Volunteering over the Life Course

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This paper examines how volunteering varies over the life course. Based on three theoretical explanations (resources, interests, and role substitution), we analyze how changing family characteristics, employment status, and educational attainment affects individual volunteering behavior. Drawing on longitudinal data from the German Socio-Economic Panel (SOEP, 1985–2009), we compare estimates from between-effects and fixed-effects models. In this way, we discriminate between variation in volunteering frequency that is due to differences between social groups and changes over time, respectively. We find that volunteering behavior is relatively stable over the life course. Moreover, some of the differences that we observe between individuals are no longer statistically significant once we focus on within-person variation. This finding shows the importance of unobserved heterogeneity and selection into volunteerism, which has not been addressed systematically in previous work. Although life-course events have an impact on the frequency of volunteering, their influence is limited and largely constrained to events occurring in the family domain.

Introduction

To what extent does volunteering change over the life course, and what processes drive these changes? Only a few studies have analyzed volunteering behavior over the life cycle using longitudinal data (Butrica, Johnson, and Zedlewski 2009; Nesbit 2012; Oesterle, Johnson, and Mortimer 2004). In fact, "most descriptions of volunteering are static—who volunteers, for how much time, for what reasons, and with what organizations" (Morrow-Howell 2010, 463). Although previous studies have examined differences between age groups (Tang 2006) and between birth cohorts (Broese van Groenou and van Tilburg 2012; Rotolo and Wilson 2004) or time points (van Ingen and Dekker 2011), the majority are based on cross-sectional data or short panels with only two waves, with the attendant methodological limitations. This paper studies the evolution of volunteering over the life cycle as a process.

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Existing theories of volunteering have different implications for life-course changes in volunteering behavior. Conventional conceptualizations of voluntary work emphasize altruistic values as a main driver of volunteering (Hodgkinson 2003; Son and Wilson 2012). Because values are usually assumed to remain largely unaltered during adulthood (Janoski, Musick, and Wilson 1998), a value-based explanation implies that volunteering rates remain rather stable over the life course. However, more recent theorizing has moved away from value-based explanations of voluntary work (Wilson 2000). Other explanations are based on the availability of resources (Oesterle, Johnson, and Mortimer 2004), time use (Kohli, Hank, and Künemund 2009), or rational-choice arguments (Ehrhardt 2011). These approaches imply that volunteering changes as people occupy different social and economic positions across their life course. In short, because life-course transitions change people's capacities, opportunities, and incentives to become socially involved, they also change people's volunteering behavior.

However, these explanations of volunteering have rarely been tested within a longitudinal design. Hence, the main contribution of this paper is to analyze to what extent life-course transitions in the work and family domain affect volunteering behavior. Using longitudinal data and fixed-effects estimation, we approach the question of continuity and change in volunteering from a new perspective.

Previous research has shown that volunteering varies across the life course, with a peak in middle age (Wilson 2012). While a curvilinear age effect may simply be the consequence of how physical and cognitive capacities develop with age, the genuine impact of life-course events has not been established thus far. There is also evidence for stable volunteering patterns across the life course. Studies from different countries have reported that volunteering behavior among adults rarely changes (Butrica, Johnson, and Zedlewski 2009; Erlinghagen 2010; Oesterle, Johnson, and Mortimer 2004); the majority of those who were volunteering at the beginning did not stop, and most of those who did not volunteer initially did not start later. These findings are broadly in line with the continuity theory of aging, which stipulates that people largely continue the habits that they acquire at younger ages (Wilson 2012, 190). Accordingly, stable patterns of volunteering take hold once individuals have settled into adult roles, such as steady jobs, marriage, and parenting, "that build up their stake in community affairs" (Flanagan and Levine 2010, 160).

It is unclear to what extent this stability is due to the joint influence of lifecourse effects or to self-selection into volunteering. For example, earlier volunteering exerts an impact on later volunteering. Oesterle, Johnson, and Mortimer (2004, 1141) report that young adults were "almost eight times as likely to volunteer in a given year if they had volunteered the year before." However, because of unobserved heterogeneity, such estimates are spurious and cannot be interpreted as the causal effect of prior volunteering on future volunteering. As the authors acknowledge, past volunteer experience may itself reflect relevant differences among respondents (Oesterle, Johnson, and Mortimer 2004, 1144). Furthermore, parental influence also leads to selection into volunteering (Mustillo et al. 2004). The issue of self-selection, however, has not been addressed systematically in the volunteering literature (Wilson 2012, 196).

Longitudinal analysis can help advance our understanding of the driving factors of volunteering. Cross-sectional studies suffer from bias due to unobserved heterogeneity. To the extent that values are not observed and correlate with socio-economic characteristics, cross-sectional analyses cannot distinguish between different driving forces of volunteering. Other characteristics that may affect volunteering and are usually unobserved are social skills or personality traits. To test how life-course transitions affect volunteering behavior, this study analyzes within-person changes in volunteering using panel data. Fixed-effects (FE) estimation addresses the problem of unobserved heterogeneity. Although FE models cannot account for heterogeneity that is both unobserved and time varying, all unobserved variance that is time constant is accounted for, which is a great advantage vis-à-vis cross-sectional analysis.

The study draws on data from the German Socio-Economic Panel Survey (SOEP) collected yearly from 1985 to 2009. Using 25 years of panel data, we draw a more complete picture of how volunteering varies over the life cycle. Comparing the findings from between- and fixed-effects models, we analyze states as well as transitions: on one hand, we use a conventional approach to show how socio-economic and family characteristics account for differences between persons in volunteering. On the other hand, we use a longitudinal approach to analyze the extent to which life-course events explain within-person changes in volunteering. Because our data do not contain people younger than 18, we cannot explain how early selection into volunteering occurs. However, fixed-effects models allow for estimating the effect of life-course transitions while controlling for selection into volunteering.

Volunteering in Germany

There are many different conceptualizations of volunteering, and operationalizations in empirical research depend on data sources. Wilson and Musick (1997, 700) make an important differentiation between formal and informal volunteering: "Formal volunteering is typically carried out in organizations, informal volunteering is more private and is not organized." The present study focuses on formal volunteering: similar to Wilson's (2000, 215) definition, volunteering is understood as institutionalized, unpaid assistance intended to benefit certain people, groups, or organizations. Rather than mere membership, our conceptualization refers to active participation in voluntary work. Specifically, we analyze the frequency of performing volunteer work in clubs, associations, and social services.

Depending on data source and definitions, volunteering rates in Germany vary between 18 percent in the German Time Use Study (2001–2002) and the Eurovol study (1996), to 36 percent in the Survey of Volunteering and Civic Engagement (2004) (Strauß 2008, 133–34). Volunteering is less common in Germany than in the Anglo-Saxon countries (Strauß 2009). In Germany, volunteering also tends to be more recreation oriented and less connected

to the church, but even when religious activities are not taken into account, volunteering rates are higher in the United States than in (West) Germany (Dekker and van den Broek 1998). Low levels of volunteering in Germany have been related to the larger role of the state possibly crowding out private initiatives (Schofer and Fourcade-Gourinchas 2001). Volunteering activities in Anglo-Saxon countries are largely concentrated in charitable organizations, whereas in Germany the bulk of volunteering takes place in clubs or associations (Strauß 2008).

