045	.208
Joining non-religious voluntary associations	21,945	0–1	.053	.225
Starting non-religious volunteer work	16,135	0–1	.045	.206
<i>Independent variables:</i>				
Duration (/10)	21,262	0–6.4	1.166	1.066
Same year as start membership	16,173	0–1	.106	.308
Age (/10)	21,262	1.6–8.4	3.011	1.156
Year ^a (/10)	21,262	–5–1.8	–.292	1.304
Member of a religious voluntary association	21,945	0–1	.031	.173
Volunteer for a religious voluntary association	16,135	0–1	.022	.148
Roman Catholic	21,262	0–1	.359	.480
Dutch Reformed	21,262	0–1	.102	.302
Re-reformed	21,262	0–1	.067	.251
Other Christian religion	21,262	0–1	.020	.140
Other religion	21,262	0–1	.007	.081
Moving to another municipality	21,262	0–1	.064	.244
Number of years in same municipality (/10)	21,262	0–7.2	1.393	1.123
Female	21,262	0–1	.583	.493
Married	21,262	0–1	.629	.483
Separated / Divorced	21,262	0–1	.012	.109
Widowed	21,262	0–1	.005	.069
Educational level	21,262	0–10	3.726	2.703
Children between the ages 0–4 at home	21,262	0–1	.229	.420
Children between the ages 5–12 at home	21,262	0–1	.211	.408
Children between the ages 13–18 at home	21,262	0–1	.113	.316
Children of 19 years and older at home	21,262	0–1	.068	.252
Full-time high status job	21,262	0–1	.126	.332
Full-time medium status job	21,262	0–1	.155	.362
Full-time low status job	21,262	0–1	.178	.382
Part-time high status job	21,262	0–1	.020	.141
Part-time medium status job	21,262	0–1	.033	.179
Part-time low status job	21,262	0–1	.036	.185
Proportion non-religious in municipality	21,262	0–.813	.277	.196
Proportion non-religious in municipality at age 12	21,262	0–.727	.180	.165
Little urbanization	21,262	0–1	.244	.429
Moderate urbanization	21,262	0–1	.186	.389
Strong urbanization	21,262	0–1	.299	.458
Very strong urbanization	21,262	0–1	.191	.393

^aWe mean-centered this variable by first subtracting 1982.

4.3.3 Methods

In the next section, we present parameter estimates for separate discrete time logit models for our events of interest. Because some respondents experienced more than one event, we used cluster correction in Stata to obtain robust standard errors. This results in analyses in which person-years (N_1) are clustered within individual respondents (N_2). In order to avoid unnecessarily elaborate tables, we decided to use a backward selection procedure with respect to the inclusion of interaction effects. So, we started with the estimation of the full model, excluding all interaction terms. Subsequently, we included all interactions between (1) the contemporaneous religious context variable and the five dummy variables for church membership (for a test of hypothesis 7), and (2) between the proportion non-religious people in the municipality and number of years in the same municipality (for a test of hypothesis 6). We then removed the least significant interaction effects until we ended up with significant parameters (with $\alpha < .05$) for all remaining interaction effects. Because none of the interaction effects reached significance, we only present the full model without interaction effects. This means that we do not find support for hypotheses 6 and 7. In the following section, we describe all other results.

4.4 Results

4.4.1 Joining voluntary associations and starting volunteer work

In Table 4.3, we present the results from discrete time logit models for joining voluntary associations and starting volunteer work. To start with memberships, the results show that the odds to join a voluntary association at any given time are 36 percent ($e^{.309}$) higher for the Reformed than for non-religious people. However, people from other denominations do not differ from the non-religious. So, this only partially corroborates hypothesis 1a. Furthermore, the proportion of non-religious people in the municipality of residence clearly affects the chance to join. The odds to become a member are less than half ($e^{-.735}$) as high for people who live in a completely secular municipality as the odds for people living in a completely religious municipality. This is in line with hypothesis 4b1. We do not find support for the hypothesis (4a1) that people who grew up in a devout context are more likely to join voluntary associations. Clearly, only the contemporaneous religious context matters, which is more in line with the network recruitment explanation than with the altruistic norm explanation. Some other parameter estimates also reach significance. Apparently, as people grow older, they become less likely to join voluntary associations ($B = -.533$). Rotolo (2000a) also finds that the joining rate is at its peak when people are young. Next to this life cycle effect, we see that the likelihood to join voluntary associations declined until the beginning of the 1960s after which it started rising to reach unprecedented high levels in the year 2000 ($B_{\text{year}} = .367$ and

$B_{\text{year-sq.}} = .079$). This is in line with the finding in cross-national research that people living in more affluent societies are more likely to be a member of a voluntary association (Ruiter and De Graaf 2006). Clearly, the Netherlands became increasingly wealthier over the past decades. The declining trend for the years between 1932 and 1960 is probably caused by the turmoil caused by World War II. Contrary to the expectation, we find that length of residence comes with a declining chance to join ($B = -.198$). In fact, people who have just moved to another municipality are much more likely ($B = .408$) to join voluntary associations than those living in the same community for quite some time. Maybe people deliberately choose to join associations as a way to facilitate their integration in the new community. Furthermore, women ($B = -.257$) are less likely to join than men. We do not find differences with respect to marital status. However, both education ($B = .080$) and employment do affect joining rates. Clearly, higher educated people are much more likely to join, and people who hold full-time high status ($B = .363$), full-time low status ($B = .257$), and part-time medium status jobs ($B = .362$) are significantly more likely to join than those who do not have a job. In fact, all parameters for job status are positive (though not all reach significance), which indicates that employment generally seems to stimulate involvement. The presence of school-aged children ($B = .229$) also increases the likelihood to join voluntary associations⁴⁵. Finally, level of urbanization does not influence joining rates at all.

⁴⁵Additional analyses showed a significant interaction between sex of the respondent and the presence of school-aged children. The results showed that only women's joining rates are positively affected by the presence of those children. This is in line with findings by Rotolo (2000a), and it probably shows that these women have more spare time once the children start going to school. Besides, they might get involved in voluntary associations that are directly linked to their school-aged children.

Table 4.3: Discrete time logit models for joining a voluntary association and starting volunteer work^d

	Memberships ($N_1 = 21, 262$; $N_2 = 777$; $N_{\text{events}} = 1, 231$)		Volunteering ($N_1 = 16, 173$; $N_2 = 784$; $N_{\text{events}} = 810$)	
	B	SE(B)	B	SE(B)
Duration (/10)	.056	(.121)	.003	(.168)
Duration (/10)-sq.	.008	(.030)	-.054	(.053)
Same year as start membership (duration = 0)			1.585***	(.111)
Age (/10)	-.533*	(.255)	.138	(.246)
Age (/10)-sq.	.043	(.033)	-.039	(.030)
Year (/10)	.367***	(.039)	.135**	(.045)
Year (/10)-sq.	.079***	(.018)	-.002	(.022)
Non-religious (ref.)				
Roman Catholic	-.075	(.088)	.206*	(.097)
Dutch Reformed	-.121	(.122)	.033	(.148)
Re-reformed	.309*	(.135)	-.089	(.157)
Other Christian religion	.235	(.201)	.335	(.236)
Other religion	.213	(.310)	-.226	(.618)
Moving to another municipality	.408***	(.119)	.170	(.164)
Number of years in same municipality (/10)	-.198*	(.086)	-.327**	(.105)
Number of years in same municipality (/10)-sq.	.030	(.021)	.053*	(.024)
Female	-.257***	(.069)	-.014	(.087)
Single (ref.)				
Married	.058	(.097)	.182	(.137)
Separated / Divorced	.138	(.236)	-.235	(.394)
Widowed	-.358	(.701)	-.889	(.962)
Educational level	.080***	(.013)	.004	(.015)
No children at home (ref.)				
Children between the ages 0 – 4 at home	-.067	(.090)	.194	(.101)
Children between the ages 5 – 12 at home	.229*	(.097)	.429***	(.104)
Children between the ages 13 – 18 at home	.068	(.133)	-.092	(.137)
Children of 19 years and older at home	.064	(.159)	.077	(.192)
No job (ref.)				
Full-time high status job	.363***	(.098)	-.080	(.124)
Full-time medium status job	.086	(.102)	-.219	(.128)
Full-time low status job	.257**	(.100)	-.258	(.132)
Part-time high status job	.350	(.202)	-.000	(.189)
Part-time medium status job	.362*	(.158)	-.252	(.181)
Part-time low status job	.092	(.177)	-.584*	(.258)
Proportion non-religious in municipality	-.735*	(.313)	.036	(.346)
Proportion non-religious in municipality at age 12	.317	(.290)	-.305	(.349)
Non-urban municipality (ref.)				
Little urbanization	-.096	(.132)	.251	(.149)
Moderate urbanization	-.018	(.137)	.115	(.160)
Strong urbanization	-.148	(.135)	-.041	(.155)
Very strong urbanization	.154	(.143)	.032	(.184)
Constant	-1.946***	(.389)	-3.252***	(.424)

^a* $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed tests)

For volunteering, we find that only Roman Catholic members are more likely ($B = .206$) than non-religious members to switch from passive membership to active volunteering. People from all other denominations do not differ from the non-religious. This only partially corroborates hypothesis 1b. Furthermore, we find no evidence for hypothesis 4; neither the contemporaneous religious context nor the religious context during socialization affects the likelihood to start volunteering. Note, however, that the risk set for this analysis contains a selection of people (namely members) who generally live in more devout municipalities. Of all other parameter estimates, the one for the dummy variable indicating a simultaneous start of both membership and volunteering really stands out. Clearly, many people who join a voluntary association start volunteering in the same year ($B = 1.585$). No other duration effects are found, nor life cycle effects. However, the results ($B = .135$) show that the chance that passive members become active volunteers has increased over the past decades (even for the postwar years). Again, this is in line with general findings from cross-sectional research showing that people are more likely to volunteer in more prosperous societies (Ruiter and De Graaf 2006). The findings for length of residence are somewhat puzzling. When people just moved into a new municipality their odds to become a volunteer are reasonably high ($B_{\text{number of years in same municipality}} = -.327$ and $B_{\text{number of years in same municipality-sq.}} = .053$). The odds then drop until people live in the same municipality for about 30 years, after which the odds start rising again. Maybe, the odds are high among newcomers because many of them use volunteering as an active way to become integrated into their new community, whereas Smith (1994) is also right in his claim that length of residence generally results in higher participation rates because recruitment is more likely among those who settled down. Again, we do not find differences with respect to marital status. The presence of school-aged children ($B = .429$) seems to stimulate volunteering though⁴⁶. Finally, people with part-time low status jobs ($B = -.584$) are less likely to start volunteering as compared to people without a job. No other effects reach significance.

⁴⁶The additional analyses showed that this effect only holds for women. Clearly, women become more engaged once their children start going to school.

Table 4.4: Discrete time logit models for leaving a voluntary association and quitting volunteer work^a

	Memberships ($N_1 = 23,082$; $N_2 = 786$; $N_{\text{events}} = 498$)		Volunteering ($N_1 = 8,288$; $N_2 = 526$; $N_{\text{events}} = 398$)	
	B	SE(B)	B	SE(B)
Duration (/10)	-.709***	(.137)	-.092	(.230)
Duration (/10)-sq.	.119**	(.036)	-.075	(.088)
Age (/10)	-1.485***	(.366)	-.441	(.413)
Age (/10)-sq.	.134**	(.045)	.014	(.049)
Year (/10)	.122*	(.057)	.095	(.068)
Year (/10)-sq.	.010	(.023)	.064*	(.031)
Non-religious (ref.)				
Roman Catholic	-.111	(.128)	-.217	(.136)
Dutch Reformed	.266	(.194)	-.315	(.312)
Re-reformed	-.294	(.192)	.161	(.200)
Other Christian religion	-.731	(.417)	-.512	(.466)
Other religion	-.216	(.609)	-1.271	(1.299)
Moving to another municipality	1.465***	(.184)	1.765***	(.218)
Number of years in same municipality (/10)	.024	(.139)	.082	(.150)
Number of years in same municipality (/10)-sq.	.001	(.030)	-.002	(.032)
Female	.688***	(.108)	.392**	(.127)
Single (ref.)				
Married	.040	(.173)	-.165	(.218)
Separated / Divorced	-.217	(.459)	.224	(.520)
Widowed	-.210	(1.018)		
Educational level	-.044*	(.021)	-.025	(.023)
No children (ref.)				
Children between the ages 0 – 4 at home	.082	(.150)	-.323	(.175)
Children between the ages 5 – 12 at home	.153	(.150)	.239	(.147)
Children between the ages 13 – 18 at home	.300	(.181)	.031	(.167)
Children of 19 years and older at home	-.108	(.278)	.175	(.226)
No job (ref.)				
Full-time high status job	.004	(.163)	-.064	(.170)
Full-time medium status job	.396**	(.143)	.226	(.186)
Full-time low status job	.068	(.148)	.023	(.180)
Part-time high status job	-.716*	(.341)	.285	(.256)
Part-time medium status job	.084	(.234)	-.049	(.300)
Part-time low status job	.139	(.285)	.213	(.338)
Proportion non-religious in municipality	-.116	(.476)	-.665	(.515)
Proportion non-religious in municipality at age 12	-.103	(.468)	.678	(.527)
Non-urban municipality (ref.)				
Little urbanization	.171	(.187)	.078	(.226)
Moderate urbanization	.209	(.193)	.291	(.225)
Strong urbanization	.036	(.186)	.507*	(.229)
Very strong urbanization	.258	(.227)	.405	(.284)
Constant	-.663	(.557)	-1.998**	(.714)

^a* $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed tests)

4.4.2 Quitting volunteer work and leaving voluntary associations

Before we turn to the results presented in Table 4.4, we stress again that the risk sets for these analyses are restricted to those who are engaged in voluntary associations. First, we describe the results for leaving voluntary associations. None of the parameters for religious denominations reach significance. This means that religious members and non-religious members are equally likely to end their engagement. This refutes hypothesis 2a. Neither do we find significant effects for the religious context, which contradicts hypothesis 5a2 and 5b2. However, for understanding how these findings relate to what has been found in cross-sectional designs, we should go back to the hypothetical results from Table 4.1. Because Table 4.3 shows that the Re-reformed as well as people living in more religious municipalities are more likely to join voluntary associations, the fact that we do not find differences for leaving voluntary associations does not contradict the cross-sectional findings. The duration parameters ($B_{\text{duration}} = -.709$ and $B_{\text{duration-sq.}} = .119$) show that the chance to leave a voluntary association is quite high among new members. This chance decreases with every additional year until 30 years of membership, after which it starts rising again. Clearly, organizations suffer loss of members mainly among newcomers. With every additional year of membership, members become less likely to end their engagement. Eventually the likelihood to leave an organization rises again, although this only applies to those who remain a member for over 30 years, i.e., a really small group of members. We see a similar pattern for life cycle effects ($B_{\text{age}} = -1.485$ and $B_{\text{age-sq.}} = .134$). The young are most likely to end their engagement, whereas members in their fifties are least likely to disengage, and the leaving rates go up again for the elderly. Although technically duration effects are controlled for life cycle effects and vice versa, people with many years of membership simply cannot be young. So, maybe declining health explains why we find rising leaving rates after 30 years of membership as well as for people over 60. Unfortunately, the FSDP2000 does not contain extensive health data over the entire life course to test this explanation. Furthermore, the results show that members have become more likely to end their engagement over the past decades ($B = .122$). Apparently, both joining and leaving rates have increased over time. This has resulted in more volatile memberships. Moving to another municipality is also detrimental for voluntary engagement. Although Table 4.3 shows that moving coincides with joining voluntary associations, Table 4.4 shows that it has a far greater impact on leaving organizations ($B = 1.465$). Clearly, on the whole, moving results in less engagement. Length of residence, however, does not affect leaving rates; neither does the level of urbanization of the municipality of residence. However, women ($B = .688$) appear to be more likely to leave voluntary associations, whereas a higher education ($B = -.044$) leads to a smaller chance to leave. Neither marital status nor the presence of children⁴⁷ affects leaving rates. Finally, members who hold full-time medium status jobs ($B = .396$) have higher leaving rates than

⁴⁷Additional analyses showed no gender-specific effects of marital status and the presence of children.

those without a job, whereas members with part-time high status jobs ($B = -.716$) are less likely to leave a voluntary association.

The model on quitting volunteer work also shows no differences between non-religious and religious people; nor do we find a significant impact of the contemporaneous religious context or the religious context during socialization. So, once people have started volunteering, individual nor contextual religiosity matters for the chance to quit. This is not in line with hypotheses 2a, 5a1, and 5b1. Only a few of the other parameters reach significance. The results show that the likelihood to quit volunteering decreased until the mid-1970s after which it started rising again ($B_{\text{year}} = .095$ and $B_{\text{year-sq.}} = .064$). So, both the chance that passive members start volunteering (as shown in Table 4.3) and the chance that volunteers end their engagement (as shown in Table 4.4) have increased over the past three decades. This implies that voluntary associations have experienced a trend towards increased turnover of volunteers. Furthermore, many volunteers appear not to be able to continue volunteering after moving to another municipality ($B = 1.765$). Besides, people living in relatively urban municipalities ($B = .507$) do have a higher chance to quit volunteering⁴⁸. None of the other parameters reach significance. So, length of residence, marital status, the presence of children⁴⁹, and job status all seem unrelated to the chance to quit volunteering.

⁴⁸Although not all urbanization parameters reach significance, the results suggest that the more urban the municipality of residence is, the more likely volunteers are to end their engagement. Additional analyses in which we replaced the set of dummy variables with a single linear term showed a significant effect ($B = .143$).

⁴⁹Additional analyses also showed no gender-specific effects of marital status or the presence of children.

Table 4.5: Discrete time logit models for joining a non-religious voluntary association and starting non-religious volunteer work

	Memberships ($N_1 = 21, 945$; $N_2 = 783$; $N_{\text{events}} = 1, 170$)		Volunteering ($N_1 = 16, 135$; $N_2 = 781$; $N_{\text{events}} = 719$)	
	B	SE(B)	B	SE(B)
Duration (/10)	.148	(.126)	.099	(.173)
Duration (/10)-sq.	-.015	(.030)	-.070	(.054)
Same year as start non-religious membership (duration = 0)			1.622***	(.115)
Age (/10)	-.666*	(.264)	.111	(.248)
Age (/10)-sq.	.060	(.034)	-.034	(.030)
Year (/10)	.389***	(.038)	.126**	(.046)
Year (/10)-sq.	.085***	(.018)	-.007	(.023)
Member of / Volunteer for a religious voluntary association	.308*	(.150)	.247	(.288)
Non-religious (ref.)				
Roman Catholic	-.131	(.088)	.134	(.099)
Dutch Reformed	-.210	(.120)	-.084	(.154)
Re-reformed	.205	(.134)	-.317*	(.156)
Other Christian religion	.078	(.167)	-.128	(.305)
Other religion	.190	(.317)	-.177	(.623)
Moving to another municipality	.353**	(.121)	.245	(.1660)
Number of years in same municipality (/10)	-.217*	(.085)	-.260*	(.110)
Number of years in same municipality (/10)-sq.	.035	(.021)	.036	(.025)
Female	-.257***	(.070)	-.033	(.092)
Single (ref.)				
Married	.044	(.098)	.177	(.137)
Separated / Divorced	.142	(.237)	-.081	(.384)
Widowed	-.491	(.687)	-.793	(.985)
Educational level	.078***	(.013)	-.005	(.015)
No children (ref.)				
Children between the ages 0 – 4 at home	-.077	(.090)	.166	(.106)
Children between the ages 5 – 12 at home	.247*	(.097)	.390***	(.107)
Children between the ages 13 – 18 at home	.079	(.129)	-.070	(.138)
Children of 19 years and older at home	.125	(.157)	.068	(.193)
No job (ref.)				
Full-time high status job	.387***	(.097)	-.060	(.130)
Full-time medium status job	.124	(.103)	-.268*	(.136)
Full-time low status job	.274**	(.099)	-.299*	(.137)
Part-time high status job	.448*	(.193)	.047	(.192)
Part-time medium status job	.368*	(.151)	-.344	(.191)

Continued on Next Page...

Table 4.5 – Continued^a

	Memberships ($N_1 = 21,945$; $N_2 = 783$; $N_{\text{events}} = 1,170$)		Volunteering ($N_1 = 16,135$; $N_2 = 781$; $N_{\text{events}} = 719$)	
	B	SE(B)	B	SE(B)
Part-time low status job	.052	(.177)	-.668*	(.275)
Proportion non-religious in municipality	-.869**	(.309)	-.083	(.356)
Proportion non-religious in municipality at age 12	.369	(.288)	-.373	(.358)
Non-urban municipality (ref.)				
Little urbanization	-.046	(.129)	.175	(.153)
Moderate urbanization	.022	(.134)	.069	(.164)
Strong urbanization	-.105	(.132)	-.104	(.158)
Very strong urbanization	.232	(.142)	.034	(.193)
Constant	-1.788***	(.398)	-3.127***	(.435)

^a $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed tests)

4.4.3 Spillover of religious involvement

In Table 4.5, we present the results for joining non-religious voluntary associations and starting non-religious volunteer work. In these analyses, we test the spillover hypothesis. The results are almost identical to those presented in Table 4.3. Therefore, we focus on the description of the results that are important for the test of the spillover hypothesis and discuss only some other parameter estimates that clearly differ from the results presented in Table 4.3. In the analysis on joining non-religious voluntary associations, we find support for the spillover hypothesis. The results show that the odds to join a non-religious association are 36 percent ($e^{.308}$) higher for people who are already a member of a religious voluntary association than for those who are not. Furthermore, the analysis presented in Table 4.3 shows that Re-reformed appear to be more likely to join voluntary associations ($B = .309$). In Table 4.5, however, this effect does not reach significance ($B = .205$), which implies that the difference between Re-reformed and non-religious as found in Table 4.3 is mainly due to differences in the likelihood to join religious voluntary associations⁵⁰. Finally, Table 4.5 shows that people who hold a part-time high status job ($B = .448$) are more likely to join non-religious voluntary associations than those who do not have a job. In Table 4.3, this effect does not reach significance. This suggests that people who hold those jobs are somewhat less likely to join religious voluntary associations (as shown in Appendix B, although this difference does not reach significance). For starting volunteer work, we do not find support for the spillover hypothesis. So, those who are already volunteering for a religious organization are equally likely to start volunteering for a non-religious association. Again, we find some striking differences between Table 4.3 and Table 4.5. The fact that we find a significant positive effect for Roman Catholics ($B = .206$) in Table 4.3 and no significant effect in Table 4.5 suggests that Roman Catholics are mainly more likely to start volunteering for a religious voluntary association (the results in Appendix B clearly support this explanation). Moreover, Re-reformed members of non-religious voluntary associations are in fact less likely ($B = -.317$) to start volunteering than non-religious members. This effect was suppressed in Table 4.3 because they are more likely to start volunteering for a religious association (see Appendix B). Finally, those who hold a full-time medium ($B = -.268$) or low status job ($B = -.299$) are less likely to start volunteering for a non-religious voluntary association than those who have no job.

In order to test that the hypothesized spillover effect does not work both ways, we performed some additional analyses in which we tested whether involvement in non-religious

⁵⁰In Appendix B, we present the results on joining religious voluntary associations and starting religious volunteer work. The results show that religious people are obviously more likely to join religious voluntary associations. Furthermore, the likelihood to start volunteering for a religious organization does not differ as much between religious and non-religious people (only the Roman Catholics and the Re-reformed stand out). This latter finding clearly reflects the fact that non-religious people who join religious organizations form a select group of highly motivated people.

voluntary associations also enhances the likelihood to become involved in religious associations. The results presented in Appendix B show no significant effects for variables indicating non-religious involvement. So, this supports the idea that the spillover effect only works one-way.

4.5 Conclusion and discussion

In this chapter, we set out to disentangle the social mechanisms underlying the cross-sectional findings that religious people are generally more involved in voluntary associations. We built on previous research on the dynamics of voluntary association involvement (e.g., McPherson et al. 1992; Popielarz and McPherson 1995; Rotolo 2000a) arguing that the cross-sectional findings could only be the result of religious people being more likely to become involved, or because they are less likely to end their engagement, or both. Based on both the altruistic norms explanation as well as the network explanation, we hypothesized that religious people would be more likely to become engaged and less likely to end their engagement. Furthermore, recent cross-sectional research shows that people who are currently living in a more religious context are more likely to be engaged (Curtis et al. 2001; Parboteeah et al. 2004; Ruiter and De Graaf 2006). In Chapter 3, however, we claimed that the religious context during socialization affects voluntary participation later in life and we did not find a direct effect for the contemporaneous religious context. We showed that people who were raised in relatively religious settings are generally more likely to be engaged in voluntary associations. Nevertheless, the data analyzed in Chapter 3 do not tell us at which point in time people became involved. Consequently, we could not rule out that the contemporaneous religious context in fact affects joining and leaving rates. Because we studied all these effects with life course data on voluntary association involvement in this chapter, we were better able to differentiate between effects of the religious context at the time people become involved (or end their engagement) and effects of the religious context in which they grew up. This allowed us to determine whether individual religiosity, the religious context during socialization, and/or the contemporaneous religious context affect joining and leaving rates.

The results generally confirmed our hypotheses with respect to joining voluntary associations and starting volunteer work; Dutch Reformed are more likely to join voluntary associations than non-religious people, and among the members, Roman Catholics are more likely to start volunteering than non-religious people. Based on these results we would expect that both the Dutch Reformed and the Roman Catholics show higher participation rates in cross-sectional studies than non-religious people. Bekkers (2003) indeed finds that these groups generally volunteer more in the Netherlands, although the fact that he controls for church attendance and that he does not distinguish joining voluntary organizations from starting volunteer work makes the results difficult to compare.

Furthermore, we found that people living in a more religious context are also more likely to join a voluntary association. Clearly, the contemporaneous religious context matters. Because we did not find evidence for effects of exposure to a religious setting during socialization, we conclude that our results are more in line with the recruitment explanation than with the altruistic norm explanation. Clearly, recruitment usually takes place in the municipality of residence, whereas socialization in a religious setting might have instilled altruistic values, it does not result in an increase in the likelihood to become involved. Note, however, that the altruistic norm explanation was not fully ruled out, because the effect of the contemporaneous religious context could also be the result of sanctioning based on group norms. We found no significant effects on the chance to leave voluntary associations or quit volunteering for either church membership or exposure to a religious context. So, both individual religiosity and the contemporaneous religious context do affect joining rates, but they have no impact on leaving rates. This implies that the cross-sectional findings of higher involvement among religious people (and people living in more religious settings) stem from their greater joining rates, and not because they remain involved longer than non-religious people (and people living in more secular settings). We conclude that scenario (2) of Table 4.1 is most likely to explain the cross-sectional findings. Religious people are not only more likely to become involved in religious organizations (as we show in Appendix B), they are also more likely to become a member of secular organizations. However, this seems to come about through a spillover effect of involvement in a religious organization. We corroborated the spillover hypothesis showing that people who are a member of such organizations are more likely to also join secular organizations. For volunteering for secular organizations we found no such effect. However, because only members of secular organizations are able to start volunteering for these organizations, and these members already are a selective sample with respect to religiosity (due to the spillover effect of religious memberships), religious people are also more likely to volunteer for secular organizations. Note that the use of life course data enabled us to provide a much stronger test for the spillover hypothesis than those presented in previous cross-sectional research (Dekker and De Hart 2002; Jackson et al. 1995; Ruiter and De Graaf 2006), since we were able to satisfy a necessary (though not sufficient) condition to determine true causation: we got the time order right. In fact, additional analyses showed that the spillover effect only works one-way, which even strengthens the case for the original spillover hypothesis.