A Life-Course Perspective on Volunteering

Theoretical Approaches

In this section, we ask what changes in volunteering behavior can be expected from a life-course perspective. Adopting a life-course perspective means that "changes in human lives (as changes in personal characteristics and transitions between states) are considered over a long stretch of lifetime" (Mayer 2009, 414). We consider the impact of various key biographical transitions in the realm of the family and the labor market, following the general notion that people's volunteering behavior changes as they occupy different social and economic positions across their lives. We identify three sets of mechanisms that explain how specific life-course events influence volunteering behavior.

The *resource* perspective emphasizes that volunteering is a demanding activity that not everyone is prepared for. Similar to paid work, voluntary work requires resources. Thus, large stocks of human capital make it easier to meet the demands of voluntary work. Often, social or managerial skills are also required to participate. Another basic requirement is usually good health (Li and Ferraro 2006). Social capital, too, facilitates participation, because social networks can open doors to volunteer organizations (Wilson and Musick 1998). Conversely, people with low skills, poor health, and few contacts may not see a chance to become involved in a meaningful way. In addition, each person's stock of resources fluctuates with age. The resource perspective therefore predicts changes in volunteering behavior over people's lifetime to the extent that their biographical trajectory affects their capacity to engage in volunteering.

The *interest* perspective stipulates that people become involved in volunteer work because participation serves as a means to achieve specific goals. According to Butrica, Johnson, and Zedlewski (2009, 646), this theory of economic welfare maximization "predicts that the decision to start or stop volunteering is driven by the costs and benefits of volunteering." For example, an instrumental motivation to volunteer can be the acquisition of specific skills or contacts through engagements in voluntary activities. In fact, volunteering has been shown to be related to labor-market benefits, both during early and mid-life (Strauß 2009; Wilson and Musick 1997) and during the later career (Lancee and Radl 2012). In other words, volunteering is more than charity. Key life-course transitions, such as parenthood, often lead to changing priorities, which alter the perceived benefits of different social activities. The interest perspective implies that as interests change, volunteering behavior changes, too.

Volunteering behavior may also change because of role substitution. According to the activity-substitution perspective, the relationship between various productive activities is characterized by a trade-off (Hank and Stuck 2008). Like employment or parenthood, volunteering is a social role that requires time and fulfills certain social and emotional needs. Role-overload theory predicts that individuals faced with too many demands on their time will experience stress or conflict that can limit volunteerism (Mutchler, Burr, and Caro 2003). Because of time constraints, starting a new activity may require giving up or reducing the intensity of other activities: as people take up a new role in their life (e.g., by becoming a parent), the odds of leaving the volunteer role increase. Indeed, lack of time is commonly mentioned as a barrier to volunteering (Sundeen, Raskeen, and Garcia 2007). Vice versa, as roles are dropped (e.g., when people enter retirement, or the empty-nest phase), the odds of taking up volunteering increase. In sum, the role-substitution perspective stipulates that role changes over the life course have a direct impact on individual volunteering behavior.

Life-Course Transitions and Volunteering Behavior

We proceed by describing how specific life-course transitions impinge on volunteering behavior according to the three theoretical approaches. For each transition, we also summarize previous empirical findings, which, albeit mostly based on cross-sectional analyses, are valuable points of reference for our study.

Parenthood The influence of parenthood on volunteering is ambiguous. From a role-substitution perspective, the birth of children imposes a time constraint, which limits the possibilities for parents to volunteer. However, children also create new opportunities for volunteering: from a resource perspective, becoming a parent establishes contact with multiple non-profit organizations (kindergartens, sports clubs, etc.) and with other parents, which may readily lead to active engagement. These forms of parental volunteering, and especially voluntary work in one's children's school (Gee 2011), could also be interpreted as instrumental investments in offspring's status attainment (cf. Albertini and Radl 2012). This would deem parent-related volunteering ultimately self-interested, as is argued in the interest perspective.

The empirical evidence for the effects of parenthood on volunteering is mixed. Several studies report a negative effect, particularly for those who face most time constraints: single parents (Sundeen 1990) and parents of young children (Nesbit 2012; Oesterle, Johnson, and Mortimer 2004; Rotolo and Wilson 2004, 2007). In turn, there is also evidence that parents of school-aged children have a higher likelihood of entering and a lower likelihood of abandoning civic engagement than childless persons (Ehrhardt 2011). Wilson (2000) suggests that the effect of parenthood depends on the type of volunteering, and Rotolo and Wilson (2007) point to the presence of moderating factors, such as women's participation in the labor market.

Union formation According to the role-substitution perspective, the transition to marriage and cohabitation should go along with a reduction in volunteering (when compared to being unmarried and single), as most free time will usually be spent with the new partner. Indeed, marriage has been found to crowd out other social contacts (Sarkisian and Gerstel 2008). Volunteers for whom meeting new people (and potentially a new partner) was a motivation to become involved in the first place may thus choose to quit volunteering once they enter a new relationship. Sundeen (1990) indeed finds such a negative effect on volunteering, and Stoker and Jennings (1995) discover that entry into marriage had more potent negative effects on political participation than other marital transitions.

Other studies do not find significant differences according to marital status (Hank and Stuck 2008; Choi 2003; Oesterle, Johnson, and Mortimer 2004; Erlinghagen 2010; Hank and Erlinghagen 2010). Some even report a positive effect of being married (Rotolo and Wilson 2004), which could be explained with the resources perspective: a spouse leads to new contacts, which provide additional information and build up trustful relationships that may function as channels to volunteering (Tang 2006). In that sense, there might be differences in volunteering frequency between spouses and cohabiters. For example, Rotolo and Wilson (2006) find that volunteer work is positively linked among spouses but not among cohabiters, possibly because cohabiters' lives are less interlinked.

Separation, divorce, and widowhood The role-substitution perspective predicts an increase in volunteering following widowhood, divorce, or separation (after cohabitation). Volunteering is one of many possible ways to engage in social relations and may fulfill a compensatory function by covering social needs that were previously satisfied by the partner (Pavlova and Silbereisen 2012). Moreover, time previously spent with the partner becomes available. However, this may be less relevant in the case of divorce or separation, which often occurs after a period of conflict and disengagement. It is also possible that—in line with the resource perspective—divorces abandon their engagement because their involvement in voluntary activity had been mediated through the spouse. If cohabiters' lives are indeed less intertwined than married couples' (Rotolo and Wilson 2006), this effect is likely to be less strong for cohabiters. In the case of widowhood, involvement through the partner is less plausible, since death is often preceded by a period of morbidity, which already makes volunteering less likely.

Previous evidence is mixed. Most studies do not find any influence of widowhood or divorce on volunteering (Broese van Groenou and van Tilburg 2012; Choi 2003; Utz et al. 2002). Li (2007) concludes that widowhood increases the likelihood of volunteering, but only during the first few years after the spouse's death. Nesbit (2012) reports a positive effect of divorce (for men), and mixed effects of widowhood (depending on age).