Although we were able to show clear effects of religion on joining rates, we acknowledge that previous research claims that the differences between religious and non-religious people come about mostly through differences in church attendance (e.g., Hodgkinson et al. 1990; Ruiter and De Graaf 2006). We agree that church attendance would better capture whether people are actually integrated within a religious community than mere church membership. This makes church attendance a far better measure for testing hypotheses about recruitment mechanisms, particularly for the Netherlands in which many people (especially among Ro-

man Catholics) are only nominal church members. Unfortunately, the FSDP2000 does not contain life course information on church attendance. However, we showed that the use of retrospective data on joining and leaving voluntary associations allows for a study of the dynamics of voluntary involvement, and we hope to encourage other researchers to collect these kinds of data, preferably including retrospective questions on church attendance as well.

Part II

Consequences

Chapter 5

Socioeconomic payoffs of voluntary association involvement: A Dutch life course study*

Abstract

Over the last three decades, research on social stratification, traditionally focusing on parental background and educational achievement effects, has been extended with research indicating the importance of social resources. We study socioeconomic effects of voluntary association involvement, which is an important source of weak ties for getting a better job. First, we determine to what extent involvement causes better socioeconomic outcomes. Second, we test whether specific voluntary associations provide larger socioeconomic payoffs than others. We use life course data from the Family Survey of the Dutch Population 2000 to test our hypotheses. Because timing of job changes and voluntary participation are known, we are able to test for socioeconomic effects of involvement at the time of a job start while controlling for previous socioeconomic characteristics. Consequently, the endogeneity problem from which much research in this field suffers is overcome. Results show that members are more likely to start new jobs which are better in terms of status and earnings than those of non-members. Besides, volunteering is beneficial when entering the labor market for the first time. Furthermore, members of associations with more high status co-members are more likely to start new jobs and these jobs are of higher status too. Hence, voluntary association involvement definitely pays off.

*A slightly different version of this chapter is currently under review. Nan Dirk de Graaf is co-author.

5.1 Introduction

Over the past three decades, research on occupational attainment has been extended with studies that indicate the importance of social resources (e.g., Campbell et al. 1986; De Graaf and Flap 1988; Flap and Boxman 2001; Franzen and Hangartner 2006; Granovetter 1973, 1983, 1995; Lin et al. 1981a,b; Lin and Dumin 1986; Lin 1990, 1999; Marsden and Hurlbert 1988; Podolny and Baron 1997; Smith 2000; Tassier 2006; Wegener 1991). Granovetter (1973; 1983; 1995) points out that many people get their jobs through informal channels. He stresses the importance of weak ties which would provide people with access to new job-related information. This implicates that family background and educational credentials are not the only factors determining occupational success, knowing the right people should matter too. This is often exaggerated when people claim that “it’s not what you know, but who you know that counts”. Lin et al. (1981a; 1981b; 1986; 1990; 1999) extend Granovetter’s basic idea with the social resources hypothesis stating that people profit more when they have access to people who rank higher on the occupational ladder.

Although most research on the socioeconomic benefits of social resources studies job search behavior and personal contacts as sources of informally obtained job-related information (e.g., De Graaf and Flap 1988; Flap and Boxman 2001; Franzen and Hangartner 2006; Granovetter 1995), Mouw (2003) argues in line with Montgomery (1992) that we “must look at the relationship between the structure and composition of social networks and labor market outcomes” (2003: 871). Marsden and Hurlbert (1988) also call for improved measures of social resources. They suggest that “alternative forms of social participation as, for example, voluntary participation (McPherson and Smith-Lovin 1982) also may be useful in gathering information” (Marsden and Hurlbert 1988: 1055). Some studies have already focused on the socioeconomic effects of voluntary association involvement (e.g., Astin et al. 1999; Beggs and Hurlbert 1997; Day and Devlin 1998; McPherson and Smith-Lovin 1982, 1986; Wilson and Musick 1999, 2003). In general, these studies indeed find that voluntary association involvement is positively related to socioeconomic outcomes. Hodgkinson and Weitzman (1996: 112) even show that for nearly a quarter of the volunteers one of the reasons to volunteer is to “make new contacts that might help my business or career”. However, the causal link between voluntary participation and socioeconomic benefits remains unclear. Although Astin et al. (1999) and Wilson and Musick (1999; 2003) show effects of volunteering on job outcomes using panel data, others rely mostly on cross-sectional data. Consequently, most studies cannot rule out possible selection effects or reverse causality, a concern that was also raised by Halpern (2005) and Mouw (2003). In this study, we also direct our attention to what Granovetter (1973: 1375) in his groundbreaking work called “a common source of weak ties”, namely participation in formal organizations. We overcome the endogeneity problem (selection effects and reverse causality) by the use of life course data on labor market careers and association involvement. This enables us to study the socioeconomic effects of voluntary

association involvement that predates the job change while simultaneously controlling for prior job characteristics.

Wilson and Musick (2003: 446) hint upon a test of the mechanisms for why volunteering would have socioeconomic payoffs when they describe two cases which differ in the composition of the voluntary association. They expect that volunteering for organizations with relatively a lot of middle- and upper-middle-class members provides most job-related resources. Clearly, in some associations members are more likely to acquire weak ties with higher-ranking and more influential people than in others. Those people might be better able to provide relevant job-related information and possibly even use their authority to help co-members get better jobs. Day and Devlin (1998) show for Canada that the payoffs of volunteering differ with the type of organization. However, they use a cross-sectional design with which they cannot rule out all kinds of selection effects and reverse causality. Since our data allow us to determine in which types of organizations people are involved over the life course, we are able to test whether compositional differences of organizations indeed explain outcome differences. We do this by including measures of the composition of voluntary associations, as suggested by Montgomery (1991) and Mouw (2003), to study whether memberships of some associations are more beneficial than others. In this way, we extend previous research by looking at differential benefits of voluntary memberships.

Prior research that shows socioeconomic effects of voluntary association involvement was based on American data. However, Moerbeek (2001) shows that 37% of the jobs in the Netherlands were found through personal contacts. We therefore expect effects of personal contacts on job outcomes for the Netherlands too. Although these effects appear to be smaller for the Netherlands than for the United States, De Graaf and Flap (1988) also show for the Netherlands that it matters whom you know. Besides, international comparative research on voluntary association involvement shows that the Netherlands rank high in terms of participation among all Western societies (Curtis et al. 2001). Clearly, a lot of Dutch people are involved in voluntary associations, which presumably provides them with an extensive network of weak ties. Our research question reads: *To what extent does voluntary association involvement have socioeconomic payoffs within the Dutch labor market, and how much does the composition of voluntary associations explain differences in the socioeconomic success of their members?*

In the next section, we describe theories on socioeconomic effects of social resources from which we derive hypotheses about the relation between voluntary association involvement and job outcomes. From the strength of weak ties argument (Granovetter 1973, 1983, 1995, 2005) follows that participation in voluntary associations leads to better jobs, because voluntary associations are an important source of weak ties. The *social resources hypothesis* (Lin et al. 1981a,b) extends Granovetter's argument by stating that people benefit especially from ties to high-ranking others. These contacts could help people getting a better job because, according to the theory, they are expected to have better access to the right job-

related information and they might exercise their authority. However, we try to disentangle the information argument from the authority argument by specifying a new interaction hypothesis which is based on the assumption that people in fact have best access to job-related information at their own level of work, which makes them the best possible helpers for peers in similar positions.

5.2 Theory and hypotheses

5.2.1 Why would voluntary association involvement have socioeconomic payoffs in the first place?

Wilson and Musick (2003) distinguish two mechanisms why people involved in voluntary associations would profit socioeconomically: (1) in voluntary associations people acquire certain job-related skills that might be conducive to the professional career, and (2) joining these organizations extends the social network of people, providing them with contacts that might help getting a better job. These contacts could provide relevant job-related information as well as the leverage needed to convince future employers. Although two mechanisms are distinguished, most research, as we do, focuses on the social network explanation. The basic idea of the network explanation stems from the work of Granovetter (1973). He distinguishes weak ties from strong ties. The former pertains to acquaintances, friends of friends, etc. whereas the latter usually refers to family and friends. Granovetter argues that weak ties are better able to provide people with non-redundant job-related information than strong ties. Having access to this information often proves to be important for getting a good job. Granovetter (1983: 202) writes that “individuals with few weak ties will be deprived of information from distant parties of the social system and will be confined to the provincial news and views of their close friends. This deprivation will not only insulate them from the latest ideas and fashions but may put them in a disadvantaged position in the labor market, where advancement can depend [...] on knowing appropriate job openings at just the right time”. However, based on homophily, people usually hold strong social connections with others that are alike. Consequently, in general, people are deprived of important new information to get the better jobs. However, it is precisely because voluntary associations sustain many weak ties, they are expected to provide members with socioeconomic benefits. McPherson and Smith-Lovin (1986: 63) argue that “interpersonal contacts generated by voluntary affiliation can create channels through which useful information and influence pass”. However, distinguishing cause and effect is difficult here, because people usually get recruited through their social networks into voluntary associations (Bekkers 2000; Gaskin and Davis Smith 1995; Ruiter and De Graaf 2006). This is why people with more extensive networks are more likely to become affiliated. Though, once people have joined these organizations, their social network is expanded even further. Therefore, our most

general hypothesis reads: *Members of voluntary associations get higher-status and better paid jobs than non-members (hypothesis 1).*

If members of voluntary associations are indeed more likely to get information concerning good job opportunities than non-members, we also expect that *members start new jobs more often than non-members (hypothesis 2).* Consequently, all following hypotheses which predict socioeconomic benefits also apply to job starts. Although the group of people starting new jobs obviously is diverse, consisting both of employed and unemployed, our second hypothesis is not restricted to the unemployed only, since people who are already in the workforce are also expected to acquire new job-related information through their social networks. Hannan (1999) shows that, among different social involvement variables, participation in voluntary associations increases the probability of leaving unemployment. We believe however that our second hypothesis applies to all job starts.

Although we expect that people enlarge their social network by joining voluntary associations, Wilson and Musick (1999: 163-164) argue that volunteers probably have more social contacts than members. By participating in all kinds of activities, volunteers would generally get better integrated in the organization than mere members. Therefore, we assume that members get much more ties in general and therefore also more weak ties with co-members once they start volunteering for an organization. From this follows that *volunteering provides greater socioeconomic benefits than memberships per se (hypothesis 3).*

Smith (2000: 513-514) describes two opposing theories for a contingency to the value of weak ties. She argues that Granovetter contends that individuals of low socioeconomic statuses are less likely to benefit from weak ties because, as he argues, they would connect to others who are in low socioeconomic positions as well. Those social contacts are not really able to help them getting a better job. However, Lin et al. (1981a) and Lin and Dumin (1986) would argue that individuals of high socioeconomic status would experience a ceiling effect resulting in no additional advantages of weak ties, whereas people of low socioeconomic status would not experience such a ceiling effect. Smith finds support for Granovetter's hypothesis. If the same holds within voluntary associations, the following interaction hypothesis should be true: *High-status people gain more from their involvement in voluntary associations than low-status people (hypothesis 4).*

So far, we have discussed hypotheses about socioeconomic payoffs of voluntary association involvement per se. However, not all associations are alike. Would joining a sports club provide the same benefits as joining an environmental organization? In the next section, we elaborate on compositional differences between voluntary associations and derive new hypotheses about contingencies to the socioeconomic benefits of memberships.

5.2.2 Which voluntary associations provide most socioeconomic benefits?

What happens in voluntary associations? Based on Granovetter's arguments, the weak ties within voluntary organizations could provide people with knowledge about new job openings. However, not all members have equal access to this information. Of course, the quality of the information matters. Do people get the best information from co-members who are in top positions? Lin et al. write that "if social ties have different instrumental consequences, then the status of the contact should be a good indicator of the structural advantage of the tie" (1981b: 1166). They do not find that personal contacts per se affect occupational achievement, but especially the social status of the contacts would affect individual's occupational success. Besides the fact that people in top positions might have best access to information, they could certainly use their authority to help others. If the former arguments are true, having a lot of co-members in top positions seems most beneficial. This leads to an adjusted version of Lin's *social resources hypothesis* which states that *members of voluntary associations which comprise relatively a lot of high-status co-members get higher-status and better paid jobs than members of voluntary associations with relatively few high-status co-members (hypothesis 5)*.

As we have shown, all research in this field seems to argue along two possible lines, either using contacts per se would be beneficial (as in hypothesis 1), or high-status contacts provide the best possible help and low-status contacts would not (as in hypothesis 5) (cf. the flow chart in Mouw 2003: 876). However, we question the auxiliary assumption that high-status others always have best access to relevant job-related information. We propose an interaction hypothesis based on the argument that high-status contacts not necessarily have the best information for every job seeker. It seems intuitive that high-status contacts are better able to help high-status people, but we question whether this also holds for low-status people. Why would physicians or lawyers have better information concerning new job-openings for a carpenter than a foreman or someone else who works in construction? They may have more authority, but we believe that the latter are better able to provide new information to help the carpenter than the former. If this assumption holds, people get best job-related information from others who are in a similar position. This leads us to propose the *position similarity hypothesis* stating that *low-status people get higher-status and better paid jobs through memberships of low-status associations whereas high-status people get these benefits through memberships of high-status associations (hypothesis 6)*. Note that this hypothesis does not rest on the authority argument. To our knowledge, the two mechanisms behind the *social resources hypothesis*, (1) access to information and (2) authority, have never been disentangled before. However, we believe that Mouw's (2003) results can be interpreted as support for our *position similarity hypothesis*. When he excludes the same-occupation cases from his analysis, it results in a drastic decline of the effect of contact's job

prestige on respondent's occupational prestige; the effect becomes non-significant. Mouw justifies the exclusion of these cases stating that "in many cases, the contact person is in the same job as the respondent" (Mouw 2003: 882). He concludes that "the evidence in favor of the social resources perspective is largely an artifact of the incidence of same-occupation information flows between contacts and jobseekers" (Mouw 2003: 883). Although we agree with Mouw that his results refute the general *social resources hypothesis*, they can be seen as support for our *position similarity hypothesis*. It is precisely those contacts, who are in similar occupations, who might have the best knowledge about the specific labor market segment of the respondent. This would make them the best possible helpers with regard to information. So, it seems that Mouw's findings merely refute the authority argument.

Campbell, Marsden, and Hurlbert (1986) provide us with a reason to expect that not only the amount of high-status co-members matters, they argue that diversity in statuses could be beneficial too. They write that "range provides access to diverse others, and thus increases the likelihood that information available to an actor is novel and diverse. Composition, on the other hand, reflects not the diversity of contacts, but the location of alters in social structure" (1986: 99). Since all prior arguments rest on the assumption of the social network providing access to new job-related information, we propose the following hypothesis: *Members of voluntary associations which comprise co-members from diverse socioeconomic positions get higher-status and better paid jobs than members of voluntary associations with fewer socioeconomic diversity (hypothesis 7).*

In the next section, we describe the data and methods we use to test our hypotheses.

5.3 Data and methods

To answer our research question and test our hypotheses, we use life course data on the occupational career and voluntary association involvement from the Family Survey of the Dutch Population 2000 (FSDP2000) (see for a detailed description of the data De Graaf et al. 2000). These data were gathered through a structured face-to-face interview with both primary respondents and their partners (provided that they were married or cohabiting). The primary respondents were randomly selected from a two-step stratified sample (random sample within 67 randomly sampled municipalities in the Netherlands, with an oversample of the married or cohabiting population). The complete data set consists of 1,561 Dutch speaking individuals (870 primary respondents and 691 partners) aging between 18 and 70.

In the following sections, we first describe the dependent and independent variables used in this study, and subsequently the methods we apply to test our hypotheses.

5.3.1 Dependent variables

In the FSDP2000, the entire occupational career was recorded. For all jobs respondents had held over their entire life course, start dates, end dates (provided that the respondent had quit the job prior to the year 2000), as well as job characteristics are known. This provides us with the opportunity to track the socioeconomic position of respondents at any given year. In this study, we use two different indicators for the socioeconomic position of respondents, (1) monthly net earnings, and (2) occupational status. The first indicator was only available for respondents who were active in the labor force at the time of the survey. It was measured in guilders (1 guilder = 0.432 US\$ at 06/30/2000) and we logged the original variable to make it (Earnings current job) less skewed⁵¹. Note that we only use this dependent variable for respondents who were at least in their second job. This enables us to include prior job characteristics to avoid possible selection effects. The second indicator was available for all jobs respondents had held. All these jobs were coded according to the International Socio-Economic Index of Occupational Status (ISEI) (Ganzeboom et al. 1992). To test whether voluntary association involvement provides socioeconomic benefits during the entire occupational career, we constructed four different dependent variables. Because voluntary association involvement might already be beneficial for people who are at the start of their occupational career, we study first occupational status (ISEI first job). Subsequently, we examine the effect of voluntary participation on monthly net earnings. Finally, we study to what extent voluntary association involvement influences the probability to start a new job (Job start), and to what extent it affects occupational status, given that people started a new job (ISEI). Note that the job start variable applies to person-years. It scores zero for all years in which respondents did not start a new job, and it scores one for all years in which a job start occurred.

5.3.2 Independent variables

For the test of our hypotheses, the independent variables pertaining to voluntary association involvement are of main importance. We distinguish two sets. The first set refers to voluntary association involvement in general, and the last set captures compositional differences between voluntary association memberships.

In the FSDP2000, respondents were asked whether they were, at the time of the survey, a member of the following list of voluntary associations: union or professional organizations, political party or organization, religious group or organization, societal organization (e.g., Amnesty International), environmental organization, musical organization / choir / dramatic club, youth organization (e.g., boy scouts), school organization, sports club, or any other

⁵¹We deliberately chose monthly earnings instead of computing hourly wages, because in the Netherlands (1) most people accept job offers based on a fixed contract telling what they can earn on a monthly or yearly basis, and (2) because dividing monthly earnings by working hours is quite often not equal to contractual hourly wages.

organization (the other category was later subdivided). If the respondents indicated that they were not a member of a specific type of association, they were asked whether they had once been a member after the age of 16. For all memberships, start year and end year (provided that the respondents stopped prior to the year 2000) were recorded. All members were also asked, per association, whether and when they volunteered. We constructed two independent variables indicating (1) the number of memberships, and (2) the number of organizations for which the respondent volunteered⁵². Because only one spell per type of organization was recorded, we are not completely sure about the years for which we recorded no participation. Therefore, we include two additional dummy variables to distinguish respondents who might have been a member or a volunteer from those for which we are certain that they never were a member or a volunteer. Furthermore, we add separate dummy variables for respondents whom we are certain of that they had been a member or a volunteer in the past. We include the last two dummy variables to capture socioeconomic effects of voluntary association involvement in the past. It seems reasonable to expect such lasting effects, because social networks which are built up while participating in a voluntary association are not immediately broken down after leaving the association.

Note that we used the information about start and end year to determine that memberships and volunteering had already started prior to the job changes for which we recorded our dependent variables. This is a necessary condition to avoid wrong causality interpretations.

Table 5.1: *Voluntary association characteristics*

Voluntary association	Mean ISEI	Standard deviation ISEI
Neighborhood association ^a	45.452	14.111
Religious group or organization	48.651	16.006
Musical choir, dramatic club	49.616	16.249
Hobby club ^a	50.103	15.608
Youth organization (e.g., boy scouts)	50.380	14.858
Union or professional organization	50.676	16.424
Sports club	50.754	15.808
School organization	51.245	15.666
Environmental organization	52.548	15.909
Political party or organization	53.579	14.529
Societal organization (e.g., Amnesty International)	55.531	16.075

^asubcategory of the “other” category

⁵²For the analysis of ISEI first job we dichotomized these independent variables because too few respondent recorded more than one organization at the time they got their first job.

The second set of variables captures (1) occupational status of the association, and (2) occupational status diversity of the association. Both measures were based on the ISEI scores (mean scores and standard deviations respectively) of both members and past members of the particular association. We calculated these scores only for associations with a substantial number of members (lowest number was 42 for neighborhood association). Hooghe (2001) uses a similar approach in his research on the degree in which involvement in voluntary associations diminishes ethnocentrism. Instead of using measures based on the occupational status of members, he replaces the names of all association types with measures for the educational composition of the association and he shows that only involvement in associations with many highly educated members reduces ethnocentrism. Campbell et al. (1986) also create several different measures for range and diversity and check to what extent their measures capture the underlying concepts in factor analysis. Some of their measures are also based on average scores (composition measures) and standard deviations (diversity measures). We assigned the scores, which are displayed in Table 5.1, to both members and past members of a specific type of association. For respondents who held multiple memberships we assigned the highest possible scores.

All other independent variables pertaining to social background and previous job characteristics are included in the models to avoid possible selection effects. Based on the occupational attainment and the voluntary association involvement literature, we expect these control variables to affect occupational status and earnings on the one hand, and voluntary association involvement on the other. We control for father's occupational status when the respondent aged 15, measured by the ISEI score of that job. When we analyze the dependent variables ISEI, and Earnings current job, we also include the occupational status of the previous job, again measured by the ISEI score of that job. Besides the occupational status of the previous job, we include a set of dummy variables which captures whether the previous job was managerial / professional, or white collar. Furthermore, the degree in which the respondents had supervision over subordinate employees during their previous job was included. Although the supervision variable was measured on a 5-point scale, from (0) no supervision at all, (1) 1–2 subordinates, (2) 3–10 subordinates, (3) 11–24 subordinates, to (4) 25 or more subordinates, we included it linearly. The number of working hours were also included in the models for ISEI first job, Earnings current job, and ISEI over the life course, since higher-status and better paid jobs generally require more working hours. Of course, the results for this variable should not be interpreted in a causal way. However, because time spent on voluntary association involvement cannot be spent on paid work, it is necessary to control for working hours. We also include the educational level of the respondent at the time of the job start. It ranges from 0 (did not finish elementary school) to 10 (postdoctoral education) and puts all intermediary Dutch school types in a hierarchical order⁵⁴. Next to level of education, we include in all but the model for job start the number of years since

⁵⁴For the Dutch educational system, this indicates level of education better than years of education.

respondents left school⁵⁵. Because some respondents just started their current job whereas others had considerable seniority, the number of years since the job start is added to the model for earnings current job. Our models also contain a dummy variable for women and a count variable⁵⁶ for the number of children at home when changing jobs, as well as their interaction. Finally, we include year in the models for ISEI first job and ISEI over the life course whereas age is included in the model for job start. Descriptive statistics of all variables are displayed in Table 5.2.

Table 5.2: Descriptive statistics for dependent and independent variables^a

	N	Range	Mean	Standard deviation
<i>Dependent variables:</i>				
ISEI first job	1,493	10–88	44.203	15.526
Earnings current job	917	4.605–10.189	7.863	.725
Job start	30,059	0–1	.129	.335
ISEI	3,877	10–88	47.700	15.306
<i>Independent variables:</i>				
Memberships	3,877	0–8	.866	1.024
Possibly a member	3,877	0–1	.251	.434
Possibly a member, but definitely before	3,877	0–1	.132	.338
Volunteering	3,877	0–4	.235	.528
Possibly a volunteer	3,877	0–1	.261	.439
Possibly a volunteer, but definitely before	3,877	0–1	.102	.303
Occupational Status of Association ^b	2,528	45.452–55.531	6.027	1.605
Occupational Status Diversity Association ^b	2,528	14.111–16.424	1.983	.392
Occupational status father ^b	3,877	16–88	29.078	16.142
Occupational status previous job ^b	3,877	10–78	36.151	15.065
Manager/professional previous job	3,877	0–1	.332	.471
White collar previous job	3,877	0–1	.234	.423
Supervision previous job	3,877	0–4	.422	.972
Number of working hours ^b	3,877	1–144	36.748	12.709
Educational level	3,877	0–10	4.568	2.826
Years since leaving school	3,877	0–47	10.202	8.802
Female	3,877	0–1	.430	.495
Children at home	3,877	0–5	.689	1.022
Year ^b	3,877	1934–2000	47.483	13.742
Age ^b	3,877	9–65	19.534	8.811

^aAll figures for independent variables come from the data set for ISEI of all jobs over the life course. For the other data sets the range, mean, and standard deviation for some independent variables differ because a specific sub sample of respondents is used.

^bBefore including this variable in the models, we subtracted the minimum

⁵⁵The models for ISEI first job contain a set of dummy variables, because the number of years since respondents left school was rather limited.

⁵⁶Because only a few respondents had two or more children at home when entering the labor market, we dichotomized this variable for the analysis of ISEI first job.

5.3.3 Methods

In order to be able to use all available information from all respondents, we used the MCMC multiple imputation procedure (PROC MI) from SAS 9.1 to generate multiply-imputed data sets without missings. The variable for which we had most missings is monthly earnings (other variables with missings are variables on previous job characteristics, occupational status of the father, years since leaving school, and number of working hours). For approximately 11 percent of the respondents who held a job at the time of the survey, we do not know their earnings. Even when the data contain this many missings, Rubin (1987: 114) shows that only a small number of imputations suffices to get estimators with high relative efficiency. In this study, we use five multiply-imputed data sets⁶³. In the next section we present the results from three different statistical models. For the analyses of ISEI first job and Earnings current job, the regression parameters are Least Squares estimates obtained from the Generalized Linear Models procedure from SAS 9.1 (PROC GLM). Because we also analyze the extent in which respondents start new jobs over their life course as well as the ISEI scores of all those new jobs, the nested nature of these data (multiple jobs within respondents) require the use of a multilevel model. Our analyses of these variables are analogous to those presented by Petersen (1988). Although he uses a hazard rate analysis for duration data, we estimate discrete time models for job start on a person-year file using the GLIMMIX procedure. Subsequently, we analyze the ISEI scores for all jobs, given that a new job start occurred. The parameters for the models for this dependent variable are maximum likelihood estimates obtained from the mixed models procedure (PROC MIXED). All three procedures enable us to combine the results of the five imputed data sets (per dependent variable) with the multiple imputation procedure (PROC MIANALYZE) which generates valid statistical inferences (see Rubin (1987) for extensive explanation of multiple imputation).

5.4 Results

5.4.1 Socioeconomic payoffs of involvement in general

In Table 5.3, we present four models in which we test whether voluntary association involvement in general provides socioeconomic payoffs. Note that these models include memberships and volunteering variables as well as all control variables. When both memberships and volunteering and the four dummy variables concerning voluntary association involvement are included, the interpretation of the voluntary participation parameters is as follows. The

⁶³Because our dependent variables apply to different sets of respondents, we did five imputations for each data set containing only one dependent variable and all covariates.

parameters for memberships indicate to what extent every additional membership provides socioeconomic benefits⁶⁴. The volunteering parameter signifies whether, on top of being a member, every additional organization for which people volunteer provides additional payoffs. The effects for the dummy variables indicate to what extent respondents belonging to the particular categories deviate from non-participating respondents (scoring zero on volunteering and/or memberships). In the following sections, we discuss the results from Table 5.3 and evaluate the hypotheses in light of these results.