Starting or losing employment From a role-substitution perspective, one would expect volunteering to decrease with the amount of time spent on paid work. This view is supported by prior evidence (Sundeen 1990; Oesterle, Johnson, and Mortimer 2004). It is also consistent with this approach that part-time workers have been found to have higher rates of volunteering than full-time

workers (Ehrhardt 2011; Rotolo and Wilson 2004). However, some studies find the lowest participation rates among unemployed and inactive persons (Einolf 2011; Wilson 2000; Erlinghagen 2010; Strauß 2009). Indeed, the relationship between paid and unpaid productive activities among older people seems to be of complementary rather than substitutive nature (Hank and Stuck 2008; Kohli, Hank, and Künemund 2009). Broadly consistent with the interest perspective, this can be interpreted as an indicator that participation in the labor market fosters volunteering because it is a form of social integration and raises the stakes an individual has in society (Wilson 2000). Also according to the resources perspective, work and volunteering are complementary because work experience yields skills, which makes people more able to volunteer. Furthermore, people of higher social status are more likely to be asked to volunteer (Oesterle, Johnson, and Mortimer 2004).

Retirement The state of research regarding the impact of retirement on social engagement is inconclusive. There appears to be little evidence for role substitution in the case of labor-market withdrawal. Cornwell, Laumann, and Schumm (2008) find that whereas age is positively related to volunteering, retirement did not have a significant effect. In a recent literature review, Wilson (2012, 190) concludes that "whereas it is often suggested that volunteer work can 'fill in' for the loss of the work role when people retire, the data do not really support this idea."

The resource perspective implies that labor-market withdrawal reduces volunteering behavior, because opportunities deteriorate. Based on multivariate analyses, several studies focusing on the elderly did not detect significant differences by employment status (Broese van Groenou and van Tilburg 2012; Utz et al. 2002), or even found positive effects of inactivity (Ehrhardt 2011; Hank and Erlinghagen 2010; Hank and Stuck 2008). The latter finding would fit with the dominant perception of the past that volunteering is an activity that is confined mostly to women not participating in the labor market (Wilson 2000).

Education Unquestionably, volunteerism is positively correlated with the level of education. Engagement rates are higher among the well educated in Germany (Ehrhardt 2011; Erlinghagen 2010), the United States (Choi 2003; Oesterle, Johnson, and Mortimer 2004; Rotolo and Wilson 2004; Tang 2006; Utz et al. 2002), and other societies (Hank and Erlinghagen 2010; Hank and Stuck 2008).

While the empirical evidence is unequivocal, the theoretical explanation of this recurrent finding is less clear. Insofar as education translates into skills that are necessary requirements for many volunteering tasks, the resource perspective would suggest that as young adults acquire more education, their capacity to volunteer increases. Furthermore, although some tasks do not demand specific skills, these are often also the less interesting or gratifying activities for which it is difficult to recruit volunteers (Wilson 2000).

However, education is not only a source for the acquisition of skills and social contacts; it is also believed to foster civic values (Oesterle, Johnson, and Mortimer 2004; Wilson 2000). As Wilson (2000, 2129–20) puts it, "education boosts volunteering because it heightens awareness of problems, increases empathy, and builds self-confidence." Hence, the time spent in education may also favor volunteerism because it leads to greater civic obligation (Son and Wilson

2012). Oesterle, Johnson, and Mortimer (2004) even make the claim that—in line with the interest perspective—people with higher levels of education have a greater interest in volunteering because they have a greater stake in the community. Interestingly, however, Oesterle Johnson, and Mortimer find (with longitudinal data) that the positive effect of education on volunteering does not persist beyond the years actually spent at school. From a theoretical standpoint, if the effect of education is due to gains in human or cultural capital, volunteering rates should increase with each year spent in education and persist after leaving the educational system. Alternatively, postsecondary education may have a positive albeit transient effect on volunteering that would be the consequence of the characteristic time flexibility during student life, but not related to any values or skills that are acquired during education.

The Moderating Effect of Gender

Parenthood, care obligations, and labor-market participation differ substantially between men and women. More importantly, there is evidence that also associations with volunteering are gender specific (Einolf 2011; Taniguchi 2006).

Gender might moderate the effect of family characteristics. For example, parenthood can be expected to reduce women's volunteering frequency more than men's, because the time devoted to childcare and household work is unequally distributed (Nesbit 2012; Taniguchi 2006). Furthermore, previous research found that for men, the transition into marriage resulted in a larger reduction of contact with parents than for women (Sarkisian and Gerstel 2008). If this reflects a general tendency toward shrinking social networks, men who get married may also change their volunteering behavior more than women do. Nesbit (2012) concludes that the effect of divorce on volunteering is more pronounced for men, possibly because men need "specific hooks" to draw them into volunteering (Einolf 2011). Nesbit's study finds no gender differences in terms of how widowhood affects volunteerism.

Also with regard to the labor market, there are reasons to expect different lifecourse effects for men and women. Specifically, the trade-off between full-time employment and volunteering that follows from the role-substitution approach can be expected to be more rigid for men than for women, because men usually work longer hours (Cooke 2004). Taniguchi (2006) shows that, in the United States, there is a significant difference in the way employment status affects men's and women's volunteering behavior. For example, part-time employment encourages women to volunteer, but not men. Also, Lewis and Noguchi (2006) find that a reduction in labor supply increases women's volunteering in community activities, but not for men. Unemployment, on the other hand, prevents only men from volunteering (Taniguchi 2006).

Data and Method

We draw on data from the German Socio-Economic Panel Survey (SOEP), a panel study with yearly waves that began in 1984¹. Because the measurement

of volunteering in 1984 differs from the subsequent years, our analyses are based on the years 1985–2009. The SOEP is an unbalanced household panel that is representative for the German population. By virtue of careful tracking and interviewer continuity, panel attrition rates are kept around 12 percent (Kroh 2011). To ensure representativeness, refreshment samples with new households are added to the data on a regular basis (in 1995, 1998, 2000, 2002, and 2006) (Kroh 2011). As a consequence, there are almost six personyear observations per individual in our sample. The amount of missing data is 2.7 percent across the entire data matrix. We replaced missing values by carrying forward observed values on our independent variables, prospectively for up to two years, herewith reducing total missingness to 2.5 percent. We also estimated the models without the carry-forward imputation; this did not yield substantially different results. Our analytic sample consists of 251,611 personyear observations, representing 42,624 individuals who are between 18 and 80 years old when interviewed.

Method of Estimation

To assess how life-course factors affect volunteering, we analyze both the crosssectional and longitudinal variation in our data, comparing two estimation techniques.

The between estimator (BE) exclusively uses cross-sectional variation for outcome and predictors (Cameron and Trivedi 2005). It eliminates within-person variation by averaging observations over time and corresponds to a regression based on group means. Put simply, the BE estimator is equivalent to taking the person-specific mean of each variable across time and estimating an OLS regression on the collapsed data set of means. The BE estimator allows differences between subjects to be assessed without temporal changes influencing the results. Albeit rarely used, the BE estimator is a neat benchmark that mimics the logic of cross-sectional modeling techniques.

One of the disadvantages of estimation techniques that rely on analyzing variance between subjects is that the covariates and the error terms are assumed to be uncorrelated (exogenous). Correlation of the independent variables with the error term (endogeneity) results in biased estimates, for example due to self-selection. Hence, BE estimates (or any cross-sectional estimation, for that matter) might be biased by unobserved heterogeneity. Unobserved characteristics (e.g., altruistic values or personality traits), or variables that lead to selection into volunteering (e.g., parental volunteering), can be correlated with the variables that measure life-course transitions. If this is the case, the estimates are biased and may lead to the wrong conclusions.

The fixed-effects (FE) model draws only on within-person variation and is specifically designed for analyzing changes over time. Its advantage is that the FE estimator is unbiased and consistent, even when the assumption that the unit effects are uncorrelated with the explanatory variable is violated. Put differently, all time-constant, unobserved heterogeneity is eliminated because the FE estimator controls for all differences between individuals by canceling out the idiosyncratic error term (Halaby 2004).

We first report BE estimates, which are exclusively based on betweenindividual differences. Then, we report FE models that exclusively examine within-individual variation over time. By comparing the BE model with the FE model, we gain a better understanding of the processes governing volunteering behavior.

To address gender differences in volunteering behavior, we estimate separate models for men and women as well as fully interacted models with both sexes together. For ease of interpretation, we primarily present the gender-specific models. In order to analyze the moderating effect of gender more systematically, we further report the significance level of the interaction effect of each covariate with gender from the pooled models.

Measurement

Dependent variable At least every second year, the SOEP contains a module on how people spend their free time. Volunteering is measured with the survey question "Which of the following activities do you take part in during your free time?" One item is "Volunteer work in clubs, associations, or social services." The following answers were possible: 3 = at least every week; 2 = at least every month; 1 = less frequently; 0 = never. We measure the frequency of participation rather than membership of voluntary associations. Modeling volunteering behavior based on a frequency measure captures not only the difference between volunteers and non-volunteers but also differences in volunteering intensity. Unfortunately, the time frame of reference is not specified in the wording of the survey question. Another downside of our measure is that we do not capture transitions into and out of specific volunteering jobs if volunteers leave one organization to join another (Rotolo 2000).

Independent variables To assess the influence of family-related events, we include marital status as well as household type. The household type variable contains seven categories: one-person household without children, couple without children, single parent, couple with young children (under age 5), couple with school-aged children (aged 5 to 15), couple with grown-up children (aged 16 and older), and other. If parents have children in multiple age groups, they are coded according to the age of the youngest child. A residual category comprises any other household constellations, such as multi-generation households. Work events are measured by a detailed employment status variable, consisting of the following categories: full-time work, part-time work, vocational training, unemployed, in school, and inactive. We measure education with years spent in education².

Because of nonlinearity in the age effect, we control for quinquennial age groups. We control for satisfaction with one's health because poor health is expected to lead to diminished volunteering. As a proxy for wealth, we control for homeownership, which may furthermore pick up possible effects of long-term commitment to the local community. To account for the enduring differences between East and West Germany, and particularly for the lower volunteering rate in the East (Ehrhardt 2011), we include a dummy variable for residency in the former East Germany. Finally, to control for any time trend, we include period dummies.

Results

Descriptive Analysis

The frequency of volunteering for men and women by age is presented in figure 1. For men, the average proportion of those who volunteer at least sometimes hovers around 30 percent over the adult life course. This includes about 10 percent of the men, who volunteer at least weekly. For women, these frequencies are somewhat lower, as the overall rate varies between 15 and 30 percent, including about 8 percent of weekly volunteers. The bivariate variation by age suggests that the propensity to volunteer is rather stable over the life course, with the exception of the highest ages, when volunteering rates drop decidedly.

This impression of continuity is largely confirmed when adopting a longitudinal perspective. Figure 2 shows the within-person variation in volunteering behavior. Because the number of years that people are observed in the data varies across individuals, the absolute number of years that people volunteer



Figure 1. The frequency of volunteering for men and women, by age

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Figure 2. Longitudinal variation in volunteering behavior, by gender

is not informative. Therefore, figure 2 shows the volunteering rate, that is, the proportion of years during which individuals are observed to be volunteering at least sometimes. We see that about half of the men never volunteer during the observed period; about 15 percent volunteer every year. In between, about 35 percent of the men had at least one volunteering and one non-volunteering episode, yielding a volunteering rate between zero and one. The picture is similar for women: 56 percent never participate in voluntary work, and 10 percent volunteer every year. In summary, more than half of the people are never observed to volunteer, and about one-third enter and exit civic participation across their life course. These figures must be interpreted with caution, as the amount of life-course variability is likely to increase with additional waves of data becoming available with time.

Appendix Table A1 presents the mean volunteering frequency for different socio-economic characteristics; it also provides an overview of the sample composition by gender. Men volunteer significantly more frequently than women within each and every subgroup considered. The data furthermore show statistically significant differences in volunteering behavior by household type, marital status, and employment status.

Source: SOEP 1985–2009.

Note: The volunteering rate refers to the proportion of years that individuals are observed to volunteer at least sometimes. For example, a volunteering rate of 0.5 means that the person reported (at least some) volunteering in half of the years he was interviewed, and did not volunteer in the other years.

Multivariate Analyses

Table 1 contains the results from BE and FE models predicting volunteering frequency. Because the focus is on the comparison between the two estimation techniques, we discuss the findings one thematic block of life-course transitions at a time, rather than proceeding column by column.

Family characteristics The first block of covariates in table 1 refers to family relations and events. In terms of household composition, the BE models show that parents living with children aged 5 years or older volunteer significantly more frequently than couples without children, especially mothers. Even for parents of grown-up children, the cross-sectional effect is positive. The results for men and women are similar in this regard. However, there is no statistical difference in volunteering between parents with young children and couples without children. Furthermore, women in one-person households volunteer more frequently than couples without children (or men in the same situation).

However, the effects of parenthood are different when we consider changes over the life course rather than between-person differences. In the FE models, we see that for women, the effect of having young children is negative and highly significant. It thus seems that while children are young, the possible stimulating effects of parenthood (increased opportunities and greater payoffs) are overshadowed by the averting effects of motherhood (stricter time constraints). This is in line with a role-substitution perspective. Largely consistent with previous research, this balance tips as children become older. Even when selection is controlled for in the FE model, the effect of becoming a coupled household with children older than 4 is positive for both sexes. Men starting to live in single households volunteer more frequently than coupled men without children. This possibly reflects greater time flexibility due to role substitution. However, the male effect is not significantly different from the female effect. The negative effect estimated for women in "other" household types possibly reflects caregiving arrangements in multi-generational households (Taniguchi 2006).

With regard to marital status, the BE models show that married men volunteer significantly more frequently than unmarried men (or married women). Widowed and divorced women volunteer less than unmarried women. There is no difference between unmarried women and those who are married. Overall, the findings from the BE model are in line with the resources perspective as well as with an interest-based account of volunteering, whereas there is little evidence pointing to role substitution. However, the results of the FE models are quite different. Among men, the effect of being married is no longer statistically significant once only within-person variance is analyzed. For women, the effect of widowhood is no longer significant. However, women who divorce consistently volunteer less often (also when compared to men who divorce).