From the first column of Table 5.3 it is clear that people who already volunteered at the time they entered the labor market for the first time get higher status first jobs than those who were not volunteering. Membership itself does not promote occupational status. Furthermore, none of the other parameters pertaining to voluntary association involvement are significant⁶⁵. However, two other parameters are significant, namely those for the interaction “female \times number of children”, and year. Apparently, women who have children at home enter the labor market in considerably lower status jobs. The year variable shows that over time, controlling for all other variables, occupational status of the first job decreased. This is in line with the inflation of credentials (Van de Werfhorst 2005), since average job status in fact increased over time, but the average educational level rose more rapidly. Consequently, people nowadays get lower status jobs compared to equally educated people from some decades ago. Finally, number of working hours and the years since the respondent had left school are not related to the occupational status of the first job.

In the second column of Table 5.3, the results for earnings current job are displayed. Although we are unable to control for earnings of the previous job, we try to overcome possible selection effects by including other previous job characteristics, including ISEI. Again, we find positive effects of voluntary association involvement. Although the parameter estimate for memberships looks small, it should be noted that we logged the earnings variable. This means that every additional membership increases the earnings with about 5 percent, clearly a substantial effect. Based on the model it can be calculated that the average respondent⁶⁶ who does not hold any memberships earns about 2,475 guilders a month. If the same respondent would have been a member of one voluntary association, the monthly earnings would have been 2,598 guilders. According to the model, the same respondent who holds the maximum number of memberships would earn 3,652 guilders, although this is a rather theoretical case.

⁶⁴For the analysis of ISEI first job the variables were dichotomized, and consequently the effect signifies the difference between those who were not involved and those who were.

⁶⁵We are not sure to have ruled out possible selection effects effectively. Although, we control for father’s occupational status and respondent’s educational level (both positive and highly significant effects), respondents could still differ in certain capacities which are not fully captured by these two variables. We could for instance think of leadership skills, which might promote volunteering as well as give access to better jobs.

⁶⁶For the calculations we vary membership scores while we set volunteering to zero and use mean scores for all other covariates.

Table 5.3: Estimates for socioeconomic effects of voluntary association involvement

	ISEI first job (<i>N</i> = 1, 493)	Earnings current job (<i>N</i> = 917)	Job start (<i>N</i> ₁ = 30, 059; <i>N</i> ₂ = 1, 290; <i>N</i> _{events} = 3, 877)	ISEI (<i>N</i> ₁ = 3, 877; <i>N</i> ₂ = 1, 290)
Intercept	32.079*** (2.197)	6.504*** (.097)	.128 (.088)	17.834*** (1.404)
Memberships ^b	-1.123 (1.281)	.049* (.023)	.122*** (.031)	1.237*** (.319)
Possibly a member	-1.658 (1.216)	.069 (.073)	.146* (.062)	1.621* (.636)
Possibly a member, but definitely before	.977 (1.771)	.005 (.060)	.105 (.073)	1.491* (.741)
Volunteering ^b	2.804* (1.321)	.019 (.036)	.034 (.048)	.555 (.508)
Possibly a volunteer	1.322 (.813)	-.153* (.061)	.100 (.053)	.597 (.550)
Possibly a volunteer, but definitely before	.565 (1.916)	.017 (.053)	.194** (.074)	.856 (.768)
Occupational status father	.187*** (.022)	.003* (.001)	.005*** (.001)	.093*** (.015)
Occupational status previous job		.006** (.002)	.002 (.002)	.405*** (.019)
Manager/professional previous job		.077 (.072)	.182* (.089)	-2.081* (.862)
White collar previous job		.140* (.061)	.029 (.082)	2.408** (.770)
Supervision previous job		.022 (.019)	.248*** (.024)	.309 (.229)
Number of working hours	.048 (.033)	.027*** (.002)		.109*** (.018)
Educational level	2.486*** (.145)	.044*** (.008)	.061*** (.009)	1.277*** (.094)
Years since leaving school		.001 (.002)		.042 (.028)
Years since job start		.009* (.003)		

Continued on Next Page...

Table 5.3 – Continued^a

	ISEI first job (<i>N</i> = 1, 493)	Earnings current job (<i>N</i> = 917)	Job start (<i>N</i> ₁ = 30, 059; <i>N</i> ₂ = 1, 290; <i>N</i> _{events} = 3, 877)	ISEI (<i>N</i> ₁ = 3, 877; <i>N</i> ₂ = 1, 290)
One year since leaving school	.937 (1.513)			
Two years since leaving school	.680 (1.842)			
Three years since leaving school	-1.489 (2.929)			
Four or more years since leaving school	-1.780 (2.143)			
Female	.697 (.724)	-.349*** (.047)	.023 (.053)	.107 (.534)
Number of children ^b	2.813 (3.911)	.009 (.038)	-.171*** (.026)	.691* (.272)
Female × Number of children ^b	-12.426* (5.889)	.004 (.052)	-.111** (.038)	.588 (.394)
Year	-.080** (.028)			.000 (.019)
Age			-.107*** (.003)	
<i>R</i> ² (level-1) ^c	.287	.573		.454
<i>R</i> ² (level-2) ^c				.758

^aNumbers in parentheses are standard errors; * $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed tests)

^bDichotomous variable for model on ISEI first job.

^cFor model on ISEI calculated according to method proposed by Snijders and Bosker (1999; chapter 7).

There is no additional payoff for volunteering. In fact, we find a negative effect for the dummy variable “possibly a volunteer”. We are not sure how to explain this finding. However, remember that this dummy variable contrasts respondents for which we are sure that they do not volunteer at the time they got their current job (these respondents score zero on the count variable “volunteering”) with those for which we are not fully sure. Furthermore, the parameter for this dummy variable can only be interpreted in combination with the parameters for the membership variables. Because the design of the questionnaire implied that respondents could only indicate that they volunteered if they had indicated that they were a member, all respondents who score one on the dummy “possibly a volunteer” ($N = 86$) either score one or higher on memberships ($N = 44$) or one on either two memberships dummies ($N = 32$ for “possibly a member”, and $N = 10$ for “possibly a member, but definitely before”). This means that a large part of the puzzling negative effect is compensated by positive effects from the memberships variables. Most other significant effects are in the expected direction. Of course, educational level and occupational status of the previous job are highly predictive for earnings current job. However, we also find, even after controlling for educational level and previous job characteristics, a small positive effect for occupational status of the father. This means that some ascription (De Graaf and Luijkx 1993) remains in Dutch society. Apparently, white collar workers earn somewhat more than others (who were not in managerial or professional occupations). Of course, people who work longer hours bring home better wages. Seniority also adds to the salary and women earn considerably less than men. Finally, the number of children, years since leaving school, and supervising subordinates in the previous job appear not to affect monthly net earnings.

In columns 3 of Table 5.3, we present results from a discrete time model for job start. Clearly, voluntary association involvement is positively related to the probability to start a new job. Every additional membership increases the odds to start a new job with almost 13 percent ($e^{.122}$). Respondents who might be a member (remember that we do not have all spells) have a more than 15 percent ($e^{.146}$) higher odds to start a new job than respondents who definitely hold no memberships at all. For people who volunteered in the past, the odds to start a new job is more than 21 percent ($e^{.194}$) higher than for those who never volunteered. Furthermore, social background affects the probability to start a new job too. Apparently, children of fathers with higher occupational status start new jobs more often. The same holds for people who were previously employed in a managerial or professional occupation, and who had supervised more subordinates. Education also contributes to the chance to start a new job. Furthermore, having children at home decreases the probability to start a new job, especially for women. Finally, younger people are much more likely to start new jobs.

The results presented in the final column of Table 5.3 should be interpreted with the results for job start in mind. In column 4, parameter estimates for ISEI of all but the first job, given that a new job start occurred, are presented. Note that we are best able to control for possible selection effects in this analysis; we analyze effects of voluntary association involvement

on occupational status, controlling for occupational status of the previous job. Again, we see a positive effect for memberships. People who had joined more organizations prior to a job change gain more occupational status than people who are less engaged. In fact, every additional membership increases the ISEI score with more than 1 point. Both parameters for the dummy variables contrasting possible and past members to non-members are significant. This means that respondents for which we are sure that they never were a member really get lower-status jobs compared to people who (possibly) were a member. So, members have a higher chance to start a new job, and once they do, it is of higher status. Volunteers have no additional gains. The effect of memberships corresponds to the effect of having a father with a 13-point higher ISEI score, which clearly is a substantial effect. This significant effect of father's occupational status itself again indicates ascription in Dutch society. However, achievement effects are larger. Actually, the occupational status of the previous job has the largest effect (given its range), but educational level also remains important, even after controlling for previous job characteristics. Furthermore, the number of working hours is positively related to occupational status. Apparently, higher-status jobs require people to work longer hours. Moreover, compared to all other job types and controlling for all other variables, people who held a managerial or professional occupation get somewhat lower status jobs whereas people with white collar jobs switch to higher status jobs. This could indicate a ceiling effect for managers and professionals, or maybe switching to a new job coincides with a conscious decision to slow down a bit. Finally, people with children at home get higher status jobs.

From all models in Table 5.3, we can conclude that voluntary association involvement is related to higher status and better paid jobs. Furthermore, members are also more likely to start new jobs, and once they do, they gain more occupational status. This corroborates our first two hypotheses. Results on whether volunteering provides additional payoffs, on top of merely being a member, are mixed. In the models for occupational status of the first job and job start, variables pertaining to volunteering reached significance. However, the other models do not show a positive additional effect of volunteering. In fact, we do not fully understand the negative effect for the dummy "possibly a volunteer" in the model for earnings current job. However, all in all, we believe it is justified to conclude that voluntary association involvement indeed causes people to get better jobs. We control for important previous job characteristics by which we avoid possible selection effects or reverse causality.

Next, we turn to the results on the effect of compositional differences between voluntary associations, which are displayed in Table 5.4.

Table 5.4: Estimates for socioeconomic effects of voluntary association characteristics

	ISEI first job (N = 660)	Earnings current job (N = 727)	Job start (N ₁ = 21,583; N ₂ = 1,148; N _{events} = 2,528)	ISEI (N ₁ = 2,528; N ₂ = 956)
Intercept	33.211** (3.856)	6.596*** (.184)	-.113 (.177)	16.662*** (2.294)
Occupational Status of Association	-.327 (.415)	.011 (.012)	.079*** (.017)	.635*** (.175)
Occupational Status Diversity Association	-.301 (1.336)	-.032 (.071)	-.033 (.067)	-.450 (.700)
Possibly a member, but definitely before	-1.993 (1.557)	-.070 (.053)	-.030 (.066)	-.139 (.659)
Occupational status father	.168*** (.033)	.002 (.001)	.003 (.002)	.079*** (.018)
Occupational status previous job		.007*** (.002)	.000 (.002)	.403*** (.024)
Manager/professional previous job		-.077 (.081)	.218* (.109)	-2.040† (1.049)
White collar previous job		.144* (.067)	-.055 (.096)	3.330*** (.893)
Supervision previous job		.032 (.021)	.246*** (.027)	.443 (.270)
Number of working hours	-.048 (.052)	.026*** (.002)		.125*** (.023)
Educational level	3.019*** (.221)	.048*** (.009)	.052*** (.011)	1.252*** (.114)
Years since leaving school		.001 (.002)		.030 (.032)
Years since job start		.005 (.004)		
One year since leaving school	3.509 (2.074)			
Two years since leaving school	2.733 (2.598)			
Three years since leaving school	1.349 (4.325)			

Continued on Next Page...

Table 5.4 – Continued^a

	ISEI first job (<i>N</i> = 660)	Earnings current job (<i>N</i> = 727)	Job start (<i>N</i> ₁ = 21,583; <i>N</i> ₂ = 1,148; <i>N</i> _{events} = 2,528)	ISEI (<i>N</i> ₁ = 2,528; <i>N</i> ₂ = 956)
Four or more years since leaving school	-1.792 (3.375)			
Female	1.910 [†] (1.107)	-.373*** (.053)	-.003 (.070)	-.398 (.704)
Number of children ^b	9.448 [†] (5.269)	.023 (.040)	-.141*** (.029)	.474 (.305)
Female × Number of children ^b	-16.043 [†] (8.097)	-.006 (.059)	-.074 (.046)	-.008 (.471)
Year	-.140*** (.041)			.012 (.023)
Age			-.101*** (.003)	
<i>R</i> ² (level-1) ^c	.326	.573		.459
<i>R</i> ² (level-2) ^c				.731

^aNumbers in parentheses are standard errors; [†] $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed tests)

^bDichotomous variable for model on ISEI first job.

^cFor model on ISEI calculated according to method proposed by Snijders and Bosker (1999: chapter 7).

5.4.2 Socioeconomic payoffs of different associations

Before we describe the results presented in Table 5.4, it should be stressed that these models apply to members and past members only. We include the dummy variable “possibly a member, but definitely before” to be able to test whether past memberships provide different payoffs than present ones. Selecting only (past) members leads to a decline in the number of cases, which makes significant results less likely. Therefore, we decided to present significance at $p < .10$ too. In our description we focus on the effects of voluntary association characteristics, describing parameter estimates for covariates only if they deviate strongly from the results presented in Table 5.3.

In the first column of Table 5.4, results for occupational status of the first job are shown. Because only 44 percent of all respondents who entered the labor market was or had been a member of a voluntary association (most memberships start at a higher age), the decline in the number of cases is most drastic for this dependent variable. The results show no significant effect of voluntary association characteristics. Furthermore, the parameter estimate for past members is negative, which we would expect if the positive effects of voluntary association involvement are somewhat lasting, but begin to fade when people leave the organization. However, the parameter is also non-significant. Remember from Table 5.3 that volunteering does affect occupational status of the first job. So, which organization to join does not seem to influence first occupational status, doing unpaid work for an organization does. Furthermore, the other parameters are quite similar to those presented in Table 5.3. Only the effects for female and number of children differ somewhat. Apparently, women who enter the labor market with a history of voluntary association involvement get slightly higher status first jobs than men. Having children coincides with higher status first jobs for men, but lower status first jobs for women.

Next, we turn to earnings of the current job. Do compositional differences of voluntary associations influence what people get paid? Clearly, the answer is no. Although results from Table 5.3 show that joining voluntary associations helps getting a better paid job, we do not find that the composition of the association influences these socioeconomic payoffs. Again, the parameter estimate for past members is negative but non-significant. All other effects are similar to those presented in Table 5.3, although occupational status of the father and years since job start do not reach significance in this model.

For the models pertaining to the complete life history we do find positive effects of the average occupational status of the voluntary association. Both the likelihood of a job start and the occupational status⁶⁷, provided that a new job start occurred, are higher for members of voluntary association which contain relatively a lot of high-status co-members. Past members

⁶⁷In fact, an additional analysis showed that a model in which we replaced our single measure for the occupational status of the association with a set of dummy variables does not provide a statistically better fit. This suggests that the average occupational status of the organization is able to account for much of the differences in payoffs between members of different types of organizations.

do not differ in this respect from present members. This corroborates *the social resources hypothesis* (hypothesis 5). Whether people join associations with small or large occupational status diversity does not influence their socioeconomic position. This refutes hypothesis 7. Again, all other parameters are similar to those presented in Table 5.3.

When we overlook all findings from Table 5.4, we should conclude that there is clear evidence that joining high-status associations provides more socioeconomic payoffs than joining low-status associations. However, only job start and occupational status of all but the first job seem to be affected; it does not help members getting a better paid job. Because both job start and occupational status are affected, joining high-status associations seems to provide double benefits. Finally, the occupational diversity of voluntary associations does not influence occupational outcomes at all. Apparently, associations that provide ties to high-status others provide socioeconomic benefits, whereas associations that link people to more diverse others do not.

Although we postulated a set of interaction hypotheses, we do not present any extensions of the models presented in Table 5.3 and 5.4, simply because no important significant results were found. Most effects of voluntary association involvement (Table 5.3) are the same for low-status and high-status people. This refutes hypothesis 4 suggesting that high-status people would gain more from their involvement than low-status people. However, we did find one significant interaction, namely between volunteering and father's occupational status in the first model of Table 5.3. It indicates that people from lower-status backgrounds do not gain from volunteering, whereas people from higher-status backgrounds do gain occupational status if they volunteered for a voluntary association when entering the labor market. Although this result is in line with hypothesis 4, we attach no great value to this finding, because in the models for occupational status of the first job possible selection effects cannot be ruled out sufficiently.

We did not find statistically significant interaction effects between occupational status of the association and previous occupational status for any of the models presented in Table 5.4. This refutes the *position similarity hypothesis* (hypothesis 6). Two possible explanations can be given for why the *position similarity hypothesis* is not corroborated. First, the auxiliary assumption that people who work in a similar position have best job-related information might be false. In fact, most research in this field assumes, either implicitly or explicitly, that high-status people have best access to relevant job-related information irrespective of the level of the job. This would explain why all people benefit from ties to these high-status others. Second, maybe our assumption about access to job-related information is right, but the effect of authority is stronger than the effect of information. Consequently, ties to high-status others might not necessarily lead to the best information, but they might be most beneficial in terms of authority. So, people with best information could have too little authority to be beneficial, and only high-status people have enough authority to help others getting a better job.

5.5 Conclusion and discussion

Within the vast amount of literature on the impact social resources on socioeconomic outcomes, we focused on the impact of voluntary association involvement. We tried to make theoretical progress by specifying the mechanisms why involvement would have socioeconomic payoffs. We derived several hypotheses from the strength of weak ties argument (Granovetter 1973, 1983, 1995) and the *social resources hypothesis* (Lin et al. 1981a,b; Lin and Dumin 1986; Lin 1990, 1999) for voluntary association involvement and elaborate on the importance of the composition of the voluntary association. Empirically, we made progress by testing the hypotheses with data on the complete job history and voluntary association involvement over the life course. Although we did not have all spells for the voluntary participation career, we were better able than in previous research to test for effects of involvement at the time of the job change on subsequent socioeconomic outcomes while controlling for previous socioeconomic characteristics. The major advantage is that our results were much less affected by the endogeneity problem. To test whether there remained additional selection bias, we performed additional analyses in which we controlled for personality traits (Big-5), which Gelissen and De Graaf (2006) show to be important for occupational career success. We, however, found no significant effects and the effects of voluntary association involvement remained virtually the same.

The data unambiguously showed that voluntary association involvement is beneficial. Such involvement makes it not only more likely to get a new job, but also more likely to get a better job, i.e., both in terms of more status and higher earnings. Another important finding relates to the composition of the voluntary association. If someone joins an association with more high status co-members, this increases the likelihood of finding a new job with a higher status. Most literature on the impact of social resources focuses on job search behavior (e.g., De Graaf and Flap 1988; Flap and Boxman 2001; Franzen and Hangartner 2006; Granovetter 1995). However, such research is plagued by selection effects. For example, in some sectors it might be more common to search for a new job through informal channels, like for instance in the construction business. If in such sectors the majority earns relatively little, informal job search methods seem to generate negative outcomes, i.e., lower earnings. The advantage of our approach is that we focused on the social network generated by voluntary association involvement, which is generally not directly related to one's job. This could explain why we did find positive effects on earnings and scholars who focus on searching behavior do not. However, we should realize that making contacts that are potentially beneficial to one's career is one of the reasons to start volunteering. This, however, applies to a minority (Hodgkinson and Weitzman 1996).

Our hypotheses on the impact of voluntary association involvement on socioeconomic outcomes are based on the weak ties argument and the *social resources hypothesis*. Although we think these arguments provide the best plausible explanation, empirically we could not

exclude the interpretation that the effects may be caused by people learning important job-related skills within voluntary associations. However, the fact that we did not find additional payoffs of volunteering (just being a member seems to suffice to reap the socioeconomic benefits of voluntary association involvement) seems more in line with the social network argument than with the skills argument. Since it is unlikely that mere members acquire the same skills as volunteers we would have expected additional payoffs for volunteers if these skills are crucial. The socioeconomic effects of weak ties with co-members in voluntary associations can be better separated from the effects of job-related skills obtained by voluntary participation if future data were collected on (1) job-related information provided by co-members, and (2) actual tasks performed within voluntary associations. Another improvement would be to gather information on all spells of voluntary association involvement. This would also free us from the necessity to include the nuisance dummy variables for the cases for which voluntary association involvement was not completely sure. Yet another suggestion for improvement would be to collect individual-level data on the composition of voluntary associations from which respondents are a member. Our analyses now rested on the assumption that all associations that fall within a specific category are alike. Because this obviously is not the case (think for instance of different sports clubs) distinguishing this within-group heterogeneity would probably yield even stronger effects. Van der Meulen (2007) shows that respondents are able to provide estimates for the ethnic and socioeconomic composition of their sports clubs and we believe that his approach can also be used for collecting information on the composition of other types of voluntary associations.

Although we are aware of the restrictions of our data, we think the data used here offer the best possible test for socioeconomic payoffs of voluntary association involvement so far. We could show that the effect of the voluntary association involvement is the same for low-status and high-status people and we showed that the *position similarity hypothesis* does not hold. It remains unclear though why the *position similarity hypothesis* was not corroborated. It might be that authority of the social contacts is more important than their access to relevant job-related information, or the assumption about whom has best access to relevant job-related information is wrong. Our most general finding, however, was that voluntary association involvement is beneficial, since it results in substantially better paid and higher-status jobs. Apparently, voluntary association involvement pays off.

Part III

Conclusions and discussion

Chapter 6

What have we learned and how to proceed?

In this study, we set out to examine two things: (1) individual-level and contextual-level causes of voluntary association involvement, and (2) its socioeconomic consequences for individuals who are involved. In Chapters 2 to 4, we studied the first topic. Although all three chapters had their own specific research questions, stressed different aspects of voluntary association involvement, and employed different statistical methods to different data sets, together they aimed at providing an answer to our first general research question, which reads:

(1) To what extent is voluntary association involvement affected by the interplay between (a) individual-level characteristics, (b) the context in which people currently live, and (c) the context cohorts of people experienced when growing up?

Subsequently, in Chapter 5, we presented our research on socioeconomic consequences of voluntary association involvement in the Netherlands with which we tried to provide an answer to our second general research question, which reads:

(2) To what extent does voluntary association involvement generate socioeconomic payoffs, and how do these payoffs differ with the composition of these associations?

In this concluding chapter, we return to these two original research questions and answer them based on the research presented in the previous chapters. For this purpose, we first summarize the main findings per chapter. Subsequently, we link some of the results from separate chapters to one another in order to show how the combination of these findings

provide new insights in the link between voluntary association involvement and inequality. Then, we reflect on some puzzling findings from this study and we try to come up with possible explanations for them. After that, we turn to a highly debated topic that we only occasionally touched upon in this study, namely trends in voluntary association involvement. We wrap it all up with a theoretical reconsideration and suggestions for future research.

6.1 Summing it all up

6.1.1 Causes of voluntary association involvement

In Chapter 2, we described our cross-national study on the impact of individual religiosity, the national religious context, and their interplay on volunteering. We derived new hypotheses by combining social network explanations for voluntary association involvement with hypotheses from the sociology of religion. We argued that recruitment networks are crucial for understanding which people become volunteers. Since recruiters of voluntary associations generally tend to turn to people from their own social network first, their network members have a higher chance of being asked to participate. This is one of the reasons why religious people are more likely to volunteer, because other religious people who are already involved might ask them to become involved too. Within close-knit religious communities it is hard to refuse such requests. Furthermore, because all the world's major religions promote solidarity and altruistic norms, religious people might also be intrinsically more motivated to become involved (in Section 6.5.1, we discuss in more detail how the network theory and the norm theory are related). We extended these explanations for involvement of religious people to hypothesize differences in volunteer rates between relatively devout and rather secular countries. Because people who live in a devout country have a higher chance to be part of a social network that consists of many religious people (e.g., potential friends, teachers, colleagues, and marriage partners are predominantly devout), we expected them to have a higher chance to volunteer than those who live in relatively secular countries. We indeed found support for our hypotheses in our analyses of European/World Values Survey data for over 100,000 individuals from 53 countries. The analysis showed that religious people are more likely to volunteer, and, on top of that, people had a higher chance to volunteer in more religious countries, irrespective of their own religiosity. Furthermore, the national religious context strongly influences the way individual religiosity affects volunteering. In devout societies, individual church attendance is hardly relevant for explaining volunteering, whereas in more secular societies, church attendance strongly predicts volunteering. In the latter, avid churchgoers appear to be much more likely to volunteer than people who rarely visit church. This also is in line with network recruitment arguments, since people who do not visit church often but who live in a devout society are more likely to be asked to participate. In secular societies, we reasoned, especially frequent churchgoers try to sustain

voluntary associations and those who do not attend religious services will have a relatively small chance to be asked to participate.

Next to the impact of the national religious context, the results showed that national voluntary association involvement levels are also affected by level of democracy and economic development, with the former negatively affecting volunteering levels (we come back to this puzzling finding in Section 6.3.2) and the latter only boosting membership levels. This latter finding is in accordance with Putnam's (2000) claim that "checkbook memberships" might have risen in Western societies. Many people living in affluent societies are just nominal members of voluntary associations without actively volunteering. That is, they pay their annual membership fees, but do not devote time doing any actual work for the organization. The rise of all kinds of professionalized voluntary associations (e.g., environmental organizations like Greenpeace) has also contributed to this phenomenon. Furthermore, we did not find support for the so-called crowding out hypothesis, which states that collective welfare state arrangements would cause less involvement due to the fact that the state would provide substitutes for individual efforts to provide collective goods.

Another important hypothesis that was tested in Chapter 2 is the so-called spillover hypothesis. In general, it states that participation in one type of organization causes people to become involved in other types of organizations too. This hypothesis is based on the simple idea that people who have become active in one organization are likely to get acquainted with people from other organizations, which would make their chance of recruitment into those other organizations higher. Furthermore, they would also acquire specific skills that are useful to these other organizations, which would further enhance their recruitment chances, because recruiters tend to aim for new participants who are thought to be most beneficial to the organization (Brady et al. 1999). Usually, scholars apply this hypothesis to the link between involvement in some religious organization and involvement in secular organizations, and so did we. Indeed, we found evidence for such a link. Participation in religious organizations does seem to spillover to involvement in secular organizations. That is to say, people who were engaged in religious organizations also appeared to have a higher chance to be involved in secular organizations. This spillover effect appeared to be strongest for Roman Catholics. The fact that the spillover effect was smaller for Protestants is in line with the idea that some conservative Protestant denominations discourage their adherents to volunteer for secular organizations (Wilson and Janoski 1995).

Aside from all aforementioned effects, the analyses in Chapter 2 showed that the chance to be involved in voluntary associations increases with education. Furthermore, married people appeared to be more engaged than those cohabiting, divorced, or widowed. Finally, we also found the oft-mentioned (Boraas 2003; Curtis et al. 1992; Knoke and Thomson 1977) curvilinear relationship between age and voluntary association involvement. It reflected that middle-aged people are most likely to be engaged.