In sum, the findings from the FE model regarding family events suggest that the coefficients obtained with the BE estimator are biased by unobserved heterogeneity. Various coefficients that are statistically significant with the between estimator decrease in magnitude and are not significant when focusing on withinperson variance. When we analyze changes over the life course, the patterns are

etween-Effects and Fixed-Effects Regression Models Predicting the Frequency of Volunteering, by Gender	
Table 1. B	

		A	len			Wc	omen		Interaction in pooled	vith gender I model ^a
	Between	effects	Fixed ef	fects	Between	effects	Fixed e	ffects	Between effects	Fixed effects
	q	se	q	se	q	se	q	se	<i>p</i> -value	<i>p</i> -value
Household type (ref. couple without	children)									
One person without children	.012	(.028)	.034*	(.016)	.148***	(.023)	.015	(.017)	***000°	.437
Single parent	.006	(.039)	.052	(.029)	.046	(.026)	001	(.018)	.397	.116
Couple with children 0–4 years	055	(.032)	008	(.015)	049	(.027)	067***	(.014)	.884	.004**
Couple with children 5-15 years	.062**	(.023)	.065***	(.015)	.133***	(.020)	.068***	(.013)	.022*	.859
Couple with children 16+ years	**690.	(.022)	.051***	(.013)	.050**	(.019)	.037**	(.012)	.510	.399
Other HH type	.026	(.035)	002	(.020)	.015	(.027)	035*	(.017)	.793	.215
Marital status (ref. unmarried)										
Married	.089***	(.025)	.018	(.020)	.019	(.021)	022	(.017)	.029*	.136
Divorced	.000	(.034)	.019	(.029)	054*	(.026)	055*	(.024)	.194	.050*
Widowed	.062	(.051)	600.	(.051)	080**	(.028)	.015	(.031)	.011*	.926
Years of education	.042***	(.002)	011*	(.005)	.048***	(.002)	004	(.004)	$.052^{+}$.317
Homeowner	.288***	(.014)	.044***	(.013)	.204***	(.011)	.046***	(.012)	***000.	.907
Residence in former East Germany	096***	(.015)	.069	(.047)	098***	(.012)	.018	(.038)	.926	.397
Employment status (ref. full-time wo	rk)									
Part-time work	.143***	(.039)	$.061^{**}$	(.019)	.161***	(.017)	.044***	(.010)	.656	.405
Vocational training	.018	(.045)	002	(.019)	.026	(.039)	010	(.017)	.891	.754
Unemployed	264***	(.036)	.001	(.011)	133***	(.032)	.013	(.011)	.006**	.399
In education	133**	(.043)	016	(.020)	.057	(.037)	600.	(.020)	.001**	.362
									<u>`</u>	Continued)

Inactive	078**	(.029)	.022	(.013)	.138***	(.019)	.046***	(.011)	***000.	.149
Satisfaction with health	$.010^{**}$	(.003)	.003	(.002)	.012***	(.003)	.004**	(.001)	.677	.724
Age (ref 40–44 years)										
18-24 years	.088*	(.041)	055*	(.028)	.030	(.032)	137***	(.024)	.265	.026*
25-29 years	.025	(.040)	033	(.024)	104**	(.033)	152***	(.020)	.012*	***000"
30-34 years	050	(.040)	043*	(.019)	100**	(.033)	107***	(.016)	.346	$.010^{**}$
35–39 years	049	(.043)	015	(.013)	090**	(.035)	040***	(.012)	.453	.155
45–49 years	.033	(.043)	020	(.014)	.056	(.035)	027*	(.012)	.674	.678
50-54 years	.031	(.040)	059**	(.019)	.028	(.033)	048**	(.016)	.954	.653
55–59 years	013	(.042)	120***	(.023)	017	(.035)	044*	(.020)	.948	.014*
60–64 years	.103*	(.046)	146***	(.028)	055	(.038)	058*	(.025)	°00,**	.018*
65–69 years	.031	(.052)	155***	(.033)	027	(.039)	076*	(.029)	.367	.071†
70-74 years	.047	(.055)	251 * * *	(.037)	078	(.041)	137***	(.033)	.066†	.023*
75–79 years	073	(.055)	409***	(.044)	176***	(.039)	204***	(.037)	.122	***000"
Period (ref. 1985–1989)										
1990–1995	.052	(.032)	008	(.012)	.073**	(.027)	.033**	(.010)	.621	.011*
1996-2000	$.101^{**}$	(.032)	.030	(.016)	.081**	(.027)	.066***	(.013)	.619	.077†
2001-2005	·078**	(.024)	.038	(.019)	.086***	(.020)	.096***	(.017)	.786	.025*
2006–2009	$.169^{***}$	(.024)	.053*	(.023)	.223***	(.020)	$.106^{***}$	(.020)	.082†	$.081^{\dagger}$
Constant	.742***	(.055)	1.674^{***}	(690.)	.500***	(.046)	1.400^{***}	(.058)		
N observations	122,313		122,313		129,298		129,298		251,611	251,611
N individuals	20,957		20,957		21,667		21,667		42,624	42,624
Within R-squared	.00092		.00542		.00562		.01138		.0028	.0082
Between R-squared	.07516		.00026		.09882		.03534		.0949	.0009

Table 1. *continued*

Source: SOEP 1985–2009.

^a Interaction effects with gender in pooled model (men and women), fully interacted model. *** $p < .001 ** p < .01 * p < .05 ^{\dagger} p < .1$ (two-tailed tests), robust standard errors clustered on the person level.

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different. While cross-sectional analysis is informative as such, the differences between the BE and FE models suggest that cross-sectional differences according to marital status or the presence of children in the household are likely to reflect selection effects. We will come back to these issues.

Education and employment The second block in table 1 shows the estimates for educational attainment and employment status. The findings on education from the BE estimator confirm previous evidence: more years in education is strongly associated with a higher frequency of volunteering. However, for women, the effect of education is no longer statistically significant once we consider gains in educational attainment within persons; for men, the effect even becomes negative (although the gender interaction is not significant). Neither is there a significant impact of entering or leaving the education system (when compared to full-time employment). This suggests that the effect of education as measured in cross-sectional models might be driven by selection into education. Rather than upgrades in education leading to increased volunteering, highly educated people may already have a higher volunteering frequency to begin with. However, our sample includes only adults, which limits the number of educational transitions that we observe. The fact that effects are no longer significantly different from zero in the FE framework is therefore possibly related to the low number of within-person changes. It could also be that there is a positive effect of education, which shows only in the long run and is thus not captured by the FE model.

The frequency of volunteering also differs according to employment status. In the BE model, we see that compared to men who work full-time (and compared to women), unemployed, inactive, and men in school volunteer less often, while part-time employed men volunteer more often. In the FE model, however, all coefficients are smaller and no longer statistically significant. The exception is the effect of part-time employment, which is consistent with the literature (Wilson 2000).

For women, the picture in the BE model is slightly different. Women who are inactive or part-time employed volunteer significantly more frequently than women who work full-time. Furthermore, unemployed women volunteer less frequently than women in full-time employment. However, this changes drastically when looking at within-person changes only. In the FE model, all coefficients are of smaller magnitude; the only statistically significant effects are those pertaining to part-time employment and not being active on the labor market. For the latter, the gender interaction term is not significant either. It thus appears that employment status does not strongly determine women's volunteering behavior.