Chapter 3 focused on important and by many scholars either implicitly or even explicitly suggested, but never empirically tested, generational explanations for voluntary association involvement. One of these generational explanations (i.e., the one on the impact of the religious context experienced during socialization) is in direct competition to the social network explanation based on recruitment as was studied in Chapter 2. We claimed that generational explanations are generally merely an extension of explanations based on contemporaneous contextual differences (as those studied in Chapter 2), simply because they also suggest an impact of contextual characteristics, namely of the context people had experienced when they were growing up (especially during socialization). Five generational hypotheses with respect to the impact of the following topics on voluntary association involvement were derived from the literature: (1) exposure to religious culture during socialization, (2) television exposure when growing up, (3) wartime experience, (4) exposure to Communist rule, and (5) the importance of the educational level of one's peers.

The first hypothesis builds on the arguments for an impact of the contemporaneous religious context as described in Chapter 2. We extended those arguments hypothesizing a positive effect of the religious context experienced during socialization by claiming that such exposure to religion would probably instill altruistic norms as well as it might foster the development of network ties, which would make future recruitment more likely. The second hypothesis was derived from the work of Putnam (1995a; 1995b; 2000) who claims that the rise of television is the major culprit for waning voluntary association involvement in the United States. Younger generations who grew up with television would watch it “*differently* – more habitually, even mindlessly” (Putnam 2000: 272). According to Putnam, this would cause them to be disengaged. Although Putnam's earlier work (1995a; 1995b) on explanations for civic decline in the United States mainly rests on this television exposure hypothesis, he later adds wartime experience as a second generational explanation (Putnam 2000). He argued that those generations who have had wartime experience are more involved because their experience of such an external conflict would have resulted in greater civic-mindedness and internal cohesion. In Chapter 3, we also put this hypothesis to the test. Because Communist regimes repressed all forms of autonomous non-state activity and forced their citizens to participate in state-controlled organizations, it has been claimed that this resulted in suspicion and distrust among these citizens (Howard 2002; Juknevičius and Savicka 2003). We argued that the younger generations, who have been exposed to Communist rule for a shorter period of time, are less influenced by living under such rule than the older generations who basically lived under Communist rule for (almost) their entire lives. Finally, our fifth generational hypothesis builds on the idea that recruiters generally tend to recruit among the best equipped members within their own social network. We argued that this should lead to a higher chance to be involved for those who belong to relatively highly educated cohorts.

We tested these five generational hypotheses on a large-scale concatenated data set con-

sisting of over 200,000 individual respondents from 56 countries. Results supported the first hypothesis. In fact, we only found a positive effect for exposure to religion during socialization and, unlike Chapter 2, not for the contemporaneous religious context (we come back to this puzzling finding in Section 6.3.1). Furthermore, Putnam's first generational hypothesis was also supported; those who were more exposed to television during their formative years were less likely to be involved. However, his second explanation was refuted. The models showed that people who have had severe wartime experience are actually less likely to volunteer. We discussed several possible explanations for this inverse link between wartime experience and volunteering. We argued that it might be caused by the disruptive nature of wars; it disrupts community structures as well as it might engender generalized distrust. Furthermore, De Graaf (1988) shows that wartime experience causes people to become more materialistic, which is also inversely related to the likelihood to volunteer (Bekkers and De Graaf 2002). The fourth hypothesis was strongly supported though. Indeed, the longer people had been exposed to Communist rule, the less likely they were to be involved. Finally, the results were not in line with the fifth generational hypothesis. It appeared that people from higher educated cohorts were in fact less likely to volunteer. Nevertheless, we also showed that educational expansion results in more volunteering (we discuss this puzzling finding in Section 6.3.3).

Although Chapter 3 really focused on generational explanations, testing the cohort-level hypotheses was not possible without including individual-level as well as contemporaneous contextual-level characteristics into our models. The findings with respect to these individual-level characteristics are largely consistent with those in Chapter 2, although the models in Chapter 3 also contained controls for occupational status. We briefly summarize the individual-level findings. Religious people are more likely to be involved; especially those who regularly attend religious services. Women are less likely to be involved. The same is true for manual laborers, retired people, students and those in the military force, and those without a job, as compared to managers, professionals, and white collar workers. Again, we find a highest involvement levels among married people, a positive effect for education, and a curvilinear relationship between involvement and age. With respect to the contemporaneous contextual-level characteristics, the main conclusion is that we found little evidence for such effects after controlling for individual-level and cohort-level characteristics. Nevertheless, results again showed evidence for a positive effect of national economic development and a negative effect for level of democracy, although the latter was only significant for memberships. So, people who live in less democratic societies are apparently somewhat more likely to join voluntary associations. This does not raise their chance to volunteer though. In Chapter 2, we only found a positive effect for economic development on memberships, which we claimed to be in line with Putnam's "checkbook memberships" argument. In Chapter 3 though, the effect for economic development was also significantly positive for volunteering, albeit smaller than the one for memberships. So, it seems that there still is some support for

Putnam's idea, although volunteering levels are also somewhat higher in more prosperous societies. All other contemporaneous contextual-level controls (i.e., television penetration, income inequality, average educational level, and average church attendance) turned out to be unrelated to voluntary association involvement.

In the foregoing discussion of the results, we tried to provide an answer to our first main research question by focusing on whether we had found significant effects for individual-level and/or contextual-level characteristics on voluntary association involvement. Another approach would be to look at the variance components of the different levels of analysis. This tells us to what extent individual-level voluntary association involvement varies at those levels, which informs us about the importance of those levels for understanding why some people are involved whereas others are not. Because the most extensive models were presented in Chapter 3 (we distinguished four levels of analysis), we now look at the variance components for those models (as presented in Table 3.3 and Table 3.4) to scrutinize the relative importance of each level. For this purpose, we only reflect on the variances for Model 1, which is the empty model that contains only a random intercept plus controls for survey effects⁶⁸. Two things should be kept in mind. First, because we studied whether people were involved with dichotomous dependent variables, we performed multilevel logistic regression analyses. This implies that the level-1 variance is fixed to $\pi^2/3 = 3.290$ (Snijders and Bosker 1999). All higher-level variances were estimated and it is those estimates that are displayed in the tables in Chapter 3. Second, because we estimated hierarchically nested models (i.e., individuals *nested within* cohorts *nested within* surveys *nested within* countries), the estimated variances each have a specific interpretation. The country-level variance reflects the degree in which the estimated intercept varies across countries. The survey-level variance indicates to what extent this intercept varies *within* countries. That is, it can be interpreted as an indicator for the average range in which the intercept for each country varies over the surveys. Finally, the cohort-level variance is an overall measure for the degree in which *within* a designated survey *within* a specific country the intercept varies over the cohorts. This implies that the cohort-level variance *does not* show us to what extent voluntary association involvement varies over different birth cohorts across *all* countries⁶⁹.

So, what do the estimated variance components tell us about the relative importance of each level? First, all higher levels combined only account for about 29% of the total variance for voluntary memberships and about 21% for volunteering⁷⁰. Furthermore, the

⁶⁸Of course, controlling for survey dummies decreases the survey-level variance. However, both true trends and survey design effects are confounded when these controls are left out. Including the survey dummies at least reduces the artificial survey design effects.

⁶⁹If we would have been interested in such an estimate, we would have had to estimate cross-classified models. However, we chose to estimate our hierarchically nested models, because our generational hypotheses apply to the *specific* context (i.e., within a specific country) experienced while growing up.

⁷⁰These percentages are calculated by summing all higher level variances and dividing that by the total variance. So, $(1.034 + .212 + .076)/(1.034 + .212 + .076 + 3.290) = .287$ for memberships, and $(.593 + .222 +$

relative importance of each separate level becomes clear when we look at the individual contribution of each level to the total variance. The country-level scores highest (about 22% for memberships and about 14% for volunteering), followed by survey-level (about 5% for both memberships and volunteering), followed by cohort-level (about 2% for memberships and about 1% for volunteering). This means that, although we found quite strong period and cohort effects, they can only account for a small part of the explanation for why some people are involved and others are not. Clearly, individual-level characteristics have much more explanatory potential. Nevertheless, we claim that both period and cohort effects should not be ignored, because they are often strong forces driving societal change.

In Chapter 4, in which we were able to more rigidly test the network explanation against the norm explanation, we focused again on the relation between religion and voluntary association involvement. However, we used a completely different approach than in previous chapters, because the availability of more detailed retrospective data (from the Family Survey of the Dutch Population 2000) on voluntary association involvement histories of Dutch respondents allowed us to study the link between religion and the dynamics of involvement (i.e., joining and leaving associations). We claimed that such a study was necessary because cross-sectional studies might be able to provide insight in the association between certain individual-level and contextual-level characteristics and voluntary association involvement (as was shown in Chapters 2 and 3), they do not shed light on the intrinsically dynamic nature of voluntary engagement. Chapter 4 aimed to provide an answer to the question whether individual-level, contemporaneous contextual-level, and/or cohort-level religiosity affect the likelihood that people join voluntary associations, become a volunteer, and/or end their engagement. The life course data on voluntary association involvement allowed us to follow individual respondents over the years. This way, we could make stronger claims with respect to the causal order, which was especially important for the test of the spillover hypothesis, which had already withstood a much weaker test in Chapter 2. Furthermore, because we also knew the residential mobility history of respondents, we could determine for each year whether they lived in a relatively devout or more secular community. This created the opportunity for a stronger test of the impact of the religious context during socialization (capturing exposure to religious norms) against the impact of the contemporaneous religious context (capturing network recruitment chances).

Employing discrete time logit models, we found that individual church membership positively affects the chance to join a voluntary association (higher for the Dutch Reformed compared to non-religious people), and to start volunteering (higher for the Roman Catholics compared to non-religious members). It did not affect whether members/volunteers ended their involvement. Furthermore, we found clear evidence for a positive influence of the contemporaneous religious context on the likelihood to join voluntary associations, but not

$.056)/(.593 + .222 + .056 + 3.290) = .209$ for volunteering.

on the chance to start volunteering nor the chance to quit volunteering or leave the voluntary association. Nevertheless, because the likelihood to start volunteering was only estimated for those who had become a member (i.e., estimated on a selective sample), people living in more religious settings are also more likely to start volunteering due to the positive effect of the religious context on joining voluntary associations. We found no indication for a lasting effect of the religious context in which people were socialized. We argued that these results are in line with network recruitment arguments. In Section 6.3.1, we try to explain why the analyses presented in the different chapters result in such different findings with respect to the impact of the contemporaneous religious context versus the impact of the religious context experienced during socialization. Finally, we found strong support for the spillover hypothesis. The results showed that those who are a member of a religious association are more likely to join secular organizations, and this spillover effect does not work both ways. That is to say, those who became involved in religious organizations are more likely to also become involved in secular organizations, but those who became involved in secular organizations are *not* more likely to become involved in religious organizations. So, it seems that much voluntary association involvement indeed starts with religious involvement, which again underlines how strongly voluntary association involvement and religion are related. To sum up, the results suggested that religious people (or people who live in a relatively religious setting) appear to score high on measures of voluntary association involvement in cross-sectional research because they are generally more likely to join voluntary associations; among members, they are not more likely to start volunteering, nor are they less likely to end their involvement.

6.1.2 Socioeconomic consequences of voluntary association involvement

In Chapter 5, we switched from studying multilevel causes of voluntary association involvement to the study of its socioeconomic consequences in order to answer our second main research question. We argued that social network explanations are not only fruitful for explaining involvement as such (as was shown in Chapters 2 to 4); they also provide answers to questions about the socioeconomic payoffs of such involvement. We built on the work of Granovetter (1973; 1983; 1995) and Lin et al. (1981a; 1981b; 1986; 1990; 1999) by deriving our hypotheses about these payoffs from the idea that by joining voluntary associations people's social networks are extended, which would provide them with access to others who might be able to help them getting better jobs. These social contacts could provide access to relevant job-related information as well as use their authority to convince future employers. Although all our hypotheses were based on this social network explanation, voluntary association involvement might also provide people with certain job-related skills

which could improve their chances on the labor market too. However, the results from Chapter 5 (which we discuss below) fit the social network explanation better than the explanation based on job-related skills. Again, we analyzed data from the Family Survey of the Dutch Population 2000. Since people's voluntary association involvement histories as well as their working histories were recorded, we could determine whether involvement indeed leads to better labor market outcomes. That is, the data allowed us to investigate whether someone's voluntary association involvement (or lack thereof) at a specific moment in time affects the socioeconomic position at a later point in time even when we control for the socioeconomic position that the person had held at the previous point in time. With such a dynamic approach we were able to overcome the endogeneity problem (selection effects and reverse causality) from which many studies in this field suffer.

Our results showed that people who already had volunteered when they first entered the labor market got higher status jobs than those who had not volunteered. For these first jobs, mere memberships appeared not to affect status, only volunteering was beneficial. However, we found that every additional membership increases current earnings with about 5 percent; quite a substantial effect of voluntary association involvement on an important indicator of labor market success. There is no evidence for an additional payoff of volunteering. Furthermore, members were more likely to start a new job, and if they did, the job was generally of higher status than those of non-members.

After having determined that voluntary association involvement in general pays off in the labor market, we tested whether these payoffs vary by type of association. Again, our hypotheses were based on social network theory. Because some associations contain relatively a lot of high-status members who are expected to be better able to provide relevant job-related information as well as help convince future employers than low-status members, we expected that involvement in those associations should be especially beneficial to one's career; more so than involvement in associations with a lot of low-status co-members. The results supported this hypothesis for job start and job status. So, people who had joined relatively high-status associations were more likely to start a new job, and if they did, they generally gained more status than those who had become a member of a lower-status organization. In fact, an additional analysis showed that the average socioeconomic status of voluntary associations predicts the different payoffs of different types of associations really well.

Although we found little support for the general hypothesis that volunteers would benefit more from their involvement than nominal members, we believe that this not necessarily refutes the network theory. Suppose that the network theory indeed applies here, the finding only implies that mere members do not differ from volunteers in the way they benefit from their social network. It seems that these nominal members are somehow also able to reap the benefits of their involvement. This suggests that membership suffices to get into contact with people that could help further the occupational career. However, this finding does seem difficult to wed with the other explanation for payoffs of voluntary association

involvement, namely the explanation based on the idea that people who are involved in voluntary associations acquire job-related skills which would be beneficial to the professional career. Clearly, we cannot expect mere members to acquire such skills to the same extent as volunteers, simply because these resources are likely to be acquired “on the job”. So, if skills were important, volunteers should definitely have more payoffs than mere members, which was not the case. This has, of course, the perverse consequence that people might decide to only join voluntary associations to reap the benefits without putting in some effort by doing volunteer work. This would definitely cause great damage to voluntary associations. However, Hodgkinson and Weitzman (1996) show that making contacts that are potentially beneficial to one’s career is only one of the possible reasons for volunteering, and only a minority of the volunteers mention this reason. Apparently, people have many other reasons why they would still decide to volunteer.

All in all, we conclude that voluntary association involvement definitely pays off in the labor market. Joining associations seems most beneficial, especially if they consist of relatively a lot of high-status co-members.

6.2 Voluntary association involvement and inequality

When we combine the results from Chapter 2 to 4 with those from Chapter 5, a picture emerges of voluntary associations as vehicles of inequality reproduction. Clearly, higher social status individuals (those who obtained higher educational levels and/or those with relatively high status jobs) profit most. First, they are more likely to become involved in voluntary associations. Second, those who have joined these associations profit from it in terms of socioeconomic status and earnings. This way, voluntary associations reproduce or even contribute to social inequality to some extent. Rotolo and Wilson argue against such effects when they claim that “Undoubtedly, many managers and professionals reap the benefits of these memberships in the form of human and social capital they can use to build their careers. But it is unlikely that voluntary association memberships cause careers. The evidence suggests, rather, that careers cause memberships” (2003: 604). For the Netherlands, however, we showed with life course data that the relationship works both ways: “careers cause memberships”, but memberships also “cause careers”.

We believe that the aforementioned link between voluntary association involvement and inequality even contributes to the less favorable socioeconomic position of women. In Chapters 2 and 3, we showed that women are generally less likely to be involved in voluntary associations. Chapter 4 showed for the Netherlands that women have a lower chance to join voluntary associations, and once they have become a member, they are more likely to end their engagement than men. These results imply that women are also less likely to reap the socioeconomic benefits of such involvement as described in Chapter 5.

6.3 Explanations for puzzling findings

In the following section, we discuss some puzzling findings from this study and we provide several possible explanations for these findings. We stress, however, that some of the explanations we present lack empirical foundation. These explanations should of course not be considered final, and we hope that our discussion contributes to future research into these puzzling findings.

6.3.1 The impact of the contemporaneous versus past religious context

The results with respect to the impact of the religious context are mixed. Based on network arguments, we hypothesized that people would be more likely to be involved in more religious settings, since the chance to be recruited by fellow citizens would be higher and religious norms that prevail in such contexts would also promote engagement. In this study, we first examined the impact of the contemporaneous national religious context on whether people are involved in voluntary associations (Chapter 2). Results showed that people living in more religious societies are, irrespective of their own religiosity, indeed more likely to volunteer. Furthermore, the difference in involvement between frequent churchgoers and those who do not attend church often is less pronounced in relatively religious societies compared to more secular societies. As we have argued, these results seem in line with network recruitment explanations. In Chapter 3, we extended the analysis by including the religious context experienced during socialization. It appeared that people who grew up in more religious settings are more likely to be involved. However, we did not find an additional positive effect of the contemporaneous national religious context. So, the positive effect we found in Chapter 2 turned out to be non-significant in Chapter 3. Because the religious context experienced during socialization does not necessarily reflect the contemporaneous religious context (although the two were highly correlated in the data that were analyzed in Chapter 3), the latter finding suggests that growing up in a religious setting seems to influence whether people become involved later in life and the contemporaneous religious context does not. This puts the findings of Chapter 2 in another perspective. It seems as if exposure to a religious culture during one's formative years would result in involvement later in life. People who were raised in such contexts would internalize altruistic norms that promote voluntary association involvement; more so than people who were raised in more secular societies. Furthermore, those raised in religious contexts might also have developed stronger network ties, which would make later-life recruitment more likely. However, the latter network recruitment explanation only seems to hold when people did not move out of the community, since if they did, it is likely that the network ties were ruptured.

So, how should we evaluate these mixed results? The findings from Chapter 2 do seem to fit, whereas the findings from Chapter 3 are more difficult to wed with the network re-

cruitment explanation. Does this mean that the altruistic norm explanation is to be favored over the network recruitment explanation? Not necessarily so. In Chapter 4, we argued that the findings from Chapter 3 are inconclusive because the cross-national data only inform us about whether respondents were involved in voluntary associations at the time of the survey without providing information on when this involvement had started, or whether people had been involved in the past. In fact, we believe that it is crucial to know these dynamics of voluntary association involvement for a correct evaluation of the explanations, because the network recruitment explanation seems to apply especially to the likelihood to *become* involved; more so than to the likelihood to *be* involved. In Chapter 4, we were better able to disentangle the impact of the contemporaneous religious context from that of the religious context experienced during socialization on the dynamics of involvement, because the Family Survey of the Dutch Population 2000 (De Graaf et al. 2000) provided us with the information on the voluntary association involvement history of respondents. The results showed that the Dutch are more likely to become a member of a voluntary association when they live in a more religious municipality; the religious context experienced during adolescence had no additional effect. We believe that this finding is more in line with the network recruitment explanation than with the altruistic norm explanation, because those who grew up in a relatively religious setting, and are therefore expected to have more religious norms, are not more likely to become involved; it is only those who *currently*⁷¹ live in a more religious setting that are more likely to join a voluntary association. But if this were true, that shifts back the problem to the question of how to interpret the results from Chapter 3. We believe that we found a significant effect only for the religious context experienced during adolescence, because that probably captured the religious context in which people lived at the time they *became* involved (or not) better than the contemporaneous religious context did. Of course, the results from Chapter 4 only apply to the Netherlands, whereas the results from Chapters 2 and 3 are based on cross-national analyses. Nevertheless, in additional analyses we checked whether the results from Chapter 3 were radically different for the Netherlands, which they were not⁷². That is not to say that the results from Chapter 4 also apply to other countries. However, it shows that the results from Chapters 3 and 4 can apply to a single country (in this case, the Netherlands), which suggests that they never were contradictory findings after all. We would be able to provide a stronger test if cross-national data were collected on the dynamics of voluntary association involvement.

⁷¹Because the results are based on event history models in which respondents are followed throughout the entire period in which they are at risk for experiencing a joining (or leaving) event, the contemporaneous religious context can refer to any specific year during this risk period.

⁷²We included a dummy variable for the Netherlands plus an interaction between this dummy variable and both religious context variables in the models presented in Tables 3.5 and 3.6.

6.3.2 Democracy and voluntary association involvement

In most studies democracy is thought to promote voluntary association involvement, and vice versa. This seems to make sense because in democracies people have freedom of speech, the legal right to assemble and found new associations, whereas these rights are often highly restricted in less democratic regimes. Reversely, voluntary association involvement would instigate trust among citizens, which in turn would facilitate the cooperation necessary for sustaining a thriving democracy. Such a positive link between democracy and voluntary association involvement was already suggested by De Tocqueville (2000 [1835-1840]) in the mid-1800s and much of the research since has heavily rested upon the assumed relationship. However, in Chapters 2 and 3, we found the opposite for volunteering. Our findings suggest that people who live in less democratic societies are more likely to volunteer. We believe that previous cross-national studies (e.g., Halman 2003; Parboteeah et al. 2004) did not find this result because they examined a smaller sample of countries (in which level of democracy varies to a far lesser extent) or because they failed to take important compositional differences into account. We found support for this explanation in an additional analysis in which we restricted our sample to match the smaller samples of Halman (2003) and Parboteeah et al. (2004). Indeed, the results turned out to be quite different. In fact, the sign of the effect of level of democracy reversed, although it did not reach significance. We concluded that other modeling differences (e.g., their lack of controls for important compositional differences) were probably the reason for why the effect did not reach significance in our analysis whereas it did in theirs. However, that leaves us with our own puzzling finding. Two possible explanations come to mind. First, it is likely that the less democratic societies included in our data sets have less extensive welfare states. As a consequence, citizens of those countries might have to provide certain public goods themselves and this could be arranged by participating in voluntary associations. Nevertheless, as we argued in Chapter 2, this explanation builds on the crowding-out hypothesis, which we were unable to corroborate. Furthermore, we could not fully test this explanation due to the lack of contextual-level data on welfare state expenditure for less democratic societies. This seems to leave us with our second possible explanation for our puzzling finding. Maybe, in some less democratic societies voluntary association involvement is not so “voluntarily” after all. If citizens of those countries are to some extent forced to participate in associations, participation levels might turn out relatively high. Although this would call into question the use of such general survey questions as the ones we analyzed, the lack of other, more detailed information on voluntary association involvement (e.g., the number of hours volunteered), left us no other option than to control for level of democracy in order to estimate the effects of interest to us (e.g., the impact of the religious context) more carefully. Nevertheless, because the positive association between democracy and voluntary association involvement clearly is a core hypothesis in this field of research, it seems really important to more fully understand

why our results differ so much from the results presented in previous studies. For this purpose, we believe that future cross-national survey data collections should more carefully try to measure the degree in which people are involved in voluntary associations. One way to do this is by collecting information on the number of hours people do volunteer work. Furthermore, it might be worthwhile to collect cross-national survey data on whether people get asked to participate, and by whom. This would allow for a study on whether people who live in less democratic societies get recruited in a different way than those living in democratic societies.

6.3.3 Educational expansion and volunteering

Education is generally thought to promote voluntary association involvement. In fact, Wilson argues that level of education is “the most consistent predictor of volunteering” (2000: 219). Effects of education on volunteering are often interpreted from a human capital perspective. That is, a higher level of education would provide people with the necessary knowledge and skills that would enable them to participate. If this would be true, it seems reasonable to expect that volunteering levels would rise with ongoing educational expansion, since a growing body of people would get access to the right knowledge and skills. Of course, this is a *ceteris paribus* argument, and it is clear that, along with educational expansion, other things have changed (e.g., many Western societies became more secular), which might have had opposite effects. However, the question remains why, then, did our analysis in Chapter 3 show that higher educated cohorts were less likely to volunteer. Maybe, this result only seems puzzling from a human capital perspective, whereas from another perspective it makes sense. We believe it does. In order to better understand our puzzling finding, it is crucial to keep in mind that we simultaneously controlled for individual-level education, which itself had a strong positive effect on the likelihood to volunteer. Controlling for individual-level education implies that rising cohort-level education in fact means a relative decline for the individual. Therefore, we believe that our finding shows that educational level mainly functions as a sorting mechanism with respect to volunteering. The individual outcome of such a sorting mechanism depends, of course, on the average educational level (of the cohort, in our case). This interpretation seems to fit the network theory, which explains differences in voluntary association involvement based on recruitment chances. Individuals who are relatively low educated (i.e., those from relatively high educated cohorts) are less attractive for recruiters who are actively “prospecting for participants” (Brady et al. 1999) with best skills. This suggests that education is mainly a positional good (Hirsch 1976) with respect to volunteering.

Although we found a negative effect for the average educational level of the cohort on the likelihood to volunteer, we showed in an additional analysis (as presented in Appendix A) that educational expansion does lead to somewhat higher volunteering levels. This clearly is driven by a compositional effect based on the positive effect of individual-level education,

which evidently is not fully counterbalanced by the negative effect of cohort-level education. In other words, because educational expansion simply means that more people acquire higher levels of education, and higher educated people are generally more likely to volunteer, educational expansion leads to rising levels of volunteering.

6.4 Trends in voluntary association involvement

Until now, we have paid little attention to trends in voluntary association involvement. Even in Chapter 3, where we studied generational explanations some of which were originally developed to explain declining involvement levels, we forwent discussions about whether involvement levels have indeed dropped. In fact, we argued that these general explanations do not depend on the claim that there has been an overall decline. Empirically, we were also unable to try to settle this debate because the data we used in this study do not allow for a thorough study of trends. Although we analyzed survey data from different years in Chapters 2 and 3, the survey questionnaires for the different years were too dissimilar to rule out survey effects suggesting trends that in fact were not there. The study of such trends really requires comparable data for long periods of time. These kinds of data might be available for some countries, but we could not use them for our cross-national comparative purposes. Nevertheless, in Chapter 2, we speculated that ongoing secularization might lead to declining levels of volunteering, since religion appears to be strongly related to participation. However, while religiosity might have declined in many Western societies, other things that contribute to voluntary association involvement have been on the rise. For example, we just discussed (in Section 6.3.3) that educational expansion could lead to rising levels of volunteering. This might to some extent offset a decline in involvement caused by secularization. In Chapter 3, we also argued that postcommunist societies will probably develop a more vibrant civil society as people who have been exposed to Communist rule for a shorter period of time are more likely to be engaged and they will gradually replace the people who have lived under Communist rule for (almost) their entire lives. However, it remains hard, if not impossible, to predict how voluntary association involvement will develop in so many different countries, since some developments will stimulate while others hinder participation and it is difficult to tell what the result will be of all those processes. Nevertheless, we do want to spend some time here to see what this study can teach us with respect to trends in the Netherlands.