Control variables It is worth mentioning the findings concerning satisfaction with health and homeownership. The effect of homeownership is positive and highly significant, in both the BE and FE models. Homeownership likely implies increased stakes in the neighborhood, which may incentivize engagement in the local community. It might also engender a stakeholder effect related to the prospect of a stable residence. Satisfaction with health is positively associated with volunteering in the BE models, but within individuals (FE models), increasing satisfaction results in a higher volunteering frequency only for women. However, the corresponding gender interaction is not significant.

Life-Course Transitions and Volunteering Trajectories

The results presented so far demonstrate that several differences in volunteering between social groups are not sustained within a longitudinal framework. The FE estimates presented above show the average within-person effects of a series of covariates. The advantage of this modeling strategy is that it facilitates the direct comparison of BE and FE coefficients, with the latter not being biased by unobserved heterogeneity. However, because the coefficients do not distinguish between origins and destinations, they cannot show the impact of specific lifecourse transitions. For example, the effect of entering unemployment cannot be separated from exiting unemployment and is measured against the net effect of transitions into and out of full-time employment (the reference category).

To gain a clearer picture as to how life-course transitions change volunteering behavior, we proceed with estimating models in which we specify selected transitions. We present a series of FE estimates where we restrict the sample to the person-year observations that are relevant for a given origin and its associated destinations. That is, we select all observations of a given origin category, plus all spells that occur after making a transition to the relevant destination categories. The advantage of such a spell-based analysis is that we hold the origin state constant. The logic is comparable to that of event-history analysis, where the risk set is similarly determined by origin and destination state. To account for multiple spells within persons (e.g., if a person gets married repeatedly), we use robust Huber–White standard errors clustered at the person level.

We then construct a dummy covariate for each possible transition. Hence, we estimate the effect of making the transition from an origin category to all possible destination categories. For example, to estimate the effect of divorce and widowhood, we consider all people who are "at risk" of making this transition. Specifically, we select all individuals who are married in a given year and examine how their volunteering behavior changes as they make a marital transition (if any). The estimated coefficients indicate the change in conditional mean volunteering frequency that occurs after a given transition.

Family transitions We start with a closer look at transitions in the family realm (tables 2 and 3). For women, the transition to marriage negatively affects volunteering frequency. While the same effect could not be found among men, the gender interaction term is only marginally significant. Men who remarry after divorce volunteer less frequently than before (but not significantly less than remarried women). Divorce, for both sexes, is followed by a reduced frequency of volunteering. Whereas the negative (re-)marriage effect points toward a process of role substitution (marriage as "greedy institution"), the negative divorce effect is at odds with this interpretation and suggests that divorced people lose the social contacts that connect them to volunteering activities.

Looking at the findings on household composition and parenthood in the table 3, we can see that there is no significant effect for moving together with a partner. However, women who make the transition from a two-adult household into a single household volunteer significantly more often than before.

For both men and women, there are clear effects of parenthood. For men, we find a sizeable negative impact of moving from a single household into a family

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		N	Aen			We	omen		Interaction with gender in pooled model ^a
	p	se	N transitions	Total N	p	se	N transitions	Total N	<i>p</i> -value
Unmarried -> married	002	(.021)	1,723	40,378	048**	(.018)	1,765	35,053	†660 .
Married -> divorced	062*	(.024)	797	86,694	083***	(.022)	927	91,473	.532
Married -> widowed	.011	(.049)	292	86,694	.030	(.024)	807	91,473	.727
Divorced -> remarried	084*	(.037)	502	8,776	011	(.028)	556	12,454	.105
Widowed -> remarried	011	(.028)	57	2,774	162	(.129)	39	10,150	.262
Source: SOEP 1985–2009.									

Note: Models estimated separately for each origin category. Coefficients obtained using FE estimation.

Models control for age, years of education, employment status, homeowner, satisfaction with health, residence in former East Germany. ^aInteraction effects with gender in pooled model (men and women), fully interacted model.

*** p < .001 ** p < .01 * $p < .05^+$ p < .1 (two-tailed tests), robust standard errors.

	-								
			Aen			Mo	omen		Interaction with gender in pooled model ^a
	q	se	N transitions	Total N	q	se	N transitions	Total	<i>p</i> -value
Single household -> couple without children	.012	(.058)	886	13,470	085	(.056)	758	17,307	.224
Couple without children -> single household	.032	(.029)	745	44,711	.054**	(.021)	1,147	47,831	.525
Single household -> single parent	.110	(.195)	50	13,470	166*	(.083)	113	17,307	.192
Single household -> couple with children 0-4 years	767**	(.294)	133	13,470	068	(.083)	101	17,307	.022*
Couple without children -> couple with children 0-4 years	024	(.023)	1299	44,711	110***	(.022)	1,332	47,831	.006**
Couple with children 0-4 years -> couple with children 5-15 years	.017	(.015)	3,326	24,621	.074***	(.014)	3,368	25,482	.004**
Couple with children 5–15 years -> couple with children 16+ years	032*	(.015)	2,884	40,988	026†	(.015)	2,753	40,558	.792
Couple with children 0-4 years -> single parent	007	(.123)	33	24,621	029	(.029)	327	25,482	.861
Couple with children 5-15 years -> single parent	111	(.074)	154	39,799	076*	(.032)	560	39,252	.671
Couple with children 16+ years -> couple	026	(.017)	2,124	37,519	.011	(.015)	2,164	33,783	.109
Source: SOEP 1985–2009. Note: Models estimated senarately for each origin cate	dory Coaf	ficiants o	htainad using	r FF actim	noite				

Table 3. The Effect of Household Composition on the Frequency of Volunteering (fixed effects models)

Note: Models estimated separately for each origin category. Coefficients obtained using re estimation.

Models control for age, years of education, employment status, homeowner, satisfaction with health, residence in former East Germany. ^aInteraction effects with gender in pooled model (men and women), fully interacted model.

*** p < .001 ** p < .01 * p < .05 ⁺ p < .05 ⁺ p < .1 (two-tailed tests), robust standard errors.

household with young children. Since this transition yields a significant effect only for men, which is also significantly stronger than for women, this likely reflects men moving in with single-mother families. In line with the role-substitution perspective, women who already cohabitate before becoming parents volunteer less frequently. Surprisingly, there is no equivalent effect for fathers, a gender disparity that is statistically significant. Also women who become single mothers reduce their volunteering frequency (unlike in the aggregate models presented in table 1). We observe a negative single-parenthood effect both for mothers who do not live with the father when the children are born and for mothers who separate when the children are school aged. Among men, there is no significant effect of making the transition to single parenthood, although the respective gender-interaction terms do not reach statistical significance.

Consistent with previous research, when children become of school age, their mothers increase their volunteering activities. For fathers, this effect is not found and this gender difference is strongly statistically significant. This likely reflects the new opportunities that children create. Interestingly, both men and women scale back their volunteering frequency once their children grow older. Yet, there is no (additional) backlash effect when children leave the parental home. While these latter findings are broadly in line with the resources perspective (i.e., children creating opportunities for volunteering), the fact that people volunteer less when they start a family is consistent with a role-substitution perspective. Raising small children takes time, and the findings suggest that women predominantly take responsibility for childcare. Furthermore, having children satisfies social needs that perhaps were previously fulfilled through volunteering activities.

Labor-market transitions Table 4 presents the estimates for transitions in employment status. Consonant with the estimates presented in table 1, few transitions are statistically significant. When analyzing changes in employment status within persons, volunteering is remarkably stable. For men, as the resources approach predicts, the transition from full-time employment to unemployment is accompanied by a lower frequency of volunteering. Besides the potential loss in social capital, it is also conceivable that, although unemployed persons have more time, priorities shift from volunteering toward job search. Among women, we observe a pronounced reduction in volunteering as they move from inactivity to full-time employment. Consistent with the role-substitution perspective, this likely reflects the abandoning of volunteering activities of mothers returning to work after childcare. The transition metric further reveals that the effect of entering part-time employment is no longer significant when we distinguish origin and destination. There is even some evidence that exiting part-time employment toward inactivity among women might result in increased volunteering. Possibly, people with a high propensity for volunteering self-select into part-time work. Although the coefficient is significant only at the 10 percent level, unemployed men who become inactive increase their volunteering activity. Since many older workers become unemployed before they enter retirement, it is possible that this effect is due to role substitution. While some coefficients in the work domain are

			Men			M	omen		Interaction with gender in pooled model ^a
			Ν				Ν		
	q	se	transitions	Total N	q	se	transitions	Total N	<i>p</i> -value
Full-time work -> part-time work	014	(.039)	713	80,018	007	(.021)	2,866	40,428	.878
Full-time work -> unemployed	040*	(.019)	2,434	80,018	027	(.025)	1,333	40,428	.658
Full-time work -> inactive	.073	(.045)	2,046	80,018	021	(.048)	1,349	40,428	.152
Part-time work -> full-time work	.078	(.092)	686	4,797	036	(.023)	2,355	35,825	.225
Part-time work -> unemployed	041	(.108)	163	4,797	029	(.029)	1,093	35,825	.916
Part-time work -> inactive	017	(.068)	632	4,797	.051*	(.022)	2,747	35,825	.340
Unemployed -> full-time work	033	(.023)	1,667	8,888	043	(.034)	836	8,586	.806
Unemployed -> part-time work	017	(.058)	253	8,888	.044	(.029)	1,015	8,586	.345
Unemployed -> inactive	$.084^{\dagger}$	(.044)	1,169	8,888	600.	(.035)	1,314	8,586	.184
Inactive -> full-time work	002	(.067)	706	27,111	095*	(.038)	708	50,610	.225
Inactive -> part-time work	030	(.050)	597	27,111	.019	(.023)	2,800	50,610	.372
In education -> full-time work	074	(.112)	649	4,449	309	(.311)	353	3,890	.512
In education -> part-time work	.008	(.106)	258	4,449	.010	(.093)	380	3,890	.943

Table 4. The Effect of Transitions in Employment Status on the Frequency of Volunteering (fixed effects models)

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Source: SOEP 1985–2009.

Note: Models estimated separately for each origin category. Coefficients obtained using FE estimation.

^aInteraction effects with gender in pooled model (men and women), fully interacted model.

Models control for age, years of education, employment status, homeowner, satisfaction with health, residence in former East Germany. * $p < .05^{+} p < .1$ (two-tailed tests), robust standard errors. statistically different from zero, the interaction terms show that none of the coefficients differ significantly between men and women.

Sensitivity analyses We performed several robustness checks. To assess whether effects are different across periods, we estimated all models separately for each 5-year period. Furthermore, since some life-course transitions may be more relevant for certain ages, we estimated all models for two age groups (18–49 years versus 50 and older). Because people living in East Germany volunteer less, we also estimated models separately for East and West Germany. Since there might be overlap in categories between marital status and household type, we estimated all models excluding either variable. None of these changes produced substantially different results.

Discussion

The present study has examined how volunteering behavior varies over the life course and across social groups. Using German panel data capturing a time span of 25 years, we have analyzed what kind of people volunteer, as well as the extent to which socioeconomic and family circumstances affect volunteering behavior longitudinally. By analyzing specific individual transitions in the work and family domain using fixed-effects models, we have addressed the issue of self-selection into volunteering in a novel fashion. Although many differences exist in the cross-section, these differences are much weaker, or even disappear, once we focus on within-person changes in voluntary work over time. This finding suggests that there is considerable unobserved heterogeneity between persons. In other words, some well-known differences in volunteering behavior that previous research attributed to life events appear to largely be due to selfselection into volunteering.

For example, obtaining higher education surprisingly does not affect changes in volunteering in a statistically meaningful way. Rather than higher education resulting in increased volunteering behavior, those who get a college degree often already volunteered before obtaining their education. There are limited within-person changes in education among adults, and we cannot rule out the possibility that there is an unobserved positive effect of education on volunteering in the longer run. Nevertheless, this finding questions the conventional wisdom that—as stipulated by the resources perspective—the positive correlation between education and volunteering is evidence for the benefits of human capital. It may thus not be the *acquisition* of education (or the skills that come along with that) that makes people volunteer more. Volunteering behavior might be correlated with education, but determined at an earlier phase of life by an unobserved factor that affects both outcomes. Finally, the observed pattern may also be due to positive side effects of volunteering (Wilson and Musick 2003).

We also found some empirical support for the influence of life-course transitions, especially in the family realm. Having young children impacts volunteering behavior negatively, even after unobserved heterogeneity is taken into account. When children become of school age, volunteering frequency increases; when they grow up, volunteering frequency decreases again. Especially for women, it thus seems that while children are young, time constraints reduce volunteering, while the opposite occurs when children go to school. Furthermore, in line with the resources and interest perspectives, especially during school age there may be stimulating effects of children in terms of increased opportunities and greater payoffs, which disappear again around the time children turn 16. We also found evidence for a negative influence of single parenthood on women's volunteering frequency. Again consistent with the role-substitution perspective, this can be explained by the little time that the double burden of work and childcare leaves single mothers for additional activities. Notably, the transition to first marriage for women as well as remarriage for men leads to decreased volunteering. Both effects can be explained by role substitution: the social needs of married people are largely covered, as most time is spent with the spouse. However, divorce too leads to significantly reduced volunteering behavior (for either sex), suggesting that volunteering activities were mediated through the spouse during the marriage. Work-related events explained differences between persons (BE estimator), but most effects in the FE framework are smaller and statistically insignificant.

Altogether, life-course transitions in the family domain seem to have a greater impact on volunteering behavior than do labor-market transitions. Regarding the three theoretical explanations considered in this study, empirical support is overall strongest for the role-substitution perspective, for example in the form of the negative effects of (re-)marriage and (single) parenthood. We also find evidence that is consistent with the resources perspective, namely a reduction in volunteering following divorce or job loss (for men), although other predictions of this account (such as the alleged education effect) are not sustained. The increased volunteering frequency for parents with school-aged children and the increase observed after buying a home are coherent with the interest perspective, although both findings could be readily explained with reference to resources as well.

The findings suggest that gender moderates the impact of some life-course events. Consistent with expectations, family transitions are more consequential for women's than for men's volunteering behavior. The transition to parenthood reduced volunteering frequency more for women than for men; the backlash effect of school-aged children was also restricted to women. Similarly, single motherhood emerges as a forceful reason to reduce volunteering. The fact that no significant effect could be detected for men might be due to single fathers being a rare and positively selected group (only 1 percent of children under 18 live with a single father, compared to 15 percent who live with a single mother). Furthermore, children living in single-father households are considerably older on average than those living in single-mother households (Asmus 2011). For men and women alike, few labor-market transitions affect volunteering. Moreover, while few employment-related coefficients are statistically different from zero, none differed significantly between men and women.