The life course data we analyzed in Chapter 4 allow us to study trends in the likelihood that people become engaged or end their engagement. However, before we move on to discuss the results of these trend analyses, we have to stress two things. First, the trend figures are based on retrospective data and the analyses might therefore suffer from recall effects. That is to say, respondents were probably less able to correctly recollect their voluntary association involvement in the distant past. We believe that this might especially be a problem for our

trend estimates for the expected probability to join voluntary associations (as presented in Figure 6.1a), but since all other trend estimates (as presented in Figures 6.1b to 6.1d) apply to voluntary association involvement that people did recall (remember that respondents could only answer questions about starting volunteer work or ending their involvement when they already had answered that they had joined some voluntary association), the recall effect should be less of a problem. Second, the analyses are based on what respondents reported in the year 2000. So, all figures prior to the year 2000 are not based on random samples for those years. Yet, we believe we can estimate expected probabilities for years before 2000 because the control variables (especially age) in the original analyses presented in Tables 4.3 and 4.4 should provide some correction for the selectivity of the sample⁷³.

In Figure 6.1, we present estimated trends in the expected probability of (a) joining voluntary associations, (b) starting volunteer work, (c) leaving voluntary associations, and (d) quitting volunteer work for the Netherlands. These figures were calculated based on the models presented in Tables 4.3 and 4.4. We used the parameter estimates presented in those tables to calculate expected probabilities per year when all other covariates were fixed at the mean value for each year. By using these mean values for each year we bring compositional differences over the years back into the equation. In order to avoid bold conclusions about trends drawn from results that are based on too few cases, we also estimated 95% confidence intervals around the expected probabilities.

The results suggest that the expected probability to join a voluntary association in a specific year (as presented in Figure 6.1a) has risen over the past decades. Remember though that these results should be interpreted with the utmost care since recall issues will probably cause a downward bias for the expected probabilities in the distant past⁷⁴. With respect to the probability to start volunteering (once someone has become a member), we do not see a clear trend, although the figures in Figure 6.1b seem to suggest that the probability rose after World War II until the early 1970s after which it dropped again. However, given the wide confidence intervals, we conclude that this trend mainly reflects fluctuations due to sampling variability. The probability that people leave a voluntary association in a specific year (as presented in Figure 6.1c) has clearly dropped over the past decades. The same holds for the probability to quit volunteering (see Figure 6.1d). In sum, the trends suggest that involvement levels should have risen in the Netherlands, because in later years the Dutch became more likely to join voluntary associations and less likely to end their involvement. This is an important finding, because during the same period the Netherlands evolved from a relatively religious

⁷³Of course, the original analyses do not inform us about whether certain effects were different for cohorts that did not make it to the year 2000. However, we tested whether the effects presented in Tables 4.3 and 4.4 have changed over time by including interactions with year for all covariates. Although some of the estimated effects for these interactions turned out to be statistically significant, the estimated trends did not really change. Therefore, we decided to present the results based on the original models as presented in Chapter 4.

⁷⁴Note, though, that the expected probabilities were lowest in 1961, which implies that our data allow us to estimate higher figures for more distant years. So, we believe that recall effects should not be exaggerated.

society to one of the most secular societies in the world (Te Grotenhuis 1999). So, ongoing secularization does not necessarily lead to waning involvement levels. Apparently, the effect of secularization was offset by other processes that occurred in Dutch society. This result is in line with findings by Bekkers and De Graaf (2002) who show that voluntary association involvement in the Netherlands has not declined but merely shifted from traditional, pillarized organizations to secular organizations. Nevertheless, Knulst and Van Eijck (2002) note that the Dutch population of volunteers is aging. So, maybe voluntary association involvement has not declined yet; it might start declining in the near future when older birth cohorts who now remain active until old age are gradually replaced by younger, less engaged birth cohorts.

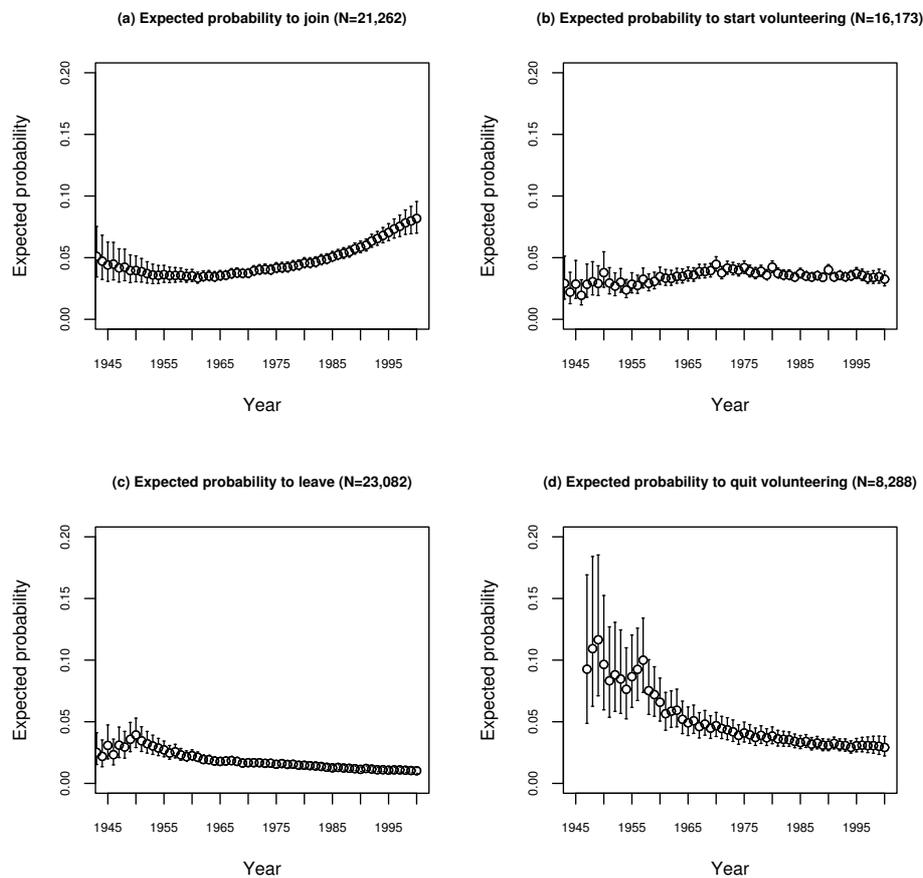


Figure 6.1: *Expected probabilities (a) to join, (b) to start volunteering, (c) to leave, and (d) to quit volunteering by year*

6.5 Future research

In this final section of our study, we discuss two things. First, we reflect on how the two general explanations for the link between religion and voluntary association involvement are related. Second, we provide suggestions for future research.

6.5.1 Theoretical reconsideration: networks or norms?

We devoted a large part of this study to investigate the link between religion and voluntary association involvement. We argued that there are two general explanations for this link: (1) the network recruitment explanation, and (2) the altruistic norm explanation. Although we claimed that previous research as well as our own showed that the former fits the data better than the latter, some might argue that the two explanations are in fact closely related, or even indistinguishable. The social network explanation argues that religious people are more involved because they are more likely to be recruited by fellow church members who are already involved. This seems to lead to a regression ad infinitum, unless some additional assumptions about, for instance, the prevalence of altruistic norms among religious people are made. For instance, if religious people have indeed more altruistic norms, and these would lead to a greater likelihood to recruit new members and/or a smaller chance to refuse such requests, the network explanation does seem to be able to explain why religious people are more involved than non-religious people. However, we claim that the network theory can even do without such additional assumptions about altruistic norms. Suppose that voluntary association involvement would have been dispersed randomly among religious and non-religious people in some distant past. The fact that religious people tend to be organized in religious congregations, whereas non-religious people are not a group at all would lead us to expect that recruitment among the former functions better, more successfully, than among the latter. This would, then, result in diverging pathways: religious people would become more likely to be involved and non-religious people less so. Although we, therefore, believe that network recruitment, in theory, suffices to explain why religious people are more involved than non-religious people, that is not to say we discard the altruistic norm explanation altogether. In fact, we believe that religious people might indeed be less likely to refuse requests to participate, although Bekkers (2004b) shows that being asked to volunteer cannot fully account for differences in volunteering levels between different religious groups and non-religious people. However, we are not sure whether, after taking the effect of requests into account, these differences remain because religious people have a stronger altruistic norm, or because they agree for reasons of social pressure.

6.5.2 Suggestions for new empirical tests and future data collections

In this study, we first analyzed large-scale cross-national data sets (in Chapters 2 and 3), which enabled us to examine the impact of several different national contextual-level characteristics (both at the cohort- and the period-level) on voluntary association involvement. Subsequently, we focused on the dynamics of involvement in the Netherlands employing event history models to life course data (see Chapter 4). We showed that the use of such life course data allowed for more rigid tests of our hypotheses, because we could determine whether specific characteristics affected joining or leaving events, or both. In fact, in general, these kinds of data allow for a more careful study of the causal order implied by hypotheses. That is, with such data it becomes possible to study whether specific characteristics that are hypothesized to affect whether people become involved (or end their involvement) actually precede joining (or leaving) events. We also benefited from this important feature of the data in Chapter 5, where we studied the socioeconomic benefits of voluntary association involvement. The data allowed us to rule out reverse causality and avoid selection effects. Furthermore, we believe that our test of social network effects on socioeconomic outcomes is strong, because the involvement data were collected completely independent of the data on occupational careers.

Unfortunately, the collection of these kinds of data is so rare that we could only analyze the dynamics of involvement and its socioeconomic benefits for the Netherlands. Were these data available for more countries, we could have tested some of the hypotheses from Chapters 2 and 3 more stringently. For example, we now studied in Chapter 3 whether exposure to television during adolescence was detrimental to involvement and whether growing up in a religious context had a reverse effect without actually knowing the effects of both characteristics on the chance to join or leave associations. Furthermore, we only knew the context cohorts of people experienced during adolescence, whereas our tests could have been much stronger when we also had access to information on individual-level circumstances over the life course. For example, our result of television exposure during adolescence suggests that all people from the same cohort were equally affected. Of course, this is an oversimplification, because some people were more exposed to television than others. In fact, such information on individual-level circumstances over the life course would even provide us with a possibility for a stronger test of the social network explanation versus the altruistic norm explanation for differences in involvement between religious and non-religious people (as we discussed in Section 6.5.1). Individual exposure to religion during one's formative years might have instilled such altruistic norms more strongly than such a collective experience as measured by average religiosity of a cohort, which was included in our models in Chapter 3. Therefore, a study which simultaneously includes (1) individual-level exposure to religion during adolescence, (2) the current individual-level religiosity, (3) the average religiosity of the cohort, and (4) the contemporaneous religious context would

provide a stronger test.

Finally, we hope to have shown that future cross-national data collections (e.g., the European Social Survey, the European Values Study, or the World Values Study) would benefit greatly from including retrospective questions on voluntary association involvement as well as its hypothesized determinants. Of course, this requires that many survey questions are designed to collect retrospective information. This probably results in more time-intensive questionnaires. Nevertheless, the payoffs of such a questionnaire design far outweigh these costs, because it already allows for studies on the dynamics after one wave of data collection, whereas with panel study designs researchers have to wait for multiple waves to be collected, and panel studies usually do not span such large periods of time. Furthermore, the quality of retrospective data collection methods is, to our opinion, underrated. Critics should realize that results that are based on these kinds of data are generally quite reliable (De Vries 2006), especially with respect to effect estimates.

Bibliography

- Allison, Paul D. 1984. *Event history analysis: regression for longitudinal event data*. Beverly Hills, Calif.: Sage Publications.
- Allison, Paul D. 2002. *Missing data*. Thousand Oaks etc.: Sage.
- Almond, Gabriel A. and Sidney Verba. 1989. *The civic culture revisited*. Newbury Park etc.: Sage.
- Andersen, Robert, James E. Curtis, and Edward G. Grabb. 2006. *Trends in Civic Association Activity in Four Democracies: The Special Case of Women in the United States*. *American Sociological Review*, vol. 71, no. 3, pp. 376, June 2006.
- Arts, Wil, Loek Halman, and Wim Van Oorschot. 2003. "The welfare state: Villain or hero of the piece?" In *The cultural diversity of European Unity*, edited by Wil A. Arts, Jacques A. Hagenaars, and Loek Halman, pp. 275–308. Leiden: Brill.
- Astin, Alexander W., Linda J. Sax, and Juan Avalos. 1999. "Long-Term Effects of Volunteerism During the Undergraduate Years." *Review of Higher Education* 22:187–202.
- Baer, Douglas E. 2006. "Voluntary Association Involvement in Comparative Perspective." In *The State and Civil Society in Northern Europe: The Swedish Model Reconsidered*, edited by Lars Trägårdh. New York and Oxford: Berghahn Books.
- Baer, Douglas E., James E. Curtis, and Edward G. Grabb. 2001. "Has Voluntary Association Activity Declined? Cross-National Analyses for Fifteen Countries." *Revue Canadienne de Sociologie et d'Anthropologie / Canadian Review of Sociology and Anthropology* 38:249–274.
- Bankston, Carl. 2003. "No Bowling at All: Television, the Vita Inactiva, and Social Capital." *Sociological Focus* 36:99–109.

- Barnes, Samuel H., Max Kaase, and et al. 1999. *Political Action: An Eight Nation Study, 1973-1976 [Computer file]*. Ann-Arbor, MI: Inter-university Consortium for Political and Social Research.
- Becker, Penny E. and Pawan H. Dhingra. 2001. "Religious Involvement and Volunteering: Implications for Civil Society." *Sociology of Religion* 62:315–335.
- Beggs, John J. and Jeanne S. Hurlbert. 1997. "The Social Context of Men's and Women's Job Search Ties: Membership in Voluntary Organizations, Social Resources, and Job Search Outcomes." *Sociological Perspectives* 40:601–622.
- Bekkers, René. 2000. "Kerklidmaatschap en participatie in vrijwilligerswerk: een kwestie van psychologische dispositie of sociale organisatie?" *Sociologische Gids* 47:268–292.
- Bekkers, René. 2003. "De bijdragen der kerckelijken." In *Geven in Nederland 2003: Giften, legaten, sponsoring en vrijwilligerswerk*, edited by Theo N.M. Schuyt, pp. 141–172. Houten/Mechelen: Bohn Stafleu Van Loghum.
- Bekkers, René. 2004a. *Giving & Volunteering in the Netherlands. Sociological and Psychological Perspectives*. Ph.D. thesis, Utrecht University.
- Bekkers, René. 2004b. "'Nee heb je, ja kun je krijgen': De effectiviteit van fondsenwervings- en rekruteringsstrategieën van maatschappelijke organisaties." In *Burgers in de buurt: Samenleven in school, wijk en vereniging*, edited by Beate Völker, pp. 129–152. Amsterdam: Amsterdam University Press.
- Bekkers, René and Nan Dirk De Graaf. 2002. "Verschuivende achtergronden van verenigingsparticipatie in Nederland." *Mens & Maatschappij* 77:338–360.
- Boraas, Stephanie. 2003. "Volunteerism in the United States." *Monthly Labor Review* pp. 3–11.
- Brady, Henry E., Kay L. Schlozman, and Sidney Verba. 1999. "Prospecting for participants: Rational expectations and the recruitment of political activists." *American Political Science Review* 93:153–168.
- Brehm, John and Wendy Rahn. 1997. "Individual-Level Evidence for the Causes and Consequences of Social Capital." *American Journal of Political Science* 41:999–1023.
- Bryant, W. Keith, Haekyung Jeon-Slaughter, Hyojin Kang, and Aaron Tax. 2003. "Participation in Philanthropic Activities: Donating Money and Time." *Journal of Consumer Policy* 26:43–73.

-
- Bryk, Anthony S. and Stephen W. Raudenbush. 1992. *Hierarchical Linear Models: Applications and Data Analysis Methods*. Newbury Park, CA: Sage.
- Bühlmann, Marc and Markus Freitag. 2004. "Individuelle und kontextuelle Determinanten der Teilhabe an Sozialkapital. Eine Mehrebenenanalyse zu den Bedingungen des Engagements in Freiwilligenorganisationen." *Kölner Zeitschrift für Soziologie und Sozialpsychologie* 56:326–349.
- Campbell, David E. 2006. *Why We Vote: How Schools and Communities Shape Our Civic Life*. Princeton, NJ: Princeton University Press.
- Campbell, Karen E., Peter V. Marsden, and Jeanne S. Hurlbert. 1986. "Social Resources and Socioeconomic Status." *Social Networks* 8:97–117.
- Clodfelter, Michael. 2002. *Warfare and Armed Conflicts: A Statistical Reference to Casualty and Other Figures, 1500-2000*. Jefferson, NC: McFarland.
- Cnaan, Ram A., Amy Kasternakis, and Robert J. Wineburg. 1993. "Religious People, Religious Congregations, and Volunteerism in Human Services: Is There a Link?" *Nonprofit and Voluntary Sector Quarterly* 22:33–51.
- Costa, Dora L. and Matthew E. Kahn. 2003. "Understanding the American Decline in Social Capital, 1952-1998." *Kyklos* 56:17–46.
- Curtis, James E., Douglas E. Baer, and Edward G. Grabb. 2001. "Nations of Joiners: Explaining Voluntary Association Membership in Democratic Societies." *American Sociological Review* 66:783–805.
- Curtis, James E., Douglas E. Baer, Edward G. Grabb, and Thomas A. Perks. 2003. "Estimation des tendances de l'engagement dans les associations volontaires au cours des dernières décennies au Québec et au Canada anglais." *Sociologie et Sociétés* 35:115–141.
- Curtis, James E., Edward G. Grabb, and Douglas E. Baer. 1992. "Voluntary Association Membership in Fifteen Countries: A Comparative Analysis." *American Sociological Review* 57:139–152.
- Day, Kathleen M. and Rose Anne Devlin. 1998. "The Payoff to Work without Pay: Volunteer Work as an Investment in Human Capital." *The Canadian Journal of Economics* 31:1179–1191.
- De Graaf, Nan Dirk. 1988. *Postmaterialism and the stratification process. An international comparison*. Ph.D. thesis, Utrecht University.

- De Graaf, Nan Dirk. 1999. "Event History Data and Making a History Out of Cross-Sectional Data: How to Answer the Question 'Why Cohorts Differ?'" *Quality and Quantity* 33:261–276.
- De Graaf, Nan Dirk, Paul M. De Graaf, Gerbert Kraaykamp, and Wouter C. Ultee. 2000. *Family Survey of the Dutch Population 2000 (dataset)*. Nijmegen University: Sociology.
- De Graaf, Nan Dirk and Hendrik D. Flap. 1988. "'With a Little Help from My Friends': Social Resources as an Explanation of Occupational Status and Income in West Germany, the Netherlands, and the United States." *Social Forces* 67:452–472.
- De Graaf, Nan Dirk and Ariana Need. 2000. "Losing faith: is Britain alone?" In *British Social Attitudes: the 17th Report: Focusing on diversity*, edited by Roger Jowell, John Curtice, Alison Park, Katharina Thomson, Lindsey Jarvis, Catherina Bromley, and Nina Stratford, pp. 119–136. London: Sage.
- De Graaf, Paul M. and Ruud Luijkx. 1993. "Trends in status attainment in the Netherlands; from ascription to achievement." In *Solidarity of Generations? Demographic, economic and social change, and its consequences, Volume I*, edited by Henk A. Becker and Piet L.J. Hermkens, pp. 437–467. Amsterdam: Thesis.
- De Hart, Joep. 1999. "Godsdienst, maatschappelijke participatie en sociaal kapitaal." In *Vrijwilligerswerk vergeleken*, edited by Paul Dekker, pp. 207–248. Den Haag: SCP.
- De Tocqueville, Alexis. 2000 [1835-1840]. *Democracy in America*. Chicago [etc.]: University of Chicago Press.
- De Vries, Jannes. 2006. *Measurement error in family background variables: The bias in the intergenerational transmission of status, cultural consumption, party preference, and religiosity*. Nijmegen: ICS dissertation.
- Dee, Thomas S. 2004. "Are There Civic Returns to Education?" *Journal of Public Economics* 88:1697–1720.
- Dekker, Paul and Joep De Hart. 2001. "Levensbeschouwing en vrijwilligerswerk. Het belang van netwerken in een seculariserende samenleving." *Tijdschrift voor Humanistiek* 8:9–17.
- Dekker, Paul and Joep De Hart. 2002. "Het zout der aarde: een analyse van de samenhang tussen godsdienstigheid en sociaal kapitaal in Nederland." *Sociale Wetenschappen* 45:45–61.
- Dekker, Paul and Loek Halman. 2003. *The values of volunteering: cross-cultural perspectives*. New York ; Boston ; Dordrecht etc.: Kluwer Academic/Plenum Publishers.

- Dekker, Paul and Andries Van den Broek. 1998. "Civil Society in Comparative Perspective: Involvement in Voluntary Associations in North America and Western Europe." *Voluntas: International Journal of Voluntary and Nonprofit Organizations* 9:11–38.
- Duncan, Craig, Kelvyn Jones, and Graham Moon. 1996. "Health-related behaviour in context: A multilevel modelling approach." *Social Science & Medicine* 42:817–830.
- Esping-Andersen, Gøsta. 1990. *The Three Worlds of Welfare Capitalism*. Princeton: Princeton University Press.
- European Values Study Group and World Values Survey Association. 2005. *European and World Values Surveys Integrated Data File, 1999-2002, release 1 [Computer file]*. Ann Arbor, MI: Inter-university Consortium for Political and Social Research.
- Fischer, Claude S. 2005. "Bowling Alone: What's the Score?" *Social Networks* 27:155–167.
- Flap, Hendrik D. and Ed A.W Boxman. 2001. "Getting Started: The Influence of Social Capital on the Start of the Occupational Career." In *Social Capital: Theory and Research*, edited by Nan Lin, Karen S. Cook, and Ronald S. Burt, pp. 159–181. New York: Aldine de Gruyter.
- Franzen, Axel and Dominik Hangartner. 2006. "Social Networks and Labour Market Outcomes: The Non-Monetary Benefits of Social Capital." *European Sociological Review* 22:353–368.
- Freedom House. 2005. *Freedom in the World Country Ratings 1972 through 2003*. Obtained from: <http://www.freedomhouse.org/ratings/allscore04.xls>, visited: 04/04/2005.
- Galston, William A. and Mark H. Lopez. 2006. "Civic Engagement in the United States." In *Civic Engagement and the Baby Boomer Generation*, edited by Laura B. Wilson and Sharon P. Simson, pp. 3–20. Binghamton NY: Hawthorne Press.
- Ganzeboom, Harry B.G., Paul M. De Graaf, and Donald J. Treiman. 1992. "A Standard International Socio-Economic Index of Occupational Status." *Social Science Research* 21:1–56.
- Gaskin, Katharine and Justin Davis Smith. 1995. *A new civic Europe?: a study of the extent and role of volunteering*. London: Volunteer Centre UK.
- Gelissen, John and Paul M. De Graaf. 2006. "Personality, social background, and occupational career success." *Social Science Research* 35:702–726.

- Gerbner, George and Larry Gross. 1976. "Living with Television: The Violence Profile." *Journal of Communication* 26:173–199.
- Goss, Kristin A. 1999. "Volunteering and the Long Civic Generation." *Nonprofit and Voluntary Sector Quarterly* 28:378–415.
- Granovetter, Mark S. 1973. "The Strength of Weak Ties." *American Journal of Sociology* 78:1360–1380.
- Granovetter, Mark S. 1983. "The Strength of Weak Ties: A Network Theory Revisited." *Sociological Theory* 1:201–233.
- Granovetter, Mark S. 1995. *Getting a job: a study of contacts and careers*. Chicago etc.: The University of Chicago Press.
- Granovetter, Mark S. 2005. "The impact of social structure on economic outcomes." *Journal of Economic Perspectives* 19:33–50.
- Halman, Loek. 2003. "Volunteering, Democracy, and Democratic Attitudes." In *The values of volunteering: cross-cultural perspectives*, edited by Paul Dekker and Loek Halman, pp. 179–198. New York: Kluwer Academic / Plenum Publishers.
- Halpern, David. 2005. *Social capital*. Cambridge etc.: Polity.
- Hannan, Carmel. 1999. "Beyond Networks: 'Social Cohesion' and Unemployment Exit Rates."
- Hayghe, Howard V. 1991. "Volunteers in the U.S.: Who donates the time?" *Monthly labor review* 114:17–23.
- Heston, Alan, Robert Summers, and Bettina Aten. 2002. *Penn World Table Version 6.1*. Philadelphia, PA: Center for International Comparisons at the University of Pennsylvania (CICUP).
- Hirsch, Fred. 1976. *Social limits to growth*. Cambridge, Mass.: Harvard University Press.
- Historisch Ecologische Databank. 2004. *HED*. Obtained from University of Amsterdam: Faculty of Social and Behavioural Sciences, University of Amsterdam.
- Hodgkinson, Virginia A. 2003. "Volunteering in Global Perspective." In *The values of volunteering: cross-cultural perspectives*, edited by Paul Dekker and Loek Halman, pp. 35–53. New York: Kluwer Academic/Plenum Publishers.
- Hodgkinson, Virginia A. and Murray S. Weitzman. 1996. *Giving and Volunteering in the United States: Findings from a National Survey*. Washington DC: Independent Sector.

- Hodgkinson, Virginia A., Murray S. Weitzman, and Arthur D. Kirsch. 1990. "From Commitment to Action: How Religious Involvement Affects Giving and Volunteering." In *Faith and Philanthropy in America*, edited by Robert Wuthnow, Virginia A. Hodgkinson, and Associates, pp. 93–114. San Francisco, CA: Jossey-Bass.
- Hooghe, Marc. 2001. "Waardencongruentie binnen vrijwillige verenigingen. Een sociaal-psychologisch verklaringsmodel voor de interactie van zelfselectie en socialisering." *Mens & Maatschappij* 76:102–120.
- Hooghe, Marc. 2002. "Televisie en de erosie van sociaal kapitaal: De invloed van televisietijd, programma-inhoud en zendervoorkeur." *Sociologische Gids* 49:158–181.
- Howard, Marc M. 2002. "The Weakness of Postcommunist Civil Society." *Journal of Democracy* 13:157–169.
- Howard, Marc M. 2003. *The Weakness of Civil Society in Post-Communist Europe*. Cambridge, U.K. ; New York, NY: Cambridge University Press.
- Hwang, Monica, Robert Andersen, and Edward G. Grabb. 2007. "Voluntary Association Activity in Quebec and English Canada: Assessing the Effects of Region and Language." *Canadian Journal of Political Science* 40:209–232.
- Iannaccone, Laurence R. 1998. "Introduction to the Economics of Religion." *Journal of Economic Literature* 36:1465–1495.
- Iannaccone, Laurence R. working paper. "Looking Backward. A Cross-National Study of Religious Trends." *Center for the Economic Study of Religion (CESR)*.
- Inglehart, Ronald F. 1997. *Modernization and postmodernization: cultural, economic, and political change in 43 societies*. Princeton, N.J.: Princeton University Press.
- Inglehart, Ronald F. 2003a. "Modernization and Volunteering." In *The values of volunteering: cross-cultural perspectives*, edited by Paul Dekker and Loek Halman, pp. 55–70. New York, NY: Kluwer Academic/Plenum Publishers.
- Inglehart, Ronald F. et al. 2003b. *World Values Surveys and European Values Surveys, 1981-1984, 1990-1993, and 1995-1997 [Computer file]*. Ann Arbor, MI: Inter-university Consortium for Political and Social Research.
- International Labour Office. 1968–1996. *The Cost of Social Security*. Geneva, Switzerland: International Labour Office.
- International Social Survey Program. 2000. *International Social Survey Program: Religion II, 1998 [Computer file]*. Ann Arbor, MI: Inter-university Consortium for Political and Social Research.

- Jackson, Elton F., Mark D. Bachmeier, James R. Wood, and Elizabeth A. Craft. 1995. "Volunteering and Charitable Giving: Do Religious and Associational Ties Promote Helping Behavior?" *Nonprofit and Voluntary Sector Quarterly* 24:59–78.
- Jennings, M. Kent and Laura Stoker. 2004. "Social Trust and Civic Engagement across Time and Generations." *Acta Politica* 39:342–379.
- Jennings, M. Kent and Jan W. Van Deth. 1991. *Political Action II, 1979-1981 [Computer file]*. Ann-Arbor, MI: Inter-university Consortium for Political and Social Research.
- Jowell, Roger and the Central Co-ordinating Team. 2003. *European Social Survey 2002/2003: Technical Report*. London, UK: Centre for Comparative Social Surveys, City University.
- Juknevičius, Stanislovas and Aida Savicka. 2003. "From Restitution to Innovation: Volunteering in Post Communist Countries." In *The values of volunteering: cross-cultural perspectives*, edited by Paul Dekker and Loek Halman, pp. 127–142. New York: Kluwer Academic.
- Kaariainen, Juha and Heikki Lehtonen. 2006. "The variety of social capital in welfare state regimes: A comparative study of 21 countries." *European Societies* 8:27–57.
- Kage, Rieko. 2006. "The Long-Term Effects of Wartime Participation: Mobilization, Civic Engagement, and Social Learning in Thirteen Countries." In *Association for Research on Nonprofit Organizations and Voluntary Action Annual Conference*, Chicago.
- Kelley, Jonathan and Nan Dirk De Graaf. 1997. "National Context, Parental Socialization, and Religious Belief: Results from 15 Nations." *American Sociological Review* 62:639–659.
- Kennedy, Bruce P., Ichiro Kawachi, Deborah Prothrow-Stith, Kimberly Lochner, and Vanita Gupta. 1998. "Social capital, income inequality, and firearm violent crime." *Social Science & Medicine* 47:7–17.
- Knoke, David and Randall Thomson. 1977. "Voluntary Association Membership Trends and the Family Life Cycle." *Social Forces* 56:48–65.
- Knulst, Wim and Koen Van Eijck. 2002. *Vrijwilligers in soorten en maten II. Ontwikkelingen in de periode 1985-2000*. Tilburg: Tilburg University.
- Kuti, Éva. 2004. "Civic service in eastern Europe and central Asia: From mandatory public work toward civic service?" *Nonprofit and Voluntary Sector Quarterly* 33 (4) Suppl. S:79S–97S.

- Ladd, Everett C. 1999. *The Ladd Report*. New York: The Free Press.
- Lahmeyer, Jan. 2006. *Population Statistics*. Obtained from: <http://www.library.uu.nl/wesp/populstat/populhome.html>, visited: 07/02/2006.
- Lam, Pui-Yan. 2002. "As the Flocks Gather: How Religion Affects Voluntary Association Participation." *Journal for the Scientific Study of Religion* 41:405–422.
- Lam, Pui-Yan. 2006. "Religion and Civic Culture: A Cross-National Study of Voluntary Association Membership." *Journal for the Scientific Study of Religion* 45:177–193.
- Li, Yunqing and Kenneth F. Ferraro. 2005. "Volunteering and depression in later life: Social benefit or selection processes?" *Journal of Health and Social Behavior* 46:68–84.
- Lin, Nan. 1990. "Social resources and social mobility: a structural theory of status attainment." In *Social mobility and social structure*, edited by Ronald L. Breiger, pp. 247–271. Cambridge etc.: Cambridge University Press.
- Lin, Nan. 1999. "Social Networks and Status Attainment." *Annual Review of Sociology* 25:467–487.
- Lin, Nan and Mary Dumin. 1986. "Access to Occupations through Social Ties." *Social Networks* 8:365–385.
- Lin, Nan, Walter M. Ensel, and John C. Vaughn. 1981a. "Social Resources and Strength of Ties: Structural Factors in Occupational Status Attainment." *American Sociological Review* 46:393–405.
- Lin, Nan, John C. Vaughn, and Walter M. Ensel. 1981b. "Social Resources and Occupational Status Attainment." *Social Forces* 59:1163–1181.
- Marsden, Peter V. and Jeanne S. Hurlbert. 1988. "Social Resources and Mobility Outcomes: A Replication and Extension." *Social Forces* 66:1038–1059.
- McConkey, Dale. 2000. "Religion, Social Capital, and the Significance of Community." In *Social Structures, Social Capital, and Personal Freedom*, edited by Dale McConkey and Peter Augustine Lawler, pp. 83–97. Westport CT: Praeger.
- McLean, Scott L. 2002. "Patriotism, Generational Change and the Politics of Sacrifice." In *Social Capital: Critical Perspectives on Community and "Bowling Alone"*, edited by Scott L. McLean, David A. Schultz, and Manfred B. Steger, pp. 147–166. New York: New York University Press.
- McPherson, James M. 1981. "A Dynamic Model of Voluntary Affiliation." *Social Forces* 59:705–728.

- McPherson, James M. and William G. Lockwood. 1980. "The Longitudinal Study of Voluntary Association Memberships: A Multivariable Analysis." *Journal of Voluntary Action Research* 9:74–84.
- McPherson, James M., Pamela A. Popielarz, and Sonja Drobnič. 1992. "Social Networks and Organizational Dynamics." *American Sociological Review* 57:153–170.
- McPherson, James M. and Thomas Rotolo. 1996. "Testing a Dynamic Model of Social Composition: Diversity and Change in Voluntary Groups." *American Sociological Review* 61:179–202.
- McPherson, James M. and Lynn Smith-Lovin. 1982. "Women and Weak Ties: Differences by Sex in the Size of Voluntary Organizations." *American Journal of Sociology* 87:883–904.
- McPherson, James M. and Lynn Smith-Lovin. 1986. "Sex Segregation in Voluntary Associations." *American Sociological Review* 51:61–79.
- Menchik, Paul L. and Burton A. Weisbrod. 1987. "Volunteer Labor Supply." *Journal of Public Economics* 32:159–83.
- Moerbeek, Hester. 2001. *Friends and Foes in the Occupational Career. The Influence of Sweet and Sour Social Capital on the Labour Market*. Ph.D. thesis, Katholieke Universiteit Nijmegen.
- Montgomery, James D. 1991. "Social Networks and Labor-Market Outcomes: Toward an Economic Analysis." *American Economic Review* 81:1407–18.
- Montgomery, James D. 1992. "Job Search and Network Composition: Implications of the Strength-of-Weak-Ties Hypothesis." *American Sociological Review* 57:586–596.
- Morales Diez de Ulzurrun, Laura. 2002. "Associational Membership and Social Capital in Comparative Perspective: A Note on the Problems of Measurement." *Politics & Society* 30:497–523.
- Mouw, Ted. 2003. "Social capital and finding a job: Do contacts matter?" *American Sociological Review* 68:868–898.
- Moy, Patricia, Dietram A. Scheufele, and R. Lance Holbert. 1999. "Television Use and Social Capital: Testing Putnam's Time Displacement Hypothesis." *Mass Communication & Society* 2:27–45.
- Musick, Marc A. and John Wilson. 2003. "Volunteering and depression: the role of psychological and social resources in different age groups." *Social Science & Medicine* 56:259–269.

- Musick, Marc A., John Wilson, and William B. Bynum Jr. 2000. "Race and Formal Volunteering: The Differential Effects of Class and Religion." *Social Forces* 78:1539–1570.
- Newton, Kenneth and José Ramón Montero. 2007. "Patterns of political and social participation in Europe." In *Measuring attitudes cross-nationally: lessons from the European Social Survey*, edited by Roger Jowell, pp. 205–237. Los Angeles CA, etc.: Sage Publications.
- NIPO/Steinmetz Archive. 2005. *NIPO weeksurveys 1962-2000 [dataset]*. Amsterdam: Steinmetz Archive.
- Norris, Pippa. 1996. "Does Television Erode Social Capital? A Reply To Putnam." *Ps Political Science and Politics* 29:474–480.
- Norris, Pippa. 2000. "The Impact of Television on Civic Malaise." In *Disaffected Democracies*, edited by S. Pharr and R. Putnam, pp. 231–251. Princeton, NJ: Princeton University Press.
- Norris, Pippa and James Davis. 2007. "A continental divide? Social capital in the US and Europe." In *Measuring attitudes cross-nationally: lessons from the European Social Survey*, edited by Roger Jowell, pp. 239–264. Los Angeles CA etc.: Sage Publications.
- Norris, Pippa and Ronald F. Inglehart. 2004. *Sacred and secular: religion and politics worldwide*. Cambridge etc.: Cambridge University Press.
- Oesterle, Sabrina, Monica Johnson, and Jeylan Mortimer. 2004. "Volunteerism during the Transition to Adulthood: A Life Course Perspective." *Social Forces* 82:1123–1149.
- Parboteeah, K. Praveen, John B. Cullen, and Lrong Lim. 2004. "Formal Volunteering: A Cross-National Test." *Journal of World Business* 39:431–41.
- Park, Jerry Z. and Christian Smith. 2000. "'To Whom Much Has Been Given...': Religious Capital and Community Voluntarism among Churchgoing Protestants." *Journal for the Scientific Study of Religion* 39:272–286.
- Paxton, Pamela. 1999. "Is Social Capital Declining in the United States? A Multiple Indicator Assessment." *American Journal of Sociology* 105:88–127.
- Paxton, Pamela. 2002. "Social Capital and Democracy: An Interdependent Relationship." *American Sociological Review* 67:254–277.
- Petersen, Trond. 1988. "Analyzing Change over Time in a Continuous Dependent Variable: Specification and Estimation of Continuous State Space Hazard Rate Models." *Sociological Methodology* 18:137–164.

- Podolny, Joel M. and James N. Baron. 1997. "Resources and Relationships: Social Networks and Mobility in the Workplace." *American Sociological Review* 62:673–693.
- Popielarz, Pamela A. and James M. McPherson. 1995. "On the Edge or In Between: Niche Position, Niche Overlap, and the Duration of Voluntary Association Memberships." *American Journal of Sociology* 101:698–720.
- Popper, Karl R. 1972. *Objective Knowledge: An Evolutionary Approach*. Oxford: Clarendon Press.
- Putnam, Robert D. 1993. *Making democracy work: Civic traditions in modern Italy*. Princeton: Princeton University Press.
- Putnam, Robert D. 1995a. "Bowling alone: America's declining social capital." *Journal of Democracy* 6:65–78.
- Putnam, Robert D. 1995b. "Tuning in, tuning out: The strange disappearance of social capital in America." *Ps Political Science and Politics* 28:664–683.
- Putnam, Robert D. 2000. *Bowling alone: the collapse and revival of American Community*. New York: Simon & Schuster.
- Putnam, Robert D. 2002. *Democracies in flux : the evolution of social capital in contemporary society*. Oxford; New York: Oxford University Press.
- Rabier, Jacques-René. 2002. *Euro-Barometer 4: Consumer Attitudes in Europe, October/November 1975 [Computer file]*. Ann-Arbor, MI: Inter-university Consortium for Political and Social Research.
- Rabier, Jacques-René and Ronald F. Inglehart. 2002. *Euro-Barometer 8: Men, Women and Work Roles in Europe, November 1977 [Computer file]*. Ann-Arbor, MI: Inter-university Consortium for Political and Social Research.
- Rasbash, Jon, Fiona Steele, William Browne, and Bob Prosser. 2004. *A user's guide to MLwiN version 2.0*. London, UK: Institute of Education.
- Raudenbush, Stephen W., Anthony S. Bryk, Yuk Fai Cheong, and Richard T. Congdon. 2004. *HLM 6: Linear and Nonlinear Modeling*. Lincolnwood, IL: Scientific Software International, Inc.
- Reif, Karlheinz and Anna Melich. 2001. *Eurobarometer 34.0: Perceptions of the European Community, and Employment Patterns and Child Rearing, October-November 1990 [Computer file]*. Ann-Arbor, MI: Inter-university Consortium for Political and Social Research.

- Reitsma, Jan, Peer Scheepers, and Manfred te Grotenhuis. 2006. "Dimensions of individual religiosity and volunteering in Europe." In *XVI ISA World Congress of Sociology*, Durban, South Africa.
- Roberts, Kenneth, Bohdan Jung, and Stan Clark. 1995. *Poland's first post-communist generation*. Aldershot, Hants, England ; Brookfield, Vt.: Avebury.
- Rodgers, Willard L. 1982. "Estimable Functions of Age, Period, and Cohort Effects." *American Sociological Review* 47:774–787.
- Rose, Richard. 2001. "When Government Fails." In *Beyond Tocqueville. Civil Society and the Social Capital Debate in Comparative Perspective*, edited by Bob Edwards, Michael W. Foley, and Mario Diani, pp. 56–69. Hanover, NH: Tufts University Press.
- Rotolo, Thomas. 1999. "Trends in Voluntary Association Participation." *Nonprofit and Voluntary Sector Quarterly* 28:199–212.
- Rotolo, Thomas. 2000a. "A Time to Join, a Time to Quit: The Influence of Life Cycle Transitions on Voluntary Association Membership." *Social Forces* 78:1133–1161.
- Rotolo, Thomas. 2000b. "Town heterogeneity and affiliation: A multilevel analysis of voluntary association membership." *Sociological Perspectives* 43:271–289.
- Rotolo, Thomas and John Wilson. 2003. "Work Histories and Voluntary Association Memberships." *Sociological Forum* 18:603–619.
- Rotolo, Thomas and John Wilson. 2004. "What happened to the "long civic generation"? Explaining cohort differences in volunteerism." *Social Forces* 82:1091–1121.
- Rubin, Donald B. 1987. *Multiple imputation for nonresponse in surveys*. New York etc.: Wiley.
- Ruiter, Stijn and Nan Dirk De Graaf. 2006. "National context, religiosity, and volunteering: Results from 53 countries." *American Sociological Review* 71:191–210.
- Salamon, Lester M. and Helmut K. Anheier. 1998. "Social Origins of Civil Society: Explaining the Nonprofit Sector Cross-Nationally." *Voluntas: International Journal of Voluntary and Nonprofit Organizations* 9:213–248.
- Salamon, Lester M. and S. Wojciech Sokolowski. 2003. "Institutional Roots of Volunteering. Toward a Macro-Structural Theory of Individual Voluntary Action." In *The values of volunteering: cross-cultural perspectives*, edited by Paul Dekker and L. Halman, pp. 71–90. New York, NY: Kluwer Academic/Plenum Publishers.

- Schofer, Evan and Marion Fourcade-Gourinchas. 2001. "The Structural Contexts of Civic Engagement: Voluntary Association Membership in Comparative Perspective." *American Sociological Review* 66:806–828.
- Smith, David Horton. 1973. "Modernization and the emergence of volunteer organizations." In *Voluntary Action Research*, edited by David Horton Smith. Lexington, MA: Lexington Books, D. C. Heath.
- Smith, David Horton. 1994. "Determinants of Voluntary Association Participation and Volunteering: A Literature Review." *Nonprofit and Voluntary Sector Quarterly* 23:243–263.
- Smith, David Horton and Ce Shen. 2002. "The Roots Of Civil Society: A Model Of Voluntary Association Prevalence Applied To Data On Larger Contemporary Nations." *International Journal of Comparative Sociology* 43:93–133.
- Smith, Justin Davis. 1998. *National Survey of Volunteering 1997*. London: National Centre for Volunteering.
- Smith, Sandra S. 2000. "Mobilizing Social Resources: Race, Ethnic, and Gender Differences in Social Capital and Persisting Wage Inequalities." *The Sociological Quarterly* 41:509–537.
- Snijders, Tom and Roel Bosker. 1999. *Multilevel Analysis. An introduction to basic and advanced multilevel modeling*. London: Sage.
- Snow, David A., Jr. Zurcher, Louis A., and Sheldon Eklund-Olson. 1980. "Social Networks and Social Movements: A Microstructural Approach to Differential Recruitment." *American Sociological Review* 45:787–801.
- Stark, Rodney. 1999. "Secularization, R.I.P." *Sociology of Religion* 60:249–273.
- Stark, Rodney and Roger Finke. 2000. *Acts of faith: explaining the human side of religion*. Berkeley etc.: University of California Press.
- Stolle, Dietlind. 2003. "The Sources of Social Capital." In *Generating Social Capital*, edited by Marc Hooghe and Dietlind Stolle, pp. 19–42. New York: Palgrave Macmillan.
- Stolle, Dietlind and Marc Hooghe. 2005. "Inaccurate, Exceptional, One-Sided or Irrelevant? The Debate about the Alleged Decline of Social Capital and Civic Engagement in Western Societies." *British Journal of Political Science* 35:149–167.
- Subramanian, S. V., Kelvin Jones, and Craig Duncan. 2003. "Multilevel methods for public health research." In *Neighborhoods and Health*, edited by Ichiro Kawachi and Lisa F. Berkman, pp. 65–111. New York: Oxford University Press.

- Sundeen, Richard A. 1990. "Family Life Course Status and Volunteer Behavior: Implications for the Single Parent." *Sociological Perspectives* 33:483–500.
- Tassier, Troy. 2006. "Labor market implications of weak ties." *Southern Economic Journal* 72:704–719.
- Te Grotenhuis, Manfred. 1999. *Ontkerkelijking: oorzaken en gevolgen*. Ph.D. thesis, Katholieke Universiteit Nijmegen.
- Thoits, Peggy A. and Lyndi N. Hewitt. 2001. "Volunteer work and well-being." *Journal of Health and Social Behavior* 42:115–131.
- Thomson, Irene Taviss. 2005. "The Theory That Won't Die: From Mass Society to the Decline of Social Capital." *Sociological Forum* 20:421–448.
- Twigg, Judyth Y. and Kate Schecter. 2003. *Social Capital and Social Cohesion in Post-Soviet Russia*. Armonk NY: M.E. Sharpe.
- United Nations Development Program. 2001. *Human Development Report 2001*. New York: Oxford University Press.
- United Nations Development Program. 2002. *Human Development Report 2002*. New York: Oxford University Press.
- United Nations Development Program. 2003. *Human Development Report 2003*. New York: Oxford University Press.
- United Nations Development Program. 2004. *Human Development Report 2004*. New York: Oxford University Press.
- Uslaner, Eric M. 1998. "Social Capital, Television, and the "Mean World": Trust, Optimism, and Civic Participation." *Political Psychology* 19:441–467.
- Uslaner, Eric M. 2002. "Religion and Civic Engagement in Canada and the United States." *Journal for the Scientific Study of Religion* 41:239–254.
- Van de Werfhorst, Herman G. 2005. "Credential Inflation and Educational Inequality." *Mens & Maatschappij* 80:25–47.
- Van der Meulen, Ruud. 2007. "Alle Menschen werden Brüder. Lidmaatschap van sportverenigingen, vriendschappen, kennissenkringen, en interetnisch vertrouwen." *Mens & Maatschappij* 82:155–176.
- Van Oorschot, Wim and Wil Arts. 2005. "The social capital of European welfare states: the crowding out hypothesis revisited." *Journal of European Social Policy* 15:5–26.

- Van Oorschot, Wim, Wil Arts, and John Gelissen. 2006. "Social Capital in Europe: Measurement and Social and Regional Distribution of a Multifaceted Phenomenon." *Acta Sociologica* 49:149–167.
- Van Tubergen, Frank and Stijn Ruiter. forthcoming. "Religious Attendance in Cross-National Perspective: A Multilevel Analysis of 60 Countries." .
- Van Voorhis, Rebecca A. 2002. "Different Types of Welfare States? A Methodological Deconstruction of Comparative Research." *Journal of Sociology and Social Welfare* 29:3–18.
- Van Willigen, Marieke. 2000. "Differential benefits of volunteering across the life course." *Journals of Gerontology Series B-Psychological Sciences and Social Sciences* 55:S308–S318.
- Watt, David H. 1991. "United States: Cultural challenges to the voluntary sector." In *Between states and markets: The voluntary sector in comparative perspective*, edited by Robert Wuthnow, pp. 243–287. Princeton, NJ: Princeton University Press.
- Wegener, Bernd. 1991. "Job Mobility and Social Ties: Social Resources, Prior Job, and Status Attainment." *American Sociological Review* 56:60–71.
- Wessels, Bernhard. 1997. "Organizing Capacity of Societies and Modernity." In *Private Groups and Public Life: Social Participation, Voluntary Associations and Political Involvement in Representative Democracies*, edited by Jan W. Van Deth, pp. 198–219. London: Routledge.
- Wilensky, Harold L. 2002. *Rich democracies: political economy, public policy, and performance*. Berkeley: University of California Press.
- Wilson, John. 2000. "Volunteering." *Annual Review of Sociology* 26:215–240.
- Wilson, John and Thomas Janoski. 1995. "The Contribution of Religion to Volunteer Work." *Sociology of Religion* 56:137–152.
- Wilson, John and Marc A. Musick. 1997. "Who cares? Toward an integrated theory of volunteer work." *American Sociological Review* 62:694–713.
- Wilson, John and Marc A. Musick. 1999. "The effects of volunteering on the volunteer." *Law and contemporary problems* 62:141–168.
- Wilson, John and Marc A. Musick. 2003. "Doing Well by Doing Good: Volunteering and Occupational Achievement Among American Women." *Sociological Quarterly* 44:433–450.

- World Bank. 2005. *World Development Indicators*.
- World Resources Institute. 2005. *Earth Trends*. Obtained from: <http://earthtrends.wri.org/>, visited: 11/30/2005.
- World Values Study Group. 1994. *World Values Survey 1981-1984 and 1990-1993*. Ann Arbor, MI: Inter-university Consortium for Political and Social Research.
- World Values Study Group. 1999. *World Values Survey, 1981-1984 and 1990-1993 [Computer file]. 2nd ICPSR version*. Ann Arbor, MI: Inter-university Consortium for Political and Social Research.
- Wuthnow, Robert. 1991. *Acts of compassion: caring for others and helping ourselves*. Princeton, N.J.: Princeton University Press.
- Wuthnow, Robert. 1999. "Mobilizing civic engagement. The changing impact of religious involvement." In *Civic engagement in American democracy*, edited by T. Skocpol and M. P. Fiorina. Washington DC: Brookings Institution Press.
- Wuthnow, Robert and Victoria A. Hodgkinson. 1990. *Faith and philanthropy in America: exploring the role of religion in America's voluntary sector*. San Francisco etc.: Jossey-Bass.
- Yamaguchi, Kazuo. 1991. *Event history analysis*. Newbury Park, Calif.: Sage Publications.
- Yeung, Anne Birgitta. 2004. "An Intricate Triangle – Religiosity, Volunteering, and Social Capital: The European Perspective, the Case of Finland." *Nonprofit and Voluntary Sector Quarterly* 33:401–422.
- Zukin, Cliff, Scott Keeter, Molly Andolina, Krista Jenkins, and Michael Carpini. 2006. *A new engagement? Political participation, civic life, and the changing American citizen*. New York; Oxford UK: Oxford University Press.

Appendix A

Educational expansion and volunteering

To test whether educational expansion (when both individual-level education and cohort-level education rise) results in a higher average likelihood to volunteer, we calculated expected probabilities based on the parameters of Model 4 in Table 3.6. Since most people from low educated cohorts have themselves spent little time in school, they are most likely to be found in the top-left cell. On the other hand, people who are from cohorts that are most highly educated are probably highly educated themselves. Therefore, we expect them in the bottom-right cell. All intermediary (most likely) situations are expected to be on the diagonal too. When we look at the figures on the diagonal (in bold face), it shows that educational expansion seems to lead to a slight increase in the likelihood to volunteer.

Table A.1: *The effect of educational expansion on the likelihood to volunteer^a*

		Individual-level education				
		Minimum	Mean – 1 sd	Mean	Mean + 1 sd	Maximum
Average educational level of the cohort	Minimum	.296	.313	.376	.444	.466
	Mean – 1 sd	.252	.268	.326	.390	.412
	Mean	.230	.245	.301	.363	.384
	Mean + 1 sd	.210	.224	.277	.336	.356
	Maximum	.181	.193	.241	.295	.315

^aAll other variables are kept at their mean.

Appendix B

Engagement in religious associations

The table is displayed on the next pages.

Table B.1: Discrete time logit models for joining a religious voluntary association and starting religious volunteer work

	Memberships ($N_1 = 41, 493$; $N_2 = 841$; $N_{\text{events}} = 119$)		Volunteering ($N_1 = 1, 352$; $N_2 = 125$; $N_{\text{events}} = 102$)	
	B	SE(B)	B	SE(B)
Duration (/10)			-1.321**	(.510)
Duration (/10)-sq.			.132	(.119)
Same year as joining religious voluntary association (duration = 0)				
Member of / Volunteer for a non-religious voluntary association			2.504***	(.448)
Age (/10)	.236	(.218)	.246	(.416)
Age (/10)-sq.	-.180	(.603)	-1.162	(1.058)
Year (/10)	-.007	(.070)	.159	(.126)
Year (/10)-sq.	.128	(.115)	-.159	(.164)
Non-religious (ref.)	.100*	(.041)	-.038	(.112)
Roman Catholic	1.636***	(.362)	1.443*	(.628)
Dutch Reformed	2.604***	(.408)	.847	(.624)
Re-reformed	2.761***	(.399)	.954	(.498)
Other Christian religion	3.773***	(.390)	.749	(.652)
Other religion	2.951***	(.832)	-.952	(1.425)
Moving to another municipality	1.218***	(.327)	-.624	(.549)
Number of years in same municipality (/10)	-.119	(.228)	-.212	(.382)
Number of years in same municipality (/10)-sq.	.049	(.047)	.036	(.076)
Female	.167	(.224)	.122	(.319)
Single (ref.)				
Married	.319	(.344)	.108	(.486)
Separated / Divorced	.119	(1.100)	2.433*	(1.001)
Educational level	.142***	(.039)	.111	(.075)
No children (ref.)				
Children between the ages 0 – 4 at home	-.046	(.286)	.434	(.410)
Children between the ages 5 – 12 at home	.183	(.282)	.595	(.464)
Children between the ages 13 – 18 at home	.198	(.332)	.509	(.470)
Children of 19 years and older at home	.045	(.426)	-.140	(.648)
No job (ref.)				
Full-time high status job	-.023	(.299)	-.156	(.495)
Full-time medium status job	-.432	(.310)	.194	(.444)
Full-time low status job	-.218	(.336)	.138	(.488)
Part-time high status job	-.788	(.509)	-.654	(1.230)

Continued on Next Page...