In sum, although certain life-course events affect volunteering behavior, their influence is limited. There are two interpretations for this finding: first, the results point toward the existence of different clusters of people that are largely stable over the life course. In line with continuity theory, most persons do not seem to dramatically change their voluntary activity over time. In fact, even for covariates that successfully predict within-person variation, the effect size is rather small. An explanation for this stability might be unobserved characteristics that account for selection into volunteering. For example, a propensity toward volunteering is acquired via parental socialization (Mustillo, Wilson, and Lynch 2004). This is consistent with the notion that active engagement depends on pro-social values, such as altruism, which are internalized early in life. In this view, volunteering varies mainly between people, and not over people's lives.

Small observed life-course effects may likewise reflect the prevalence of other latent traits. For example, the resources approach stresses that people might not volunteer because they lack the resources or skills to get involved. In this regard, plausible candidates for influential latent traits are likeability and social skills. Both characteristics are likely to improve a person's ability to perform well at voluntary work as well as his or her chances to be given the opportunity to volunteer. However, robustness checks including the frequency of meeting friends and family, which could be considered an appropriate proxy for likeability and social skills, did not alter our findings. It could also be that loneliness or unmeasured personality traits like openness or resiliency are driving the propensity to volunteer. Unmeasured factors can also refer to the opportunity structure to volunteer, in terms of the amount of disposable time. Although we account for labor-market status and household composition, available time varies beyond the measured structural variables.

Second, the relative stability of volunteering across the life course could point toward the potential influence of the act of volunteering itself. There may be a learning effect related to civic engagement. Learning would explain why many seem to get "stuck in their ways" once they volunteer for the first time. According to Janoski, Musick, and Wilson (1998, 498), volunteering tends to become a habit: "people acquire the 'habit' of volunteering because they are routinely placed in social situations and social relationships where the social skills and dispositions requisite for volunteer work are developed." Possibly, the gratifying nature of volunteering is something one must try to realize its potential benefits. It is also conceivable that only through personal involvement do some privileged persons learn about the need for help that exists in society. Moreover, the experience of volunteering may foster a durable self-perception of being a "helper" that shapes people's preferences and views of voluntary work in the long run (Matsuba, Hart, and Atkins 2007).

A limitation of the present study is that the FE estimator accounts only for time-constant unobserved heterogeneity. Whereas it is usually assumed that value formation is largely finalized after adolescence, psychological research has shown that personality traits change over people's lifetime (Roberts, Walton, and Viechtbauer 2006). With increasing age, the "career" and "understanding" motivations for volunteering lose salience, whereas the "social" motivation becomes more important (Okun and Schultz 2003). Such changes may be a reason for the limited explanatory power of our models. While our research design deals with unobserved heterogeneity more thoroughly than previous work, we cannot account for heterogeneity that is both unobserved and time varying.

In conclusion, some life-course transitions influence volunteering behavior because they affect people's resources or time-use arrangements. Nevertheless, the amount of time that individuals dedicate to volunteering is rather stable over the life cycle and not strongly affected by life-course events. This resonates with the statement by Oesterle, Johnson, and Mortimer (2004, 1144) that "continuity and selection are themselves of interest as an important part of understanding volunteerism across the life course." To find out what exactly explains selection and continuity, further research is needed. For example, future research could address the potential learning effects related to volunteering, which may help explain the relative stability of volunteering over the life course.

Notes

- 1 The data used in this publication were made available to us by the German Socio-Economic Panel Study (SOEP) at the German Institute for Economic Research (DIW), Berlin.
- 2 We also estimated models with educational levels according to the CASMIN scheme, and the substantial findings are the same. To ease interpretation, we therefore used years of education in our preferred models.

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		Men				Women		
	Volur	nteering freque	ency	Percentage	Volu	nteering frequ	ency	Percentage
Categorical variables	Mean	[95% Conf.	. Interval]	in sample	Mean	[95% Conf	. Interval]	in sample
Household type								
Single without children	1.46	1.44	1.49	11	1.38	1.36	1.41	13
Couple without children	1.57	1.56	1.59	31	1.39	1.38	1.40	30
Single parent	1.47	1.43	1.51	4	1.34	1.31	1.37	~
Family with children aged 4 or younger	1.51	1.49	1.54	10	1.34	1.32	1.36	10
Family with children aged 5-15	1.63	1.61	1.65	20	1.52	1.50	1.54	19
Family with children older than age 15	1.65	1.63	1.67	20	1.46	1.44	1.48	16
Other	1.53	1.48	1.57	4	1.30	1.27	1.33	5
Marital status								
Married	1.61	1.60	1.62	61	1.44	1.43	1.45	58
Unmarried	1.47	1.44	1.51	31	1.33	1.31	1.36	26
Divorced	1.53	1.51	1.55	6	1.41	1.40	1.43	8
Widowed	1.49	1.44	1.55	2	1.30	1.27	1.33	8
Employment status								
Full-time work	1.60	1.59	1.62	59	1.37	1.36	1.38	27
Part-time work	1.72	1.67	1.78	4	1.53	1.52	1.55	23
Vocational training	1.57	1.53	1.62	5	1.38	1.34	1.42	4
Unemployed	1.32	1.29	1.35	6	1.22	1.19	1.24	5
In education	1.52	1.48	1.57	5	1.46	1.41	1.50	4
Inactive	1.55	1.53	1.57	22	1.39	1.38	1.40	36

Table A1. Descriptive Statistics on the Frequency of Volunteering and Sample Properties by Gender

Place of residence								
Former West Germany	1.60	1.59	1.61	75	1.44	1.43	1.44	75
Former East Germany	1.50	1.49	1.52	25	1.34	1.32	1.35	25
Home ownership								
Yes	1.76	1.74	1.77	46	1.56	1.55	1.57	45
No	1.42	1.41	1.43	54	1.29	1.28	1.30	55
Period								
1995–1989	1.48	1.45	1.50	16	1.26	1.24	1.28	16
1990–1995	1.48	1.46	1.49	16	1.29	1.27	1.30	16
1996–2000	1.54	1.52	1.56	15	1.35	1.33	1.36	14
2001-2005	1.62	1.61	1.64	24	1.47	1.45	1.48	24
2006–2009	1.67	1.65	1.69	29	1.54	1.52	1.56	30
	Correlat	ion with			Correlati	on with		
	volunt	eering			volunt	eering		
Continuous variables	frequ	ency		Grand	frequ	ency		Grand
	Coefficient	P-value		mean	Coefficient	<i>P</i> -value		mean
Years of education	0.138	0.000		1.175	0.157	0.00		1.142
Satisfaction with health (0–10)	0.031	0.000		6.91	0.05	0.00		6.74
Age	0.032	0.000		4.317	0.01	0.00		4.381
Number of subjects		20,957				21,667		
Source: SOEP 1985–2009.								

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Note: Volunteering frequency is coded as follows: 3 = at least every week; 2 = at least every month; 1 = less frequently; 0 = never. Means weighted by number of spells per subject.

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