Table B.1 – Continued^a

	Memberships ($N_1 = 41,493$; $N_2 = 841$; $N_{\text{events}} = 119$)		Volunteering ($N_1 = 1,352$; $N_2 = 125$; $N_{\text{events}} = 102$)	
	B	SE(B)	B	SE(B)
Part-time medium status job	.043	(.437)	.271	(.554)
Part-time low status job	.520	(.376)	.236	(.596)
Proportion non-religious in municipality	1.171	(.812)	5.362***	(1.211)
Proportion non-religious in municipality at age 12	-.031	(.860)	-1.523	(1.195)
Non-urban municipality (ref.)				
Little urbanization	.063	(.370)	.551	(.623)
Moderate urbanization	-.316	(.366)	.527	(.643)
Strong urbanization	-.205	(.381)	.207	(.623)
Very strong urbanization	-.636	(.447)	-1.568*	(.769)
Constant	-8.360***	(1.160)	-3.592	(1.988)

*** $p < .01$, ** $p < .05$, * $p < .10$, ** $p < .001$ (two-tailed tests)

Summary in Dutch - Nederlandstalige samenvatting

Inleiding

Participatie in maatschappelijke organisaties krijgt veel aandacht in zowel het publieke als het wetenschappelijke debat in veel Westerse landen die lijken te worstelen met problemen omtrent de sociale samenhang. We gaan in het eerste deel van deze studie na wat de oorzaken zijn van dergelijke participatie. Daarbij verstaan we onder participatie zowel het lidmaatschap van formele organisaties (zoals bijvoorbeeld politieke partijen, vakbondsverenigingen, religieuze organisaties en milieuorganisaties) alsmede het verrichten van vrijwilligerswerk voor dit soort organisaties. Uiteraard maken we onderscheid tussen nominaal lidmaatschap aan de ene kant en vrijwilligerswerk aan de andere wanneer dit van belang is. In ons onderzoek naar de oorzaken van participatie besteden we aandacht aan oorzaken die op het individuele niveau spelen (verschillen tussen individuen) alsook aan oorzaken die spelen op een hoger niveau (verschillen tussen contexten waarin mensen nu leven en verschillen tussen contexten waarin individuen opgroeiden). Kort samengevat komt de vraag die in dit deel van de studie centraal staat op het volgende neer: *Welke mensen hebben een grotere kans te participeren in maatschappelijke organisaties en hoe speelt de context waarin ze leven en de context waarin ze zijn opgegroeid daarin een rol?*

In drie empirische hoofdstukken (Hoofdstuk 2 tot en met Hoofdstuk 4) wordt telkens vanuit een ander perspectief een antwoord op deze vraag geformuleerd. In Hoofdstuk 2 en Hoofdstuk 3 verrichten we grootschalige landenvergelijkende studies. In die studies gaan we na in welke mate maatschappelijke participatie van individuen kan worden verklaard enerzijds door hun eigen kenmerken en anderzijds door hoe de huidige situatie in hun land is en ook door hoe de situatie in hun land was ten tijde dat ze opgroeiden. In de derde empirische studie (Hoofdstuk 4) verleggen we onze aandacht naar Nederland. Dit stelt ons in staat dieper in te gaan op de mechanismen die ertoe leiden dat sommige mensen lid worden van organisaties en dat vervolgens sommige van deze leden ook nog vrijwilligerswerk gaan

verrichten. Bovendien biedt het ons de mogelijkheid na te gaan in welke situatie mensen een grotere kans hebben hun lidmaatschappen en vrijwilligerswerk na verloop van tijd weer te beëindigen.

Na uitvoerig stil te hebben gestaan bij de individuele en contextuele oorzaken van participatie gaan we in het tweede deel van deze studie na wat de sociaal-economische voordelen zijn van participatie in maatschappelijke organisaties. Hoewel de participatie zelf niet direct dergelijke voordelen lijkt te leveren, lidmaatschappen brengen immers veelal kosten met zich mee en vrijwilligerswerk is per definitie onbezoldigd, zijn er toch redenen te denken dat mensen die in (allerlei) maatschappelijke organisaties participeren hiervan de vruchten plukken in hun professionele leven. De maatschappelijke organisaties zelf vormen immers een context waarin mensen contacten opdoen. Het participeren in deze organisaties leidt daarmee tot een vergroting van het sociale netwerk van mensen en dit verhoogt wellicht de kans dat ze door hun sociale contacten aan een betere baan worden geholpen. In het tweede deel van deze studie beantwoorden we dan ook de volgende vraag: *In hoeverre biedt participatie in maatschappelijke organisaties de leden voordelen tijdens hun beroeps carrière?* We gaan niet enkel na of maatschappelijke organisaties hun leden dergelijke voordelen bieden, ook staan we stil bij de vraag of bepaalde typen organisaties meer voordelen bieden dan andere.

Na dit beknopte overzicht zullen we nu alle afzonderlijke empirische hoofdstukken en het afsluitende hoofdstuk kort bespreken.

Hoofdstuk 2 - “Nationale context, religiositeit en vrijwilligerswerk: Resultaten uit 53 landen”

In Hoofdstuk 2 gaan we nader in op de relatie tussen religie en vrijwilligerswerk. Waar eerder onderzoek al heeft aangetoond dat religieuze mensen vaker participeren in maatschappelijke organisaties dan niet-religieuzen, gaan we in dit hoofdstuk na of de religieuze context ook van invloed is op de participatiekans. Het verschil tussen religieuzen en niet-religieuzen wordt in de literatuur toegeschreven aan zowel het meer altruïstische waardenpatroon onder religieuzen alsmede hun uitgebreidere rekruteringsnetwerken. Eerder empirisch onderzoek lijkt vooral ondersteuning te vinden voor dat laatste; religieuze mensen hebben een grotere kans actief te worden in maatschappelijke organisaties, omdat ze in hechtere netwerken verkeren. Dit soort netwerken zou ertoe leiden dat ze een grotere kans hebben gevraagd te worden om te gaan participeren. Dit gegeven combineren we in dit hoofdstuk met een bevinding uit het godsdienstsociologisch onderzoek dat een religieuze context ertoe leidt dat mensen religieuzer zijn, onafhankelijk van de eigen religieuze opvoeding. We argumenteren dat mensen die in meer religieuze landen wonen een grotere kans hebben gerekruteerd te worden door leden van maatschappelijke organisaties, ook als ze zelf (vrijwel) nooit in een kerk te vinden zijn.

Daarnaast hoeven de sterk religieuze mensen in een religieuze context niet in hun eentje de organisatie van activiteiten op zich te nemen, terwijl dit in een meer seculiere context waarschijnlijker is. In dit hoofdstuk gaan we na wat de invloed is van zowel individuele religiositeit, de religieuze context alsmede hun samenspel. Daarmee beantwoorden we de volgende vragen: In welke mate beïnvloedt de nationale religieuze context de mate waarin inwoners van een land vrijwilligerswerk verrichten?; Beïnvloedt de nationale religieuze context de relatie tussen individuele religiositeit en vrijwilligerswerk? Daarnaast toetsen we de zogenaamde spillover hypothese die stelt dat participatie in religieuze maatschappelijke organisaties ertoe leidt dat mensen ook binnen seculiere organisaties actief worden. Voor de beantwoording van de onderzoeksvragen en de toetsing van onze hypothesen maken we gebruik van enquêtegegevens uit 53 landen. De resultaten uit zogenaamde multiniveau analyses laten zien dat mensen die vaker naar de kerk gaan inderdaad een aanzienlijk grotere kans hebben vrijwilligerswerk te verrichten. Verder blijkt een meer religieuze context eveneens de kans op vrijwilligerswerk te vergroten. Echter, het verschil tussen zij die vaak naar de kerk gaan en zij die er (vrijwel) nooit te vinden zijn blijkt geringer in meer religieuze landen dan in meer seculiere landen. Oftewel, of mensen veel of weinig naar de kerk gaan blijkt in religieuze landen vrijwel niet van invloed op hun kans vrijwilligerswerk te doen, terwijl dit in meer seculiere landen wel tot grote participatieverschillen leidt. Naast deze resultaten met betrekking tot de invloed van individuele en contextuele religiositeit vinden we ondersteuning voor de spillover hypothese. Dit houdt in dat religieuze mensen niet alleen een grotere kans hebben vrijwilligerswerk te verrichten voor religieuze organisaties; ze zijn ook meer actief in seculiere organisaties dan niet-religieuze. Wanneer we de resultaten uit dit hoofdstuk in een iets breder perspectief plaatsen lijken ze te suggereren dat voortgaande secularisering in Westerse landen op termijn kan leiden tot steeds minder vrijwilligers. We komen op deze voorspelling terug bij de bespreking van Hoofdstuk 6.

Hoofdstuk 3 - “Generationale verklaringen voor landenverschillen in participatie in maatschappelijke organisaties: Een multiniveau studie van 56 landen”

Eerder onderzoek (waaronder ook het onderzoek zoals gepresenteerd in Hoofdstuk 2) naar landenverschillen in maatschappelijke participatie bleef beperkt tot het bestuderen van de invloed van de huidige context op de kans dat mensen actief zijn in maatschappelijke organisaties. In Hoofdstuk 3 wordt de multiniveau benadering uitgebreid met verklaringen die gebaseerd zijn op de context waarin mensen zijn opgegroeid, omdat de verschillen immers vaak gebaseerd zijn op processen die plaats hebben gevonden in het verleden. In de Sociologie speelt dit soort cohortverklaringen een belangrijke rol in het verklaren van

geleidelijke maatschappelijke veranderingen. Dergelijke cohortverklaringen leunen in sterke mate op het idee dat mensen gedurende een bepaalde fase in hun ontwikkeling (de zogenaamde socialisatiefase, welke gewoonlijk verondersteld wordt plaats te vinden tijdens de jonge adolescentie) zich belangrijke attitudes en gedragingen eigen maken die vervolgens relatief stabiel blijven gedurende de rest van hun leven. Welke attitudes en gedragingen eigen gemaakt worden hangt, volgens dit soort verklaringen, in sterke mate af van de maatschappelijke omstandigheden waarin mensen opgroeien. Wanneer mensen uit verschillende geboortecohorten dus onder geheel verschillende omstandigheden opgroeien valt door cohortvervanging (oudere cohorten sterven uit en jongere cohorten gaan een steeds groter deel van de bevolking uitmaken) een geleidelijke maatschappelijke verandering te verwachten. In dit hoofdstuk gaan we na in hoeverre verschillen in participatie verklaard kunnen worden door vijf van dit soort cohortverklaringen. Uit de literatuur omtrent trends in maatschappelijke participatie leiden we vijf hypothesen af die betrekking hebben op (a) de rol van religie tijdens de socialisatie, (b) de rol van de opkomst van televisie, (c) de rol van oorlogservaringen, (d) de invloed van blootstelling aan een Communistisch regime en (e) het belang van het gemiddeld opleidingsniveau van iemands geboortecohort. Op basis van multiniveau analyses van gegevens van meer dan 200.000 respondenten uit 56 landen laten we zien dat participatie in maatschappelijke organisaties hoger is wanneer mensen onder relatief religieuze omstandigheden zijn opgegroeid. Daarnaast blijkt veel blootstelling aan televisie tijdens de jeugd de participatie op latere leeftijd geen goed te doen. Verder hebben mensen die langer onder een Communistisch bewind hebben geleefd een geringere kans actief te zijn in maatschappelijke organisaties. Mensen die in landen wonen die gedurende hun leven betrokken zijn geweest bij ernstige oorlogen (d.w.z. met relatief veel slachtoffers) zijn minder geneigd vrijwilligerswerk te doen. Als laatste blijkt dat mensen die behoren tot gemiddeld genomen hoger opgeleide geboortecohorten ook minder vrijwilligerswerk doen. Dit laatste is opvallend, aangezien mensen die zelf hoger opgeleid zijn een aanzienlijk grotere kans hebben vrijwilligerswerk te verrichten. De combinatie van beide effecten laat echter zien dat de opleidingsexpansie die gedurende de afgelopen decennia in de meeste Westerse landen heeft plaatsgevonden waarschijnlijk tot een lichte toename in het aantal vrijwilligers heeft geleid.

Hoofdstuk 4 - “Religie en participatie in maatschappelijke organisaties gedurende de levensloop: Een gebeurtenissenanalyse voor Nederland”

Terwijl we in Hoofdstuk 2 en Hoofdstuk 3 enkel kijken naar óf mensen in het jaar dat ze geënquêteerd werden participeerden in maatschappelijke organisaties, volgen we in Hoofd-

stuk 4 mensen gedurende hun leven, waarbij we nagaan wanneer ze actief worden en wanneer ze hun participatie weer beëindigen. Dit stelt ons in staat om een antwoord te geven op de vraag waardoor precies de positieve relatie tussen religie en participatie, zoals die vrijwel altijd in zogenaamd dwarsdoorsnedeonderzoek gevonden wordt, veroorzaakt wordt. Is het zo dat individuele en contextuele religiositeit positief van invloed zijn op het starten van participatie of is het zo dat ze negatief van invloed zijn op het stoppen van participatie, of allebei? Aangezien uit eerder onderzoek blijkt dat de hogere participatiegraad onder religieuze mensen in sterke mate bepaald wordt door rekruteringskansen, lijkt met name de kans op starten groter te moeten zijn onder religieuzen dan onder niet-religieuzen. Echter, wanneer binnen religieuze groeperingen een sterkere norm bestaat dat men behoort te participeren, ligt het ook in de rede te verwachten dat religieuze mensen moeilijker hun participatie kunnen beëindigen dan niet-religieuzen. Stoppen zou immers weleens negatief gesanctioneerd kunnen worden. In Hoofdstuk 4 bestuderen we de participatie dan ook vanuit een dynamisch perspectief, waarbij we op basis van unieke levensloopgegevens uit Nederland zogenaamde gebeurtenissenanalyses presenteren. De resultaten van deze analyses tonen aan dat zowel individuele religiositeit als de huidige religieuze context waarin men woont eigenlijk alleen maar het aangaan van lidmaatschappen positief beïnvloeden. Het starten met vrijwilligerswerk alsmede het beëindigen van de participatie wordt gezamenlijk door religiositeit beïnvloed. Verder is het met behulp van de gebruikte levensloopgegevens mogelijk de spillover hypothese (zoals ook getoetst in Hoofdstuk 2) aan een strengere toetsing te onderwerpen. Voor spillover dient de samenhang tussen participatie in religieuze organisaties en participatie in seculiere organisaties immers veroorzaakt te worden door het feit dat men eerst actief wordt in religieuze organisaties en pas daarna ook in seculiere organisaties. Nou is dat uiteraard niet voor alle leden het geval, maar voor zover de twee vormen van participatie samengaan, vinden we inderdaad ondersteuning voor dit idee. Participatie in religieuze organisaties leidt wel tot een grotere kans op participatie in seculiere organisaties, maar dat geldt niet andersom.

Hoofdstuk 5 - “Sociaal-economische opbrengsten van participatie in maatschappelijke organisaties: Een Nederlandse levensloopstudie”

In dit laatste empirische hoofdstuk gaan we in op de sociaal-economische consequenties van participatie in maatschappelijke organisaties. Op basis van het idee dat mensen door leden uit hun sociale netwerk aan nieuwe banen geholpen kunnen worden, formuleren we de verwachting dat participatie in maatschappelijke organisaties wel eens bij kan dragen aan een succesvolle beroeps carrière. Immers, zij die lid worden van (allerlei) organisaties

doen daar vaak veel contacten op. Deze contacten kunnen helpen bij het verkrijgen van relevante kennis met betrekking tot vacatures. Bovendien zullen sommige contacten wellicht zelfs een goed woordje kunnen doen bij potentiële toekomstige werkgevers. Zij die niet participeren in maatschappelijke organisaties missen daarmee een belangrijk kanaal voor dit soort hulp. De hulp die dit soort sociale netwerken kan bieden wordt met lichte overdrijving ook wel verwoord in de stelling dat “het niet uitmaakt wat je kent, maar wie je kent”. In Hoofdstuk 5 gaan we eerst na of mensen die participeren inderdaad ervan profiteren tijdens hun professionele loopbaan. Daarna laten we de niet-leden buiten beschouwing om te achterhalen of de samenstelling van de maatschappelijke organisatie ertoe doet. Als immers met name mensen die hoge maatschappelijke posities bekleden anderen aan de juiste informatie kunnen helpen of daadwerkelijk als goede kruiwagen kunnen fungeren, valt te verwachten dat vooral maatschappelijke organisaties waarvan dit soort mensen lid worden gunstig zijn voor de beroeps carrière. Om te toetsen of participatie in maatschappelijke organisaties daadwerkelijk sociaal-economische voordelen heeft maken we wederom gebruik van de unieke levensloopgegevens uit Nederland. Voor het vaststellen van een positief effect is het immers van belang om omgekeerde causaliteit uit te sluiten. Wanneer mensen met een succesvolle professionele carrière een grotere kans hebben te participeren (de resultaten uit de eerdere hoofdstukken wijzen daarop), kan de samenhang tussen participatie en het hebben van een hoge beroepsstatus berusten op een verband dat in de andere richting loopt. Het zou bijvoorbeeld zo kunnen zijn dat maatschappelijke organisaties met name mensen met een hoge beroepsstatus trachten te rekruteren, omdat deze mensen vooral als een aanwinst voor de organisatie worden gezien. Met behulp van de levensloopgegevens valt echter rekening te houden met het feit dat het verband weleens twee kanten op kan lopen. De resultaten laten zien dat leden van maatschappelijke organisaties inderdaad een grotere kans hebben dan niet-leden om een nieuwe baan te beginnen en dat die baan dan ook relatief vaker meer inkomsten en een hogere beroepsstatus met zich meebrengt. We vinden geen extra voordelen voor vrijwilligers. Blijkbaar plukken ook leden die geen vrijwilligerswerk doen de vruchten van hun participatie. Daarnaast blijken met name diegenen die lid zijn van een maatschappelijke organisatie waarin relatief veel leden een hoge beroepsstatus hebben te profiteren; vooral deze organisaties leiden tot het krijgen van een nieuwe baan met een hogere beroepsstatus. De conclusie is dan ook dat participatie in maatschappelijke organisaties gunstig is voor de beroeps carrière van individuele leden.

Hoofdstuk 6 - “Wat hebben we geleerd en hoe nu verder?”

In het laatste hoofdstuk van deze studie vatten we ter beantwoording van de centrale onderzoeksvragen allereerst de resultaten uit de eerdere hoofdstukken nog eens samen. Vervolgens gaan we nog wat dieper in op de onderlinge relaties tussen sommige bevindingen uit de

verschillende hoofdstukken. Zo staan we ondermeer stil bij het feit dat participatie in maatschappelijke organisaties in zekere zin de maatschappelijke ongelijkheid lijkt te vergroten. Uit Hoofdstuk 2 tot en met Hoofdstuk 4 blijkt immers dat mensen met een hogere maatschappelijke positie een grotere kans hebben te participeren, terwijl uit Hoofdstuk 5 blijkt dat diegenen die participeren daar vervolgens van profiteren tijdens hun professionele loopbaan. Dit lijkt zelfs de maatschappelijke positie van vrouwen geen goed te doen. Vrouwen, zo bleek uit Hoofdstuk 2 en Hoofdstuk 3, hebben een kleinere kans te participeren, en bovendien wanneer ze lid zijn geworden, beëindigen ze hun lidmaatschap ook nog eens sneller dan mannen (zie Hoofdstuk 4). Daarmee zullen zij minder in staat zijn de vruchten te plukken die participatie met zich mee blijkt te brengen.

Hoewel in Hoofdstuk 6 met name de conclusies worden gepresenteerd die op basis van de eerdere hoofdstukken kunnen worden getrokken, worden ook nog nieuwe empirische bevindingen aangaande trends in de Nederlandse participatie gepresenteerd. Op basis van de modellen uit Hoofdstuk 4 is het namelijk mogelijk per jaar een schatting te geven van de kans dat een willekeurige Nederlander (a) lid wordt van een maatschappelijke organisatie, (b) het passieve lidmaatschap omzet in actief vrijwilligerswerk, (c) het lidmaatschap opzegt en (d) stopt met het verrichten van vrijwilligerswerk. Uit de resultaten blijkt dat de kans dat iemand in een bepaald jaar lid wordt over de afgelopen decennia behoorlijk te zijn toegenomen. Hoewel we wat betreft het starten met vrijwilligerswerk voorzichtiger moeten zijn, lijkt het erop alsof er na de Tweede Wereldoorlog zich een lichte stijging heeft voorgedaan tot aan begin jaren '70, waarna een lichte daling lijkt te zijn ingezet. Zowel de kans dat mensen stoppen met het verrichten van vrijwilligerswerk als de kans dat ze hun lidmaatschap opzeggen is over de afgelopen decennia gedaald. De optelsom van deze vier trends schetst een beeld van toegenomen participatie in Nederland. Dit is opvallend omdat dezelfde periode gekenmerkt wordt door een enorme secularisering. Blijkbaar hoeft secularisering dus niet noodzakelijk samen te gaan met afnemende participatie, al moet worden opgemerkt dat het kader van het Nederlandse verenigingsleven over de afgelopen jaren steeds ouder is geworden. Wellicht zien we dus tot het jaar 2000 (waarin het survey werd gehouden) nog geen afname, maar ligt een dergelijke afname in de nabije toekomst wel in het verschiet.

Curriculum Vitae

Stijn Ruiter was born November 17, 1976 in Eindhoven, the Netherlands. He spent his childhood in Eindhoven, where he graduated in 1995 from the Lorentz Lyceum. In September 1995, he started his studies in Sociology at the Radboud University Nijmegen, the Netherlands. In August 2002, he obtained his Master's degree in Sociology *cum laude*. In September 2002, he became a junior researcher at the Interuniversity Center for Social Science Theory and Methodology (ICS), and he worked on this Ph.D. thesis at the Department of Sociology of the Radboud University Nijmegen, the Netherlands. In 2005, he spent a research period at the Department of Sociology of the University of Victoria, Canada, where he worked with Professor Douglas Baer on cross-national research on generational differences in voluntary association involvement. As of December 2006, he is employed as Assistant Professor at the Department of Sociology/ICS at Radboud University Nijmegen.

ICS dissertation series

The ICS-series presents dissertations of the Interuniversity Center for Social Science Theory and Methodology. Each of these studies aims at integrating explicit theory formation with state-of-the-art empirical research or at the development of advanced methods for empirical research. The ICS was founded in 1986 as a cooperative effort of the universities of Groningen and Utrecht. Since 1992, the ICS expanded to the University of Nijmegen. Most of the projects are financed by the participating universities or by the Netherlands Organization for Scientific Research (NWO). The international composition of the ICS graduate students is mirrored in the increasing international orientation of the projects and thus of the ICS-series itself.

1. C. van Liere, (1990), *Lastige Leerlingen. Een empirisch onderzoek naar sociale oorzaken van probleemgedrag op basisscholen*, Amsterdam: Thesis Publishers.
2. Marco H.D. van Leeuwen, (1990), *Bijstand in Amsterdam, ca. 1800–1850. Armeezorg als beheersings- en overlevingsstrategie*, ICS-dissertation, Utrecht.
3. I. Maas, (1990), *Deelname aan podiumkunsten via de podia, de media en actieve beoefening. Substitutie of leereffecten?*, Amsterdam: Thesis Publishers.
4. M.I. Broese van Groenou, (1991), *Gescheiden Netwerken. De relaties met vrienden en verwanten na echtscheiding*, Amsterdam: Thesis Publishers.
5. Jan M.M. van den Bos, (1991), *Dutch EC Policy Making. A Model-Guided Approach to Coordination and Negotiation*, Amsterdam: Thesis Publishers.
6. Karin Sanders, (1991), *Vrouwelijke Pioniers. Vrouwen en mannen met een 'mannelijke' hogere beroepsopleiding aan het begin van hun loopbaan*, Amsterdam: Thesis Publishers.
7. Sjerp de Vries, (1991), *Egoism, Altruism, and Social Justice. Theory and Experiments on Cooperation in Social Dilemmas*, Amsterdam: Thesis Publishers.
8. Ronald S. Batenburg, (1991), *Automatisering in bedrijf*, Amsterdam: Thesis Publishers.
9. Rudi Wielers, (1991), *Selectie en allocatie op de arbeidsmarkt. Een uitwerking voor de informele en geïnstitutionaliseerde kinderopvang*, Amsterdam: Thesis Publishers.
10. Gert P. Westert, (1991), *Verschillen in ziekenhuisgebruik*, ICS-dissertation, Groningen.
11. Hanneke Hermsen, (1992), *Votes and Policy Preferences. Equilibria in Party Systems*, Amsterdam: Thesis Publishers.
12. Cora J.M. Maas, (1992), *Probleemleerlingen in het basisonderwijs*, Amsterdam: Thesis Publishers.

13. Ed A.W. Boxman, (1992), *Contacten en carrière. Een empirisch-theoretisch onderzoek naar de relatie tussen sociale netwerken en arbeidsmarktposities*, Amsterdam: Thesis Publishers.
14. Conny G.J. Taes, (1992), *Kijken naar banen. Een onderzoek naar de inschatting van arbeidsmarktkansen bij schoolverlaters uit het middelbaar beroepsonderwijs*, Amsterdam: Thesis Publishers.
15. Peter van Roozendaal, (1992), *Cabinets in Multi-Party Democracies. The Effect of Dominant and Central Parties on Cabinet Composition and Durability*, Amsterdam: Thesis Publishers.
16. Marcel van Dam, (1992), *Regio zonder regie. Verschillen in en effectiviteit van gemeentelijk arbeidsmarktbeleid*, Amsterdam: Thesis Publishers.
17. Tanja van der Lippe, (1993), *Arbeidsverdeling tussen mannen en vrouwen*, Amsterdam: Thesis Publishers.
18. Marc A. Jacobs, (1993), *Software: Kopen of Kopiëren? Een sociaal-wetenschappelijk onderzoek onder PC-gebruikers*, Amsterdam: Thesis Publishers.
19. Peter van der Meer, (1993), *Verdringing op de Nederlandse arbeidsmarkt. Sector- en sekseverschillen*, Amsterdam: Thesis Publishers.
20. Gerbert Kraaykamp, (1993), *Over lezen gesproken. Een studie naar sociale differentiatie in leesgedrag*, Amsterdam: Thesis Publishers.
21. Evelien Zeggelink, (1993), *Strangers into Friends. The Evolution of Friendship Networks Using an Individual Oriented Modeling Approach*, Amsterdam: Thesis Publishers.
22. Jaco Berveling, (1994), *Het stempel op de besluitvorming. Macht, invloed en besluitvorming op twee Amsterdamse beleidsterreinen*, Amsterdam: Thesis Publishers.
23. Wim Bernasco, (1994), *Coupled Careers. The Effects of Spouse's Resources on Success at Work*, Amsterdam: Thesis Publishers.
24. Liset van Dijk, (1994), *Choices in Child Care. The Distribution of Child Care Among Mothers, Fathers and Non-Parental Care Providers*, Amsterdam: Thesis Publishers.
25. Jos de Haan, (1994), *Research Groups in Dutch Sociology*, Amsterdam: Thesis Publishers.
26. K. Boahene, (1995), *Innovation Adoption as a Socio-Economic Process. The Case of the Ghanaian Cocoa Industry*, Amsterdam: Thesis Publishers.
27. Paul E.M. Ligthart, (1995), *Solidarity in Economic Transactions. An Experimental Study of Framing Effects in Bargaining and Contracting*, Amsterdam: Thesis Publishers.
28. Roger Th. A.J. Leenders, (1995), *Structure and Influence. Statistical Models for the Dynamics of Actor Attributes, Network Structure, and their Interdependence*, Amsterdam: Thesis Publishers.
29. Beate Völker, (1995), *Should Auld Acquaintance Be Forgotten...? Institutions of Communism, the Transition to Capitalism and Personal Networks: the Case of East Germany*, Amsterdam: Thesis Publishers.
30. A. Cancrinus-Matthijssse, (1995), *Tussen hulpverlening en ondernemerschap. Beroepsuitoefening en taakopvattingen van openbare apothekers in een aantal West-Europese landen*, Amsterdam: Thesis Publishers.
31. Nardi Steverink, (1996), *Zo lang mogelijk zelfstandig. Naar een verklaring van verschillen in oriëntatie ten aanzien van opname in een verzorgingstehuis onder fysiek kwetsbare ouderen*, Amsterdam: Thesis Publishers.
32. Ellen Lindeman, (1996), *Participatie in vrijwilligerswerk*, Amsterdam: Thesis Publishers.
33. Chris Snijders, (1996), *Trust and Commitments*, Amsterdam: Thesis Publishers.

34. Koos Postma, (1996), *Changing Prejudice in Hungary. A Study on the Collapse of State Socialism and Its Impact on Prejudice Against Gypsies and Jews*, Amsterdam: Thesis Publishers.
35. Jooske T. van Busschbach, (1996), *Uit het oog, uit het hart? Stabiliteit en verandering in persoonlijke relaties*, Amsterdam: Thesis Publishers.
36. René Torenvlied, (1996), *Besluiten in uitvoering. Theorieën over beleidsuitvoering modelmatig getoetst op sociale vernieuwing in drie gemeenten*, Amsterdam: Thesis Publishers.
37. Andreas Flache, (1996), *The Double Edge of Networks. An Analysis of the Effect of Informal Networks on Cooperation in Social Dilemmas*, Amsterdam: Thesis Publishers.
38. Kees van Veen, (1997), *Inside an Internal Labor Market: Formal Rules, Flexibility and Career Lines in a Dutch Manufacturing Company*, Amsterdam: Thesis Publishers.
39. Lucienne van Eijk, (1997), *Activity and Well-being in the Elderly*, Amsterdam: Thesis Publishers.
40. Róbert Gál, (1997), *Unreliability. Contract Discipline and Contract Governance under Economic Transition*, Amsterdam: Thesis Publishers.
41. Anne-Geerte van de Goor, (1997), *Effects of Regulation on Disability Duration*, ICS-dissertation, Utrecht.
42. Boris Blumberg, (1997), *Das Management von Technologiekooperationen. Partnersuche und Verhandlungen mit dem Partner aus Empirisch-Theoretischer Perspektive*, ICS-dissertation, Utrecht.
43. Marijke von Bergh, (1997), *Loopbanen van oudere werknemers*, Amsterdam: Thesis Publishers.
44. Anna Petra Nieboer, (1997), *Life-Events and Well-Being: A Prospective Study on Changes in Well-Being of Elderly People Due to a Serious Illness Event or Death of the Spouse*, Amsterdam: Thesis Publishers.
45. Jacques Niehof, (1997), *Resources and Social Reproduction: The Effects of Cultural and Material Resources on Educational and Occupational Careers in Industrial Nations at the End of the Twentieth Century*, ICS-dissertation, Nijmegen.
46. Ariana Need, (1997), *The Kindred Vote. Individual and Family Effects of Social Class and Religion on Electoral Change in the Netherlands, 1956–1994*, ICS-dissertation, Nijmegen.
47. Jim Allen, (1997), *Sector Composition and the Effect of Education on Wages: an International Comparison*, Amsterdam: Thesis Publishers.
48. Jack B.F. Hutten, (1998), *Workload and Provision of Care in General Practice. An Empirical Study of the Relation Between Workload of Dutch General Practitioners and the Content and Quality of their Care*, ICS-dissertation, Utrecht.
49. Per B. Kropp, (1998), *Berufserfolg im Transformationsprozeß, Eine theoretisch-empirische Studie über die Gewinner und Verlierer der Wende in Ostdeutschland*, ICS-dissertation, Utrecht.
50. Maarten H.J. Wolbers, (1998), *Diploma-inflatie en verdringing op de arbeidsmarkt. Een studie naar ontwikkelingen in de opbrengsten van diploma's in Nederland*, ICS-dissertation, Nijmegen.
51. Wilma Smeenk, (1998), *Opportunity and Marriage. The Impact of Individual Resources and Marriage Market Structure on First Marriage Timing and Partner Choice in the Netherlands*, ICS-dissertation, Nijmegen.
52. Marinus Spreen, (1999), *Sampling Personal Network Structures: Statistical Inference in Ego-Graphs*, ICS-dissertation, Groningen.
53. Vincent Buskens, (1999), *Social Networks and Trust*, ICS-dissertation, Utrecht.

54. Susanne Rijken, (1999), *Educational Expansion and Status Attainment. A Cross-National and Over-Time Comparison*, ICS-dissertation, Utrecht.
55. Mérove Gijssberts, (1999), *The Legitimation of Inequality in State-Socialist and Market Societies, 1987–1996*, ICS-dissertation, Utrecht.
56. Gerhard G. Van de Bunt, (1999), *Friends by Choice. An Actor-Oriented Statistical Network Model for Friendship Networks Through Time*, ICS-dissertation, Groningen.
57. Robert Thomson, (1999), *The Party Mandate: Election Pledges and Government Actions in the Netherlands, 1986–1998*, Amsterdam: Thela Thesis.
58. Corine Baarda, (1999), *Politieke besluiten en boeren beslissingen. Het draagvlak van het mest-beleid tot 2000*, ICS-dissertation, Groningen.
59. Rafael Wittek, (1999), *Interdependence and Informal Control in Organizations*, ICS-dissertation, Groningen.
60. Diane Payne, (1999), *Policy Making in the European Union: an Analysis of the Impact of the Reform of the Structural Funds in Ireland*, ICS-dissertation, Groningen.
61. René Veenstra, (1999), *Leerlingen – Klassen – Scholen. Prestaties en vorderingen van leerlingen in het voortgezet onderwijs*, Amsterdam: Thela Thesis.
62. Marjolein Achterkamp, (1999), *Influence Strategies in Collective Decision Making. A Comparison of Two Models*, ICS-dissertation, Groningen.
63. Peter Mühlau, (2000), *The Governance of the Employment Relation. A Relational Signaling Perspective*, ICS-dissertation, Groningen.
64. Agnes Akkerman, (2000), *Verdeelde vakbeweging en stakingen. Concurrentie om leden*, ICS-dissertation, Groningen.
65. Sandra van Thiel, (2000), *Quangocratization: Trends, Causes and Consequences*, ICS-dissertation, Utrecht.
66. Rudi Turksema, (2000), *Supply of Day Care*, ICS-dissertation, Utrecht.
67. Sylvia E. Korupp (2000), *Mothers and the Process of Social Stratification*, ICS-dissertation, Utrecht.
68. Bernard A. Nijstad (2000), *How the Group Affects the Mind: Effects of Communication in Idea Generating Groups*, ICS-dissertation, Utrecht.
69. Inge F. de Wolf (2000), *Opleidingsspecialisatie en arbeidsmarktsucces van sociale wetenschappers*, ICS-dissertation, Utrecht.
70. Jan Kratzer (2001), *Communication and Performance: An Empirical Study in Innovation Teams*, ICS-dissertation, Groningen.
71. Madelon Kroneman (2001), *Healthcare Systems and Hospital Bed Use*, ICS/NIVEL-dissertation, Utrecht.
72. Herman van de Werfhorst (2001), *Field of Study and Social Inequality. Four Types of Educational Resources in the Process of Stratification in the Netherlands*, ICS-dissertation, Nijmegen.
73. Tamás Bartus (2001), *Social Capital and Earnings Inequalities. The Role of Informal Job Search in Hungary*, ICS-dissertation, Groningen.
74. Hester Moerbeek (2001), *Friends and Foes in the Occupational Career. The Influence of Sweet and Sour Social Capital on the Labour Market*, ICS-dissertation, Nijmegen.
75. Marcel van Assen (2001), *Essays on Actor Perspectives in Exchange Networks and Social Dilemmas*, ICS-dissertation, Groningen.

76. Inge Sieben (2001), *Sibling Similarities and Social Stratification. The Impact of Family Background across Countries and Cohorts*, ICS-dissertation, Nijmegen.
77. Alinda van Bruggen (2001), *Individual Production of Social Well-Being. An Exploratory Study*, ICS-dissertation, Groningen.
78. Marcel Coenders (2001), *Nationalistic Attitudes and Ethnic Exclusionism in a Comparative Perspective: An Empirical Study of Attitudes Toward the Country and Ethnic Immigrants in 22 Countries*, ICS-dissertation, Nijmegen.
79. Marcel Lubbers (2001), *Exclusionistic Electorates. Extreme Right-Wing Voting in Western Europe*, ICS-dissertation, Nijmegen.
80. Uwe Matzat (2001), *Social Networks and Cooperation in Electronic Communities. A theoretical-empirical Analysis of Academic Communication and Internet Discussion Groups*, ICS-dissertation, Groningen.
81. Jacques P.G. Janssen (2002), *Do Opposites Attract Divorce? Dimensions of Mixed Marriage and the Risk of Divorce in the Netherlands*, ICS-dissertation, Nijmegen.
82. Miranda Jansen (2002), *Waardenoriëntaties en partnerrelaties. Een panelstudie naar wederzijdse invloeden*, ICS-dissertation, Utrecht.
83. Anne Rigt Poortman (2002), *Socioeconomic Causes and Consequences of Divorce*, ICS-dissertation, Utrecht.
84. Alexander Gattig (2002), *Intertemporal Decision Making*, ICS-dissertation, Groningen.
85. Gerrit Rooks (2002), *Contract en Conflict: Strategisch Management van Inkooptransacties*, ICS-dissertation, Utrecht.
86. Károly Takács (2002), *Social Networks and Intergroup Conflict*, ICS-dissertation, Groningen.
87. Thomas Gautschi (2002), *Trust and Exchange, Effects of Temporal Embeddedness and Network Embeddedness on Providing and Dividing a Surplus*, ICS-dissertation, Utrecht.
88. Hilde Bras (2002), *Zeeuwse meiden. Dienen in de levensloop van vrouwen, ca. 1850–1950*, Amsterdam: Aksant Academic Publishers.
89. Merijn Rengers (2002), *Economic Lives of Artists. Studies into Careers and the Labour Market in the Cultural Sector*, ICS-dissertation, Utrecht.
90. Annelies Kassenberg (2002), *Wat scholieren bindt. Sociale gemeenschap in scholen*, ICS-dissertation, Groningen.
91. Marc Verboord (2003), *Moet de meester dalen of de leerling klimmen? De invloed van literatuuronderwijs en ouders op het lezen van boeken tussen 1975 en 2000*, ICS-dissertation, Utrecht.
92. Marcel van Egmond (2003), *Rain Falls on All of Us (but Some Manage to Get More Wet than Others): Political Context and Electoral Participation*, ICS-dissertation, Nijmegen.
93. Justine Horgan (2003), *High Performance Human Resource Management in Ireland and the Netherlands: Adoption and Effectiveness*, ICS-dissertation, Groningen.
94. Corine Hoeben (2003), *LETS' Be a Community. Community in Local Exchange Trading Systems*, ICS-dissertation, Groningen.
95. Christian Steglich (2003), *The Framing of Decision Situations. Automatic Goal Selection and Rational Goal Pursuit*, ICS-dissertation, Groningen.
96. Johan van Wilsem (2003), *Crime and Context. The Impact of Individual, Neighborhood, City and Country Characteristics on Victimization*, ICS-dissertation, Nijmegen.

97. Christiaan Monden (2003), *Education, Inequality and Health. The Impact of Partners and Life Course*, ICS-dissertation, Nijmegen.
98. Evelyn Hello (2003), *Educational Attainment and Ethnic Attitudes. How to Explain their Relationship*, ICS-dissertation, Nijmegen.
99. Marnix Croes en Peter Tammes (2004), *Gif laten wij niet voortbestaan. Een onderzoek naar de overlevingskansen van joden in de Nederlandse gemeenten, 1940–1945*, Amsterdam: Aksant Academic Publishers.
100. Ineke Nagel (2004), *Cultuurdeelname in de levensloop*, ICS-dissertation, Utrecht.
101. Marieke van der Wal (2004), *Competencies to Participate in Life. Measurement and the Impact of School*, ICS-dissertation, Groningen.
102. Vivian Meertens (2004), *Depressive Symptoms in the General Population: a Multifactorial Social Approach*, ICS-dissertation, Nijmegen.
103. Hanneke Schuurmans (2004), *Promoting Well-Being in Frail Elderly People. Theory and Intervention*, ICS-dissertation, Groningen.
104. Javier Arregui (2004), *Negotiation in Legislative Decision-Making in the European Union*, ICS-dissertation, Groningen.
105. Tamar Fischer (2004), *Parental Divorce, Conflict and Resources. The Effects on Children's Behaviour Problems, Socioeconomic Attainment, and Transitions in the Demographic Career*, ICS-dissertation, Nijmegen.
106. René Bekkers (2004), *Giving and Volunteering in the Netherlands: Sociological and Psychological Perspectives*, ICS-dissertation, Utrecht.
107. Renée van der Hulst (2004), *Gender Differences in Workplace Authority: An Empirical Study on Social Networks*, ICS-dissertation, Groningen.
108. Rita Smaniotto (2004), 'You Scratch My Back and I Scratch Yours' Versus 'Love Thy Neighbour'. *Two Proximate Mechanisms of Reciprocal Altruism*, ICS-dissertation, Groningen.
109. Maurice Gesthuizen (2004), *The Life-Course of the Low-Educated in the Netherlands: Social and Economic Risks*, ICS-dissertation, Nijmegen.
110. Carlijne Philips (2005), *Vakantiegemeenschappen. Kwalitatief en Kwantitatief Onderzoek naar Gelegenheid- en Refreshergemeenschap tijdens de Vakantie*, ICS-dissertation, Groningen.
111. Esther de Ruijter (2005), *Household Outsourcing*, ICS-dissertation, Utrecht.
112. Frank van Tubergen (2005), *The Integration of Immigrants in Cross-National Perspective: Origin, Destination, and Community Effects*, ICS-dissertation, Utrecht.
113. Ferry Koster (2005), *For the Time Being. Accounting for Inconclusive Findings Concerning the Effects of Temporary Employment Relationships on Solidary Behavior of Employees*, ICS-dissertation, Groningen.
114. Carolien Klein Haarhus (2005), *Promoting Anti-Corruption Reforms. Evaluating the Implementation of a World Bank Anti-Corruption Program in Seven African Countries (1999–2001)*, ICS-dissertation, Utrecht.
115. Martin van der Gaag (2005), *Measurement of Individual Social Capital*, ICS-dissertation, Groningen.
116. Johan Hansen (2005), *Shaping Careers of Men and Women in Organizational Contexts*, ICS-dissertation, Utrecht.
117. Davide Barrera (2005), *Trust in Embedded Settings*, ICS-dissertation, Utrecht.

118. Mattijs Lambooi (2005), *Promoting Cooperation. Studies into the Effects of Long-Term and Short-Term Rewards on Cooperation of Employees*, ICS-dissertation, Utrecht.
119. Lotte Vermeij (2006), *What's Cooking? Cultural Boundaries among Dutch Teenagers of Different Ethnic Origins in the Context of School*, ICS-dissertation, Utrecht.
120. Mathilde Strating (2006), *Facing the Challenge of Rheumatoid Arthritis. A 13-year Prospective Study among Patients and Cross-Sectional Study among Their Partners*, ICS-dissertation, Groningen.
121. Jannes de Vries (2006), *Measurement Error in Family Background Variables: The Bias in the Intergenerational Transmission of Status, Cultural Consumption, Party Preference, and Religiosity*, ICS-dissertation, Nijmegen.
122. Stefan Thau (2006), *Workplace Deviance: Four Studies on Employee Motives and Self-Regulation*, ICS-dissertation, Groningen.
123. Mirjam Plantinga (2006), *Employee Motivation and Employee Performance in Child Care. The effects of the Introduction of Market Forces on Employees in the Dutch Child-Care Sector*, ICS-dissertation, Groningen.
124. Helga de Valk (2006), *Pathways into Adulthood. A Comparative Study on Family Life Transitions among Migrant and Dutch Youth*, ICS-dissertation, Utrecht.
125. Henrike Elzen (2006), *Self-Management for Chronically Ill Older People*, ICS-dissertation, Groningen.
126. Ayşe Güveli (2007), *New Social Classes within the Service Class in the Netherlands and Britain. Adjusting the EGP Class Schema for the Technocrats and the Social and Cultural Specialists*, ICS-dissertation, Nijmegen.
127. Willem-Jan Verhoeven (2007), *Income Attainment in Post-Communist Societies*, ICS-dissertation, Utrecht.
128. Marieke Voorpostel (2007), *Sibling support: The Exchange of Help among Brothers and Sisters in the Netherlands*, ICS-dissertation, Utrecht.
129. Jacob Dijkstra (2007), *The Effects of Externalities on Partner Choice and Payoffs in Exchange Networks*, ICS-dissertation, Groningen.
130. Patricia van Echtelt (2007), *Time-Greedy Employment Relationships: Four Studies on the Time Claims of Post-Fordist Work*, ICS-dissertation, Groningen.
131. Sonja Vogt (2007), *Heterogeneity in Social Dilemmas: The Case of Social Support*, ICS-dissertation, Utrecht.
132. Michael Schweinberger (2007), *Statistical Methods for Studying the Evolution of Networks and Behavior*, ICS-dissertation, Groningen.
133. István Back (2007), *Commitment and Evolution: Connecting Emotion and Reason in Long-term Relationships*, ICS-dissertation, Groningen.
134. Ruben van Gaalen (2007), *Solidarity and Ambivalence in Parent-Child Relationships*, ICS-dissertation, Utrecht.
135. Jan Reitsma (2007), *Religiosity and Solidarity - Dimensions and Relationships Disentangled and Tested*, ICS-dissertation, Nijmegen.
136. Jan Kornelis Dijkstra (2007) *Status and Affection among (Pre)Adolescents and Their Relation with Antisocial and Prosocial Behavior*, ICS-dissertation, Groningen.

137. Wouter van Gils (2007), *Full-time Working Couples in the Netherlands. Causes and Consequences*, ICS-dissertation, Nijmegen.
138. Djamila Schans (2007), *Ethnic Diversity in Intergenerational Solidarity*, ICS-dissertation, Utrecht.
139. Ruud van der Meulen (2007), *Brug over Woelig Water: Lidmaatschap van Sportverenigingen, Vriendschappen, Kennissenkringen en Veralgemeend Vertrouwen*, ICS-dissertation, Nijmegen.
140. Andrea Knecht (2008), *Friendship Selection and Friends' Influence. Dynamics of Networks and Actor Attributes in Early Adolescence*, ICS-dissertation, Utrecht.
141. Ingrid Doorten (2008), *The Division of Unpaid Work in the Household: A Stubborn Pattern?*, ICS-dissertation, Utrecht.
142. Stijn Ruiter (2008), *Association in Context and Association as Context: Causes and Consequences of Voluntary Association Involvement*, ICS-dissertation, Nijmegen.

Index

- age, 23, 24, 26–28, 34, 52, 53, 55, 56, 59–66, 78, 81, 82, 84, 87, 89, 90, 92, 93, 109, 111, 115, 119, 129, 143, 168
age effect, 59
- (Roman) Catholic(s), 13, 17, 23, 26, 28, 30, 33–36, 38, 55, 59, 60, 64, 80, 84, 87–89, 92, 94, 95, 97, 129, 133, 168
- church attendance, 13–15, 17–19, 23, 24, 27–38, 45, 54–57, 60, 61, 63–67, 95–97, 128, 132
- cohort(s), 5, 6, 27, 41, 42, 44, 46–49, 52–65, 68, 69, 127, 130–132, 140, 142, 143, 145, 165
cohort effect(s), 5, 6, 9, 27, 52, 53, 58, 133
cohort replacement, 5, 42, 44, 68
cohort-level, 41, 42, 49, 52–54, 59, 62, 63, 66, 67, 69, 131–133, 140, 141, 165
- Communism, 47, 48
Communist, 43, 47, 66, 68
Communist regime(s), 43, 48, 67, 68, 130
Communist rule, 41–43, 48, 53, 57, 61, 62, 65, 66, 68, 130, 131, 141
non-communist, 47
postcommunism, 47
postcommunist, 43, 68, 141
- data set(s), 4, 15, 19, 23, 25, 30, 37, 38, 49, 52, 58, 62, 66, 67, 77, 107, 111, 112, 127, 130, 139, 145
- democracy, 4, 25, 30, 33, 43, 54, 55, 139
level of democracy, 23, 25, 28, 30, 32, 36, 37, 54, 55, 57, 61, 62, 65, 66, 129, 131, 139
- earnings, 101, 108, 110–120, 122, 135, 136
- education, 2, 22–24, 28, 31, 34, 44, 46, 48, 55, 59, 63, 68, 69, 83, 86, 90, 110, 116, 129, 131, 140, 141, 165
educational attainment, 41, 42
educational expansion, 48, 66–69, 131, 140, 141, 165
educational level, 26, 27, 48, 53–57, 60–66, 68, 82–84, 87, 89, 92, 110, 111, 113, 114, 116–118, 130, 132, 136, 140, 168
educational system, 83, 110
- hypothesis/es, 1, 4, 5, 7, 13–19, 22, 24–26, 30, 31, 33, 36–38, 41, 42, 44–49, 52, 54, 62, 63, 66, 67, 69, 73–79, 81, 85, 88, 90, 91, 94–96, 101–108, 113, 117, 121–123, 128–135, 139, 145
- job-related information, 6, 102–105, 107, 121, 123, 134, 135
job-related skills, 6, 104, 123, 134–136
- life course, 6, 8, 27, 71, 73, 75, 77, 78, 80, 81, 90, 95–97, 101–103, 107, 108, 110–112, 122, 133, 136, 145
- membership(s), 1, 2, 7, 9, 14, 15, 22–24, 28, 29, 31, 32, 34–37, 42, 47, 49, 52, 54, 56–60, 62, 63, 66, 67, 69, 72, 74, 76, 78, 79, 84, 85, 87–90, 92, 93, 96, 103, 105, 106, 108–114, 116, 117, 120, 129, 131–133, 135, 136, 168, 169
checkbook memberships, 32, 37, 129, 131
church membership(s), 14, 23, 26, 27, 30, 33, 55, 71, 73, 80, 85, 96, 133

- multilevel, 3–5, 13, 26, 28, 34, 41–44, 58–60, 64, 67, 112, 132, 134
 multiple imputation, 58, 112
 Netherlands, 17, 20, 50, 71, 77, 80, 83, 86, 95, 96, 103, 107, 108, 127, 136, 138, 141–143, 145
 network(s), 1, 4, 6–8, 14, 16–19, 24, 32, 37–39, 43–45, 48, 55, 67, 73–76, 83, 85, 95, 102–105, 107, 109, 122, 123, 128, 130, 133–135, 137, 138, 140, 144, 145
 non-Christian(s), 2, 13, 23, 26, 28, 30, 33–35, 38, 55, 80
 non-religious, 13, 19, 22, 23, 26–28, 30, 33–36, 38, 55, 56, 59, 60, 64, 71, 73–75, 78–81, 84, 85, 87–96, 133, 144, 145, 168, 169
 norm(s), 16, 18, 19, 38, 42, 44, 45, 67, 73–76, 85, 95, 96, 128, 130, 133, 137, 138, 144, 145
 period(s), 5, 6, 31, 37, 43–45, 47, 49, 57, 67–69, 78, 81, 130, 133, 138, 141, 142, 145, 146
 period effect(s), 4, 6, 9, 49, 53, 54, 59, 61, 62, 65
 Protestantism, 43
 Protestant(s), 13, 17, 18, 23, 26, 28, 30, 33, 34, 36, 38, 55, 56, 59, 60, 64, 80, 129
 recruitment, 4, 16, 17, 32, 39, 45, 48, 55, 63, 68, 69, 74, 76, 77, 82, 83, 85, 88, 96, 128–130, 133, 134, 137, 138, 140, 144
 religion(s), 2, 4, 6, 9, 15, 16, 24, 37, 38, 41–45, 47, 56, 59, 60, 64, 71–73, 75–77, 80, 81, 84, 87, 89, 92, 96, 128, 130, 131, 133, 134, 141, 144, 145, 168
 religiosity, 2, 4, 6, 9, 13–16, 18, 19, 24, 36–38, 43, 44, 54, 55, 59, 63, 67, 71–73, 75–77, 79–82, 91, 95, 96, 128, 133, 137, 141, 145
 religious association(s), 71, 94, 95, 134, 167
 religious context, 4, 6, 9, 13–16, 18, 19, 30–32, 36, 37, 43–45, 52, 54, 56, 60, 62, 64, 66, 67, 73, 75–77, 80, 81, 85, 88, 90, 91, 95, 96, 128–131, 133, 134, 137–139, 145
 religious groups, 1, 24, 26, 144
 religious organization(s), 14, 15, 22, 23, 33–35, 37, 75, 78, 81, 94, 96, 129, 134
 religious setting(s), 45, 76, 95, 96, 134, 137, 138
 secular organization(s), 13, 17, 18, 38, 75, 96, 129, 134, 143
 secularization, 15, 31, 37, 38, 43, 54, 69, 141, 143
 spillover, 13, 17, 18, 33, 36, 38, 71, 75, 81, 94–96, 129, 133, 134
 status, 9, 68, 83, 84, 86–94, 101, 105–108, 110, 113, 117, 120–123, 135, 136, 168, 169
 employment status, 82, 83
 marital status, 24, 27, 46, 55, 59, 77, 82, 83, 86, 88, 90, 91
 occupational status, 59, 108, 110–114, 116–118, 120, 121, 131
 television, 41, 42, 44–46, 53, 54, 62, 66–69, 130–132, 145
 trend(s), 5, 25, 31, 48, 52, 53, 81, 82, 86, 128, 132, 141, 142
 United States, 2, 5, 14, 15, 21, 24, 45, 46, 51, 103, 130
 volunteering, 1–4, 7–9, 13–19, 22, 24–38, 41, 42, 45, 49, 52, 55–59, 63, 64, 66–69, 71, 74, 76, 78–80, 82, 87–89, 91–96, 101–103, 105, 109, 111–114, 116, 117, 120–123, 128, 129, 131–136, 139–142, 144, 165, 168, 169
 war, 41, 42, 44, 46, 47, 53, 56, 61, 65, 66, 68, 69, 86, 88, 131, 142
 wartime experience, 41, 44–47, 53, 62, 66, 67, 69, 130, 131
 welfare state(s), 4, 23, 25, 26, 36–38, 129, 139

